



Convention on Biological Diversity

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Regional workshop on knowledge management for biodiversity for countries in Africa Addis Ababa, 21–24 July 2025

Report of the regional workshop on knowledge management for biodiversity for countries in Africa

Introduction

1. At its fifteenth meeting, the Conference of the Parties to the Convention on Biological Diversity adopted the Kunming-Montreal Global Biodiversity Framework,¹ which sets forth an ambitious agenda for action to halt and reverse biodiversity loss. Target 21 of the Framework is to ensure that the best available data, information and knowledge are accessible to decisionmakers, practitioners and the public and, inter alia, used effectively to support biodiversity-related decision-making, planning, implementation, monitoring and reporting. In that context, it is emphasized that the traditional knowledge, innovations, practices and technologies of indigenous peoples and local communities should be accessed only with their free, prior and informed consent, in accordance with national legislation. Knowledge management is a strategic means of implementation for the Framework.²
2. At its sixteenth meeting, the Conference of the Parties adopted a knowledge management strategy to support the implementation of the Framework.³ The strategic knowledge management objectives, actions and expected outcomes in support of the goals and targets of the Framework are outlined in the strategy, which provides a description of the approaches to implementation and monitoring and underscores the need for collaboration among knowledge holders, researchers and practitioners to ensure inclusive and effective knowledge management.
3. The Secretariat launched a series of capacity-building and peer learning activities at the regional level to operationalize the strategy. Those activities aimed towards contextualizing global knowledge management priorities with respect to national and subregional realities, taking into account regional specificities, institutional structures and ongoing biodiversity initiatives. In that regard, workshops facilitating engagement with Parties and regional actors support the co-development of tailored responses that strengthen implementation of the Framework.
4. Against this backdrop, the regional workshop on knowledge management for biodiversity for countries in Africa was organized to: (a) review and assess the biodiversity knowledge management landscape; (b) share national and regional experiences, good practices and lessons learned; (c) identify specific needs, gaps and challenges in national knowledge management systems; and (d) co-develop practical, context-specific solutions to strengthen biodiversity knowledge management at

¹ Decision 15/4, annex.

² The systematic collection, organization, sharing and application of biodiversity data, information and knowledge play a critical role in supporting effective planning, policy development, implementation, monitoring and reporting.

³ Decision 16/9 B, annex.

the national level and promote regional cooperation in support of achieving Target 21 of the Framework.

5. The workshop was organized jointly by the Secretariat of the Convention on Biological Diversity; the United Nations Development Programme (UNDP) Regional Service Centre for Africa in Addis Ababa; UNDP, the International Union for Conservation of Nature and the German Agency for International Cooperation, as partners under the Panorama: solutions for a healthy planet initiative;⁴ and the United Nations Environment Programme (UNEP) Liaison Office to the African Union Commission, the Economic Commission for Africa (ECA) and Ethiopia in Addis Ababa.

6. The workshop, which was held at the offices of the UNDP Regional Service Centre for Africa, was attended by 75 participants representing, inter alia, 39 Parties and organizations representing indigenous peoples and local communities and women and youth. Representatives of several other key stakeholders attended, including representatives of UNDP, the National Biodiversity Strategies and Action Plans Accelerator Partnership and technical and scientific cooperation support centres in Africa. The list of participants is contained in annex II below.

7. The main workshop outcomes are presented in the body of the present report and annex I below. They are conveyed in summaries of discussions and do not necessarily reflect a group consensus.

Item 1

Opening of the meeting

8. The workshop was opened at 9 a.m. on 21 July 2025 by the national focal point for the Convention on Biological Diversity of Ethiopia, Karta Kaske Kalsa, who represented the Minister of Agriculture, Girma Amente. In his opening remarks, Mr. Kalsa welcomed the participants to Addis Ababa and highlighted the recent progress of Ethiopia in advancing national biodiversity policies and actions in line with the Kunming–Montreal Global Biodiversity Framework, while underscoring the importance of regional cooperation and knowledge-based approaches for implementation.

9. This was followed by opening remarks delivered by the Executive Secretary of the Convention on Biological Diversity, Astrid Schomaker, who emphasized that knowledge management was a foundational enabler of implementation of the Framework at national, regional and global levels. She recalled the adoption of the global knowledge management strategy at the sixteenth meeting of the Conference of the Parties and stressed the role of the Knowledge Management for Biodiversity initiative⁵ in translating global commitments into practical national action by ensuring that biodiversity knowledge was accessible, usable and impactful for decision makers, practitioners and other actors.

10. The Director of the UNDP Regional Service Centre for Africa, Mathias Naab, highlighted the rich biodiversity, indigenous knowledge systems and innovation potential of Africa, while noting that gaps between knowledge generation and knowledge use remained a major barrier to effective implementation. He emphasized the importance of robust, inclusive and actionable knowledge management systems to support evidence-based decision-making, implementation of national biodiversity strategies and action plans and stakeholder participation and reaffirmed the commitment of UNDP to supporting African countries through its country offices, regional hubs and global policy networks.

⁴ The PANORAMA: solutions for a healthy planet initiative is a global partnership that identifies, documents and promotes replicable and scalable solutions related to nature conservation and sustainable development (see <https://panorama.solutions/en>).

⁵ The initiative is a Secretariat-led programme aimed at strengthening national capacities in knowledge management for biodiversity (see <https://km4b.cbd.int/>).

11. In opening remarks delivered on behalf of UNEP by Muluwork Maru, who represented the Head of the UNEP Liaison Office to the African Union Commission, ECA and Ethiopia in Addis Ababa, Margaret Oduk, the urgency of strengthening the knowledge foundations for environmental governance of Africa was underscored. In the intervention, the role of UNEP in supporting evidence-driven, inclusive and Africa-owned knowledge systems through regional assessments, digital platforms and science-policy networks was highlighted and the need to ensure that biodiversity knowledge empowered communities, respected indigenous knowledge and supported sustainable development was emphasized.

12. The Project Lead for the PANORAMA initiative at the German Agency for International Cooperation, Helga Mahler, emphasized the value of sharing, documenting and scaling good practices and highlighted the importance of partnerships and collaborative platforms in supporting biodiversity action across the region.

13. Other speakers who contributed to the opening session stressed that, while the rich biodiversity, indigenous knowledge systems and scientific expertise of Africa presented significant opportunities, persistent gaps in capacity, data availability and coordination remained challenges. Participants were encouraged to strengthen regional collaboration, promote interoperable and inclusive national knowledge systems and enhance connections among policy, science and practice. The importance of empowering countries and communities through robust knowledge management approaches and the need for collective efforts to translate knowledge into concrete action for biodiversity across the region were highlighted.

Item 2

Workshop objectives, scope and expected outcomes

14. Representatives of the Secretariat delivered a presentation on the objectives, scope and expected outcomes of the workshop. They emphasized that the workshop aimed towards strengthening national and regional capacities for biodiversity knowledge management in line with Target 21 of the Kunming–Montreal Global Biodiversity Framework. Core objectives included: identifying national and regional knowledge management needs, gaps and priorities; supporting the development or enhancement of national biodiversity knowledge management policy frameworks, strategies and action plans; and reinforcing biodiversity knowledge management networks and communities of practice across the region. Expected outcomes included: (a) identification of key knowledge management gaps and good practices; (b) proposals for national and regional knowledge management partnerships contributing to a regional knowledge management framework; (c) strengthened mechanisms for peer learning and knowledge-sharing; (d) greater clarity on the role of the subregional technical and scientific cooperation support centres; and (e) construction of the initial elements of a concept note outlining next steps and potential funding opportunities.

15. A representative of the Secretariat presented an overview of the structure and flow of the four-day workshop. Participants were informed that day 1 would cover introductory items, including the objectives and expected outcomes of the workshop, an introduction to the Knowledge Management for Biodiversity initiative and an overview of the knowledge management strategy to support the implementation of the Framework adopted at the sixteenth meeting of the Conference of the Parties. Day 2 would be devoted to core technical work: diagnosing how knowledge management was addressed in national biodiversity strategies (item 5), illustrating national experiences and good practices (item 6) and co-designing elements of national biodiversity knowledge management policy frameworks and briefs (item 7). Day 3 would include practical sessions on tools such as the PANORAMA initiative methodology and discussions on inclusive knowledge management approaches. Day 4 would focus on resource mobilization, partnership building and the presentation of draft national knowledge management strategies and a regional action plan. This overview was provided to give participants a clear sense of the objectives, methodology and progression of the workshop.

16. Preliminary results of a pre-workshop survey conducted among African Parties were shared. The findings offered an initial picture of existing national knowledge management capacities, institutional arrangements and common challenges and served as an analytical baseline for the discussions under subsequent agenda items.

