



**REPORT OF THE AFRICAN MINISTERIAL SUMMIT ON BIODIVERSITY
SHARM EL-SHEIKH, EGYPT, 13 NOVEMBER 2018**

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ACCOUNT OF PROCEEDINGS

Introduction

1. An African Ministerial Summit on Biodiversity was held on 13 November 2018, ahead of the fourteenth meeting of the Conference of the Parties to the Convention on Biological Diversity and the meetings of the Parties to the Cartagena Protocol on Biosafety and the Nagoya Protocol on Access and Benefit-sharing, collectively known as the 2018 United Nations Biodiversity Conference, in Sharm El-Sheikh, Egypt. The theme of the Summit was “Land and ecosystem degradation and restoration: Priorities for increased investments in biodiversity and resilience in Africa”.

2. The Summit was hosted by the Government of Egypt in collaboration with the African Union Commission, with support from the secretariat of the Convention on Biological Diversity (CBD), the secretariat of the African Ministerial Conference on the Environment (AMCEN) and the United Nations Environment Programme (UN Environment). The goal of the summit was to bring together African partners to discuss and provide policy and strategic guidance on Africa’s biodiversity priorities and future work programmes, identify opportunities for African countries to adopt a coordinated approach to addressing the challenges of biodiversity loss, climate change and land degradation and promote synergetic implementation of the three Rio conventions, namely CBD, the United Nations Convention to Combat Desertification in those Countries Experiencing Serious Drought and/or Desertification, particularly in Africa (UNCCD) and the United Nations Framework Convention on Climate Change (UNFCCC).

Session 1. Opening

3. The first session of the Summit was moderated by Mr. Hamdallah Zedan, Chairman of the Preparatory Committee for the fourteenth meeting of the Conference of the Parties to the Convention on Biological Diversity.

4. The Summit was opened by Ms. Yasmine Fouad, Minister of Environment of Egypt, who welcomed the representatives to Egypt and to the summit. As the first in a series of events in the 2018 United Nations Biodiversity Conference, the Summit would set the scene for the conference and for adopting a coordinated approach to biodiversity loss, climate change and land degradation. Africa was proud to host the fourteenth meeting of the Conference of the Parties to the Convention on Biological Diversity. Africa was rich in biodiversity, ecosystem services and traditional knowledge, and countries had already designated protected areas covering 13.4 per cent of the continent’s landmass and 2.6 per cent of the seas to conserve them. Ecosystem degradation and biodiversity loss, driven by rapid growth in population growth, urbanization, infrastructure and industrial development, pollution, waste and demand for services such as water and food, were of great concern, as they would hamper Africa’s economic and social development. In 1992, to catalyse sustainable development, countries had agreed to the conventions on biological diversity, climate change and land degradation—the “Rio conventions”. Prepared as separate instruments, the three conventions had since taken separate tracks, and it was time to look at how to reconnect them. The fourteenth meeting of the Conference of the Parties presented an opportunity to design a road map for the post-2020 global biodiversity framework and mechanisms for effective implementation. Africa should take the lead for world. At the summit, representatives would hear presentations on various aspects of biodiversity and land degradation in Africa and would consider a ministerial declaration on biodiversity, including the pan-African action agenda on ecosystem restoration and Africa’s biodiversity priorities for inclusion in the post-2020 global biodiversity framework. Ideally, the Parties to the Convention would translate the outcome of the Summit into the action needed to accelerate the implementation of the Aichi Targets and pave the way for the post-2020 global biodiversity framework to end the cycle of destruction of the natural world.

5. Statements were then made by Mr. Harsen Nyambe, Head, Division of Environment, Climate Change, Water and Land Management, African Union Commission; Ms. Cristiana Paşca Palmer, Executive Secretary of CBD; Ms. Patricia Espinosa, Executive Secretary of UNFCCC; Ms. Monique Barbut, Executive Secretary of UNCCD; Ms. Naoko Ishii, Chief Executive Officer of the Global Environment Facility (GEF); and Mr. Frank Turyatunga, Deputy Director, Africa Office of UN Environment.

6. Mr. Nyambe delivered a statement on behalf of Ms. Sacko Josefa Leonel Correa, African Union Commissioner for Rural Economy and Agriculture. He said that biodiversity in Africa was of fundamental importance to food and nutrition security, trade and economies; yet, Africa was steadily losing biodiversity and the related traditional knowledge. African genetic resources were being used in other parts of the world

without recognition or due benefit-sharing. Biodiversity loss in Africa was also driven by poverty, greed and corruption, urbanization and skewed distribution of wealth. The role of biodiversity in economies was undervalued, and few countries had undertaken natural resources accounting. African countries needed to share best practices to stop illegal logging, improve land-use planning, develop Africa's biodiversity economy and ensure broad-based participation, including of women and young people. The African Union Commission remained committed to supporting its member States to develop policies and frameworks for managing the continent's biodiversity sustainably to realize Agenda 2063: The Africa We Want. An advocacy strategy was being prepared to phase out the use of plastics, which had negative impacts on both biodiversity and humans. The Commission was also developing a common African position on the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) in preparation for the eighteenth regular meeting of the Conference of the Parties to CITES, in May 2019, and coordination of the African Group of Negotiators on Biodiversity, including the CBD Protocols, remained a priority.

7. Ms. Paşca Palmer, speaking on behalf of both CBD and other members of the Liaison Group of Biodiversity-related Conventions, said that the presence of the executive secretaries of UNFCCC and UNCCD was a sign of the connections between climate, biodiversity and land management. Actions in those three critical areas must go hand-in-hand. The fourteenth meeting of the Conference of the Parties to the CBD provided a forum for designing new, bold commitments for 2030 and beyond. The meeting was beginning with a meeting of African ministers of the environment because the region had an important role to play as a leader in conservation and sustainable development. While difficult challenges lay ahead, the benefits of land restoration and biodiversity conservation were significant. The ecosystem restoration target in the Strategic Plan for Biodiversity 2011–2020 (Aichi Biodiversity Target 15) called for further commitments and initiatives. Africa had shown that it could lead in conservation and restoration by mobilizing political commitment. Under the African Forest Landscape Restoration Initiative, for instance, States pledged to restore over 110 million hectares, and many non-State actors also made pledges. She reaffirmed the commitment of the CBD secretariat to work with Africa and the rest of the world. She was confident that adoption of the Summit's ministerial declaration on biodiversity and the pan-African action agenda on ecosystem restoration for increased resilience would spur the implementation of the short-term action plan adopted by the Conference of the Parties at its thirteenth meeting. She acknowledged Africa's support for the proposed United Nations Decade of Ecosystem Restoration 2021–2030. During the coming two weeks, decisions would be made that may affect not only the next two decades but the next two millenniums and beyond. She emphasized that she was counting on the continued leadership and partnership of African ministers of environment.

8. Ms. Espinosa opened her remarks by saying that the conventions on biological diversity, climate change and land degradation had a collective goal to take action to protect the air, land and water that human beings depended on for their survival. Africa, more than most other places on Earth, suffers from the devastating impacts of climate change and biodiversity loss and clearly recognized the need for urgent and rapid action. Noting that 45 African countries had identified ecosystems and biodiversity as key vulnerabilities in their Paris Agreement contributions, she said that Africa was well placed to take a leadership role, particularly in the areas of nature-based solutions to the crises brought about by biodiversity loss and unchecked climate change. Measures such as the African Forest Landscape Restoration Initiative and the Central African Forest Initiative promoted nature-based solutions that would reduce deforestation and land degradation, restore degraded lands and enhance soil management, thus providing important buffers against extreme weather events. The implementation of national adaptation plans under the UNFCCC also offered countries a significant opportunity to direct their efforts on biodiversity and land degradation. From a climate-change perspective, important work remained to be done on the Paris Agreement at the December 2018 United Nations Climate Change Conference in Poland, where Parties were to finalize a work programme that would provide guidelines for the implementation of the Agreement. It was also crucial that countries accelerated actions towards achieving their global climate ambitions as reflected in their nationally determined contributions before 2020 and that they also fulfilled their financial pledges, as nations. Noting that it was not yet too late to address climate change and biodiversity issues the world faced, Ms. Espinosa asked the representatives to urge their national leaders to finalize the work to be done in Poland.

9. Ms. Barbut characterized environmental degradation as an existential crisis: owing to land degradation, 1.3 billion people worldwide were affected. In Africa, 65 per cent of cropland was degraded, resulting in an annual loss of 3 per cent of gross domestic product and putting 50 million livestock herders

at risk. Millions of rural people could be forced to abandon their ancestral lands and migrate to urban areas or fight for what natural resources were left. It was therefore urgent to stop land degradation and restore degraded natural ecosystems. Resistance from business and policy-makers could be overcome, as demonstrated by the participation of 51 African countries in the Land Degradation Neutrality (LDN) Target-setting Programme under UNCCD designed to achieve Sustainable Development Goal, target 15.3. Targets set under the programme were complementary to the Aichi Biodiversity Target of restoring at least 15 per cent of degraded ecosystems by 2020. To deliver the goals of the programme and of initiatives such as the Bonn Challenge and AFR100, restoration should become the “new norm”, with concrete results. The focus should be on large areas with high potential to recover both biological diversity and economic productivity, and the economic returns should be distributed in a socially equitable, just way. Under the UNCCD initiative for sustainability, stability and security in Africa, for instance, 12 countries would rehabilitate 10 million hectares of degraded land by 2025, creating 2 million jobs for vulnerable people. The Great Green Wall for the Sahara and the Sahel Initiative, designed to restore land from Dakar to Djibouti, once completed, could benefit more than 232 million people. Africa’s leadership with such initiatives was changing the narrative on what was possible in terms of restoration. A first closing of the Land Degradation Neutrality Fund showed that private capital saw the potential of such projects. In line with the Egyptian initiative to promote a coherent approach for addressing biodiversity loss, climate change, and land and ecosystems degradation, a joint project preparation facility was being developed to capitalize on synergies among the three Rio conventions and contribute to the pan-African action agenda on ecosystem restoration for increased resilience.

10. Ms. Ishii said that with humans were moving towards a “Hothouse Earth” of much higher temperatures, sea level rise and diminished ecosystem services, the time had come to change human behaviour and transform economic systems. The challenge of transformation was most acute in Africa, a fast-growing continent but still facing basic development needs. Africa’s future hinged on how it used its natural assets and rich ecosystems. The recent regional assessment report on biodiversity and ecosystem services in Africa by the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) provided scenarios and options for the way forward. The major driver of biodiversity loss in Africa was the conversion of natural habitats for agriculture and human settlements. It was therefore encouraging that the pan-African action agenda on ecosystem restoration for increased resilience proposed to integrate land and ecosystem restoration into sectors such as agriculture, mining and manufacturing. GEF had reoriented its strategy for the next four years to catalyse transformational change in economic systems, stimulated by the emergence of coalitions such as AFR100 and the Global Partnership on Forest Landscape Restoration, which were articulating ways to bring about transformational change. GEF programmes were expected to produce multiple benefits across the three Rio conventions, which were increasingly working together to create more integrated programmes. The time was right for a new deal for nature wherein governments, businesses, civil society organizations, academia and citizens joined forces to seek solutions and act on them.

11. Speaking on behalf of Mr. Eric Solheim, Executive Director of UNEP, Mr. Turyatunga said that the Summit provided a special opportunity to deliberate on the continent’s current and future sustainable development. The summit’s theme underscored the need for stronger linkages among the Rio conventions. Africa’s rich biological diversity, the backbone for the continent’s development, was under threat, with land and ecosystem degradation driving biodiversity loss. Urgent measures were needed to restore degraded lands and ecosystems, halt biodiversity loss and enhance resilience. UNEP supported such measures through its programmatic work, the deliberations of the United Nations Environment Assembly and its support for IPBES, the Intergovernmental Panel on Climate Change (IPCC) and AMCEN. It also supported African institutions through the African Union Commission and its regional economic communities. Inter- and intra-regional cooperation and partnerships were also needed- to bring together technical and financial means that would enhance the well-being of African peoples, including indigenous communities, women and youth. He expressed hope that the Summit would provide a programming framework for Africa to restore degraded lands and ecosystems, halt biodiversity loss and enhance resilience in the coming years and invited United Nations agencies, development banks, the private sector and civil society to support its implementation.

Session 2. Current status and trends of land degradation at the global level and of biodiversity and ecosystem services in Africa

12. The session was moderated by Ms. Estherine Lisinge-Fotabong, Director, Programme Implementation and Coordination, New Partnership for Africa's Development (NEPAD) Planning and Coordinating Agency.

13. Presentations were made by Mr. Robert Scholes, Co-Chair of the IPBES Global Land Degradation Assessment; Mr. Luthando Dziba, Co-Chair of the IPBES Regional Assessment on Biodiversity and Ecosystem Services for Africa; and Mr. Jacques-Denis Tsanga, Minister of Water and Forests for Gabon and current President of AMCEN.

14. Mr. Scholes presented the IPBES *Assessment Report on Land Degradation and Restoration*. Evidence on land degradation had been reported from 130 Member States. Land degradation due to human activities was a pervasive and systemic issue that affected the lives of two of every five people. It reduced global gross product by 10 per cent and affected 75 per cent of the Earth's land surface. All ecosystems throughout the world were affected, from forests, to rangelands, cropland, wetlands and urban ecosystems. Land degradation was closely linked to the issues addressed by the Sustainable Development Goals, with more than 80 per cent linkage to life on land, clean water, responsible consumption, mitigation of climate change, hunger and poverty, sustainable cities and clean energy. He described the bidirectional linkages with climate change, in the sense that reversing land degradation could contribute by one third to keeping global warming to less than 2°C. Land degradation, poverty, well-being, conflict and migration were also interlinked. The main cause of land degradation was overconsumption of goods extracted from nature resulting from rising affluence and population growth. Land degradation could be avoided by improving monitoring systems, coordinating policy among different ministries, eliminating perverse incentives for sustainable land management and integrating all actions. The benefits of investment in restoration, outweighed the costs of degradation by an average margin of 10 to 1, including for productivity, mitigating climate change and social benefits.

15. Presenting the IPBES *Regional Assessment Report on Biodiversity and Ecosystem Services for Africa*, Mr. Dziba said that Africa had rich biodiversity and ecosystems and unique natural assets for sustainable development. The assessment had shown, however, that Africa's riches were underestimated, as few studies had been conducted on the value of those natural assets in creating jobs and reducing inequality. The value of biodiversity and ecosystem services should thus be quantified and integrated into national accounting systems. He noted that Africa's biodiversity was under pressure due to land use changes leading to habitat degradation and loss, increasing poaching and illegal wildlife trade, invasive alien species, pollution, climate change and overexploitation exacerbated by underlying factors such as population growth. The current population of 1.25 billion was predicted to double by 2050, placing even more severe pressure on resources. By 2100, climate change could result in the loss of more than half of African bird and animal species and a 20 per cent decrease in the productivity of lakes and marine ecosystems due to. He emphasized that the loss of biodiversity would jeopardize achievement of the Sustainable Development Goals and other targets. A balance must be found between local and regional sustainability and development objectives. The options included establishment of protected areas, which currently comprised 14 per cent of the African land mass and 2.6 per cent of the seas, control of invasive alien species and restoration of ecosystems. A polycentric governance approach should be considered, in which the private and public sectors and local communities worked together. Other key considerations were building the capacity of African researchers, policymakers and institutions to analyse scenarios for long-term planning, with appropriate quantitative data. Governments should conduct periodic national assessments as a basis for decisions, as had been done in Cameroon and Ethiopia.

16. Mr. Tsanga presented the outcomes of the seventh special session of AMCEN, held from 17 to 19 September 2018 in Nairobi, Kenya. At the end of the session, ministers and representatives of Member States adopted the Nairobi declaration on "Turning environmental policies into action through innovative solutions for environmental challenges in Africa". They: (a) reaffirmed Africa's full support for Egypt in convening and hosting the African Ministerial Summit on Biodiversity; (b) agreed on the development of a pan-African action agenda on ecosystem restoration for increased resilience with partners; (c) supported the proposal to call on the United Nations General Assembly to designate 2021–2030 as "the United Nations decade of ecosystem restoration"; and (d) agreed to ensure common understanding and common positions on the post-2020 biodiversity framework. In their decision, the ministers recognized Africa's

extraordinarily rich biodiversity and ecosystem services and its wealth of indigenous and local knowledge, which comprised a strategic asset for sustainable development. They reaffirmed the request to the African Union Commission (AMCEN Decision 14/8) to coordinate the African Group of Negotiators in reaching a common understanding and positions on priorities and in “speaking with one voice” during United Nations biodiversity conferences and encouraged Member States to take opportunities to realize the full value of biodiversity and explore ways of using it sustainably. AMCEN also supported the proposal of Egypt to launch a global initiative to promote the use of nature-based approaches to address biodiversity loss, climate change and land and ecosystem degradation coherently. Mr. Tsanga then outlined the draft documents that had been endorsed by AMCEN for consideration by the African Ministerial Summit on Biodiversity: the African ministerial declaration on biodiversity, the list of African biodiversity priorities and a pan-African action agenda on ecosystem restoration for increased resilience.

Session 3. Africa’s biodiversity priorities

17. Mr. Hamdallah Zedan, Ministry of Environment, Egypt, presented Africa’s biodiversity priorities (CBD/COP/14/AFR/HLS/3) for consideration by the Summit. The priorities had been prepared by a consultative meeting of African CBD focal points held on 16 September 2018 and the expert segment of the seventh special session of AMCEN. The priorities were based on their importance for Africa and also included issues that were not addressed in the current Strategic Plan for Biodiversity 2011-2020 but needed to be addressed in the next strategy.

18. The Summit endorsed Africa’s biodiversity priorities by acclamation as contained in annex III. They would form part of the ministerial declaration of the Summit.

Session 4. Panel discussion: Relevant experiences, lessons learned and the way forward to combat land degradation and enhance ecosystem restoration in Africa

19. The fourth session of the summit was moderated by Mr. Turyatunga.

20. Ms. Lisinge-Fotabong introduced the pan-African action agenda on ecosystem restoration (CBD/COP/14/AFR/HLS/4). The pan-African action agenda would provide a framework for harmonized, coordinated action to conserve, manage and restore ecosystems across Africa, building on existing activities, such as the NEPAD Action Plan for the Environment, the TerrAfrica partnership, the Great Green Wall and the Congo Basin Forest Initiative. It aimed to promote continent-wide awareness and political support for restoration efforts; help accelerate and upscale ecosystem restoration commitments and targets; reduce or mitigate direct drivers of land and ecosystem degradation; foster integration of land and ecosystem restoration in relevant sectoral policies and programmes; implement project and programmes to achieve the restoration commitments and targets; facilitate resource mobilization and private sector investments for land and ecosystem restoration; and monitor the ecosystem restoration efforts, results and benefits.

21. Following Ms. Lisinge-Fotabong’s presentation, Mr. Turyatunga moderated a panel discussion on relevant experiences, achievements, good practices and lessons learned in land and ecosystem restoration in the region. Presentations were made by the following ministers representing each of the five subregions of Africa: Ms. Nezha El Ouafi, Secretary of State, Ministry of Energy, Mines and Sustainable Development of Morocco (North Africa); Mr. Moussa Mohamed Ahmed, Minister of Housing, Planning, Urban Affairs and Environment of Djibouti (Eastern Africa); Mr. Jacques-Denis Tsanga (Central Africa); Mr. Derek. A. Hanekom, Minister of Tourism and Acting Minister of Environmental Affairs of South Africa (Southern Africa); and Mr. Suleiman Hassan-Zarma, Minister of State for Power, Works and Housing for Nigeria (West Africa).

22. Ms. El Ouafi outlined the situation in Northern Africa, where 31 per cent of the desert and coastal land was degraded, and called for action by governments and funding institutions to develop, with civil society, a development programme up to 2030 based on commitments to mitigate climate change and other multilateral agreements. Balance was needed to ensure that economic growth and resource use did not result in soil degradation and decreased agricultural productivity. There were several initiatives in the sub-region for sustainable management of land and soil, the most important being the UNCCD “Sustainability, Stability and Security” (3S) Initiative launched in 2016 to reduce migration due to land degradation, combating desertification, restoring forests, reducing pressure on pasturelands, improving ecological systems and ensuring sustainable agriculture. Nevertheless, a global approach that involved both the private sector and civil society was needed. States alone could not meet the challenges. A database would facilitate

the sharing of lessons learned and best practices, with an early warning system and gene bank to ensure agricultural biodiversity.

23. Asked whether she knew of any initiatives for ecosystem restoration that could be replicated elsewhere, Ms. El Ouafi said that the collective engagement required under the 3S Initiative had proved very effective, particularly at the political level. Other notable initiatives were the Africa Adaptation Initiative and the three subregional commissions established by African Heads of State and Government of: the Sahel Commission, chaired by the Niger, the Island States Commission, chaired by Seychelles and the Congo Basin Commission, chaired by the Congo. All three initiatives were good examples of responses that shifted the paradigm from problem to opportunity.

24. Speaking on behalf of Eastern Africa, Mr. Ahmed described initiatives in Eastern Africa. Africa's richness in biodiversity was not matched by its capacity to manage it. In a subregion of 3.2 billion people, 90 per cent of whom depended on agriculture for their sustenance, more than 75 per cent of the land was degraded, and the rural majority continued to depend on that degraded land for their survival. Diminished productivity led to food insecurity and an ecological imbalance. Arid and semi-arid regions were particularly vulnerable. Various bodies and programmes had been set up to counter land degradation, in which local communities played an important role.

25. Mr. Tsanga spoke about the situation in Central Africa, which had the largest forest resource in the world after that of the Amazon region. National and regional policies and initiatives were needed to manage forest resources. The Central African Forest Commission (COMIFAC) sought to establish a common forest policy that allowed States in the subregion to collaborate on projects and on implementing the "forest code". The Central African Forest Initiative, a regional collaborative partnership, supported States to manage forests for better functionality of land and to balance forest management initiatives with development. In countries without forests, such as Chad, the "Great Green Wall" initiative aimed to reduce land degradation and restore the ecosystem of Lake Chad. All such initiatives were motivated by a desire for better spatial management and monitoring of the exploitation of forests to reduce land degradation. Working groups had been set up on forestry, desertification and climate change. Subsequently, responding to a question about the role of intergovernmental organizations in the management of resources, Mr. Tsanga said that several organizations were already involved in protecting wildlife and in ensuring sustainable exploitation of resources.

26. Mr. Hanekom, speaking on behalf of countries of the Southern African Development Community (SADC), said that, although land degradation was widespread, consciousness was growing in the subregion. Deforestation reduced the capacity of land to support the rural population, with a loss of US\$ 20 billion annually, undermining efforts to reduce poverty. Massive investment in proactive, responsible measures was required to protect vulnerable people. The first regional action programme had been launched in 1997. The most recent 10-year programme (2015–2025) comprised 21 actions to meet the five operational objectives of the United Nations Framework Convention on Climate Change. The gaps and obstacles included insufficient funding, lack of institutional capacity, and limited research and data. The targets for 2030 were rehabilitation of 5 million hectares of degraded land. Traditional knowledge was invaluable in all aspects and would be shared. The programme would address several of the Sustainable Development Goals and climate change mitigation and adaptation, reduce poverty and food insecurity and bring land into productivity.

27. Mr. Hanekom also responded to a comment from the representative of Botswana that sustainable land management was critical and should be based on land use plans to ensure livelihoods and reduce poverty. Experience-sharing, capacity-building and technology transfer were needed, including traditional knowledge. As most of southern Africa lacked sufficient water, water management was important, whereas most alien species consumed large amounts of water. Thus, removing alien species saved more water than building dams. Higher temperatures due to climate change resulted in more fires. Although plantations and alien species burned, indigenous species did not. Although continual restoration of forests cost money, it had long-term economic returns.

28. In his presentation, Mr. Hassan-Zarma described the situation in Western Africa. The subregion contained a wide variety of ecosystems but pollution, unplanned urbanization and increased demand for services had resulted in unacceptable land degradation, erosion, pollution and instability. A regional policy had been developed to combat illegal wildlife trafficking, with local programmes for adaptation to national

programmes. Many countries allocated part of their gross domestic product to land restoration, but other funds should be mobilized. One barrier was lack of information on biodiversity and ecosystem services. Nigeria had set up a fund for the protection of its forests. He urged other countries to do the same and to sensitize their populations. Land restoration was a national priority, as it would increase security and reduce unemployment.

29. In answer to a question from the representative of Burkina Faso about the national forestry fund in Nigeria, Mr. Hassan-Zarma said that it comprised revenue from the Ministry of the Environment, of which a percentage was transferred to a trust fund for restoration of biodiversity. The representative of Senegal said that security was an essential element in central and western Africa, as wars threatened biodiversity; furthermore, diplomacy was required to ensure that resources were shared, to stop trafficking of timber across borders. Mr. Hassan-Zarma replied that regional organizations lacked resources to protect species.

30. A statement was made by Ms. Patricia Zurita, Chief Executive Officer of BirdLife International.

Session 5. Summit outcomes and follow-up

31. The fifth session of the Summit, moderated by Mr. Nyambe, provided an opportunity for countries to outline their current ecosystem restoration initiatives, commitments and targets and present any new plans or commitments they were willing to make towards scaling up ecosystem restoration in their countries and subregions.

32. Representatives of Algeria, Burkina Faso, Cameroon, Chad, Ethiopia, Gambia, Guinea, Guinea-Bissau, Kenya, Madagascar, Niger, Nigeria, Senegal, Seychelles, South Africa, Sudan and Uganda took the floor to describe the situation in their countries. Several requested international technical and financial aid.

33. Many of those who spoke described specific initiatives currently under way to address land and ecosystem degradation, and some made commitments for the coming years.

34. The representative of Algeria said that her country was committed to developing and protecting ecosystems by planting 31,900 hectares of forest plants and 22,800 hectares of fruit trees; developing pastoral lands and conserving and improving natural resources by establishing a pastoral farm of 14,900 hectares and preventing grazing on 72,000 hectares of land; reforest 13 per cent of northern Algeria by 2020, up from the current 11 per cent; rehabilitating and expanding the green belt by 2035; and establishing and expanding a network of protected areas covering 50 per cent of the national territory by 2030.

35. The representative of Burkina Faso said that his country had committed itself in 2017 to restore 5.16 million hectares of degraded land by 2030, comprising 19 per cent of its territory, and to take steps to prevent further degradation. Areas such as wetland ecosystems and protected areas and the ecosystem services they provide, would be restored. For adaptation and climate change mitigation, carbon stocks would be improved on 798,000 hectares.

36. The representative of Cameroon voiced his country's commitment to restore 12 million hectares of degraded and deforested lands, including 8 million hectares in the Sahel ecosystem of northern Cameroon and 4 million hectares in the West Highlands and forest and coastal ecosystems. The Government also planned to develop a national restoration strategy and programme that would provide national orientation and ensure coherence in national approaches; to use a restoration approach that capitalizes on the outcomes of global restoration initiatives; to mainstream the defined restoration intervention approaches and options in key development sectors with activities that have a negative and degrading effect on ecosystems; and to support an accelerated global collaborative effort to combat land degradation and promote ecosystem restoration in Africa, including partnership with key financing bodies and mechanisms to raise the funding required for restoration activities.

37. The representative of Chad listed a number of initiatives that his country had undertaken or in which it was involved: creation of the Forest and Faunal Guard; creation of the National Agency of the Great Green Wall; operationalization of the ecological corridors restoration project in western Chad and the Support Program for Protected Areas and Fragile Ecosystems; a project to develop a green belt around major urban centres; the Lake Chad Ecosystems Rehabilitation and Restoration Project; organization since 1972 of National Tree Week and launching of the National Reforestation Programme in 23 provinces; a ban on the marketing of firewood and government subsidies for butane gas as a substitute.

38. The representative of Ethiopia said that her country planned to become a climate-resilient green economy by 2025, including a forest landscape restoration project over 15 million hectares. Millions of hectares of degraded forest areas had been restored by local farmers, and various pilot projects had been conducted.

39. The representative of the Gambia reported that his country was committed to achieving voluntary land degradation neutrality by 2030 and improvement of an additional 10 per cent of the national territory. Specific targets for avoiding, minimizing and reversing land degradation were to improve productivity and soil organic carbon stocks by 50 per cent by 2030, rehabilitate 1,099 km² of degraded grassland and cropland by 2030, halt the conversion of forests and wetlands to other land uses by 2025 and increase forest cover by 10 per cent by 2030 as compared with 2015. Land degradation neutrality would be integrated into national policies for land, agriculture and natural resources.

40. The representative of Guinea reported that his Government had enacted a code to protect the forests, which included planting 100 hectares of trees in degraded ecosystems each year up to 2026.

41. The representative of Guinea-Bissau said that his country had taken action to restore and rehabilitate the functionality and services of degraded mangrove ecosystems to improve food security and mitigate the effects of climate change. Restoration was under way in some protected areas, including restocking and assisted natural renewal of mangroves in degraded areas. For instance, 357 hectares in the Cacheu River Mangroves Natural Park had been recovered in 2017 through the assisted natural renewal system.

42. The representative of Kenya reported that a commitment had been made to restore 5.1 million hectares of land and ecosystems, representing nearly 9 per cent of its land mass. He said that landscape restoration included reforestation and rehabilitation of degraded natural forests, planting forests and woodlots on cropland, commercial tree and bamboo plantations, planting trees along waterways, wetlands and roads and restoring rangeland. She expected those activities to result in a 16 per cent increase in total tree cover and sequestering of 0.48 gigatons of carbon dioxide by 2063, corresponding to a reduction in emissions of 3.7 per cent.

43. The representative of Madagascar said that, within the African Forest Landscape Restoration Initiative, his country was committed to restoring 4 million hectares of degraded, deforested land by 2030, with large draining basins as a priority.

44. The representative of Niger said that annual targets for land degradation neutrality were central to national development plans and the national policy on environment and sustainable development adopted in 2016. His country was committed to restoring 213,000 hectares of degraded land, stabilization of 36,500 hectares of sand dunes and assisted natural regeneration of 70,000 hectares. Within the African Restoration Initiative, the country was committed to restoring 3.2 million hectares of degraded land by 2030, reducing the surface of degraded land from 9 per cent to 5 per cent and increasing vegetation coverage from 17 per cent to 19 per cent.

45. The representative of Seychelles said that his country was committed to completely restoring five major rivers and to halting conversion of forests to other uses through improved land use and urban planning. Land degradation neutrality would be attained by continuous tree-planting and revegetation on all the main islands of the country.

46. The representative of South Africa said that her country's national action programme included commitments to combat desertification, restore, rehabilitate and conserve degraded land and soil to achieve land degradation neutrality by 2030; promote sustainable agriculture to conserve and restore critical habitats, protect watersheds and improve the health of soil and water; raise awareness and build capacity on desertification, land degradation and drought; and promote innovative restoration projects and sustainable land management to create jobs and small-to-medium enterprises.

47. The representative of Sudan reported that her country intended to restoring over 40,000 hectares of land, formulating a national plan of action to identify the status and causes of land degradation in Sudan, setting ambitious national targets to be achieved by 2030 to neutralize land degradation, establishing protected areas for biodiversity conservation; implementing ecosystem-based adaptation projects to address

the impacts of climate change and biodiversity loss and land and ecosystem degradation, and increasing productivity and soil organic carbon stocks.

48. The representative of Uganda said that her Government intended to restore the forest area of the country to that of 1900, which had been 4.9 million hectares, i.e. 3 million hectares were to be restored by 2040. Wetland cover would be increased to 13 per cent of the total area of the country by 2040. Fisheries resources were to be improved to 2010 levels by eliminating illegal fishing and promoting cage fishing and aquaculture in general, with regulation of feed to avoid pollution, and the country was committed to restoring 15 per cent of degraded ecosystems by 2020.

49. Written statements were submitted by Ms. Martha Rojas-Urrego, Secretary General of the Convention on Wetlands of International Importance Especially as Waterfowl Habitat (Ramsar Convention) and Mr. Eduardo Mansur, Director of the Land and Water Division of the Food and Agriculture Organization of the United Nations (FAO).

Session 6. Summit outcomes and follow-up

50. Ms. Fouad presented the African Ministerial Declaration on Biodiversity, including the Pan-African Action Agenda on Ecosystem Restoration for Increased Resilience and Africa's Biodiversity Priorities for the consideration of the Summit and made summary remarks.

51. Ms. Fouad reiterated that the Summit was monumental in the sense that Africa has come together to coherently address the three crises of biodiversity, climate change, and land degradation. The sheer presence of so many ministers was a clear indication of the high level of commitment of the Member States of the African Union; and the presence of so many partners demonstrates strong interest and willingness to support continental efforts to address land degradation and enhance ecosystem restoration.

52. The representatives agreed to adopt the African Ministerial Declaration on Biodiversity, including the Pan-African Action Agenda on Ecosystem Restoration for Increased Resilience and Africa's Biodiversity Priorities by acclamation (for the texts, see annexes I and II).

53. Closing statements were made by Mr. Daniel Calleja, Director General for the Environment at the European Commission; Ms. Inger Andersen, Director General of the International Union for Conservation of Nature (IUCN); Ms. Alexandra Rasoamanana (Madagascar) and Ms. Simangele Msweli (South Africa) from the Global Youth Biodiversity Network; and Ms. Lucy Mullenkei, Executive Director of the Indigenous Women's Biodiversity Network.

54. In his statement, Mr. Calleja said that the Commission took note of Africa's priorities to reverse loss of biodiversity, land degradation and climate change. In 2018, the European Union had funded 66 protected area projects in 27 countries in sub-Saharan Africa; the challenge was to ensure their effective implementation by securing political commitment at the highest level. The European Union's post-2020 global framework included a requirement for measurable, time-bound monitoring and voluntary commitments, also from citizens and the private sector, accompanied by a global plan that took into account the scale and urgency of the threats. Little time was left to save the planet. Africa should strongly engage in post-2020 goals for biodiversity.