17. Under this agenda item, representatives of subregional technical and scientific cooperation support centres were invited to deliver short introductory remarks. A representative of the South African National Biodiversity Institute, host of the subregional technical support centre for Southern Africa, outlined the mandate of the institute as a national knowledge institution and discussed its long-standing role related to biodiversity information management, spatial planning and data services. The representative highlighted ongoing efforts to assess national capacity needs in collaboration with focal points for the Convention and partners and noted that the responses of African Parties to the pre-workshop survey would help guide targeted technical support. The representative referred to broader international processes, including work within the Group of 20 environmental cluster, aimed at strengthening recognition and support for regional knowledge institutions.

18. The representative of the Sahara and Sahel Observatory, covering countries across Northern Africa, emphasized the importance of knowledge as a strategic lever for biodiversity conservation, climate adaptation and sustainable land management in the region. The experience of the Observatory in data harmonization, development of open information platforms and capacity-building programmes was underscored and the need for interoperable regional systems and stronger cross-border collaboration was highlighted. The value of integrating indigenous and local knowledge into biodiversity knowledge management systems to ensure that solutions were relevant and equitable was noted.

19. A representative of the Regional Centre for Mapping of Resources for Development, which covers countries of Eastern Africa, gave a presentation on the work of the Regional Centre in ecosystem monitoring, land-use assessment and the development of user-friendly tools to support biodiversity planning. The representative showcased recent achievements, including the publication of a biodiversity and ecosystem map book marking the fiftieth anniversary of the Centre, and highlighted how the thematic work of the Centre contributed to achievement of several targets of the Framework. Efforts of the Centre to strengthen community engagement and awareness through educational and creative initiatives were described.

20. Intervening online, a representative of the Ecological Monitoring Centre (Senegal) emphasized the role of the Ecological Monitoring Centre as a technical and scientific cooperation support centre for West Africa and its long-standing contribution to strengthening environmental information systems in the region. The representative underscored the importance of coherent data flows, institutional coordination and technically robust monitoring frameworks in support of implementation of the Framework and highlighted the opportunity to build synergies across biodiversity and land degradation reporting processes. The representative concluded by reaffirming the commitment of the Centre to supporting Parties through geospatial expertise, capacity-building and regionally relevant knowledge management approaches.

21. The session was followed by an icebreaker exercise designed to facilitate interaction and collaboration. Participants introduced themselves and shared their expectations for the workshop. A guided activity, entailing the formation of subregional groups, helped participants become familiar with each other's backgrounds, expertise and areas of interest, which set a positive tone for peer learning and group work throughout the four-day period.

Item 3

Introduction to the Knowledge Management for Biodiversity Initiative

22. The Knowledge Management for Biodiversity initiative was introduced by the Secretariat, which outlined the purpose of the initiative and its contribution to the implementation of the

Kunming-Montreal Global Biodiversity Framework. The presentation highlighted the role of the initiative in supporting Parties in strengthening national knowledge management systems, enhancing the accessibility and usability of biodiversity information and fostering collaboration through regional networks and technical support centres. Participants were briefed on the core support activities of the initiative, including activities related to capacity development, knowledge exchange mechanisms and tools designed to assist countries in integrating knowledge management into national biodiversity planning and implementation processes.

23. The Secretariat provided a short recap of the online knowledge management course delivered in 2024 as part of the Knowledge Management for Biodiversity capacity-building programme. The refresher ensured that there was a shared understanding of the foundational principles and concepts introduced across the 16 training modules, including knowledge identification, organization, sharing and application in policy and planning contexts. The session aimed towards reinforcing participants' familiarity with those concepts and supporting their effective engagement in the technical discussions and exercises planned for the remainder of the workshop.

Item 4

Introduction to the knowledge management strategy to support the implementation of the Kunming-Montreal Global Biodiversity Framework

24. Representatives of the Secretariat delivered a presentation on the knowledge management strategy adopted at the sixteenth meeting of the Conference of the Parties to support the implementation of the Framework. In outlining the rationale for the strategy, the representatives recalled the request of Parties that knowledge management as a strategic enabler of implementation be strengthened and persistent gaps in the generation, organization, accessibility and use of biodiversity-related information be addressed. A representative of the Secretariat introduced the structure of the strategy, including its vision, guiding principles and strategic objectives, and emphasized the relevance of the strategy for national and regional action. Participants were invited to consider how the strategy could support the development of coherent, country-driven biodiversity knowledge management systems and how its components might guide the formulation of national knowledge management frameworks, action plans and collaborative initiatives across the region.

Item 5

Role of knowledge management in supporting the implementation of national and regional biodiversity strategies and action plans

25. In introducing a diagnostic exercise, a representative of the Secretariat presented the results of the pre-workshop survey, which provided an overview of current regional knowledge management practices. The survey highlighted several recurring themes, including ongoing efforts to develop biodiversity databases and clearing-house mechanisms, strengthen monitoring systems and improve geospatial capacities, and revealed shared constraints such as fragmented institutional mandates, insufficient data interoperability, limited incorporation of traditional knowledge and the need for more structured national knowledge management frameworks. The survey results served as a baseline for the work of the subregional groups which followed.

26. In the five subregional groups, participants worked on assessing the extent to which knowledge management was reflected in national biodiversity strategies and action plans. While countries identified notable strengths across the subregions, such as existing geoportals, environmental information systems, community-based monitoring initiatives and regional support mechanisms provided by the subregional technical and scientific cooperation support centres, at the same time, groups underscored persistent gaps, including coordination challenges, limited digitization, uneven data quality, insufficient integration across sectors and lack of sustainable financing for knowledge management systems.

27. Through the diagnostic exercise, participants in each subregion articulated priority considerations for strengthening biodiversity knowledge management systems, including the development or revision of national knowledge management strategies, improvements in data governance and interoperability, enhanced institutional coordination, investments in digital tools and human capacities and stronger collaboration with technical and scientific cooperation support centres. Those collective findings provided the analytical foundation for the subsequent sessions on national experience-sharing and the co-design of knowledge management frameworks and action plans. A consolidated summary of subregional findings is provided in annex III below.

Item 6

Experiences, challenges and success stories in national biodiversity knowledge management and documenting of good practices

28. The session opened with a brief presentation by a representative of the Food and Agriculture Organization of the United Nations (FAO), which illustrated how knowledge management could enhance the integration of biodiversity considerations across sectors and support the implementation of national strategies. Drawing on examples from the agriculture and environment domains, the representative highlighted the value of connecting evidence, policy and practice. That framing set the stage for reflection by participants on their own national experiences, challenges and successes.

29. In sharing experiences derived from their national contexts, participants highlighted a number of common challenges. Those challenges included fragmented institutional mandates, difficulties in accessing and mobilizing biodiversity data, weak interoperability among information systems and limited coordination among ministries responsible for environment, agriculture, planning and related sectors. Several delegates noted that, although valuable knowledge existed, it was often dispersed, siloed or insufficiently translated into usable formats for policy- and decision-making.

30. The discussion surfaced several emerging good practices, such as the development of national clearing-house mechanisms, environmental information systems, participatory monitoring initiatives and platforms that provided access to scientific, indigenous and local knowledge. Participants emphasized that co-produced knowledge, supported by sustained capacity-building and tailored to user needs, had greater potential to influence implementation.

31. Participants reinforced the importance of coherent national frameworks that enabled institutions to work together more effectively, in particular where responsibilities for biodiversity and relevant sectors were institutionally separated. That intervention echoed participants' reflections on the need for robust coordination and integrated approaches to knowledge management. Further details on regional strengths, challenges and good practices identified during the session are provided in annex III below.

32. Overall, the exchanges highlighted both the diversity of national experiences and the convergence of challenges across the region. Participants underscored that strengthening national knowledge management systems through improved coordination, clearer institutional roles, enhanced data governance and inclusive knowledge processes would be essential for enabling effective implementation of national biodiversity strategies. Those insights laid the foundation for consideration of agenda item 7 on co-designing national biodiversity knowledge management strategies and action plans.

Item 7

Introduction to the development of national knowledge management frameworks and strategies

33. A representative of the Secretariat introduced the session by outlining the process for developing national biodiversity knowledge management frameworks aligned with the knowledge management strategy adopted at the sixteenth meeting of the Conference of the Parties. The representative recalled the 10 components of the Knowledge Management Agenda, introduced

previously in the workshop, and explained that those components provided a structured basis for assessing national needs, defining priorities and identifying enabling conditions for effective knowledge management systems.

34. Participants were invited to work in groups, with each group assigned one of the 10 components of the knowledge management agenda. Building on the diagnostic exercise conducted under item 5, the groups examined their assigned component in the context of four guiding questions: (a) why was the component important for implementation; (b) what were the main challenges and gaps experienced at national level; (c) what were the strategic objectives that countries might pursue; and (d) what possible solutions and priority actions existed for strengthening national systems.

35. During their work in groups and subsequent plenary exchanges, participants identified a range of recurrent challenges across components, including data fragmentation, limited human and financial capacity, insufficient political support, low integration of traditional and local knowledge and weak coordination among institutions responsible for providing biodiversity-relevant information. The need to pursue several strategic course of action was consistently recognized, including strengthening institutional arrangements, adopting common standards, investing in digital infrastructures, enhancing competencies, promoting inclusive knowledge processes and fostering stronger partnerships with subregional technical and scientific cooperation support centres.

36. The group presentations provided concrete insights into how each component of the knowledge management agenda could be operationalized at national and regional levels. The reflections that emerged constituted initial building blocks for future national knowledge management policy frameworks and strategies. A consolidated summary of all of the group outputs, including for components that were not discussed in plenary, is contained in annex III below.

Item 8

Implementation of knowledge management at the local, national and regional levels

37. Discussions under item 8 focused on the practical application of knowledge management approaches to supporting the implementation of national biodiversity strategies and action plans, with emphasis on tools that facilitated documentation and exchange of experiences. The PANORAMA: solutions for a healthy planet initiative was introduced as a key mechanism for strengthening national and regional knowledge ecosystems through the use of a standardized and proved methodology for documenting, learning and sharing as related to replicable building blocks and enabling factors for successful practitioner-led biodiversity practices. Representatives of UNDP, the German Agency for International Cooperation and the International Union for Conservation of Nature highlighted how the PANORAMA methodology enabled countries to capture and package successful biodiversity practices in a standardized format that supported replication, peer learning and integration into clearing-house mechanism platforms and wider Framework implementation processes and directly supported Parties in developing or updating their national biodiversity strategies and action plans and meeting requirements under Target 21.

38. The session provided conceptual and methodological guidance on identifying challenges and enabling factors and building blocks that could be replicated in different contexts. Participants explored how national biodiversity initiatives, local practices and sectoral examples could be documented as PANORAMA initiative-type solutions and used to inform national knowledge systems. Emphasis was placed on the role of the PANORAMA initiative in complementing national biodiversity strategy and action plan updates, supporting transparency, strengthening monitoring and reporting processes and contributing to the achievement of Target 21. Practical exercises enabled participants to begin translating their national experiences into PANORAMA initiative components, which reinforced a solution-oriented approach to knowledge management at multiple levels and demonstrated how the PANORAMA methodology could be applied to structuring and documenting national experiences so as to produce replicable and shareable knowledge products.

Item 9**Peer-to-peer learning on inclusive knowledge management**

39. Under item 9, participants engaged in peer-to-peer exchanges focused on fostering inclusive knowledge management practices which reflected the diversity of stakeholders that were contributing to biodiversity action. Participants shared experiences on engaging indigenous peoples and local communities, youth and women's groups, scientific institutions and other knowledge holders involved in national and local knowledge management processes. Participants heard directly from representatives of indigenous peoples, the Global Youth Biodiversity Network and academia who provided concrete examples of inclusive knowledge management approaches, such as multi-stakeholder national ecosystem assessments and national biodiversity platforms, and information on how youth were contributing to biodiversity and climate action on the ground. In discussions, challenges were identified, such as uneven access to information, fragmented data governance and limited mechanisms for recognizing local knowledge and barriers for youth participation.

40. The exchanges built on the methodological insights arising from consideration of item 8, with several participants reflecting on how tools like the PANORAMA initiative could serve as platforms for elevating diverse perspectives and making locally grounded practices visible at national, regional and global scales. Participants identified opportunities for strengthening national knowledge management frameworks by integrating inclusive practices, enhancing communication channels and expanding collaboration with indigenous peoples and local communities, youth networks and other constituencies. The session reaffirmed the importance of multi-stakeholder participation for effective implementation of the Framework and informing the development of elements for national knowledge management strategies and the regional knowledge management action plan, with the PANORAMA initiative serving as a practical resource and tool for integrating structured, replicable knowledge into those strategies, especially national biodiversity strategy and action plan-related processes to promote cross-country and South-South learning.

Item 10**Funding opportunities and partnerships for knowledge management**

41. A representative of the Secretariat opened the session by emphasizing the importance of mobilizing financial and technical resources to establish and operationalize national biodiversity knowledge management systems. In presentations delivered by representatives of UNEP, UNDP and the National Biodiversity Strategies and Action Plans Accelerator Partnership, an outline was provided of complementary support mechanisms available to Parties, including the early action support project under the seventh replenishment of the GEF Trust Fund, the umbrella programme under the eighth replenishment of the GEF Trust Fund to support updating of national biodiversity strategies and action plans and preparation of seventh national reports and a range of biodiversity-related trust funds. Those mechanisms offered opportunities to address knowledge management gaps, strengthen monitoring and reporting systems, enhance institutional coordination and advance effective implementation of the Framework.

42. A representative of UNEP highlighted its portfolio of support to African countries, with a focus on flexible technical assistance, peer learning, help desk functions and the alignment of national targets, monitoring frameworks and reporting processes. The representative mentioned the ongoing support provided by UNEP to countries in the region through its work related to national biodiversity strategy and action plan alignment and preparation of seventh national reports and noted that more than 130 countries globally, and a large majority of African Parties, were receiving support through UNDP country offices and regional hubs and the UNDP Global Policy Network. The representatives of the Secretariat, UNEP and UNDP emphasized the importance of embedding knowledge management within national biodiversity strategy and action plan implementation, promoting coherent resource mobilization strategies and leveraging synergies across funding streams addressing biodiversity, climate and land degradation. Interventions of participants underscored the value of regional technical and scientific cooperation support centres, including the Sahara and Sahel

Observatory, the South African National Biodiversity Institute, the West African Science Service Centre on Climate Change and Adapted Land Use and the Ecological Monitoring Centre (Senegal), in providing regionally grounded expertise and facilitating stronger national knowledge governance.

43. A representative of the National Biodiversity Strategies and Action Plans Accelerator Partnership gave a presentation on the demand-driven model of the Partnership for matching country requests with technical and financial partners and offered examples of African countries that had benefited from coordinated assistance on issues such as digital platforms, monitoring systems and restoration planning. Representatives of South Sudan and Sierra Leone shared experiences of their countries which illustrated the challenges faced by many countries in accessing funding windows, preparing high-quality proposals and articulating knowledge-related priorities clearly. Their interventions highlighted persistent barriers, such as limited national capacity for resource mobilization and the need for clearer channels of communication with implementing agencies. The exchanges underscored that operationalizing national biodiversity knowledge management systems would require coherent, long-term resource mobilization efforts, strategic engagement with regional and global partners and strengthened collaboration with technical and scientific cooperation support centres to ensure sustained technical and institutional support.

Item 11

Workshop recommendations and next steps

44. In the final session, subregional groups presented their proposed recommendations and next steps for advancing biodiversity knowledge management at national and regional levels. Building on the diagnostic work undertaken during day 2 and the technical exchanges during day 3, participants expressed a strong collective commitment to accelerating efforts to operationalize knowledge management as a core enabler of the Framework.

45. Across all regions, participants reaffirmed their intention to institutionalize knowledge management within national biodiversity governance, including through integrating elements of the Knowledge Management for Biodiversity initiative into national biodiversity strategies and action plans, establishing or strengthening dedicated national units or focal points for knowledge management and promoting the inclusion of knowledge management within national budgets and sectoral planning processes. Central African countries in particular indicated their readiness to advance subregional alignment through the Commission for the Forests of Central Africa, the Observatory for the Forests of Central Africa and other cooperation platforms and to work towards developing shared processes for coordination, monitoring and capacity-building.

46. Recognizing that accessible, reliable and connected biodiversity data systems were essential for implementation of and reporting under the Framework, participants committed to advancing data governance and interoperability. Proposed actions included undertaking rapid national assessments of data assets and capacity needs; upgrading national biodiversity platforms; improving curation and publication of existing data sets using open standards; and contributing to the development of subregional data standards that enabled interconnection with regional platforms such as those developed by the Observatory for the Forests of Central Africa, the South African National Biodiversity Institute, the West African Science Service Centre on Climate Change and Adapted Land Use, the Sahara and Sahel Observatory and the Biodiversity and Protected Areas Management Programme.