55. Ms. Andersen noted the many commitments made in the previous session. Restoration of degraded land was an imperative, and she was gratified that ministers had made commitments to do so. Land was valuable not only for food or timber production but also for other ecosystem services, such as water storage and carbon capture. The ministers had made smart investments for their countries and communities. IUCN regretted that targets set in 2010 under the Strategic Plan for Biodiversity 2011-2020 might not be fully met. The reasons should be identified. The way in which indicators were measured, accounted for and analysed also need to be examined. Regular, time-bound performance measurements would be useful. CBD might learn from other conventions that had established more robust measurement systems. She suggested setting of just one target, which people would more readily understand, rather than several. However, the target should be based on scientific evidence and reviewed regularly. The post-2020 global biodiversity framework was the last chance; targets and commitments should be clear.

56. Ms. Rasoamanana and Ms. Msweli warned that the world was at a critical point. Synergistic, inclusive restoration was the only acceptable option. Preventing future degradation was more important

than restoration. Good progress had been made in setting policies, which should be implemented inclusively, involving, for instance, women and young people. Youth were a particularly useful resource in Africa and they should be supported, with workshops to build capacity and commitments to work with African leaders, and be seen as the leaders of today, not of tomorrow.

57. Ms. Lucy Mullenkei, Executive Director, Indigenous Women's Biodiversity Network, recalled that indigenous peoples had long worked on environmental issues and using the traditional knowledge learned from their ancestors. At the conference in Mexico, indigenous peoples and local communities had celebrated 20 years of work as the International Indigenous Forum on Biodiversity, and, in Sharm El-Sheik, the Indigenous Women's Biodiversity Network (IWBN) would be celebrating its twentieth anniversary. The celebration would be held to mark the close of the three-day Nature and Culture Summit organized by the Government of Egypt and partners. In Africa, indigenous peoples played an important role in ecosystem restoration, but governments should more fully recognize their role and their unique expertise. Indigenous peoples, local communities, young people and women should engage in efforts to achieve harmony with nature and the development agendas.

58. A written closing statement was submitted by Mr. Cosmas Ochieng, Director of the African Natural Resources Centre at the African Development Bank. The Bank is committed to working towards achieving the sustainable development goals as demonstrated in its ten-year strategy, which placed emphasis on the natural resource sectors to promote the twin objectives of inclusive growth and transition to green growth and established the African Natural Resources Centre to provide capacity development support to enable African countries to achieve integrated resource development and good governance of natural resources. The support included policy and technical advice and support for development of project pipelines for member countries for funding through African Development Trust Funds and Global Funding entities such as the Global Environment Facility and the Green Climate Fund

59. Ms. Fouad declared the Summit closed at 6:10 p.m. on Tuesday, 13 November 2018.

Annex I
African Ministerial Declaration on Biodiversity
Sharm El Sheikh, Egypt, 13 November 2018

We, the ministers and other heads of delegation from African countries, having met on the occasion of the African Ministerial Summit on Biodiversity hosted by the Government of Egypt in collaboration with the African Union Commission in Sharm El Sheikh, Egypt, on 13 November 2018 under the theme “Land and ecosystem degradation and restoration: Priorities for increased investments in biodiversity and resilience in Africa”,

Recalling decision Assembly/AU/Dec.352(XVI) of the Assembly of the African Union which, inter alia, called for the inclusion of biodiversity among the priorities of the African Union,

Recognizing the critical importance of biodiversity and ecosystem services in supporting economic growth, sustainable development, livelihoods and human well-being in Africa and its contribution to achieving the African Union Agenda 2063 and the 2030 Agenda for Sustainable Development and its Sustainable Development Goals,

Recalling decision 16/2(V) adopted by the African Ministerial Conference on the Environment at its sixteenth session which, inter alia, endorsed and supported the proposal of the Government of Egypt to host a high-level event on African biodiversity in conjunction with the fourteenth meeting of the Conference of the Parties to the Convention on Biological Diversity to provide policy and strategic guidance on Africa’s biodiversity priorities for inclusion in future work programmes of the Convention and its Protocols,

Recalling also decision SS.7/1 on biological diversity adopted by the African Ministerial Conference on the Environment at its seventh special session,

Welcoming the reports and the key messages from the Intergovernmental Science-Policy Platform for Biodiversity and Ecosystem Services (IPBES) global assessment on land degradation and restoration, and the regional assessment on biodiversity and ecosystem services for Africa,

Noting with concern the significant impact of land and ecosystem degradation on biological diversity, land productivity and human well-being in Africa, affecting over 485 million people and leading to an estimated annual cost of US\$ 9.3 billion,

Recognizing the urgent need for action to prevent further land and ecosystem degradation and to restore degraded ecosystems to protect biological diversity and ecosystem services vital to safeguarding life on Earth, increasing food and water security, ensuring human well-being and achieving other Sustainable Development Goals,

Recalling relevant decisions of the Conference of Parties to the Convention on Biological Diversity, including decision XIII/5 whereby the Parties adopted a Short-Term Action Plan on Ecosystem Restoration,

Welcoming the commitments already made by African countries on land and ecosystem restoration within the context of the Convention on Biological Diversity (including Aichi Targets 5, 14 and 15), the United Nations Framework Convention on Climate Change and the Paris Agreement, the United Nations Convention to Combat Desertification in Those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa (including on land degradation neutrality targets), the Ramsar Convention on Wetlands and the 2030 Agenda for Sustainable Development (particularly Sustainable Development Goal 15),

Noting the progress made by some African countries in promoting land and ecosystem restoration through various initiatives and programmes, such as the African Forest Landscape Restoration Initiative (AFR100) which seeks to restore 100 million hectares of degraded and deforested land in sub-Saharan Africa by 2030 and the Great Green Wall of the Sahara and the Sahel Initiative,

Underlining the importance of integrating ecosystem restoration into relevant sectoral and cross-sectoral policies, plans and programmes to address challenges of land degradation, biodiversity loss, and climate change vulnerability,

Declare and resolve to:

1. *Endorse* the Pan-African Action Agenda on Ecosystem Restoration for Increased Resilience contained in annex II to the report of the Summit as a basis for future work on land and ecosystem restoration in the region;

2. *Submit* the above-mentioned Pan-African Action Agenda for adoption by the African Union Assembly of Heads of State and Government;

3. *Invite* all member States of the African Union to support and implement the Pan-African Action Agenda on Ecosystem Restoration for Increased Resilience and to mobilize resources locally and through bilateral, regional and global funding sources, such as the Global Environment Facility, the Green Climate Fund, the Adaptation Fund, and the Land Degradation Neutrality Fund, to support its implementation;

4. *Invite* the African Union Commission and the New Partnership for Africa's Development (NEPAD), in close collaboration with regional economic communities and with the support of relevant financial and technical partners, to provide support to African countries in implementing the Pan-African Action Agenda on Ecosystem Restoration for Increased Resilience in a coherent and coordinated manner;

5. *Invite* the United Nations Environment Programme, the United Nations Development Programme, the Food and Agriculture Organization of the United Nations, the United Nations Economic Commission for Africa, other United Nations agencies, development partners and the international community to provide support to African countries to implement the Pan-African Action Agenda on Ecosystem Restoration for Increased Resilience in order to:

- (a) Combat land degradation and enhance ecosystem restoration in the region;
- (b) Facilitate strengthening of biodiversity mainstreaming initiatives to address the sectoral drivers of land degradation and biodiversity loss;
- (c) Work towards implementation of sustainable food systems for well-being of people and nature;

6. *Encourage* member States to link and synergize the implementation of the above Pan-African Action with the African Union Agenda 2063, the 2030 Agenda for Sustainable Development and Sustainable Development Goals, the Strategic Plan for Biodiversity 2011-2020 and any follow-up to it after 2020, the Convention on Biological Diversity Short-Term Action Plan on Ecosystem Restoration and with the development and implementation of national biodiversity strategies and action plans, land degradation neutrality targets, national adaptation plans, and nationally determined contributions;

7. *Support* the proposal calling upon the United Nations General Assembly to designate the decade 2021–2030 as “the United Nations Decade of Ecosystem Restoration”;

8. *Support also* the proposal of Egypt to launch a global initiative to promote the use of nature-based approaches to coherently address biodiversity loss, climate change and land and ecosystem degradation;

9. *Urge* member States to take note of the important role of protected areas in conserving biodiversity and to develop sustainable and innovative conservation finance mechanisms to enhance the role of protected areas in contributing to biodiversity conservation and sustainable development;

10. *Endorse* Africa's biodiversity priorities as contained in annex III to the report of the Summit and request the Conference of the Parties to the Convention on Biological Diversity and the Conference of the Parties serving as the meetings of the Parties to the Cartagena and Nagoya Protocols to consider these in the development and adoption of the post-2020 global biodiversity framework;

11. *Urge* member States and relevant regional bodies to undertake cross-sectoral consultations, as appropriate, and proactively contribute to the preparation of the post-2020 global biodiversity framework and support its implementation;
12. *Emphasize* the need to promote financing and investment in biodiversity for people and the planet at a scale that is commensurate with the magnitude of the funding and investment needs assessed under the Convention on Biological Diversity and other relevant international processes;
13. *Urge* member States to continue to promote synergy in the implementation of the Rio Conventions and other biodiversity-related conventions and processes to address in a coherent manner the interrelated issues of biodiversity loss, land and ecosystem degradation, desertification and climate change;
14. *Agree* to convene future African ministerial summits on biodiversity to review progress with the implementation of the Pan-African Action Agenda on Ecosystem Restoration for Increased Resilience and to consider other priority issues relating to the conservation and sustainable use of biological diversity across the African continent;
15. *Express* sincere gratitude to the Government of Egypt for successfully organizing the African Ministerial Summit on Biodiversity.

Annex II

Pan-African Action Agenda on Ecosystem Restoration for Increased Resilience

1. Background

Terrestrial and marine ecosystems and their biodiversity underpin economic growth, sustainable development and human wellbeing in Africa. However, many ecosystems in the region are facing severe degradation leading to the decline or loss in biodiversity and the impairment or disruption of ecosystem functions and services, thus threatening Africa's ability to realize the African Union Agenda 2063 goals and the 2030 Agenda for Sustainable Development and its Sustainable Development Goals. Land and ecosystem degradation affect human livelihoods, the cultural identity and traditional knowledge of communities and the productive capacity of African economies as underlined in recent reports by the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES). Direct causes of land and ecosystem degradation in the region include conversion of forests, rangelands, wetlands and other natural areas for food production and urban development among other land use changes. Land and ecosystem degradation is also accelerated by climate change, rapid population growth, unplanned urbanization, infrastructure and industrial development, pollution and waste and an increased demand for services (including water, food and energy supply).¹

The recent IPBES regional assessment of biodiversity and ecosystem services for Africa (IPBES, 2018) noted that investing in avoiding land and ecosystem degradation and in restoration activities makes sound economic sense. While the cost of land degradation has reached about US\$ 490 billion per year globally, this is much higher than the cost of action to prevent it (UNCCD 2013, De Groot et al 2013). The benefits, including the prevention of species loss and extinction, maintenance of key ecosystem services and of bio-cultural identities, contribute to enhancing resilience. Land restoration contributes significantly to achieving the United Nations Sustainable Development Goals and can be an effective solution for climate adaptation and mitigation by improving CO₂ sequestration and hydrological cycle (UNEP, 2015). This is particularly important in fragile ecosystems where land restoration can contribute to landslide prevention and reduction in damage from climate change and extreme events.

To implement Article 8(f) of the Convention on Biological Diversity (CBD)² and achieve Aichi Biodiversity Targets 14 and 15, there is a need for a concerted and collaborative effort to support, facilitate, upscale, finance and implement ecosystem restoration activities on the ground. In this regard, the Conference of the Parties to the Convention on Biological Diversity (CBD COP), particularly through its Decisions XI/16, XII/19 and XIII/5 has urged Parties and encouraged other Governments and relevant organizations, as well as indigenous peoples and local communities, and relevant stakeholders to promote, support and take actions on ecosystem restoration inter alia by making use, as appropriate, of the short-term action plan on ecosystem restoration as a flexible framework according to national circumstances.

In 2016, the CBD COP in its decision XIII/5 adopted a short-term action plan on ecosystem restoration, as a flexible framework and adaptable to national circumstances and legislation for immediate action towards achieving Aichi Biodiversity Targets 5, 12, 14 and 15, and Targets 4 and 8 of the Global Strategy for Plant Conservation, and other internationally agreed goals and targets, and in particular targets identified in national biodiversity strategies and action plans or other relevant strategies and plans. Four main activities of the plan include: a) Assessment of opportunities for ecosystem restoration; (b) Improving the institutional enabling environment for ecosystem restoration; (c) Planning and implementation of ecosystem restoration activities; (d) Monitoring, evaluation, feedback and disseminating results. The

¹ <https://undocs.org/AMCEN/SS.VII/3>

² Article 8(f) provides that each Contracting Party shall, as far as possible and as appropriate: "Rehabilitate and restore degraded ecosystems and promote the recovery of threatened species, inter alia, through the development and implementation of plans or other management strategies".

decision also appreciated and welcomed the ongoing work of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem (IPBES) to conduct a thematic assessment on land degradation and restoration as one of the efforts to achieve targets related to restoration by 2020.

Africa's biodiversity is one of the key assets for the achievement of the Sustainable Development Goals and can be sustainably and equitably used to reduce inequality and poverty on the continent. The alignment of African Union Agenda 2063 goals, the Sustainable Development Goals and Aichi Biodiversity Targets, linked to the conservation of biodiversity and the contribution of nature to human well-being in Africa, facilitates the development of interventions that can achieve multiple positive outcomes. Africa seeks to ensure that its environment and ecosystems are healthy and protected to support climate-resilient economies and communities' livelihoods.

This Pan-African Action Agenda on Ecosystem Restoration for Increased Resilience proposes policy measures, strategic actions, cooperation mechanisms and on-the-ground actions to advance land and ecosystem restoration in Africa. The production of this document was facilitated by the Secretariat of the Convention on Biological Diversity (CBD) in cooperation with UN Environment and various other partners and stakeholders, particularly the CBD Focal Points, other stakeholders including technical government institutions, civil society and academia. Draft elements of the Action Agenda were discussed during the second preparatory meeting for African Ministerial Summit on Biodiversity and the meeting of the expert group for the Seventh Special Session of the African Ministerial Conference on the Environment (AMCEN) that took place on 16-17 September 2018 in Nairobi. The draft elements were supported by the ministerial segment of the seventh special session of AMCEN, held on 19 September 2018.

The Government of Egypt, in collaboration with the African Union Commission and with support from the Secretariat of the Convention on Biological Diversity, the Secretariat of the African Ministerial Conference on the Environment and the United Nations Environment Programme further developed the draft action agenda and made it available for consideration at the African Ministerial Summit on Biodiversity, held on 13 November 2018 in Sharm El Sheikh, Egypt. The Summit endorsed the action agenda and submitted it for adoption by the African Union Assembly of Heads of State and Government.

This Pan-African Action Agenda will be implemented by all African member States under the direction of the African Union. The New Partnership for Africa's Development Planning and Coordinating Agency (NEPAD Agency) will serve as the lead institution in facilitating, coordinating, monitoring and evaluating its implementation, in collaboration with Regional Economic Communities (RECs) and other institutions.

2. Land and Ecosystem Degradation in Africa: Status, Challenges and Opportunities

A. Status and Trends

Africa has rich and diverse ecosystems, including deserts and drylands with unique flora and fauna; savannah grasslands with the world's greatest diversity of ungulates; moist tropical forests; mangrove forests; tropical dry and humid forests; islands and coastal ecosystems; wetlands around freshwater bodies like rivers, lakes and estuaries; urban and semi-urban systems and agroecosystems; and marine ecosystems.

However, according to the second edition of *The State of Biodiversity in Africa*, prepared by UNEP-WCMC in 2016 as part of the mid-term review of progress towards the achievement of the Aichi Biodiversity Target³ and the recent IPBES regional assessment report on biodiversity and ecosystem services for Africa noted that ecosystem degradation and biodiversity loss are increasing at an alarming

³ <https://www.eldis.org/document/A100651>

rate. Under business-as-usual scenarios, it is predicted that a further 11 per cent of biodiversity would be lost.

Land and ecosystem degradation has already had a pronounced impact on ecosystem functions on the African continent and the rates of ecosystem degradation and biodiversity loss are increasing (UNEP-WCMC 2016, IPBES 2018). Data from the World Atlas of Desertification⁴ Joint Research Centre of the European Commission's show that, in 21.5% of vegetated land in Africa, productivity (between 1999 and 2013) has declined or been stressed, just above the world average (20.3 %). Some of the most degraded areas include the southern margin of the Sahara Desert and a patchwork of areas throughout West Africa, much of Madagascar, scattered pockets of land in the East African nations, and a distinct band along the west coast of southern Africa, including coastal areas of Namibia.⁵

According to WRI's Forest and Landscape Restoration (FLR) Tool on Forest Landscape Restoration Opportunities Assessment, Africa has the greatest area of FLR opportunity. More than 720 million hectares in Africa have the potential to be restored, an area that is roughly equivalent to the entire opportunity area for North and South America combined. The magnitude of land and ecosystem degradation in Africa is significant and deserves urgent and ambitious response. The continental target for the Pan-African Ecosystem Restoration Action Agenda is to restore over 200 million ha by 2030, complementing existing initiatives such as AFR100.