47. The central role of regional technical and scientific cooperation support centres was strongly reaffirmed. Participants expressed interest in enhancing collaboration with the support centres with a view to ensuring support for capacity development, facilitating harmonized approaches, strengthening interoperability and securing assistance in developing national knowledge management for biodiversity strategies. Several groups proposed establishing or revitalizing technical working groups with the support of technical and scientific cooperation support centres to

help countries progress more rapidly in the areas of knowledge governance, digital infrastructure and coordination mechanisms.

48. Participants agreed on the need to strengthen communication, inclusiveness and collaboration related to biodiversity knowledge management. Proposed commitments included enhancing stakeholder engagement mechanisms; establishing or revitalizing national and subregional communities of practice; promoting coherent knowledge management-related awareness and communication strategies; and ensuring the integration of traditional and local knowledge, including through culturally appropriate documentation, participatory approaches and safeguards for intellectual and cultural rights.

49. Participants identified a set of immediate priority actions to sustain momentum following the workshop, including: (a) mapping national actors, knowledge flows and existing platforms; (b) initiating knowledge management capacity-building activities, including on geographic information systems, digital platforms and data standards; (c) preparing or updating knowledge management components within national biodiversity strategies and action plans and associated implementation plans; (d) exploring opportunities for resource mobilization with UNEP, UNDP, the National Biodiversity Strategies and Action Plans Accelerator Partnership and other partners; (e) strengthening cooperation with technical and scientific cooperation support centres on interoperability and monitoring; and (f) preparing subregional or national road maps aligned with the 10 components of the knowledge management agenda. Those proposed actions reflected a shared determination to strengthen the knowledge foundations needed to support effective and coordinated implementation of the Framework.

Item 12

Closing of the meeting

50. In the closing session, representatives of the Secretariat and UNDP thanked participants for their active engagement and constructive contributions throughout the duration of the workshop. They noted the strong commitment demonstrated by countries to advancing biodiversity knowledge management in support of the Framework.

51. The Secretariat expressed its appreciation to the representatives of UNDP, UNEP and the Panorama initiative, the technical and logistic teams and the interpreters for their support in organizing the workshop and acknowledged the financial contributions of the Government of Denmark, UNEP and UNDP.

52. UNDP reiterated its commitment to continuing its support to African countries in the strengthening of biodiversity knowledge management systems and emphasized the importance of maintaining the collaborative spirit and momentum generated during the workshop.

53. The Chair thanked all of the participants and partners for their contributions and declared the meeting closed. The workshop officially closed at 3 p.m. on 24 July 2025.

Annex I

Knowledge Agenda for Biodiversity in African countries resulting from the Regional Knowledge Management for Biodiversity Workshop, Addis Ababa, (21-24 July 2025)

A. Background

1. Knowledge Management (KM) is recognized by the Parties of the Convention on Biological Diversity through various decisions, and a Knowledge Management Strategy has been adopted at the sixteenth meeting of the Conference of the Parties in 2024. As countries have developed their national initiatives to strengthen KM in the context of biodiversity, the Convention on Biological Diversity continues to support national efforts through various instruments. The “Knowledge Management for Biodiversity (KM4B) Initiative has been launched in 2023 to support the national initiatives and add value with a portfolio of activities. A KM4B training course was offered online to develop capacities and create a common understanding of knowledge management. On this basis, regional workshops are facilitated to share experiences in person, identify knowledge gaps and needs and work toward co-create solutions to support the implementation of the Kunming-Montreal Biodiversity Framework (KMGBF).
2. The regional workshop for African countries took place in Addis Ababa from 21 to 24 July 2025. A total of 75 participants from 39 African countries and relevant international organizations attended. The workshop was a starting point to connect as a community, learn from each other and identify areas for urgent action. The Knowledge Agenda for Biodiversity builds on the experiences of the workshops in Bogotá and Bangkok and also includes new perspectives. It has been drafted during the workshop based on inputs by workshop participants and resource persons.
3. This knowledge agenda is intended to provide an understanding of pressing needs and challenges, and possible solutions and action points to enable participants to foster further dialogue and inspire uptake at the national level, for example, by integrating these objectives and action points into the National Biodiversity Strategies and Action Plans (NBSAPs). The countries can refer to this regional concept in their national strategies while reflecting their specific national context.
4. Subregional KM4B Communities of Practice will be established to sustain collaboration and communication beyond the workshop and other interested parties and partners will be invited to join to further develop this Agenda and put it into practice.

Knowledge Agenda for Biodiversity for Africa



Key actions to be taken

5. Ten work packages are proposed with argumentations on the background, the challenges, related objectives, and action points. It is an ambitious package, but considering that the lives of species, the health of the environment, the wellbeing of people, and the sustainability of our region and the planet are rooted in the ability to make the best use of knowledge for our future, no effort must be spared to advance Knowledge Management. Thus, the quote “Lost knowledge, lost species” was created at the conference.

6. The 10 work packages are briefly outlined in this policy brief. The countries have the lead in implementing the Agenda in their countries, the five [Subregional Technical and Scientific Cooperation \(TSC\) Support Centres](#)⁶ are supporting the countries and coordinating joint activities on the subregional and regional level.

Overview of the 10 packages

1. Knowledge Partnership and Knowledge Agenda

Why this is important: Biodiversity challenges are inherently complex, transcending sectors, national borders, and scales. To address them effectively, knowledge partnerships are essential. They offer a powerful means to overcome fragmentation, avoid data silos, and bring together diverse and complementary expertise. Such collaboration enables the pooling of efforts and resources, promotes efficiency, and reduces duplication. By fostering dialogue around a shared agenda, these partnerships create space to co-develop practical, context-sensitive solutions rooted in national and local realities. Moreover, they strengthen transparency, accountability, and alignment among stakeholders, reinforcing a collective sense of purpose and long-term commitment to biodiversity conservation.

Challenges: Despite growing recognition of the importance of knowledge partnerships, several persistent challenges continue to hinder their effectiveness. Knowledge systems remain largely isolated and fragmented, limiting the flow and integration of information across actors and scales. The coexistence of divergent knowledge management tools and standards further complicates collaboration and interoperability. Cross-sectoral coordination remains weak, while collaboration between knowledge management partners is often limited or ad hoc, undermining coherence and long-term impact. The language and accessibility of knowledge products also pose barriers, particularly at the local level. Many partnerships suffer from a lack of sustainability, being highly dependent on short-term donor-driven support, and are weakened by a lack of trust between institutions and partners, which restricts open exchange and joint action.

Solution: Partnerships for the generation, alignment, and dissemination of knowledge must be reinforced through a shift in mindset among key data stakeholders (both producers and users) around the strategic value of collaboration. Sustainable financing should be promoted through joint planning and the co-creation of integrated project ideas across sectors. Regional stakeholder dialogues and inclusive platforms are essential to capture and connect knowledge products from a variety of actors. Partnerships should be grounded in shared roadmaps that link biodiversity goals with broader development priorities and must be embedded in legal and policy frameworks to ensure continuity. Collaborations with global knowledge mechanisms such as IPBES, GGW, and GBF can strengthen technical coherence and global alignment. Local knowledge holders and practitioners must be recognized as key actors in this landscape, with their expertise actively integrated into national systems. In doing so, partnerships become more equitable, resilient, and impactful.

⁶ <https://www.cbd.int/tsc/tscm/subregionalcentres>

Strategic objectives:

Strengthened institutional and legal frameworks

- Enabling legal and policy environments that support long-term establishment, and structured knowledge partnerships.
- Biodiversity priorities are aligned with national development plans, sectoral policies, and global frameworks (e.g. GBF, SDGs, UNFCCC).

Knowledge sharing

- Open, inclusive, and systematic knowledge exchange across institutions and levels is promoted and implemented
- Strong and active multi-stakeholder knowledge platforms are established and adapted to national contexts, fostering collaboration, innovation, and dialogue.
- Knowledge equity is widely established by recognizing all stakeholders (including researchers, indigenous peoples, and traditional authorities among others) as co-producers of knowledge, not just recipients.

Coordination and partnerships

- Peer learning and regional exchanges (south-south, north-south cooperation) are actively enabled and operational.

Key actions:

- **Establish knowledge partnerships:** Conduct a stakeholder mapping exercise at national and (sub-)regional levels to identify and categorize key actors involved in biodiversity knowledge (government agencies, research centers, NGOs, local communities), specifying their roles and existing tools/platforms. Launch the partnership and facilitate the development of a knowledge agenda for biodiversity.
- **Launch and facilitate a regional Community of Practice (CoP)** focused on biodiversity knowledge management, including regular virtual exchanges, shared thematic workspaces, and joint capacity-building activities.
- **Set up a regional biodiversity knowledge hub** hosted by a designated institution, with a clear mandate to collect, curate, and disseminate biodiversity data, tools, and case studies in coordination with national focal points (to be inspired by the GGW observatory platform).
- **Mobilize and pilot co-funded initiatives** that showcase how effective partnerships can improve biodiversity knowledge management: for example, by co-developing multilingual knowledge products, shared monitoring platforms, or integrated decision-support tools.

2. Knowledge inclusion: lost knowledge, lost species

- **Why this is important:** Traditional knowledge is important for the conservation of biodiversity (sustainable use of natural resources, climate change resilience, agricultural practices, health etc.). It helps to enhance the holistic understanding about the ecosystem status such as the discovery of <new species, it helps to identify species behaviours, seasonal patterns, and ecosystem dynamics. Inclusive decision-making and participatory planning ensure that indigenous peoples and local communities have a voice in conservation decisions and in enhancing restoration. An inclusive approach to knowledge helps filling the knowledge gaps and promoting innovation by unlocking diverse perspectives.
- **Challenges:** The inventory/documentation of traditional knowledge (e.g. use of biodiversity in health) is insufficient and undervalued. The access to traditional knowledge is limited due to inadequate need for intergeneration knowledge sharing. The engagement of stakeholders like indigenous peoples and local communities, youth, and women is limited with a risk of

misappropriation. Scientific and traditional knowledge are not well harmonized to inform actions at the local level: traditional knowledge is often undervalued or dismissed as anecdotal, especially when compared to scientific data. Language and communication barriers hinder inclusion. Legal frameworks for inclusion are lacking or insufficient.

- **Solution:** Traditional knowledge shall be better documented, while respecting the rights of the indigenous peoples and local communities (considering ABS, Article 8(j)). Multi-stakeholder platforms shall be established with a strong gender-inclusive approach. Capacity-building (e.g. legal, technical, communication etc.) and guidance protocols can enable the development of frameworks, methods and approaches. Partnerships for the harmonization of knowledge (academia, research institutions, government etc.) shall be formed. Inclusive KM shall be mainstreamed in legal frameworks.

Strategic objectives:

- Indigenous peoples and local communities are empowered, recognized as key knowledge stakeholders/holders and included in biodiversity conservation and planning.
- Policy and Legal Frameworks that protect community knowledge rights are established, ensuring benefit-sharing and supporting inclusive decision-making.
- A more holistic understanding of biodiversity. Advanced research and documentation efforts that capture both scientific and traditional and other forms of knowledge to better understand biodiversity status, trends, and threats.
- Awareness and capacities of indigenous peoples and local communities are built to participate in biodiversity planning and raise awareness among policymakers and other stakeholders about the value of diverse knowledge systems.

Key actions:

- Ensure that inclusion and participation is embedded in the NBSAPs. NBSAP focal points should lead the process of development of the multi-stakeholder platform in consultation with the representatives of organizations of indigenous peoples, local communities, women, youth, academia, research organizations, NGOs, other government bodies beyond the environment bureaus, and other groups.
- Provide trainings to indigenous peoples and local communities and other groups to competently participate in national policy processes or encourage/support them to do that themselves.
- Ensure that tools created and capacity-building efforts are inclusive for all actors; identify and promote technologies helping disadvantaged people to access biodiversity
- Training for public and private bodies to become knowledge holders, establish focal points for knowledge inclusion, being capacitated on knowledge inclusion.

3. Knowledge awareness programme

Why is this important? Knowledge awareness is the understanding and recognition of knowledge and its relevance for biodiversity through its creation, sharing and application. Understanding the need to manage knowledge as an essential resource for biodiversity. Without this understanding, policy makers and stakeholders would handle it carelessly, contributing to knowledge loss, siloing of knowledge, inadequate access, use, and capturing, and finally leading to knowledge loss and lost opportunities. Knowledge awareness is necessary to have policies developed, which strengthen knowledge. Knowledge awareness enhances the conservation & sustainable use of biodiversity.

Sensitization leads to accurate media reporting and supports gender responsive conservation. It promotes capacity development at organizational & community levels and helps in empowering communities to manage their own resources and take part in decision making processes.

Challenges: Challenges include the lack of capacities in KM, limited experts are available. Priorities of key institutions are misaligned and disregard knowledge management. Cultural barriers hinder the awareness and prioritization of knowledge. Documentation of knowledge is lacking and financial resources are limited due to lacking awareness. Lacking access and adaptability in rapid technology changes limit the dissemination of knowledge and the relevance of knowledge dissemination is underestimated. Finally, the responsibility for Knowledge Management is unclear, and finally no organization is explicitly responsible for KM4B.

Solution: Excellent training centres to build capacities on Knowledge Management need to be identified and engaged, and if not available, such training centres need to be established. Cross-sectoral partnerships on Knowledge Management (regional & subregional) need to be established or supported. Traditional knowledge needs to be documented and public awareness needs to be created for its value. A KM awareness strategy and action plan needs to be developed within a national KM4B strategy, e.g. within the NBSAP.

Strategic objectives:

- Increased awareness and understanding of knowledge management for biodiversity conservation.
- All round government, institutions, communities (indigenous peoples and local communities) awareness on knowledge management.
- Traditional knowledge for future generations is documented and preserved.
- Best practices in knowledge management are shared and adopted.

Key actions:

- Increase awareness & understanding of Knowledge Management for biodiversity conservation.
 - o Identify target audience
 - o Develop & disseminate awareness products for the different target groups.
 - o Develop communication and awareness strategy
- Attain awareness of all government bodies, institutions, Communities (indigenous peoples and local communities) and stakeholders on Knowledge Management.
 - o Establish a governance model that will ensure effective Co-ordination
 - o Establish Community of Practices for KM
 - o Establish networks
 - o Engage media
- Share best practices on Knowledge Management and promote adoption
- Use appropriate tools & channels to share knowledge

4. Knowledge Management Excellence Programme

Why is this important? If knowledge is an important resource, then Knowledge Management is a must to make the best use of it, to develop new knowledge, make knowledge available to those who need it, and assure that critical knowledge is not lost. Without knowledge “management”, knowledge is subject to lacking individual or organizational skills, motivation, priority, and capability. Knowledge will be lacking, or siloed, disorganized, unused, lost. And: lost knowledge, lost species! Knowledge is a prerequisite for decision making. It helps to avoid duplications and reinventing the wheel, it helps to solve complex problems, it enhances learning from the past and informs the future. Knowledge Management is a key management challenge in a dynamic knowledge society.

Challenges: Capacities in KM are lacking! Knowledge is too marginalized and considered a side- or sub-component, rarely considered a key element on its own. It has too low priority in most organizations. Financial resources are inadequately allocated to KM. Technical challenges are complicating the use of knowledge even though the technologies for effective KM are available.

Knowledge holders are not motivated to share their knowledge, an organizational culture for sharing is often lacking. Knowledge sharing is even restricted and knowledge dissemination is inadequate.

Frameworks for KM are missing and competence centres for KM are not available in most African countries. Terminologies are not harmonized enough. Access to knowledge is often limited and security issues of data, information, and knowledge need to be addressed.

When experts leave organizations without organizational mechanisms for capturing, knowledge gets lost, which leaves gaps for the whole community. A lot of knowledge is created but not captured due to lacking KM. Practical solutions are inadequately shared and made available to others and upscaled, used for decision makers. Collaboration among partners is insufficient. KM does not exist as a discipline or role in most organizations. Knowledge is not managed and therefore inadequately used, shared, captured with multiple effects on efficiency, cost, quality and finally biodiversity loss.

Solution: Excellent Knowledge Management at the organizational level is a prerequisite for its effective use in the sector as a whole. Knowledge Management needs to be professionalized in all institutions that play a vital role in the biodiversity ecosystem. KM Policies for public administrations provide a critical framework, as biodiversity is not a stand-alone issue in public administration. KM positions in biodiversity bodies are key, a community of such key actors can benefit the collaboration significantly. Professional consultants or societies can give support once they are engaged and recognized.

Strategic objectives:

All key institutions in biodiversity have established a state-of-the-art KM policy and strategy, reflecting a national KM4B knowledge agenda (if existing).

KM4B roles and focal points are established, actors are communicating and collaborating to advance their practices together. Outstanding practices in KM4B are appreciated and awarded.