In Africa, ecosystems most affected by degradation include the following:

Wetlands and rivers: *Freshwater ecosystems are experiencing an immense threat from various human-induced factors such as climate change, unsustainable infrastructural development, urbanization, tourism, mining and many other inappropriate or improperly planned development activities, leading to loss of biodiversity and extensive damage to key ecosystems. A number of African rivers are under threat from large dams for hydropower and irrigation, pollution, erosion, human encroachment and invasive species. There is a need for all stakeholders to take proactive actions, even sacrifices, to manage, protect, conserve and restore African rivers so that their resources can be sustained for future use. Several lakes in Africa face unprecedented pressure from land-based pollution including eutrophication by fertilizers, and unsustainable use impeding their natural replenishment processes. The introduction of invasive species, such as the Nile Perch in Lake Victoria and the water hyacinth invasion in several lakes constitutes a major threat to endemic species. River ecosystems are also threatened by various activities including flow alteration (e.g. damming, irrigation) and poor catchment management. Examples of the most degraded wetlands and rivers in Africa include the Mid-Boteti area in north-central Botswana around Boteti River and the Niger River which is polluted with more than 2,200 m³ of industrial waste from tanneries, soap and oil factories, wastewater containing dyes, chemical pollutants, and heavy metals. Wetland sites, including some Ramsar sites such as the Muni-Pomadze Ramsar site in Ghana, are also seriously threatened by mining and poor agricultural practices. In South Africa, of the nearly 800 wetland ecosystem types, a massive 65 per cent are threatened with 48 per cent critically endangered, 12 per cent endangered and 5 per cent vulnerable.*

Forest ecosystems: *According to FAO (2016), Africa experienced the biggest forest area loss from 1990 to 2015 compared to the rest of the world, although the rate of forest loss in the region decreased substantially from 2010 to 2015, while average per capita forest area declined from 0.8 hectares to 0.6 hectares per person. Forest degradation is largely caused human activities, such as overgrazing, agricultural expansion, overexploitation, and deforestation. In particular, small-scale farming activities in the dry areas have caused the greatest impact on vegetation degradation. Change in forest cover has been observed in many African countries. For example, in Equatorial Guinea, nearly 60 per cent of the original lowland forests on Bioko island have been cleared for cocoa and other tropical crops; Madagascar has witnessed the destruction of an estimated 80 per cent of its indigenous forests; Uganda's forest cover has been reduced from 50 per cent (12.1 million ha) of the total land surface in 1900 to an estimated 2.97 million ha in 2012; and Rwanda's natural forests areas have declined by 65 per cent between 1960 and 2007. In Zambia, the annual deforestation rate is in the range of 79,000*

⁴ World Atlas of Desertification <https://wad.jrc.ec.europa.eu/>

⁵ <http://documents.worldbank.org/curated/en/561091468008110938/pdf/691900ESW0P1250LIC00000Invest0Trees.pdf>

270,000 ha of the total forest cover largely due to an increase in the urbanization rate and the need to develop infrastructure in the housing, energy, transport and irrigation sectors, while in Sierra Leone, a country that was once dominated by forest (70 per cent of land area), now has less than 5 per cent of mature forest remaining as a result of civil unrest and habitat loss from mining.

Marine and coastal areas: Marine and coastal ecosystems are facing significant threat from overexploitation, habitat degradation and loss, acidification, pollution from land-based sources, alien invasive species and sea-level rise. Damage to coral reef systems is growing, mostly as the result of pollution and climate change, and this is having far-reaching implications for fisheries, food security, tourism and overall marine biodiversity. Mangroves in Africa are also particularly overexploited and becoming heavily degraded or destroyed by multiple pressures on resources and pollution. Habitats in marine ecosystems are facing serious threats due to mangrove destruction, coral destruction, dynamite fishing and illegal fishnets is one of the escalating problems. Multiple pollutants, including used water and oil, industrial and household waste, are dumped causing the degradation of biological diversity within these habitats. This degradation is not only a threat to natural resources but also local communities. The problem is aggravated by city expansion. In Angola for example, the disappearance of mangroves in the Lobito bay due to city expansion (drainage and waste discharge) has led to the disappearance of flamingos and the endangerment of fish species in the bay. In many countries, the coastline is increasingly at risk from oil spills and sewage that goes into the sea without being treated. Some of the highly threatened coastal regions include the Eritrean Coast Desert eco region, where four species of marine turtles breed, the Korle Lagoon in Accra, Ghana, and the Korle Lagoon in Accra.

African mountains: Mountains, which provide vital goods and services and serve as invaluable importance as water towers, biodiversity hotspots, indicators of climate change and hubs of traditional indigenous knowledge, are facing multiple challenges. These are mainly driven by fast growing population, unsustainable natural resources use which are exacerbated by climate change. Deforestation and intensive agriculture in mountain areas without proper erosion control have disturbed soil integrity and compromised the water retention function of the soil upstream. Landslides and floods are also more frequent, causing substantial damage to the infrastructure and human lives downstream. In Burundi and Rwanda, for example, about 76 and 71 per cent of the respective country's total area encounters very severe degradation problems (UNEP, 2006). In Madagascar, deforestation of central highlands coupled with weathering from natural geologic and soil conditions, has resulted in widespread soil erosion, which in some areas may top 400 tons/ha per year. The Ethiopian highlands¹ (especially the Tigray and Amhara regions) in the northern part of the country are one of the most degraded areas in Africa and in the world (Terefe, 2003)⁶. Finally, the Semenawi and Debubawi Bahri Green Belts in the central highlands of Eritrea, which house some of the last remaining tropical coniferous and broad-leaved forest along the Horn of Africa, are under severe threat.

Savannah grasslands and rangelands: With an estimated 13 million km², grasslands cover almost half of the continent and are found widely in the west, the east and the southern subregions. Grassland ecosystems in Africa possess significant wild animal diversity that supports tourism and subsistence livelihoods (food, medicinal plants, and construction material), in addition to cultural, regulating and supporting services. However, savannah and grasslands in many parts of Africa are under pressure from anthropogenic activities, such as expansion of agriculture and plantation forestry, overgrazing, spread of invasive alien species, human settlements, mining activities, and other commercial or subsistence activities. These changes are accelerated by climate change and bush fires. In Morocco, for example, climate change is expected to reduce cereal yields by 50 per cent in dry years and 10 per cent in normal years and to affect animal production. In Namibia, uncontrolled bushfires are a threat to national parks, such as Etosha, Namib Naukluft and those in the north-east.

African drylands and deserts: Drylands and desert ecosystems, including those in Sahara Desert, the Succulent Karoo, Namib Desert, Nama Karoo and the Kalahari Desert and xeric savannah are facing decline due to anthropogenic disturbances such as overgrazing, mining, illegal harvesting of succulents and alien

⁶ https://www.researchgate.net/publication/233633604_Effects_of_region-wide_soil_and_water_conservation_in_semi-arid_areas_The_case_of_northern_Ethiopia.

invasive species. It is estimated that desertification affects approximately 33 per cent of the global land surface and Africa is the most exposed, with desertification affecting around 45 per cent of the Africa continent's land area, out of which 55 per cent is at high or very high risk of further degradation. It is also projected that by 2030 the number of people living in the drylands of East and West Africa is expected to increase by 65 to 80 per cent and over the same period climate change could result in an expansion of the area classified as drylands, by as much as 20 per cent under some scenarios (ADF, 2016).

B. Opportunities and challenges

Degradation of terrestrial and marine ecosystems in Africa has reduced real wealth and assets, and income-earning potential for local land farmers, the public sector, and private businesses. However, there are many opportunities that are arising or could potentially arise from restoration. These include among others increased employment, increased business spending, improved gender equity, increased local investment in education and improved livelihoods of all people who depend on land and other ecosystems. Land and ecosystem restoration that increases carbon storage or avoids greenhouse gas emissions in global forests, wetlands, seas, grasslands and croplands could also provide one of the most cost-effective approaches greenhouse gas mitigation required by 2030 to keep global warming to below 2°C. Thus, investing in avoiding land degradation and in the restoration of degraded ecosystems makes sound economic sense; the benefits generally by far exceed the cost. Land and ecosystem restoration is about restoring ecological functionality of fragile ecosystems, as well as securing livelihoods, water, energy and food security.

However, there are several challenges hindering effective land and ecosystem restoration in Africa. First, perceptions of human-environment relationships have a strong influence on the design and implementation of land and ecosystem management policies and actions. Unfortunately, however, land and ecosystem degradation are still viewed by some as an unintended consequence of economic development. Also, there is a lack of credible and easily accessible information to allow decision makers, practitioners and other stakeholders to improve their approaches to land and ecosystem management and use.

Rising unsustainable consumption levels and lifestyles in many of African countries combined with unsustainable practices and the continued population growth are also driving land and ecosystem degradation. Increases in consumption have opened-up new economic opportunities that lower the costs of land-based resources for consumers, leading to a rise in demand. The failure of policies and institutions to incentivize sustainable practices and internalize the long-term economic costs of unsustainable production has also meant that the exploitation of natural resources typically leads to greater levels of land and ecosystem degradation. Tackling land and ecosystem degradation in Africa thus requires systemic change on a macroeconomic level, including a concerted effort to improve the sustainability of both production systems and consumer lifestyles.

*UNCCD: In October 2015, UNCCD country Parties reached a breakthrough agreement on the **land degradation neutrality (LDN)** concept, developed to encourage implementation of an optimal mix of measures designed to avoid, reduce and/or reverse land degradation to achieve a state of no net loss of healthy and productive land. LDN aims to balance anticipated losses in land-based natural capital and associated ecosystem functions and services with measures that produce alternative gains through approaches such as land restoration and sustainable land management.*

Four building blocks form the basis of the LDN target-setting:

1) Leveraging LDN: LDN target setting is not a stand-alone process but provides opportunities for coordination across ministries and sectors involved in land management.

2) Assessing LDN: Assessing the current state of land degradation and its drivers for informed decisions on what action to take, and tracking progress;

3) Setting LDN targets and associated measures: LDN targets define a country's ambitions in terms of combatting land degradation.

4) Achieving LDN: An enabling environment that makes integrating the LDN concept into national policies easier and identifying

Rapid expansion of croplands and grazing lands is another biggest challenge to land and ecosystem restoration in Africa, and globally. Croplands and grazing lands now cover more than one third of African land surface, with recent clearance of native habitats, including forests, being concentrated in some of the most species-rich ecosystems on the planet are big challenges to the sustainable land management and restoration of ecosystems. Intensified land-management systems have greatly increased crop and livestock yields in many areas in Africa but, when inappropriately managed, can result in high levels of land degradation, including soil erosion, fertility loss, excessive ground and surface water extraction, salinization, and eutrophication of aquatic systems. Proven management practices currently exist to avoid and reduce degradation of existing croplands and grazing lands, including sustainable intensification, conservation agriculture, agroecological practices, agroforestry, grazing pressure management and silvopastoral management. However, these are not widely applied in Africa and thus challenges landscape restoration.

As noted in the recent IPBES regional assessment report on biodiversity and ecosystem services for Africa, ecosystems and landscapes will play an increasingly important role in the countries' attempts to reconcile their conservation and restoration interests with the growing demand for demand for food, consumer goods and multiple ecosystem benefits in the region. Overall, interventions should be devoted to the maintaining or restoration of an optimum health status of the all ecosystem as well as an optimum use. This will guarantee the resilience of African ecosystem against global changes.

3. Purpose and Scope of the Pan-African Action Agenda

The Pan-African Action Agenda on Ecosystem Restoration provides a framework for harmonized and coordinated action on ecosystem restoration across Africa by the African Union its member states and partners. It aims to conserve and manage sustainably African land and ecosystems and at the same time reduce, mitigate or reverse the impacts of land and ecosystem degradation. This includes efforts to reduce and halt biodiversity loss; combat land degradation and desertification; mitigate climate change; reduce disaster-related risks, and restore ecosystem conditions and processes for increased resilience, enhanced ecosystem functions and sustainable benefits.

The Action Agenda provides a strategic direction for ecosystem restoration in the region, promote continent-wide awareness raising and political support for restoration efforts, help to accelerate and upscale ecosystem restoration commitments and targets; foster synergetic and integrated action and facilitate effective monitoring of implementation and tracking of progress towards the achievement of ecosystem restoration commitments and targets at the continental and regional level. Furthermore, it seeks to facilitate resource mobilization and to leverage private sector investments in ecosystem restoration.

The Action Agenda will guide and support African countries to meet, in synergetic and integrated manner, their ecosystem restoration objectives and commitments under various international agreements and processes, including the three Rio Conventions – the Convention on Biological Diversity (CBD), the United Nations Convention to Combat Desertification (UNCCD), the United Nations Framework Convention on Climate Change (UNFCCC) and the Paris Agreement, – as well as the Ramsar Convention on Wetlands, the Convention on the Conservation of Migratory Species of Wild Animals, the New York Declaration on Forests, the Bonn Challenge on Forest and Landscape Restoration and the 2030 Agenda for Sustainable Development.

This Action Agenda builds on and aims to upscale exiting land and ecosystem restoration initiatives in Africa, including those underway or planned in line with the national biodiversity strategies and action plans to achieve Aichi Biodiversity Targets 5, 14 and 15 as outlined in annex 1. It also aims to reinforce action towards achieving the commitments made under various regional and global processes and initiatives, among them the African Resilient Landscapes Initiative, the African Forest Landscape

Restoration Initiative (AFR100 - see Annex 2),⁷ the Great Green Wall for the Sahara and the Sahel Initiative,⁸ the Restoration Initiative,⁹ the Forest Ecosystem Restoration Initiative (FERI),¹⁰ the Central African Forest Initiative,¹¹ the African Union’s flagship programme on climate change, biodiversity and land degradation, the Integrated Lake Basin Management Initiative (LBMI),¹² and the Mangrove Capital Africa programme.¹³

The Action Agenda targets restoration across all types of ecosystems – terrestrial, inland water, marine and coastal, and, as appropriate, urban ecosystems. It will be implemented at various scales — national, regional, subnational, including transboundary ecosystems — and site levels using a land- and seascape perspective. It can be applied to address situations where: (a) ecosystems are already under ongoing restoration (strengthening or upscaling existing initiatives); (b) degraded and destroyed ecosystems have already been identified and considered for restoration (establishing new initiatives); and (c) degraded and destroyed ecosystems have not yet been considered for restoration (assessing new restoration opportunities).

The Action Agenda covers a period of 12 years (2019-2030) and is consistent with the CBD 2050 Vision on Living in harmony with nature where “By 2050, biodiversity is valued and conserved, restored and wisely used, sustaining a healthy planet and delivering benefits essential for all people”. It is also aligned with the 2030 Agenda for Sustainable Development and Agenda 2063: The Africa We Want.

Vision

Degraded and destroyed ecosystems across Africa restored to an ecologically healthy, diverse and resilient condition, able to cope with natural and anthropogenic disturbances and support the region’s economic, social, and cultural development objectives and well-being of its people.

Mission

To catalyse, promote and implement ambitious integrated ecosystem restoration initiatives across the region, thus positioning Africa as a world leader in ecosystem restoration.

Strategic Goals and Objectives

The overall goal of this Pan-African Action Agenda is to inspire, promote and facilitate regional and national ecosystem restoration initiatives across Africa with a view to reversing the loss of biological diversity and ecological infrastructure, combating land degradation and desertification, mitigating and adapting to the effects of climate change, enhancing resilience and improving peoples’ well-being. Its main objectives include helping African Union Member States and relevant organizations and initiatives to, inter alia:

1. Promote, support and accelerate action in the planning, implementation and monitoring of ecosystem restoration activities at all levels;
2. Undertake actions to reduce, mitigate or reverse direct drivers of land ecosystem degradation
3. Mainstream land and ecosystem restoration in relevant sectoral policies, plans and programmes

⁷ <http://afr100.org>

⁸ <https://www.greatgreenwall.org/about-great-green-wall>

⁹ <https://www.iucn.org/theme/forests/projects/restoration-initiative-tri-scaling-support-forest-landscape-restoration>

¹⁰ <https://www.feri-biodiversity.org/>

¹¹ www.cafi.org

¹² <https://www.ilec.or.jp/en/lbmi/>

¹³ <https://www.wetlands.org/casestudy/mangrove-capital-africa/>

4. Identify and implement specific actions to achieve agreed ecosystem restoration commitment and targets;
5. Communicate the ecosystem restoration efforts, results and benefits to increase and promote active public support and involvement.

Strategic Actions

This Pan-African Action Agenda is closely aligned with the short-term action plan on ecosystem restoration adopted by the Conference of Parties to the Convention on Biological Diversity in decision XIII/5.¹⁴ The African Union Member States will implement, as appropriate, the following main groups of activities and the associated action identified in the short-term action plan, in collaboration with relevant organizations and in accordance with national legislation, circumstances and priorities:

- (a) Assessment of opportunities for ecosystem restoration;
- (b) Improving the institutional enabling environment for ecosystem restoration;
- (c) Planning and implementation of ecosystem restoration activities;
- (d) Monitoring, evaluation, feedback and disseminating results.

These activities will be implemented in an iterative manner with feedback among and within the four main groups of activities. Because of the large scope of work involved, the implementation of the Action Agenda will be done in phased manner using an adaptive management approach (see indicative timelines in Annex I).

The first phase (2019-2020) will focus on supporting and consolidating the ongoing activities and initiatives proposed in the national biodiversity strategies and action plans to achieve Aichi Biodiversity Targets 5, 14 and 15. This may include, among other actions, a coordinated Pan-African awareness-raising campaign on ecosystem restoration; identification of stakeholders to be involved at various levels; further consultations about measures for implementation of the Pan-African Action Agenda at the regional, national and sub-national levels; review of existing enabling policy, legal and institutional frameworks for ecosystem restoration and identification of major gaps/ bottlenecks; identification, design and mobilization of resources for key pilot transboundary ecosystem restoration projects and programmes; support for regional, national and sub-national assessments to identify priority areas and opportunities for ecosystem restoration including their total extend and feasibility, and as appropriate, formulation of national ecosystem restoration strategies and action plans and assessment of the costs and benefits associated with different restoration options and the profitability of various restoration interventions.

During the second phase (2021-2025) the focus will be on launching and implementing a series ambitious ecosystem restoration projects and programmes in all African countries so as make tangible progress towards achieving the commitments and targets made by countries in their NBSAPs and under various initiatives, such as AFR100, the Great Green Wall Initiative and others. This phase will also involve further concerted efforts on awareness-raising, capacity-building support, technical and scientific cooperation and facilitation of access to relevant technologies and innovative solutions to enable stakeholders at various levels to effectively contribute to the achievement of the restoration targets.

The third phase (2026-2030) will focus on actions that result in long-term deliverables such as the establishment of a regional land and ecosystem restoration trust fund, promotion of payment for ecosystem services (PES) schemes to support land and ecosystem restoration; establish public-private sector partnership for ecosystem restoration ventures; integration of ecosystem restoration activities into wider corporate social responsibility initiatives; evaluation of restoration efforts across the region; and documentation, communication and celebration of success stories and achievements.

¹⁴ <https://www.cbd.int/decisions/cop/?m=cop-13>

Targets and key milestones

It is hoped that by 2025:

- All African Union Member States would have in place national ecosystem restoration plans to operationalize the Pan-African Action Agenda
- National and sub-national ecosystem restoration coordination committees (or similar mechanisms) would have established or strengthened across the region.
- All Member States would have developed policy and legal frameworks or reformed existing ones to enable or incentivise national ecosystem restoration or create disincentives for activities and processes causing ecosystem degradation, including tenure related drivers.
- At least one large-scale major ecosystem restoration project and programme would have initiated in each Member State or up scaled with sizeable funding from national budgetary allocation and external financial and technical support from multiple sources and partners.
- IPLCs, women and youth would be proactively engaged in the development and implementation of ecosystem restoration policies, projects and programmes in all Member States.
- Relevant tools, technologies and innovative solutions developed or mobilized and made available to assist Member States and partners to effectively design, implement, monitor and report on ecosystem restoration initiatives.

It is also expected that, by 2030:

- At least 200 million ha of critically degraded ecosystems of various types would have been restored (i.e. moved back into a condition of good ecological health, integrity and resilience) with direct benefits to livelihoods.
- Different major ecosystem types (forests, wetlands, coastal and marine, mangroves, agroecosystems, rangelands, desert and others) would be well represented among the restored ecosystems.
- All Member States would have in place the requisite capacities, policy and institutional frameworks, and knowledge management systems to support the restoration and sustainable management of ecosystems.

4. Guiding Principles

The implementation of the Pan-African Action Agenda on Ecosystem Restoration will consider, and be guided by, the following core principles, as well as those identified in the short-term action plan on ecosystem restoration adopted by the CBD COP in decision XIII/5:

- Land and ecosystem restoration should maximise multiple benefits (biodiversity, resilience to climate change and CC mitigation/ adaptation, economic and livelihood benefits). Priority should be given to sustainably managing and conserving biodiversity and preventing the degradation of natural habitats and ecosystems by reducing pressures and maintaining ecological integrity and provision of ecosystem services (CBD COP decision XIII/5).
- Healthy ecosystem is a catalyst for sustainability or sustainable development. Investing in preventative measures and restoration initiatives makes sound economic sense.
- Ecosystem restoration activities should build and be consistent with the provisions of the Convention, particularly the Ecosystem Approach, the Addis Ababa Principles and Guidelines for the Sustainable use of Biodiversity, the United Nations Declaration on the Rights of Indigenous

Peoples, the Akwé: Kon guidelines, the Tkarihwaí:ri Code of Ethical Conduct, and the Plan of Action on Customary Sustainable Use of Biological Diversity.

- Ecosystem restoration activities should be planned at various scales and implemented using the best available science and traditional knowledge. The prior informed consent and full and effective participation of indigenous peoples and local communities, as well as the engagement of women and other relevant stakeholders are important considerations at all stages of the processes. Communication, education and public awareness are also important to consider at all stages so that the drivers of degradation, benefits, solutions and costs of ecosystem restoration activities are widely understood.
- Synergies among multilateral processes provide opportunities for integration of biodiversity and ecosystem restoration. The Pan-African action agenda contributes to the achievement of objectives and commitments under other conventions, including the United Nations Framework Convention on Climate Change, the United Nations Convention to Combat Desertification, the Ramsar Convention on Wetlands, the Convention on the Conservation of Migratory Species of Wild Animals, and the United Nations Forum on Forests, as well as the 2030 Agenda for Sustainable Development and the Sendai Framework for Disaster Risk Reduction 2015-2030.

5. Establishing enabling conditions for ecosystem restoration through national and regional policies and strategies

Land and ecosystem degradation is rarely, if ever, the result of a single cause and can thus only be addressed through the simultaneous and coordinated use of diverse policy instruments and responses at the institutional, governance, community and individual levels. Critical issues and drivers leading to land and ecosystem degradation such as climate change, population growth and unsustainable practices demand timely attention and involvement of different stakeholders and cross-sectoral collaboration. A development of large-scale plans is also necessary to make cost-effective large-scale solutions and to deliver synergies with all ongoing small-scale plans. Instead of working in isolation, cross-sectoral collaboration seeks to foster engagement across sectors, strengthen awareness and capacity to support outcomes of shared benefits from the restoration of ecosystem services.

The priorities for improving enabling conditions for land and ecosystem restoration are:

- Promote integrated sectoral planning and implementation of policies at all levels and particularly strengthen synergies between sectors to enhance sustainable outcomes of interventions, and avoid “leakage” of the “cost” of restoration at/among different levels;
- Conduct assessment of drivers of ecosystem degradation and restoration opportunities at the appropriate level and develop restoration plans;
- Develop and implement land and ecosystem management and restoration plans at national and local levels, ensuring alignment at different levels (local level plans support the achievement of national-level plans but also national-level priorities are linked to local priorities);
- Develop and implement land use plans at national and local levels both for avoiding degradation and for restoration (ensuring linkages as above);
- Promote payment for ecosystem services (PES) schemes to support the functioning of forest, rangeland and water management structures;
- Upscale restoration initiatives through new commitments and implementation of existing commitments (e.g. commitments under CBD, UNCCD and UNFCCC, and the Bonn Challenge/AFR100, The Great Green Wall Initiative);
- Incorporate information and knowledge on natural capital analyses into national accounts, development planning and decision-making, especially through implementing the System of Environmental-Economic Accounting and futures planning among others, to improve the sustainable use of natural resources for sustainable development;

- Establish a national Monitoring and Evaluation Framework for national commitments, building on existing M&E frameworks (e.g. UNEP-WCMC M&E Framework).

6. Integrating land and ecosystem restoration in relevant sectoral policies, plans and programmes

6.1. Environment Sector

Managing the environment sector, which is at the centre of the systems that sustain life on Earth, livelihoods and national economies, involves investing in national environmental management, monitoring and reporting, and developing national environmental standards, guidance and guidelines for other sectors in the restoration of degraded land and ecosystems.

The priorities for the environment sector are:

- Develop national programmes for promoting integration of biodiversity and ecosystem services in other sectors (e.g. agriculture, energy, infrastructure development, tourism, livestock, fisheries, forestry, trade, etc.) with clear objectives and tools for the short term, medium term and long term, and with clear mechanisms for monitoring, evaluation and adaptive management to enable successful implementation;
- Apply existing practical guidelines for integration of biodiversity into other sectors (agriculture, energy, infrastructure development, tourism, fisheries, forestry, livestock, etc.) and adapt them to specific context to support implementation and to strengthen public education and awareness;
- Put in place measures to control activities affecting wetlands functionality and integrity, and implement restoration measures to ensure that they continue to play their vital roles as water reservoirs, flood barriers and short-term holding areas for excess rainwater;
- Carry out appropriate actions to maintain or enhance provision of ecosystem services and functionality in degraded ecosystems such as mountains, wetlands, drylands, rangelands and forests, marine and coastal ecosystems;
- Develop and implement national invasive species strategies as appropriate;
- Promote the ecosystem approach for holistic consideration of ecosystem functionality and multi-stakeholder needs and engagement.

6.2. Agriculture Sector

The expansion of agriculture by land conversion is one of the biggest drivers of land and ecosystem degradation and biodiversity loss. The current area of degraded soil amounts to about 494 million ha in Africa, with sub-Saharan Africa alone accounting for 65 per cent of agricultural land degraded. From the seven aspirations of the African Union's vision and Agenda 2063, a prosperous Africa based on inclusive growth and sustainable development will rise from the modernization of agriculture. Sustainable agriculture and ecosystem restoration provide opportunity for meeting the challenges of food production and enhancing ecosystem resilience.

The priorities for the agriculture sector are:

- Develop and implement integrated agroforestry strategies and appropriate rural extension services considering landscape restoration principles, including agrobiodiversity;
- Adopt ecosystem-based adaptation and climate-resilient agricultural practices to leverage sustainable production in the agriculture and livestock sectors;
- Integrate biodiversity research and monitoring and avail provisions for incentivizing organic farming in agriculture strategies and plans;

- Support/promote restoration of degraded land for agriculture and livestock where there is the potential, relevant off-farm initiatives to strengthen the capacity of local communities and small to medium sized enterprises (SMEs), and boost creation of green jobs to reduce the need for agricultural land expansion;
- Use available technologies to minimise the impact on biodiversity in agricultural systems;
- Facilitate the conservation and sustainable use of local species and related reproductive material (such as seeds) to increase the resilience of local ecosystems.

6.3. Forestry Sector

Forests in Africa are major providers of food, wood, energy, fibre and non-timber forest products (NTFPs) on the continent, and they play a crucial role in conserving biodiversity, mitigating climate and maintaining functional ecosystems. Promoting and restoring agro-sylvopastoral/agro-forestry landscapes and increasing forest cover (including the NTFPs) should be emphasized for the protection of biodiversity as well as livelihood security of millions of Africans.

The priorities for the forestry sector are:

- Give due consideration to biodiversity, and adopt an ecosystem approach when planning and implementing actions including those set out in Article 5 of the Paris Agreement for realizing multiple benefits;
- Avoid the afforestation of grasslands and ecosystems with naturally low tree cover;
- Make use of the United Nations forest instrument to implement the United Nations strategic plan for forests, 2017-2030 (UNSPF), under the United Nations Forum on Forests, ensuring that due consideration is given to biodiversity;
- Promote the implementation of sustainable management of all types of forests including agroforestry systems and enhance the sustainable management and production of NTFPs for biodiversity conservation and sustainable livelihoods;
- Develop or enhance mechanisms of monitoring, evaluation of the impacts of policies, programmes, plans, projects and strategies relating to forest activities to inform adaptive management and public awareness.

6.4. Fisheries and Aquaculture Sector

The fisheries and aquaculture sector contribute significantly to Africa's overall economy. FAO (2014), estimated that in 2011, the fisheries and aquaculture sector generated more than US\$ 24 billion, representing 1.26 per cent of the gross domestic product (GDP) of all African countries. However, the sector faces enormous threats including over-exploitation, pollution, introduction of invasive alien species, overharvesting and global climate change that need to be addressed in the context of Africa's Blue Economy agenda.

The priorities for the Fisheries and Aquaculture sector are:

- Encourage national and regional fisheries management institutions to further consider biodiversity and ecosystem restoration related matters in fisheries management, in line with the ecosystem approach;
- Enhance professionalization in aquaculture and payment for ecosystem services to sustain and restore marine ecosystems and their services;
- Enhance the protection, conservation and restoration (including natural regeneration) of coastal areas and lake buffer systems to enhance biodiversity, ecosystem services, and resilience and reduce pollution;

- Promote the use of sustainable and innovative fishing materials that allow breeding of native species to occur and ensure that fish populations and other biodiversity remain at a sustainable level;
- Develop and implement national blue economy strategies to diversify the economic base and catalyse socio-economic transformation, using ocean resources for economic growth, improved livelihoods and jobs, while preserving ocean and coastal ecosystem health.

6.5. Energy Sector

Africa faces an enormous energy challenge and its growing population and economic progress has sent energy demand soaring. About 600 million people in Africa do not have access to electricity, and approximately 730 million people rely on traditional uses of biomass (IEA, 2014). Africa 2030 for the continent's energy transition illuminates a viable path to prosperity through renewable energy development. In addition, Sustainable Development Goal 7 calls all countries to ensuring universal access to affordable electricity by 2030. Therefore, investing in clean energy sources such as solar, wind and thermal and expanding infrastructure and upgrading technology to provide clean energy in all African countries is a crucial goal that can both encourage growth and help the environment.

The priorities for the energy sector are:

- Promote clean and efficient energy technologies that take into account the conservation of biodiversity and ecosystem services, such as certification schemes for charcoal and wood to encourage more investment in landscape restoration and move towards a more sustainable and efficient supply chain;
- Take into consideration the conservation of biodiversity when planning for clean, low-cost wind, wave and solar energy through effective regional collaboration and grid interconnection;
- To close the electricity gap sustainably and cleanly, by channelling investments in fossil fuel subsidies to renewable energy systems that take into account the conservation of biodiversity and ecosystem services;
- Take into account the conservation of biodiversity and ecosystem services when expanding infrastructure and upgrading technology for supplying modern energy services for all.

6.6. Infrastructure Development Sector

The African Union Heads of State and Government have endorsed the Programme for Infrastructure Development in Africa (PIDA) as common framework for building the infrastructure necessary for more integrated transport, energy, ICT and trans-boundary water networks to boost trade, spark growth and create jobs. Consequently, a number of infrastructure projects have been initiated and others are planned. However, some of the projects have contributed or, if not designed and implemented appropriately, are likely to lead to land and ecosystem degradation by damaging and destroying natural habitats, and negatively impacting biodiversity (Laurance et al. 2017). As such, it is important to find a balanced path that is economically, socially and environmentally responsible.

The priorities for the infrastructure sector are:

- Integrate futures thinking into the design of infrastructure so that the impact of infrastructure developments on biodiversity and ecosystem services is minimum;
- Develop a spatial assessment that identifies the current and future physical infrastructure and correlate this to critical ecological infrastructure to manage the trade-off between the needs for physical infrastructure and the sustainable and more inclusive provision of ecological services;
- Conduct strategic environmental assessments (SEAs) for different sectors (e.g. physical infrastructures such as roads development) to identify potential environmental impacts and potential mitigation measures;

- Promote the use of social and environmental criteria during infrastructure planning and design, prioritizing consideration of ecosystem-based approaches;
- Integrate sustainability concerns into national and regional infrastructure development policies.
- Undertake proactive land-use planning to ensure that infrastructure development effectively integrates other land-use needs.

6.7. Mining Sector

African countries have potential wealth — oil, gas and mineral wealth can contribute to the improvement of the well-being of their populations. However, mining disturbs soil and rock in the course of constructing and maintaining roads, open pits, and waste impoundments. Erosion of the exposed earth may carry substantial amounts of sediment into streams, rivers and lakes. The approach taken towards the exploitation of these resources often determines a country's ecological and economic resilience and increases the risk of undermining national goals of sustainable and therefore inclusive development. Excessive sediment can clog riverbeds and smother watershed vegetation, wildlife habitat and aquatic organisms. There is a need to adopt adequate prevention and control strategies and promote sustainable mining in Africa.

The priorities for the mining sector are:

- Conduct strategic environmental assessments (SEAs) for the mining sector to minimize the negative impact on biodiversity and degradation of ecosystem services;
- Enable the mainstreaming of biodiversity concerns into the mining sector, including by participating in intersectoral committees;
- Promote and support model mining to avoid degradation and enhance biodiversity and ecosystem services conservation and restoration of mining sites;
- Enhance public-private sector partnerships for the operationalization of Payment for Ecosystem Services schemes and corporate social responsibility through sustainable land management and ecosystem restoration;
- Enforce laws and strategies for rehabilitation and restoration plans in new open sites for mining activities.

6.8. Manufacturing and industrial development Sector

Development in Africa requires economic transformation and industrialization. The 10th African Union Assembly (January 2008), adopted the Action Plan for Accelerated Industrial Development of Africa (AIDA). This plan needs to be implemented in such a way that it does not lead to land and environmental degradation, air and water pollution and affect biodiversity and the quality of human lives. In order to sustainably benefit from the manufacturing and industrial development sector, African countries need to adopt, use and adapt existing environmentally sound technologies to local conditions as well as indigenous technological innovation.