Key actions:

- Implement national KM4B Initiatives, build capacities and foster the establishment of KM policies and strategies on organizational level, aligned with national / subregional KM strategies.
- Create legal frameworks for KM, develop a National Knowledge Management Policy and Strategy for the public administration or at least for biodiversity.
- Establish KM roles in public institutions and in all stakeholder groups
- Establish a KM community of Practice
- Support professional societies in Knowledge Management and train stakeholders in KM
- Strengthen collaboration with (academic or private) competence centres in KM to support the professionalization of KM.
- Embed KM in workflows

5. Clearing House Mechanisms and National Knowledge Hubs

Why is this important? Knowledge Hubs are essential for knowledge sharing, mutual learning, coordinated action, and upscaling of innovation and best practices. The Clearing-house mechanisms are a key element and shall be further upgraded to facilitate the full spectrum of knowledge processes from searching/finding, acquiring, creating, sharing, applying, capturing, and managing knowledge.

Challenges: Capacity limitations, expertise gaps, fragmentation and insufficient integration are hindering the progress of establishing and advancing CHMs and Knowledge Hubs. AI can be utilized more. CHM could be developed to work as National Knowledge Hubs or could be complemented by such additional platforms. Integration of data through knowledge graphs (semantic metadata) is missing though it could benefit the multiple use and benefits of existing data/information and to provide reliable knowledge, also when using AI.

Solution: Establish a regional clearing house mechanism for Africa. Promote cooperation between regional, subregional, and national CHMs. Expand the functionalities of existing CHM and further

develop existing metadata for better linkages and more reliability. Existing apps supporting biodiversity shall be promoted and linked, technology innovation for biodiversity shall be supported and encouraged.

Strategic objectives:

- Inclusive and comprehensive national biodiversity knowledge platforms are established:
- National platforms of different countries by sub-region are interconnected.
- Regional CHM are efficient, sustainable, multilingual, interoperable, and aligned with the CBD's central CHM.
- Resource mobilization mechanism is effective to support the operation of national and regional platforms sustainably.

Key actions:

- Although several platforms may exist within each country, each African country will need to create or retain one of the existing platforms as its national biodiversity knowledge management platform in an inclusive manner.
- Capacity of national platform stakeholders are developed. This will involve organizing training sessions for national platform stakeholders on various topics based on the country's realities. This could encourage their commitment to support the process and ensure the mechanism's success.
- Developing multilingual and subregional digital platforms, with modular interfaces by subregion (West, Central, Southern, Western Africa, etc.). A rotating governance model should also be implemented, with a shared presidency and secretariat per country.
- Establish interconnectivity between sub-regional platforms to create a regional information clearinghouse within five years. This will involve developing a regional digital platform for all of Africa based on the existing sub-regional platforms. A rotating governance model should also be implemented, with a chair and secretariat shared by sub-region.
- Ensuring technical interoperability between Africa's regional information clearinghouse and other regional and international systems (e.g., GBIF, CBD's central CHM).
- Establish a sustainable financing plan, involving technical and financial partners to mobilize resources and support the operation of national and regional platforms.

6. Advanced Knowledge Processes

Why this is important: Advanced knowledge processes are a key lever for enhancing operational efficiency, ensuring the sustainability of actions and ensuring stakeholder accountability. Knowledge processes can include searching and finding knowledge, acquiring knowledge, creating, sharing, disseminating, applying and capturing knowledge on a societal, cross-organizational level. This process aims to structure sophisticated mechanisms for collecting, analyzing, capitalizing on and disseminating relevant knowledge. This requires coordination such that e.g. scientific knowledge is translated into knowledge understandable by different stakeholders including citizens and assuring appropriate dissemination. Advanced knowledge processes facilitate informed decision-making, foster continuous innovation, and enable rigorous alignment with international standards and frameworks, including those of the Convention on Biological Diversity. Special focus is given to:

- Development of mechanisms for sharing and disseminating good practices to targeted users, with better use of the regional CHM.
- Cooperation with other regional and subregional CHMs.
- Development of mechanisms for capturing and sharing traditional practices and Indigenous knowledge, ensuring the free, prior and informed consent of Indigenous peoples.
- Progress in the adoption of international experiences at the national level.

Challenges: The knowledge necessary for environmental protection and biodiversity conservation may exist, but the dissemination, the application, the coordination and other knowledge flows in the ecosystem may fail as they are not coordinated and not managed. Efforts are made and capital is invested in the development of data, information, and knowledge, but the impact is still limited as they don't achieve the end-users to take action.

Solution: Establish professional management for key knowledge processes. Enhance knowledge sharing and management practices, create a stakeholder map to support and better manage the knowledge flows. Focus on sharing and disseminating good practices to the right users, capturing and sharing traditional practices and indigenous knowledge with Free, Prior and Informed Consent (FPIC) of indigenous peoples, and adopting and integrating international experiences.

Key actions:

- Development of mechanisms for sharing and disseminating good practices to targeted users, with better use of the regional CHM:
 - Identify good practices to be promoted: Identify successful local initiatives for the conservation, sustainable use or restoration of biodiversity (e.g., agroecology, seeds, community management). Collaborate with families, cooperatives, NGOs, researchers
 - Identify target users: Farmers, teachers, youth/students, local agents, researchers, NGOs, decision-makers. Adapt content to specific profiles and needs.
 - Strategically exploit the regional CHM: Produce illustrated sheets of good practices. Upload testimonial videos or tutorials. Create a thematic and regional database. Develop an interactive map of local initiatives.
 - Diversify distribution channels: Use social networks (WhatsApp, local Facebook). Collaborate with rural community radios. Organize participatory workshops, knowledge fairs. Translate content into local languages
- Cooperation with other regional and subregional CHMs:
 - Establish a structured collaborative framework: Create a subregional collaborative working group or network. Hold regular virtual meetings to discuss progress, challenges and opportunities. Designate a technical focal point to coordinate the exchanges.
 - Pooling tools, resources and content: Share good practice sheets, data on biodiversity (species, protected areas, migratory species), educational materials and technical guides. Develop interoperable databases, with harmonized formats and common standards. Translate and adapt shared documents into relevant local languages
 - Develop and implement joint projects: Design regional projects funded by technical and financial partners (GEF, EU, UNDP, etc.). Organize regional capacity building and experience sharing workshops among CHMs.
- Development of equitable mechanisms for collecting, capturing and sharing traditional practices and indigenous knowledge, ensuring the free, prior and informed consent of indigenous peoples:
 - Establish an ethical and legal framework of reference: Align with international standards such as the Convention on Biological Diversity (CBD), the Nagoya Protocol and the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP). Develop an ethical commitment protocol for the collection of knowledge. Legally recognize the right of communities to control the use of their knowledge.
 - Develop participatory collection tools: Design, with knowledge holders, practical sheets documenting the uses, local names, cultural or ritual meanings of biodiversity elements. Establish secure, locally managed community databases.
 - Ensuring fair and equitable sharing of benefits: Guarantee concrete benefits: training, local projects, revenue sharing. Prohibit exploitation without authorization or remuneration. Promote the holders in all publications.
 - Strengthening the capacities of local communities: Training in documentation (digitization, participatory mapping). Create community monitoring teams (young people, women relays). Encourage development through cooperatives or community patents.
- Strengthening the integration of international experiences at the national level.

- Identification of relevant experiences: Select proven practices, technologies or governance models in countries with similar contexts. Use the resources of international databases (CHM, CBD, FAO, UNEP, IUCN, etc.)
- Draw on successful experiences in integrating local knowledge, community participation and ecological resilience.
- Involvement of national stakeholders: Organize co-analysis workshops with sectoral ministries, researchers, NGOs and community representatives. Promote national ownership through the co-construction of adoption strategies.
- Adaptation to the local context and capacity building: Translate and simplify international tools and methodologies to make them accessible. Organize trainings, South-South exchanges, webinars or institutional partnerships. Integrate innovations into national policies (biodiversity, climate, agriculture), legal frameworks, educational programmes and financing mechanisms. Implement monitoring and evaluation mechanisms to measure long-term impacts.

7. Academic Centres for Knowledge Excellence

Why this is important: Academic Centres for Knowledge Excellence play a central role in driving biodiversity knowledge generation, innovation, and capacity development. These centres serve as the interface between science, policy, and society, supporting decision-making through research, training, and dissemination of reliable biodiversity information.

As biodiversity loss accelerates, the need for credible, science-based evidence to inform policies and actions becomes more critical than ever. Academic institutions are well-positioned to lead this transformation through targeted knowledge management (KM) efforts.

Challenges:

- Reluctance to adopt new curricula focused on KM or interdisciplinary biodiversity science.
- Limited and unsustainable funding for biodiversity KM research and awareness.
- Disagreements with profit-driven academic universities and lack of coordination.
- Brain drain and lack of KM career pathways. Weak linkages between science and society.

Solution:

- Offer academic incentives, policy mandates, and promote KM as a core skill for the future biodiversity workforce.
- Engage Ministries of Finance and Environment to institutionalize funding and co-develop proposals with donors for long-term support e.g. BIOFIN.
- Identify non-profit universities, establish collaborative frameworks, provide benchmarking standards, and recognize KM Centres through national accreditation.
- Develop attractive career tracks, scholarships, and post-doctoral fellowships in KM-related fields.
- Promote transdisciplinary research, youth engagement, citizen science, and public communication training for researchers.

Strategic objectives:

- Generate and synthesize science-based evidence to inform biodiversity policies, promote innovation and emerging technologies.
- Strengthen institutional competencies and develop KM and biodiversity skills across academic, governmental, and civil society sectors.
- Function as KM hubs, offering data stewardship, technical support, services and platforms for sharing biodiversity knowledge and innovations.

- Bridge the gap between researchers, policy-makers, and the public to foster co-production and use of biodiversity knowledge.

Key actions:

- **KM Capacity Development:** Design and deliver training programs for youth and professionals (e.g., accredited courses, online modules, outreach and life-long learning). Partner with regional universities to integrate KM into environmental science curricula.
- **Biodiversity Research and Innovation:** Conduct cutting-edge research addressing policy gaps and biodiversity challenges. Apply and develop new technologies (e.g., GIS, AI, sensors) to support monitoring and forecasting.
- **Scientific Publishing and Knowledge Dissemination:** Document and publish research findings in peer-reviewed journals and local knowledge platforms. Translate complex knowledge into user-friendly formats for different audiences.
- **Citizen Science Engagement:** Train and mobilize citizen scientists to support field data collection, biodiversity monitoring, and local knowledge sharing.
- **Monitoring & Evaluation:** Develop a robust M&E framework to track implementation, document lessons learned, and ensure adaptive management.
- **Science-Policy-Society Interface:** Host policy dialogues, produce policy briefs, and support engagement forums linking researchers, policy-makers, and communities.
- **Knowledge Packaging and Curation:** Process and repackage research and field data into visually engaging, accessible formats (e.g., dashboards, infographics, policy briefs, animations).

8. Business Models and Resource Mobilization

Why is this important? Resource mobilization encompassing financial, technical and human resources is essential to support data infrastructure, capacity building, monitoring systems and stakeholder engagement. Without adequate resources, knowledge platforms may remain fragmented, underutilized or outdated, limiting their usefulness for policy, research and community action. Without financial benefits, various stakeholders, including but not limited to the business sector, may not adequately support biodiversity initiatives.

Challenge: There is no standalone funding for KM, it is mostly incorporated as a sub-component in funding programmes, which leads to marginalization of knowledge. Countries rely heavily on donor support with minimal domestic financing. The coordination among stakeholders and funding mechanisms is poor. Incentives and clear business cases for investment from the private sector are missing. Institutional capacity and skills to access and manage diverse funding sources are limited.

Enabling frameworks/policies/legal systems for investment in knowledge management systems are lacking. Poor Valuation of Biodiversity in financial terms. Low appreciation of the role of biodiversity in development and resilience.

Solutions:

- Develop Biodiversity Financing Plans, including cost assessments and gap analyses.
- Establish innovative financing mechanisms such as PES, green bonds and biodiversity offsets.
- Institute capacity building programmes focused on proposal development and donor engagement.
- Promote Public-Private Partnerships (PPPs) to support data and information sharing platforms on ecosystem services.
- Institute policy reforms to mainstream biodiversity into fiscal instruments and legal frameworks.
- Promote awareness and advocacy campaigns that link biodiversity knowledge to broader development goals.

Key actions:

- Conduct national biodiversity finance needs assessments
- Develop and implement national biodiversity resource mobilisation strategies
- Establish biodiversity knowledge endowment or revolving funds
- Train institutions in project development for GEF, GCF, etc.
- Create incentives for private sector investment
- Include biodiversity indicators in development planning
- Promote regional collaboration via AU and RECs

9. Quality information standards

Why is this important? Quality information is important for informed and effective decision making. It helps in planning and making evidence-based decisions. It promotes institutional coordination and easier accessibility of data. It enhances data interoperability and makes it easier to interpret data. Uniform data is easier to disseminate, manage and use.

Challenges: The lack of standardized biodiversity data formats and interoperability across various systems poses a significant challenge to effective conservation and decision-making. Data are fragmented, technical capacities are inadequate, funding gaps lead to inadequate data maintenance and restrictions in data sharing. A unified methodology for biodiversity data management in Africa is absent. Partnerships between the public and private sector to coordinate data standards are lacking. Data quality assurance verification standards are missing or inadequate. Standards for both traditional knowledge and scientific knowledge are not aligned or integrated. Clear national policies and regulations for data sharing are missing.

Solution:

- Designation of regional institutions for biodiversity data oversight
- Adoption of regionally recognized biodiversity data standards
- Establishment of a digital data sharing platform
- Investing in capacity building in biodiversity data management
- Ensure resource mobilization from all sources including the private sector

Strategic objectives:

- Institutional frameworks are created to establish national and regional biodiversity information standards in five years
- A regional monitoring system and data sharing platform is established
- Capacities at all levels are developed through training and skills development in biodiversity data generation, management, and use.
- Biodiversity knowledge partnerships are established and operational

Key actions:

- Implementing a regional assessment on data management across different countries
- Conducting a thorough stakeholder analysis to identify and onboarding key stakeholders
- Disseminating the regional biodiversity standards into national processes
- Conducting regular capacity-building programs on biodiversity knowledge management and knowledge sharing forums among the countries
- Facilitating dialogues with indigenous peoples and local communities to document and integrate traditional knowledge with Free Prior Informed Consent (FPIC)
- Development of a legal and institutional framework for the region on DSI data

10. Knowledge Infrastructures and Centres

Why is this important? Knowledge Centres are needed to organize all KM-related activities on local, national, subregional, and regional levels. This includes knowledge creation, dissemination/sharing, access, storing/ record keeping. Knowledge Centres combine the physical presence with the social network for the mobilisation of knowledge in all directions: From local to regional and vice-versa. As much as subregional TSC Support Centres facilitate the subregional knowledge management initiatives, local centres are needed to support local collaboration and knowledge sharing. Knowledge Centres promote collaboration and partnership through events/ workshops as well as proposal development/ resource mobilization. They give a sense of authenticity through collaboration and signing data contributor agreements. When knowledge centres from local to subregional are coordinated and aligned, the knowledge flows will be more effective and efficient.

Challenge: Funding for local biodiversity centres may be limited, but good examples may demonstrate the multiple benefits, even for resource mobilisation. Political good will/interest may be lacking, due to limited priority to biodiversity conservation by citizens or governments. Human resources and skills for operating a knowledge centre are lacking. Ownership claim of the knowledge centre (local government or NGOs) may be an issue. There are also challenges with accessibility of the internet (connectivity issues). Language and cultural barriers may be a hindrance, but centres are the key solution to overcome them. Knowledge is often fragmented through limited willingness to share knowledge.

Solution:

- Formulation of policy briefs to inform governments policies, strategies and plans
- Internal resource mobilization initiatives through commercialization of knowledge products and intellectual properties, advisory services and partnerships
- Political and institutional lobbying/advocacy by strong CSOs
- Outsourcing the expertise; training module creation for commercialization

Key actions:

- Develop a strategy and organizational concept/business plan for setting up local biodiversity knowledge centres including financial approaches.
- Set up the organization structure with skilled human resources
- Develop systems and adopt technological innovations (KM system)
- Develop Knowledge Management products
- Identify KM stakeholders
- Develop a stakeholders engagement plan (Targeting different groups)
- Disseminate KM products

Annex II

List of participants

	Countries and entities	Name
Parties		
1	Ethiopia (host country)	Karta Kaske Kalsa Director General Ethiopian Biodiversity Institute Addis Ababa
2	Angola	Aristofanes Romão da Cunha Pontes National Focal Point for the Convention on Biological Diversity Ministry of Environment Luanda
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6	Cameroon	Jean François Moussa Head Publications and Reprography Ministry of Environment, Protection of Nature and Sustainable Development Yaoundé
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21	Madagascar	Randriamahaleo Sahoby Ivy Researcher in conservation Ministry of Environment and Sustainable Development Antananarivo
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24	Mauritius	Suraj Nundlall Scientific Officer National Parks and Conservation Service Port Louis
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		Ministry of Environment, Forestry and Tourism Windhoek
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37	Tunisia	Mohamed Ali Ben Temessek National Focal Point for the Convention on Biological Diversity Ministry of Environment Tunis
38	Uganda	Tony Achidria Senior Environment Awareness Officer National Environment Management Authority Entebbe
39	Zambia	Stephen Phiri Natural Resources Management Officer Ministry of Lands and Natural Resources Lusaka
40	Zimbabwe	Courage Mbiriyawanda Principal Wildlife and Forestry Officer Secretary of Environment, Climate and Wildlife Harare
Indigenous peoples and local communities		