The priorities for the manufacturing and industrial development sector are:

- Promote clean and efficient technologies that support conservation and restoration of biodiversity and reduce the impact of manufacturing and industrial development on biodiversity and ecosystems;
- Strengthen adoption of sustainable waste management practices at national and local levels, especially at industrial production sites;

- Identify the business risks and opportunities associated with companies' contribution to land and ecosystem degradation and develop plans for mitigating impacts involving employees, owners, suppliers and customers;
- Integrate business strategies and actions on land conservation and restoration with wider corporate social responsibility initiatives;
- Promote alternative technologies for effluent management in marine and freshwater systems, including ecosystem-based approaches.

7. Means of Implementation

7.1. Capacity Development

Africa's constrained human resource capacity is arguably the greatest limitation to land and ecosystem restoration efforts. Capacity building efforts are instrumental to creating foundations of adaptive management and stakeholders' ability to implement the planned actions in this agenda. Many of the actions required to implement this Agenda are knowledge-intensive and require new skills across sectors and management levels.

The priorities for capacity development actions for land and ecosystem restoration in Africa are the following, among others:

- Harmonize and avoid contradictory policies for sustainable land management, and request technical support from other countries or agencies as needed;
- Conduct training on mitigating the main drivers of land use change (e.g. conservation agriculture, watershed management, energy, poverty);
- Develop and disseminate monitoring instruments for sustainable land management, including land and ecosystem restoration;
- Undertake capacity development for implementing sustainable land management at the local, subregional, regional and national levels;
- Increase awareness of the serious effects of land and ecosystem degradation on human well-being;
- Conduct training in sustainable land and ecosystem management and ecosystem restoration techniques to farmers and other land users, leveraging traditional knowledge;
- Provide training in specialized fields such as climate and hydro-climate studies, geographical information systems, environmental impact assessment, modelling, integrated coastal zone management, soil and water conservation and soil restoration.

7.2. Technology Development and Transfer

African countries have committed to take measures to ensure technology transfer, adaptation and support for innovation (Africa Agenda 2063). However, most of the technologies, especially those related to land and ecosystem management, are poorly documented, and their efficiency and potential are not well assessed. In addition, some technologies available are costly and there is limited capacity to adapt them.

The priorities for technology development and transfer are:

- Promote the adaptation of existing environmentally sound technologies to local conditions and incorporate the traditional knowledge of indigenous peoples and local communities with their full involvement;
- Enhance the use of enabling technologies, including information and communications technology, to promote land and ecosystem restoration;

- Promote innovation, adoption and diffusion of technologies related to land and ecosystem restoration, in line with objectives of the African Continental Free Trade Agreement (AfCFTA);
- Strengthen South-South cooperation for technological exchange;
- Strengthen capacity of institutions to provide research on efficient technologies for land and ecosystem restoration;
- Create an enabling environment for the participation of the private sector in the development and adoption of technology for ecosystem restoration in urban and rural areas;
- Take measures to ensure technology transfer, adaptation and support for innovation;
- Identify existing traditional and local knowledge in undertaking land and ecosystem restoration and enhance sharing and wider dissemination, with the full involvement of indigenous peoples and local communities.

7.3. Resource Mobilization

The sources of financing for the implementation of this Pan African Agenda will range from government budgetary allocations, commercial finance from both public and private sources, concessional loans and also other international agencies that support various initiatives on land and ecosystem restoration. Domestic Resource Mobilization (DRM) will be the pillar of all finances needed to implement this agenda in order to create greater domestic policy ownership and greater coherence with domestic needs. DRM is meant to contribute at least 70 per cent to 90 per cent of the financing of this Agenda on average per country, namely through enhanced fiscal resource mobilization, government expenditure, institutional savings, central banks and foreign exchange reserves and other innovative mechanisms.

The implementation of this Pan African Agenda will also build on commitments and investments of private sector. More and more businesses have now realized that land degradation affects business performance and have now recognized the importance of restoring natural capital. Putting in place innovative financing mechanisms such as tax levies and tax rebates on natural resources related sector, licensing fees and user permits as well as developing and implementing projects that support biodiversity and ecosystem restoration across the continent can motivate private sector engagement in land and ecosystem restoration. Moreover, private companies will contribute to biodiversity and ecosystem restoration through payment for ecosystem services of which their business depend.

This Pan African Agenda will also be financed through external financing mechanisms including FDI, official development assistance (ODA), the Global Environment Facility (GEF) and the African Development Bank among others. Through its Land Degradation focal area, the GEF has, since 2016, been integrating land degradation neutrality into its programs. By investing more resources in land and ecosystem restoration, the GEF can help to deliver on multiple goals and benefits in a more strategic and effective manner and achieve a higher return on its investment. The African Development Bank is already committed to assisting African member countries in combatting desertification as well as land and ecosystem degradation, with several successful programmes on the continent.

7.4. Knowledge management and Experience sharing

Development and implementation of frameworks for improved collaboration and knowledge flows between member states on land and ecosystem restoration in Africa will be crucial to the successful implementation of this Pan Africa Agenda. It is proposed in this Action Agenda that an online Land and Ecosystem Restoration portal will be established to communicate, among other things, the national programs, plans and activities planned in this agenda to the public and international community, thereby raising awareness and facilitating knowledge sharing. African member States have and will have knowledge and experiences

emanating from the implementation of this Pan African Agenda captured through their monitoring and evaluation systems could be shared for the benefit of all.

Some of the mechanisms and measures for sharing knowledge and experiences may include the following:

- Documentation of best practices from the monitoring and evaluation reports from member States by NEPAD or any elected committee and shared between member States through meetings, website presentation, e-network or publications;
- Organization of study tours at the regional level within and across RECs for Member States to learn first-hand from the experiences and lessons of other member States;
- Taking advantage of existing structures and initiatives, such as the African Forestry and Wildlife Commission (a regional body under FAO)¹⁵ for experience sharing;
- Creating annual forums for stakeholders to exchange ideas and perspectives on the implementation outcomes of this Action Agenda at the subregional and continental levels.

7.5. Research

Studies from Africa indicate that the cost of inaction in the face of land degradation is at least three times higher than the cost of action (IPBES, 2018). Much has been accomplished regarding research, monitoring, implementing protected areas and identifying areas of biodiversity hot spots. Aichi Biodiversity Targets 7 and 19 underline the need for science-based information.

The research priorities are:

- Conduct assessments and collect data and information to guide decision-making, including the mapping of ecological conditions, especially of critically degraded ecosystems, the protection status across the region, and the mapping of current uses of degraded areas that support other locally important uses (e.g. grazing), using available tools (such as those developed by International Union for Conservation of Nature (IUCN), Institutional Institute for Sustainability (IIS), World Resource Institute (WRI) and FAO among others);
- Conduct mapping of degradation risk (from different types of use) and the potential for restoration for different goals (e.g. for conservation, water provisioning, sustainable agriculture, or agro-forestry);
- Develop a framework for an integrated assessment of degradation and restoration potential at different levels that allows integration of national and local level priorities, involving all sectors and actors;
- Compile relevant experiences and good practices (including traditional knowledge) and lessons learned from various initiatives to combat land degradation and enhance land and ecosystem restoration;
- Establish and/or strengthen national and regional information systems on land and ecosystem restoration to enhance data management and sharing;
- Develop national accounts of biodiversity and ecosystem services, including on the cost-benefits of restoration, to inform policy and decision-making;
- Involve universities and other research institutions in finding scientific, technical and technological solutions to land and ecosystem degradation;
- Carry out an assessment of how to integrate various biodiversity approaches and tools (e.g. information, decision-support and implementation tools) to inform development of national programmes and selection of a combination of approaches and tools;

¹⁵ <http://www.fao.org/3/MX460EN/mx460en.pdf>

- Support the development of educational materials for schools to advance academic training, including higher-learning institutions;
- Establish a national monitoring and evaluation framework for national commitments, with clear criteria and indicators and pathways enabling adaptive management and improving public awareness.

8. Stakeholder Engagement

8.1. Women and Youth

Embedding gender considerations and involving youth into restoration activities offers considerable opportunities for leveraging synergies between restoration commitments, climate change action and global commitments to sustainable development. Women and youth have developed a distinctive relationship with biodiversity and they often play the predominant role as users and guardians of biodiversity, for example as plant collectors, family gardeners, plant domesticators, herbalists and seed guardians. Decisions about what species to introduce in a degraded landscape and what areas should be prioritized for restoration should be made following inclusive participatory processes. Therefore, the implementation of this Pan African Agenda recognizes the critical role of women and youth in the planning and implementation of land and ecosystem restoration.

8.2. Indigenous Peoples and Local Communities and Sustainable Community Solutions

As a source of a multitude of services and resources, ecosystems in Africa provide the basis for a sustainable future. However, a variety of diverging pressures and conflicting interests continue to degrade social-ecological systems. Local communities are among the most impoverished, and they are highly vulnerable to external forces from globalization and natural disasters. On the other hand, these communities have accumulated generations of traditional knowledge, cultural values, languages and experience, and can offer solutions to land and ecosystem restoration. To create the enabling conditions to promote ecosystem restoration in Africa, there is a need to invest in sustainable and innovative local solutions and build resilient socio-ecological systems that learn, adjust and use multiple forms of knowledge, experience and technologies to cope with increasing challenges and a changing climate.

The priorities for enhancing sustainable community solutions are:

- Establish and build capacity of community structures as landscape restoration champions;
- Conduct community assessments to promote mutual understanding and to establish community interests and expectations, inputs and participation in ecosystem restoration;
- Support the development of participatory local restoration plans that provide local benefits;
- Promote sustainable practices that build on traditional knowledge and local conditions;
- Include participation of women and youth in the planning, implementation and monitoring of restoration activities.

8.3. Private Sector

Unsustainable practices by the private sector often lead to ecosystem degradation, which reduces the capacity of ecosystems to provide a constant and sustainable flow of ecosystem goods and services, for both current and future generations (UNEP 2007). Working together, governments and the private sector can enable mutually successful partnerships that incorporate environmental sustainability, ecosystem restoration, and involvement of local communities.

The priorities for private sector engagement are:

- Promote public-private partnerships to integrate land and ecosystem restoration in business operations and value chains as part of a long-term and wholistic business strategy;
- Encourage the private sector to take advantage of new technologies and management practices that take into account the conservation and sustainable use of biodiversity especially in the energy and mining sectors as an opportunity to generate benefits while contributing to national land and ecosystem restoration commitments;
- Promote the sustainable use of biodiversity as an imperative of social-economic development of Africa.

8.4. International and Technical Cooperation

This Action Agenda will be implemented by the member States in collaboration with relevant regional and international organizations and development partners that have technical expertise, tools and resources to support the implementation of the Action Agenda. Such cooperation will, among other things, facilitate capacity-building, and improve access to and transfer of knowledge, expertise and technologies to support different actions. It will also support the development and use of monitoring and evaluation tools for tracking the status of land and ecosystem restoration. Furthermore, international cooperation will support resource and finance mobilization to complement domestic sources for the successful implementation of the Action Agenda.

Member States may benefit from collaborations with various United Nations agencies, intergovernmental organizations, non-governmental organizations, research networks and non-for-profit organizations. These include but are not limited to:

Intergovernmental organizations and initiatives:

Intergovernmental organizations supporting projects and programs that aim at conserving the environment, climate change mitigations and combating land degradation in Africa are, among others, UN Environment (e.g. through the AfriMontane for Life Programme), the United Nations Development Programme (through its Global Policy Centre on Resilient Ecosystems and Desertification), the United Nations Economic Commission for Africa, the United Nations Educational, Scientific and Cultural Organization (e.g. through its Man and the Biosphere Programme), the United Nations Industrial Development Organization, the Food and Agriculture Organization of the United Nations, the International Fund for Agricultural Development (IFAD), the World Bank, and the United Nations Collaborative Programme on Reducing Emissions from Deforestation and Forest Degradation in Developing Countries (UN-REDD+).¹⁶

Bilateral and multilateral development cooperation partners:

- The following bilateral development cooperation partners, among others, may be interested in supporting the implementation of this Action Agenda: Australia Development Cooperation, Austrian Development Agency, Belgian Development Agency, Global Affairs Canada and the International Development Research Centre (IDRC), China International Development Cooperation Agency, Danish International Development Agency (DANIDA), European Union, Finnish Department for International Development Cooperation (FINNIDA), French Department for International Cooperation and French Development Agency (Afd), Germany Federal Ministry for Economic Cooperation and Development (BMZ) and German Agency for International Cooperation (GIZ), Irish Aid, Israel's Agency for International Development Cooperation (MASHAV), Italian Development Cooperation Programme, Japan International Cooperation Agency (JICA), Korea International Cooperation Agency (KOICA),

¹⁶ <https://www.unredd.net/>

Kuwait Fund for Arab Economic Development, Netherlands Development Cooperation (Ministry of Development Cooperation), New Zealand Agency for International Development (NZAid), Norwegian Agency for Development Cooperation (NORAD), Saudi Fund for Development (SFD), Spanish Agency for International Development Cooperation (AECID), Swedish International Development Cooperation Agency (Sida), Swiss Agency for Development and Cooperation (SDC), Turkish Cooperation and Coordination Agency, United Kingdom - Department for International Development (DFID), and United States Agency for International Development (USAID).

International organizations, non-profits and networks:

The following regional and international organizations and initiatives are expected to be actively involved in the implementation of the Action Agenda: Intergovernmental Authority on Development in Eastern Africa (IGAD), Permanent Interstate Committee for Drought Control in the Sahel (CILSS), Sahara and Sahel Observatory (OSS).

Not-for-profit organizations that are expected to contribute to support implementation of the Action Agenda include: African Wildlife Fund (AWF), BirdLife International, Conservation International (CI), Center for International Forestry Research (CIFOR), Eco-Agriculture Partner, International Union for Conservation of Nature (IUCN), International Union of Forest Research Organizations (IUFRO), Wetlands International, World Wide Fund for Nature (WWF) and World Resources Institute (WRI).

Member States will also leverage various platforms and networks, such as Global Landscapes Forum (GLF) and the Society for Ecological Restoration (SER), to communicate, network and share information, knowledge and experiences on ecosystem restoration.

The list below provides descriptions of ecosystem restoration work undertaken by some of the above organizations and platforms:

- *International Union for Conservation of Nature (IUCN)* has taken lead in the development and implementation of many landscape restoration initiatives such as the Bonn Challenge. IUCN coordinates the Global Partnership on Forest Landscape Restoration (GPFLR), a network of leading organizations and individuals that supports the Bonn Challenge and the achievement of the Aichi Biodiversity Targets through gathering knowledge on restoration, facilitating restoration assessments, building capacity on landscape restoration, and providing a collaboration framework for pursuing Bonn Challenge commitments.
- *World Resources Institute (WRI)* is supporting land restoration in Africa, for example, through providing various tools and methods, such as, with IUCN, the Restoration Opportunities Assessment Methodology (ROAM) which culminated in the establishment of the Atlas of Forest Landscape Restoration Opportunities.
- *UN Environment-World Conservation Monitoring Centre (UNEP-WCMC)* could support the Pan-African Action Agenda, through its broad network of scientists and policymakers worldwide, building on its considerable expertise in developing ecosystem accounts within the System of Environmental-Economic Accounting (SEEA) framework, the development of monitoring and evaluation frameworks as Secretariat of the Biodiversity Indicators Partnership, and support to the African Leadership Group on biodiversity mainstreaming approach.
- *World Agroforestry Centre (ICRAF)*, a centre of scientific excellence that harnesses the benefits of trees for people and the environment, could support the implementation of this Pan-African Agenda by building the capacities of governments and farmers to utilize the power of trees to make farming and livelihoods more environmentally, socially and economically sustainable at scales and thus contribute to land and ecosystem restoration.
- *The Center for International Forestry Research (CIFOR)*, a non-profit, scientific institution that conducts research on the most pressing challenges of forest and landscape management around the world, could support this Pan-African Action Agenda through conducting innovative research,

developing partners' capacity in forest and landscape management, and actively engaging in dialogue with all stakeholders to inform policies and practices that affect forests and people in Africa.

- *International Union of Forest Research Organizations (IUFRO)*, a non-governmental international network of forest scientists that promotes global cooperation in forest-related research and understanding of the ecological, economic and social aspects of forests and trees, could support this Action Agenda building on its expertise in disseminates scientific knowledge to stakeholders and decision makers and its contribution to forest policy and on-the-ground forest management.
- *World Wide Fund for Nature (WWF)*, an international not-for-profit organization supporting the conservation and sustainable of biodiversity worldwide, could support the implementation of the Action Agenda building on its various ongoing programmes across many countries in Africa.
- *Wetlands International* is currently supporting a number of wetlands restoration projects and programs in Africa, such as the Mangrove Capital Africa, a ten-year programme funded by the Dutch DOB Ecology, which aims to safeguard and restore 1 million hectares of African mangrove ecosystems for the benefit of people and nature by 2027.¹⁷
- *Eco-Agriculture Partner*, a non-profit champion of integrated landscape management to help communities and organizations grow healthy and resilient places from the grassroots up, could support the implementation of this Action Agenda by providing capacity-building support to communities in managing their landscapes and enhance rural livelihoods, and conserving and sustainably using biodiversity and ecosystem services.
- *Global Landscapes Forum (GLF)*, the world's largest knowledge-led platform on sustainable land use, dedicated to achieving the Sustainable Development Goals and Paris Climate Agreement, will be a useful mechanism for supporting the Action Agenda. The forum has connected 3,900 organizations with over 231.5 million participants from more than 148 countries. Particularly, the forum supports the greening of Africa through the AFR100 and resource mobilization. GLF could support the Pan-African Action Agenda in the overall implementation of AFR100 planned activities and support countries in developing innovative finance mechanisms to invest in sustainable farming and supply chains.
- *The Society for Ecological Restoration (SER)*, a global community of professionals actively engaged in the ecologically sensitive repair and recovery of degraded ecosystems utilizing a broad array of experiences, knowledge sets, and cultural perspectives, could support this Action Agenda through facilitating communication and networking, sharing information and knowledge on ecological restoration and in advancing advice on policies related to ecological restoration.