41	International Indigenous Forum on Biodiversity	Mohamed Saliwou Member International Indigenous Forum on Biodiversity Douala, Cameroon
42	International Indigenous Forum on Biodiversity	Dickson Naiyanoi Kamuye Member International Indigenous Forum on Biodiversity Nairobi, Kenya
Organizations and partners		
43	/Sahara and Sahel Observatory (technical and scientific cooperation support centre)	Abir Ben Romdhane Head of Biodiversity Division Senior Environmental Expert Land and Biodiversity Department Sahara and Sahel Observatory Tunis
44	South African National Biodiversity Institute (technical and scientific cooperation support centre)	Mahlodi Tau Chief Director, Biodiversity Information and Policy Advice South African National Biodiversity Institute Pretoria
45	Regional Centre for Mapping of Resources for Development (technical and scientific cooperation support centre)	Kelly Otieno Gregory Waga Knowledge Management Expert Regional Centre for Mapping of Resources for Development Nairobi
46	Ecological Monitoring Centre (Senegal) (technical and scientific cooperation support centre)	Adja Aïssatou Sy ¹ Head of the Division Formation Communication Ecological Monitoring Centre (Senegal)
47	Knowledge for Development Partnership	Andreas Brandner General Manager Knowledge for Development Partnership Vienna
48	Makerere University Business School	Annet Kabugo Nabatanzi Muyimba Director Knowledge for Development Centre Faculty of Management and Public Policy Makerere University Business School Kampala
49	United Nations Development Programme	Saran Selenge Coordinator, Panorama: solutions for a healthy planet initiative Nature Hub Bureau for Policy and Programme Support
50	German Agency for International Cooperation	Helga Mahler Programme Director Panorama: solutions for a healthy planet initiative
51	United Nations Environment Programme World Conservation Monitoring Centre	Abisha Mapendembe Senior Programme Officer
52	Ethiopian Biodiversity Institute	Abiyot Berhanu Deputy Director General
53	Horn of Africa Regional Environment Centre	Mekuria Argaw Executive Director

54	United Nations Development Programme	Charles Nyandiga Regional Team Leader Africa Bureau for Programme and Policy Support
55	United Nations Development Programme	Raquel Leandro Youth Empowerment Specialist
56	International Union for Conservation of Nature	Issahaku Npoagne Tawanbu Programme Management Consultant
57	United Nations Development Programme/Ethiopia	Onesimus Muhwezi Regional Technical Adviser for Ecosystems and Biodiversity United Nations Development Programme Regional Service Centre for Africa
58	United Nations Development Programme/Ethiopia	Charles Tamou Regional Technical Adviser for Ecosystems and Biodiversity Environment Team, Bureau for Policy and Programme Support United Nations Development Programme Regional Service Centre for Africa
59	United Nations Development Programme/Ethiopia	Matthias Naab Director United Nations Development Programme Regional Service Centre for Africa
60	United Nations Development Programme/Ethiopia	Hassane Hamed Sy Savane Information Systems Specialist United Nations Development Programme Regional Service Centre for Africa
61	United Nations Development Programme/Ethiopia	Hiwot Gebremeskel Regional Programme Associate United Nations Development Programme Regional Service Centre for Africa
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63	United Nations Development Programme/Ethiopia	Haileeyesus Mulugeta Information and Communications Technology Associate United Nations Development Programme Regional Service Centre for Africa
64	United Nations Environment Programme/Ethiopia	Muluwork Maru National Program Officer United Nations Environment Programme Liaison Office to the African Union Commission, the Economic Commission for Africa and Ethiopia in Addis Ababa
65	United Nations Development Programme	Katherine Madden ² Coordinator National Biodiversity Strategies and Action Plans Accelerator Partnership
66	United Nations Environment Programme	Antony Kamau ³ Programme Management Officer Global Environment Facility Enabling Activities United Nations Environment Programme
67	Economic Commission for Africa	Zoé Quesnay Blue Economy and Great Blue Wall Officer
68	Food and Agriculture Organization of the United Nations	Richard Niyomugabo Project Coordinator, multilateral environmental agreements
69	Ethiopian Youth Biodiversity Network	Bruktawit Gezahegn Kibret Wildlife ecologist and conservationist
70	Africa Climate and Environment Foundation	Neville Agesa Chief Executive Officer
71	United Nations Development Programme/Biodiversity Finance Initiative	Bruno Mweemba ⁴ Senior Technical Adviser on Environmental Finance for the African Region Biodiversity Finance Initiative
72	United Nations Development	Ronja Fischer ⁵ Knowledge Management Expert Biodiversity Finance Initiative

	Programme/Biodiversity Finance Initiative	
Secretariat of the Convention on Biological Diversity		
73	Secretariat	Astrid Schomaker Executive Secretary
74	Secretariat	Erie Tamale Senior Programme Management Officer
75	Secretariat	Frederic Vogel Knowledge Management Officer

¹ Participated online.

² Participated online.

³ Participated online.

⁴ Participated online.

⁵ Participated online.

Annex III

Regional diagnostic summary (item 5)

Combined synthesis from presentations (PPTs) and transcript reflections

Region	Vision / Ambition	Existing Strengths & Good Practices	Main Challenges Identified	Priority Actions / Recommendations
SADC (SANBI)	• A coordinated KM system supporting evidence-based decision-making and implementation of NBSAPs.	• National biodiversity databases & spatial data systems. • Ongoing collaborations with universities and research bodies. • Community-led initiatives including youth–elder TK transfer, awareness programmes, and restoration actions.	• Fragmented data systems and weak interoperability. • Limited financial and human resources. • Loss of institutional memory. • Political instability affecting continuity.	• Strengthen institutional KM governance. • Build staff capacity on digital tools, GIS & KM. • Enhance data standardization & interoperability. • Mobilize resources for KM infrastructure.
Central Africa (COMIFAC)	• A harmonized subregional biodiversity KM system enabling data validation and sharing across the COMIFAC region.	• Existing environmental information systems. • Geoportals and species/ecosystem mapping initiatives. • Regional policy frameworks under COMIFAC.	• Limited digitization of resources. • Weak incorporation of traditional knowledge. • Overlapping mandates at national level. • Inconsistent data quality.	• Develop/update KM strategies. • Strengthen CHMs and improve interoperability. • Build national capacity for digitization & TK documentation. • Enhance collaboration with COMIFAC for regional harmonization.
North & Sahel Region (OSS)	• A robust, integrated KM ecosystem anchored in geospatial and monitoring frameworks, supporting coherent reporting and GBF implementation.	• Strong geospatial capacities (LDN baselines, RS/GIS). • Regional environmental observatories. • Harmonized indicator work.	• Fragmented datasets. • Limited cross-sector integration (agriculture–biodiversity–land). • Funding gaps. • Divergent national reporting formats.	• Promote integrated KM systems linking sectors. • Establish regional data standards. • Support countries on CHM strengthening. • Expand cross-country training on geospatial tools.
East Africa (RCMRD)	• A coordinated regional KM system leveraging geospatial tools to support biodiversity, land, and climate decision-making.	• Strong geospatial datasets and capacity-building footprint. • Satellite-based monitoring systems (e.g., SERVIR).	• Weak national coordination structures. • Low awareness of available datasets. • Gaps in data verification & QA/QC.	• Improve data governance and quality assurance. • Strengthen cross-sector coordination platforms. • Promote digital transformation in KM.

Region	Vision / Ambition	Existing Strengths & Good Practices	Main Challenges Identified	Priority Actions / Recommendations
West Africa (CSE)	• An integrated KM system supporting policy implementation, grounded in harmonized indicators and regional observatory work.	• Institutional collaboration across mapping agencies. • Active work on indicator alignment across ECOWAS countries. • Engagement in biodiversity observatory networks. • Initiated KM activities with validation meetings scheduled.	• Insufficient funding and staff retention. • Limited interoperability. • Weak KM institutional frameworks. • Gaps in integrating traditional knowledge. • Insufficient financial resources.	• Enhance peer learning through RCMRD's regional hubs. • Develop KM policy frameworks. • Improve interoperability & data-sharing protocols. • Strengthen CHMs & regional alignment platforms. • Mobilize resources for KM institutionalization.