9. Implementation Arrangements

9.1. Governance: Strategic Direction and Oversight

The Action Agenda will be implemented by all African Member States in collaboration with partner organizations and under the overall policy direction and oversight of the African Union Commission and the African Ministerial Conference on the Environment (AMCEN). The New Partnership for Africa's Development Planning and Coordinating Agency (NEPAD Agency) will provide the Secretariat for coordinating the Action Agenda implementation. The roles and responsibilities for the governance, implementation and coordination of the Action Agenda are described below.

The Assembly of the African Union, as the highest governing body and decision-making organ of the African Union, will provide the legal, policy and financial frameworks for implementing commitments of their respective countries toward landscape and ecosystem restoration and facilitate the Public Private Partnership for Infrastructure financing.

¹⁷ <https://www.wetlands.org/?s=restoration>

The African Ministerial Conference on the Environment (AMCEN), with the support of its Secretariat, will also provide strategic and policy guidance and continent-wide leadership and oversight to ensure the effective implementation of the Action Agenda. Among other things, AMCEN will review and monitor progress with the implementation of the Action Agenda, develop consensus and champion new policies, strategies and programmes to combat land degradation and enhance ecosystem restoration in the region.

A High-Level Steering Committee for the Pan-African Ecosystem Restoration Action Agenda comprising ministers, senior officials and experts from Member States representing the sectors of the environment, climate change, natural resources and land management sectors will be established by the African Union Executive Council to provide advice and guidance on the implementation of the Action Agenda. The Committee will be serviced by the NEPAD Agency and will work very closely with the relevant Commission departments and the Regional Economic Communities (RECs) to ensure the proper coordination and harmonization of ecosystem restoration policies, plans and programmes across the region. The reports of the Committee will be submitted to the AMCEN and other relevant Specialized Technical Committees.

Future African ministerial summits on biodiversity will be convened to review progress in the implementation of the Action Agenda and provide further policy directions, as appropriate.

9.2. Implementation Support and Coordination Mechanism

The New Partnership for Africa Development (NEPAD) Agency in collaboration with the African Union Commission (AUC) and the Regional Economic Communities (RECs) will provide overall technical oversight and coordination of the Action Agenda implementation. The NEPAD Agency will lead and coordinate the planning and implementation of the continental level restoration initiatives and promote stakeholder engagement and coordination through the Africa member States and the RECs at the subregional level.

The African Development Bank (AfDB) will mobilize strategic investments and facilitate access to financing for ecosystem restoration projects and ventures by both government institutions, private sector, SME finance/banking and micro-finance at the regional and national levels.

At the national level, implementation of the Action Agenda will be spearheaded by designated national entities in accordance with the respective laws and regulations of the country. Government institutions are encouraged to partner with scientific, academic and civil society institutions to promote and support ecosystem restoration projects and activities at the local and subnational levels as well as facilitate capacity-building, training and technology transfer to improve the planning, implementation and monitoring of ecosystem restoration programmes using a bottom up approach to ensure local ownership and sustainability of those programmes. Academic institutions are encouraged to partner with relevant civil society organizations and development partners to promote and integrate ecosystem restoration into formal and informal education systems and environmental awareness-raising programmes across the continent. They should develop and provide tailored training course to develop the knowledge, skills and know-how, as described in section 2 above (Land and Ecosystem Degradation in Africa: Status, Challenges and Opportunities).

The NEPAD Agency in partnership with AfDB and development partners will setup an online land and ecosystem restoration portal to be used by member States to submit and access information about ecosystem restoration across Africa to facilitate knowledge sharing and awareness-raising. The information shared through the online portal could include national and subnational assessment reports on the status and trends of land and ecosystem degradation at the national and local levels; national ecosystem restoration

policies, strategies and plans; national assessments of restoration opportunities, learning and guidance materials, capacity-building and resource mobilization opportunities as well as reports on progress made by various African countries towards achieving their ecosystem restoration commitments and targets.

10. Monitoring and Evaluation

The NEPAD Agency will be responsible for monitoring and reporting on the performance of the ecosystem restoration programmes across the region and the overall progress being made towards achievement of the pledged commitments and targets.

Measuring restoration process requires a monitoring system that is based on a long-term time horizon. Furthermore, restoration involves not only tree cover but also much smaller components of vegetation cover, and as such, monitoring restoration requires high- to very high-resolution satellite to detect small, dispersed, and subtle changes in the landscape. The monitoring and evaluation will be undertaken making use of the GGWSSI¹⁸ result framework and tools such as Collect Earth and the Tree Cover Mapping Tool, which are based on a sampling approach that utilizes freely available imagery from Google Earth, thus providing a solution to some of the issues associated with cost and time constraints.

Setting the targets and monitoring system for this Pan African Action Agenda will be based on commitments made mainly at the national scale and other levels such as landscape scale or transboundary levels. In general, the development of a monitoring system should (1) engage different sectors and stakeholders at all scales; (2) consider trade-offs and finding the right balance between costs/effort, particularly for a long-term, sustainable monitoring system; and (3) develop a communications strategy to effectively communicate the results and lessons learned from the monitoring to the stakeholders to enable adaptive management and to inform awareness-raising.

A holistic monitoring system should include indicators that draw on the following (from AFR100):

- Socioeconomic: to assess the health and well-being of people within the context of restoration goals
- Political: to assess the political will and favourable policy conditions—in the form of new or modified laws that enable restoration or simply visible support from politicians
- Financial: to understand the flow and/or sum of investments in restoration activities and financing of restoration initiatives
- Biophysical: to assess the physical change in land use and land cover over time.

The actions and indicative milestones along the period 2019-2030 presented in Annex I will be used to monitor the progress in the implementation of this Pan African Action Agenda.

¹⁸ GGWSSI = Great Green Wall for Sahara and the Sahel Initiative: <http://www.fao.org/3/a-i6476e.pdf>

Annex I

Implementation Plan for the Pan-African Action Agenda on Ecosystem Restoration 2019-2030

Main Group of Action	Short-term actions (2019-2020)	Medium-term actions (2021-2025)	Long-term actions (2016-2030)
1. Assessment of opportunities for ecosystem restoration	<ul style="list-style-type: none"> • Consolidate activities and initiatives towards achieving Aichi targets as proposed in the NBSAPs • Compile and make available to Member States the various available tools for assessing ecosystem restoration opportunities • Assess the extent, type, degree and location of degraded ecosystems at regional, national, and local scales and the potential costs and multiple benefits of ecosystem 	<ul style="list-style-type: none"> • Conduct assessments of opportunities for ecosystem restoration in at least 80 per cent of African countries • Share completed assessments of ecosystem restoration opportunities through an online restoration portal established at NEPAD 	<ul style="list-style-type: none"> • Share completed assessments of ecosystem restoration opportunities through an online restoration portal established at NEPAD;
2. Establishing enabling conditions for ecosystem restoration through national and regional policies and strategies	<ul style="list-style-type: none"> • Assess the existing policy, legal and institutional frameworks for implementing ecosystem restoration and identify any gaps • Develop and implement land and ecosystem restoration plans at national and local levels, ensuring alignment at different levels • Conduct integrated sector planning and strengthen synergies between sectors to enhance sustainable outcomes of interventions 	<ul style="list-style-type: none"> • Incorporate information and knowledge on natural capital analyses into national accounts, development planning and decision-making, • Establish a regional trust fund to support land and ecosystem restoration in Africa. 	<ul style="list-style-type: none"> • Promote payment for ecosystem services (PES) schemes to support the functioning forest and water management structures; land and ecosystem restoration
3. Integrating ecosystem restoration into relevant sectoral policies, plans and programmes	<ul style="list-style-type: none"> • Develop national sectoral restoration policies and strategies for promoting integration of land and ecosystem • Conduct strategic environmental assessments (SEAs) for different sectors (e.g. roads development) to identify potential environmental impacts and potential mitigation measures; • Enforce laws and strategies for 	<ul style="list-style-type: none"> • Carry out appropriate actions to enhance provision of ecosystem services and functionality in degraded ecosystems such as mountains, and forest ecosystems; • Develop and implement integrated agroforestry strategies and appropriate rural extension services considering landscape restoration principles, 	<ul style="list-style-type: none"> • Promote the ecosystem approach for holistic consideration of ecosystem functionality and multi-stakeholder needs and engagement. • Adopt ecosystem-based adaptation and climate-resilient agricultural practices to leverage sustainable production in agriculture sector; • Establish public private sector

Main Group of Action	Short-term actions (2019-2020)	Medium-term actions (2021-2025)	Long-term actions (2016-2030)
	<p>rehabilitation and restoration plans in new open sites for mining activities.</p> <ul style="list-style-type: none"> • Put in place measures to promote sustainable practices, clean and efficient technologies that reduce land and ecosystem degradation • Undertake proactive land-use planning to ensure that infrastructure development effectively integrates other land-use needs; • Develop and implement national blue economy strategies to diversify economic base and catalyse socioeconomic transformation 	<p>including agrobiodiversity;</p> <ul style="list-style-type: none"> • Enhance the protection and conservation of coastal areas and lake buffer systems to facilitate natural regeneration and reduce pollution of aquatic systems and biodiversity; 	<p>partnership for the operationalization of the Payment for Ecosystem Services and corporate social responsibility for sustainable land and ecosystem restoration;</p> <ul style="list-style-type: none"> • Integrate business strategy and actions on biodiversity and ecosystem services with wider corporate social responsibility initiatives.
<p>4. Planning and implementation of ecosystem restoration activities, projects and programmes</p>	<ul style="list-style-type: none"> • Put in place measures to control activities leading to ecosystem degradation and address drivers of biodiversity loss • Upscale restoration initiatives through new commitments and implementation of existing commitments • Identify existing local knowledge in development of restoration related technologies and enhance sharing and wider dissemination. • Establish and operationalise a regional private sector and climate change adaptation platform and raise its awareness on green technologies that reduce pollution and degradation of ecosystems • Organize annual forums for stakeholders to exchange ideas and perspectives on the implementation outcomes of this Action Agenda at the sub regional and continental levels. • Compile relevant experiences and good practices (including traditional knowledge) and lessons learned from various initiatives to combat land 	<ul style="list-style-type: none"> • Conduct training (both on-job and academic), on issues related to land and ecosystem restoration such as sustainable agriculture, watershed management, forest landscape restoration, geographical information systems, environmental impact assessment, and integrated coastal management at the local, national sub-regional and regional level • Strengthen south-south cooperation and enable research institutions to transfer knowledge on clean technology development adapted to land and ecosystem restoration • Adopt and support modern innovative technologies as well as indigenous knowledge related to ecosystem restoration and facilitate affordability to local people within Africa; • Establish and/or strengthen national and regional biodiversity information systems to enhance data management and repatriation; • Conduct an annual assessment of the 	<ul style="list-style-type: none"> • Establish/enhance mechanisms for knowledge management and sharing • Document the best practices from the monitoring and evaluation reports for sharing between member states through various channels; • Organise study tours at the regional level within and across RECs for experience and lesson sharing among Member States; • Encourage private sector to take advantage of investing in land and ecosystem restoration initiatives such as carbon market and green mining and contribute to national landscape restoration commitments;

Main Group of Action	Short-term actions (2019-2020)	Medium-term actions (2021-2025)	Long-term actions (2016-2030)
	<p>degradation and enhance ecosystem restoration;</p> <ul style="list-style-type: none"> • Conduct community capacity needs assessment to document community interests and expectations, inputs and participation in ecosystem restoration; • Establish and build capacity of community structures as landscape restoration champions and enhance women and youth participation in the planning, implementation and monitoring of ecosystem restoration activities. 	<p>integration of various approaches and tools related to ecosystem restoration (e.g. information, decision-support and implementation tools) into the development of local, national and regional development programmes;</p> <ul style="list-style-type: none"> • Carry out appropriate actions to enhance provision of ecosystem services and sustainable production 	
5. Implementation of Supporting Actions (means of implementation)	<ul style="list-style-type: none"> • Organise Pan-Africa public awareness on land and ecosystem degradation and restoration opportunities; • Facilitate consultations on defining measures for land and ecosystem restoration at different levels of implementation; • Setup an online restoration portal to be used by member states to submit and access information about ecosystem restoration across Africa • Establish a High-Level Steering Committee for the Pan-African Ecosystem Restoration Action Agenda • Conduct assessment of financing opportunities / engagement of budgets (public, private and other financing mechanisms • Develop strategy for resource mobilisation 	<ul style="list-style-type: none"> • Enhance capacity and participation of different stakeholders, including academia, private sector and civil society; • Promote adaptation of existing and innovation of sound technologies related to ecosystem restoration; • Establish and/or strengthen national information system and best practices on ecosystem restoration; • Identify and secure resources for restoration. • Establish technical and scientific cooperation to facilitate access to relevant technologies and innovative to achieve restoration targets. 	<ul style="list-style-type: none"> • Develop and disseminate monitoring instruments on sustainable land management and restoration and other services generated by the ecosystems; • Establish a regional land and ecosystem restoration trust fund
6. Monitoring and evaluation, reporting, and communication of results	<ul style="list-style-type: none"> • Develop and disseminate monitoring instruments on sustainable land and ecosystem management and restoration • Enhance the capacity of technical teams at National level for Monitoring, evaluation and Reporting 	<ul style="list-style-type: none"> • Develop or enhance mechanisms of monitoring and evaluation of the impacts of policies, programmes, and plans. 	<ul style="list-style-type: none"> • Implement the monitoring system, report on national commitments and restoration activities and share results and lessons learned to guide future restoration efforts.

Annex II

Examples of national targets or similar commitments related to Aichi Biodiversity Target 15¹⁹ (Based on information in the national biodiversity strategies and action plans)²⁰

Country ²¹	National targets or similar commitments ²²
Algeria*	Objective 12: Protect, conserve and restore ecosystems in order to maintain their balance, ensure their sustainability and guarantee the sustainable production of ecosystem services, by aiming at the conservation of at least 20 per cent of land areas, 5 per cent of marine and coastal areas and the restoration of natural ecosystems over an area of at least 5 million hectares. Objective 17: Integrate approaches to adaptation to climate change (ecosystem resilience, restoration of degraded ecosystems, combating desertification) and prevention of natural risks and disasters into ecosystem management.
Benin*	Strategic objective 16: Restore and safeguard ecosystems that provide essential services to basic communities, poor and vulnerable populations and contribute to carbon stocks.
Botswana	National Target 15: By 2025, ecosystem integrity in all Botswana's ecoregions will be conserved through the adoption of ecosystem-level management approaches built around key ecological processes, so that they contribute to climate change mitigation and to combating desertification.
Cabo Verde	National Target 9: By 2025, Cabo Verde will have strengthened protection, improved connectivity and recovered key ecosystems so that they will continue to provide essential services to the economy and the welfare of the population. National Target 10: By 2018, all approved national conservation strategies and plans will integrate elements of resilience and adaptation to climate change.
Cameroon	Target 9: By 2020 degraded ecosystems/habitats should be rehabilitated to re-establish and/or recover lost species and maintained at a level of conservation that ensures long-term sustainability. E-Target 9: By 2020 at least 25 per cent of sites degraded by droughts or floods are rehabilitated within the semi-arid ecosystem.
Comoros*	Objective B2: By 2030, the rate of loss of all natural habitats, including forests, is reduced by at least half and if possible to near zero, and habitat degradation and fragmentation are significantly reduced. Objective C2: By 2030, degraded ecosystems will be restored, at least 50 per cent of extinct species will be restored and maintained at a

¹⁹ Target 15: By 2020, ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced, through conservation and restoration, including restoration of at least 15 per cent of degraded ecosystems, thereby contributing to climate change mitigation and adaptation and to combating desertification.

²⁰ Accessible at: <https://www.cbd.int/nbsap/>

²¹ Countries denoted with an * indicate countries which provided a national biodiversity strategy and action plan in a language other than English. To facilitate readability these national targets or commitments have been translated into English.

²² This is based on information contained in the National Biodiversity Strategies and Action Plans submitted to the Secretariat of the Convention on Biological Diversity and accessible at: <https://www.cbd.int/nbsap/default.shtml>.

Country ²¹	National targets or similar commitments ²²
	sustainable, long-term conservation level. Goal D1: By 2030, ecosystem resilience and the contribution of biodiversity to carbon stocks are improved through conservation and restoration measures, including the restoration of at least 15 per cent of degraded ecosystems.
Congo*	Goal 15: By 2020, ecosystem resilience and the contribution of biodiversity to carbon stocks are enhanced through conservation and restoration measures, including the restoration of at least 15 per cent of degraded ecosystems, thereby contributing to climate change mitigation and adaptation and combating desertification.
Egypt	National Target 13: By 2030, Research and implement measures and strategies to strengthen local-level biodiversity resilience to desertification. National Target 14: By 2025, investigate and monitor all the effects of climate change on biodiversity and ecosystem services.
Eritrea	Target 15: By 2020, ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced, through conservation and restoration of degraded ecosystems, thereby contributing to climate change mitigation and adaptation and combating desertification. Readdressing these challenges, ecosystem resilience and the contribution of biodiversity to carbon stocks have been enhanced through conservation and restoration with effective implementation of the National Adaptation Program of Action and National Action Programmes to combat desertification and mitigate the effects of drought in Eritrea. Eritrea participates in global efforts to restore at least 15 per cent of degraded ecosystems, thereby contributing to climate change mitigation and adaptation and to combating desertification. Target 5: By 2020 at least 25 per cent of catchment sites and degraded lands of high biodiversity hotspots are rehabilitated within the terrestrial ecosystem. By 2020, the loss of natural habitats, degradation and fragmentation of ecosystems has been significantly reduced
Ethiopia	Target 10: By 2020, contribution of biodiversity for ecological services, including climate change adaptation and mitigation is improved through increasing forest cover from 12 per cent to 14 per cent; increased designation of wetlands from 4.5 per cent to 9.0 per cent and doubling restoration of degraded areas. Rehabilitate 22 million hectares (15+7) of degraded forests and lands by 2030. Between 2016 and 2020 the target is to plant nearly 4.56 million ha of forests (nearly one mill ha of forests annually) using 21.35 billion seedlings (4.27 billion seedlings per annum)
Gambia	Target 15: By 2020, ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced, through conservation and restoration, including restoration of at least 50 per cent of degraded ecosystems
Ghana	Action Plan 15: Enhancing ecosystem resilience and restoration to promote the contribution of biodiversity conservation to carbon stocks and ensure restoration of at least 15 per cent of degraded ecosystems restoration.
Guinea*	Goal 15: From 2011 to 2020 at the latest, ecosystem resilience and the contribution of biological diversity to carbon stocks are enhanced through conservation and restoration measures, including the restoration of at least 15 per cent of degraded ecosystems, thus contributing to climate change mitigation and adaptation, and to combating desertification.
Guinea-Bissau	National goal 15: By the year 2020, the resilience of ecosystems and the contribution of the biodiversity for reservations of carbon will have been increased through conservation actions and recovery, through the recovery of at least 15 per cent of the most sensitive and degraded forest ecosystems, thus contributing to the mitigation and adaptation to the climate change and to combat the desertification

Country ²¹	National targets or similar commitments ²²
Equatorial Guinea	Target 10: By 2020, studies on verification and reporting mechanisms for current levels of carbon stock stored in forest ecosystems (through the ongoing REDD+ process) will be completed.
Liberia	Target 4.2: By 2018, ecosystem resilience and the contribution of biodiversity to carbon stocks will be enhanced through the protection of additional forest ecosystems which Liberia's current REDD+ project will create, in addition to the project's enhancement of the mitigation of climate change and restoration of degraded grasslands through reforestation by 2023.
Madagascar*	Strategic Objective 15: By 2025, the adaptive capacity of ecosystems and the contribution of terrestrial, freshwater and marine biodiversity to mitigation and adaptation to climate change will be enhanced, adaptation to climate change are strengthened, including the restoration of at least 15 per cent of degraded ecosystems and the fight against desertification.
Malawi	Target 6: By 2025 at least 50 per cent of the degraded terrestrial habitats are restored and protected Target 15: By 2025, the supply of important ecosystem services is safeguarded and restored
Mali*	Goal 14: By 2020, ecosystem resilience is improved through climate change mitigation and adaptation and desertification control measures.
Morocco*	C2: Take necessary measures to increase ecosystem resilience and the contribution of biodiversity to carbon stocks, including through conservation and restoration, climate change mitigation and adaptation measures, and synergy with actions under other Rio conventions (climate change and combating desertification)
Mozambique	Target 12: By 2035, rehabilitate at least 15 per cent of the degraded ecosystems /habitats, restoring their biodiversity and ensuring its sustainability, with a view to mitigating the effects of climate change and combating desertification. Target 15: By 2025, knowing and strengthen the contribution of biodiversity to increase the stock of carbon to mitigate and adapt to climate change.
Namibia	Target 4.1 By 2022, ecosystems that provide essential services and contribute to health, livelihoods and well-being are safeguarded, and restoration programmes have been initiated for degraded ecosystems covering at least 15 per cent of the priority areas.
Nigeria	Target 4: By 2020, up to 15 per cent of the areas of degraded ecosystems in Nigeria are under programmes for restoration and sustainable management.
Rwanda	Target 5: (P.64) By 2020, natural ecosystems, especially identified "Alliance for Zero Extinction (AZE)" sites are safeguarded, their degradation and fragmentation reduced Target 14: By 2020, 30 per cent of the country is covered by forests hence increasing carbon stocks and contributing to climate change mitigation and adaptation.
Seychelles	Project 19: Calculate the Carbon stored and captured annually in Seychelles ecosystems. Project 20: Identify the key threats posed to Seychelles biodiversity by projected Climate Change and initiate mitigation measures. Project 21: Current primary Biodiversity threats of Climate Change are addressed. Project 31: The NBSAP is administered, coordinated, effectively implemented and integrated into the broader environment governance framework.

Country ²¹	National targets or similar commitments ²²
Somalia	Strategic Target 15: By 2030, ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced, through conservation and restoration, including restoration of at least 15 per cent of degraded ecosystems, thereby contributing to climate change mitigation and adaptation and to combating desertification
South Africa	Outcome 1.4: Biodiversity conservation supports the land reform agenda and socioeconomic opportunities for communal land holders; Outcome 2.2: Ecosystem-based adaptation (EbA) is shown to achieve multiple benefits in the context of sustainable development Outcome 3.6: Biodiversity considerations are integrated into the development and implementation of policy, legislative and other tools Outcome 5.1: Macro-level conditions enabled for skills planning, development and evaluation of the sector as a whole Outcome 5.2: An improved skills development system incorporates the needs of the biodiversity sector Outcome 5.3: Partnerships are developed and institutions are capacitated to deliver on their mandates towards improved service delivery
South Sudan	By 2021, studies on the rate of habitat loss furnished towards promoting implementation of land use policy and enforcement of relevant legislation on conservation of natural habitats.
Sudan	Component Target: To conserve, develop and manage the area under forests to enhance environmental protection, minimize soil degradation and preserving biological diversity. Component Target: By 2020, ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced, through conservation and restoration, including restoration of at least 15 per cent of degraded ecosystems, thereby contributing to climate change mitigation and adaptation and to combating desertification. Component Target: Maximize resilience of ecosystem which has high biodiversity and greatest capacity to buffer climate change impacts.
Eswatini	Target 15: By 2022, ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced in Eswatini, through conservation and restoration, including restoration of at least 15 per cent of degraded ecosystems, thereby contributing to climate change mitigation and adaptation and to combating desertification.
Tunisia*	Strategic Objective 4.3: Mitigate/prevent environmental threats to ecosystems Strategic Objective 5.1: Protect and restore biodiversity Strategic Objective 5.2: Improve ecosystem resilience and maintain/strengthen ecosystem services
Uganda	National target: By 2020, ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced, through conservation and restoration, including restoration of at least 15 per cent of degraded ecosystems, thereby contributing to climate change mitigation and adaptation and to combating desertification
United Republic of Tanzania	Target 15: By 2020, ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced, through conservation and restoration, thereby contributing to climate change mitigation and adaptation and to combating desertification.
Zimbabwe	Target 13: By 2020, combat desertification, and enhance ecosystem resilience through conservation and restoration of degraded ecosystems.

Annex III

Country commitments under the African Forest Landscape Restoration Initiative (AFR100)

(Source: AFR100 website: <http://afr100.org/content/countries>)

Country	Commitment (million ha) by 2030	Year committed	Priority interventions
1. Benin	0.5	2016	<ul style="list-style-type: none"> • Reforestation • Restocking and improved management of existing plantations
2. Burundi	2	2015	<ul style="list-style-type: none"> • Establishment and sustainable management of tree plantations • Protection, natural regeneration and fire protection of parks and natural reserves • Agroforestry development: from mixed tree-cop systems to woodlots • Erosion and flood control through progressive terracing with grasses/trees/shrubs • Ecological agriculture • River banks protection and gullies restoration
3. Burkina Faso	5	2018	<ul style="list-style-type: none"> • Development and implementation a cross-border program between Burkina Faso and Niger for the restoration of natural capital and the resilience of local communities. • Promotion best practices for SLM and climate change adaptation • Improvement of food and nutrition security, as well as incomes of producers through the promotion of revenue-generating activities • Establishing environmental education and training programmes on the fight against land degradation
4. Cameroon	12	2017	<ul style="list-style-type: none"> • Establishment and sustainable management of tree plantations • Protection, natural regeneration and fire protection of parks and natural reserves • Agroforestry development: from mixed tree-cop systems to woodlots • Erosion and flood control through progressive terracing with grasses/trees/shrubs • Ecological agriculture • River banks protection and gullies restoration
5. Central African Republic	3.5	2016	<ul style="list-style-type: none"> • Undertaking inventory of degraded lands and analysis of drivers of deforestation • Supporting workshops and institutional arrangements to implement AFR100 in CAR
6. Chad	1.4	2017	*To be determined through the restoration opportunity assessment
7. Côte d'Ivoire	5	2016	<ul style="list-style-type: none"> • Reforestation and natural regeneration of production forests • Protection and natural regeneration, including enrichment planting of parks • Protection, natural regeneration and enrichments planting of coastal forest, riparian forests, wetlands • Enrichment planting of indigenous trees in cocoa agroforests, other tree crop systems and development of tree plantations

Country	Commitment (million ha) by 2030	Year committed	Priority interventions
8. Democratic Republic of the Congo	8	2016	<ul style="list-style-type: none"> • Restoration of deforested and degraded ecosystems • Improvement of economic activities and food security • Resilience and adaptive capacity of population to climate change • Landscape restoration in sustainable development projects, climate financing opportunities, as well as viable long-term restoration projects • National documents which integrate restoration of degraded landscape components
9. Ethiopia	15	2016	<ul style="list-style-type: none"> • Supporting Ethiopia to fulfil the Climate Resilient Green Economy (CRGE) goal of achieving middle-income status by 2025 while transitioning to a climate-resilient green economy • Increasing the scientific foundation in decision-making processes for planning and implementing tree-based landscape restoration • Support the sustainable generation of benefits from restored forest landscapes and restoration processes for the local population and the national economy • Identifying and addressing enabling conditions (policy and legal frameworks, incentives, value chains and market conditions) necessary for long-term, tree-based restoration at scale.
10. Ghana	2	2015	<ul style="list-style-type: none"> • Restore Ghana's northern savannah ecological zone which has rich biodiversity, but is threatened by the loss of important ecosystems and habitats • Restore transitional and forest zones of Ghana being threatened by mining, charcoal production and unsustainable agricultural activities
11. Guinea	2	2016	*To be determined during the restoration opportunity assessment
12. Kenya	5.1	2016	<ul style="list-style-type: none"> • Afforestation and reforestation of natural forests through tree planting and assisted natural regeneration. • Rehabilitation of degraded natural forests through tree planting and assisted natural regeneration. • Use of trees on farm land, as the primary crop or intercropped (agroforestry) • Establishing tree plantations for commercial use in appropriate places. • Establishment of tree buffers along the boundaries of streams, rivers, lakes, wetlands and reservoirs, roadways and railways through direct tree planting or assisted natural regeneration. • Rangeland restoration and management: improved management and regeneration of rangelands for both wildlife use and pastoral grazing.
13. Liberia	1	2015	<ul style="list-style-type: none"> • Supporting sustainable management of natural resources through increased vegetation cover to improve ecosystem services in degraded areas, increase rural income, and improve biodiversity richness. • Improving data and information sharing on land-use to help inform land-use planning. • Contributing to the REDD+ program through the restoration of degraded lands and supporting local livelihoods at the community level.
14. Madagascar	4	2015	<ul style="list-style-type: none"> • Transforming large areas of deforested and degraded lands into resilient and multifunctional ecosystems with the aim of improving local and national economy • Improvement of security and water supply • Protection of biodiversity in forest ecosystems

Country	Commitment (million ha) by 2030	Year committed	Priority interventions
15. Malawi	4.5	2016	<ul style="list-style-type: none"> • Promotion of agricultural technologies (conservation agriculture, farmer-managed natural regeneration, and agroforestry): 3,730,790 ha • Community forests and communal/private woodlots: 753,471 ha • Natural forest management and plantation management: 3,401,279 ha • Soil and water conservation: 1,043,768 ha • River and stream-bank restoration: 36,478 ha
16. Mozambique	1	2015	<ul style="list-style-type: none"> • Mapping of degraded forest land • Establishment of forest nurseries • Restoration of degraded forest land • Community forest management • Biodiversity offsets • Sustainable charcoal production
17. Niger	3.2	2015	<ul style="list-style-type: none"> • Targeted land rehabilitation and protection of upstream watersheds and development of irrigated agriculture in lowlands • Bilateral programs to restore resilience in rural communities in 400-600 mm rainfall zone and to "regreen" degraded landscapes • Scale up farmer-managed natural regeneration (FMNR) in association with agricultural development and food security initiatives • Provide grants and business development services to scale up private sector led business models linked to restoration and improved NRM • TerrAfrica, Great Green Wall, GEF regional program to Build a Foundation for Scaling up Restoration and AFR100 partnership
18. Nigeria	4	2017	<ul style="list-style-type: none"> • Restoration of the ecological productivity of land, water and agriculture for sustainable livelihoods. • Strengthening regional collaboration, expand opportunities for funding, research and capacity development of stakeholders to achieve restoration on the ground. • Improvement of livelihoods of households in the drylands where excessive land degradation threatens the ability to cope with climate change effects. • Elimination of natural resource-based conflicts arising from land degradation, especially due to over-grazing and other unsustainable land management practices. • Acceleration of economic diversification and industrialization through re-awakening forest-based industries for employment, poverty reduction and wealth creation. • Exploration of wider opportunities for engagement with the private sector
19. Republic of the Congo	2	2016	<ul style="list-style-type: none"> • Establishment and sustainable management of tree plantations • Protection, sustainable forest management and certification of natural forests • Commodity tree-crop systems development and agroforestry

Country	Commitment (million ha) by 2030	Year committed	Priority interventions
20. Sudan	14.6	2017	<ul style="list-style-type: none"> • Assessment of the benefits of restoration for local communities • Organization of workshops to set a hectare target to be restored • Establishment of a council to assess the national restoration opportunity and develop a plan for implementation
21. Rwanda	2	2011	<ul style="list-style-type: none"> • Supporting achievement of Vision 2020 and Economic Development and Poverty Reduction targets through scaling up tree-based forest and landscape restoration (FLR) to improve crop and livestock practices, food security, and farmer incomes. • Improvement of scientific evidence-based feedback loop for planning and implementing tree-based FLR, including capacity-building on cost-effective methods for measuring change. • Expansion of opportunities for investment in tree-based FLR over the long term by creating enabling conditions for social enterprises, donors and investors.
22. Senegal	Preparing Commitment	2016	<ul style="list-style-type: none"> • Mobilizing key stakeholders and restoration partners and strengthening platforms to promote information exchange and coordination of interventions • Assessing restoration opportunities and formulating strategies to scale up restoration • Reinforcing efforts to scale up FMNR and EverGreen Agriculture in the degraded areas of the Peanut Basin • Taking stock of efforts to promote conservation farming (reduced tillage), FMNR and agroforestry and other climate smart agricultural (CSA) practices • Organizing exchange visits and supporting peer to peer learning and training • Analysing business models and leveraging private sector investments in restoration • Developing monitoring systems to track progress in implementing restoration at scale
23. South Africa	3.6	2017	<ul style="list-style-type: none"> • Water retention and landscape stability (erosion, combating desertification) • Clearing sparse and dense stands of invasive plants and bush encroachment • Re-vegetation • Soil and donga rehabilitation and restoration • Additional interventions to be determined through restoration opportunity assessments
24. Eswatini	0.5	2017	*Still formulating the interventions
25. United Republic of Tanzania	5.2	2018	<ul style="list-style-type: none"> • Convene key stakeholders and restoration partners, and strengthening of platforms for information exchange and collaboration on restoration • Stock taking and scaling of up successful restoration, diagnostic of key success factors and enabling conditions, and assessment of restoration opportunities • Organizing exchange visits and support for peer to peer learning and training • Analysing business models and leveraging private sector investments • Facilitating access to additional financing as needed, including GCF and others • Developing a monitoring framework to track progress in implementation restoration

Country	Commitment (million ha) by 2030	Year committed	Priority interventions
26. Togo	1.4	2015	<ul style="list-style-type: none"> • Restoring deforested and degraded ecosystems • Improving economic activities and food security • Increasing resilience and adaptive capacity of population to climate change
27. Uganda	2.5	2014	<ul style="list-style-type: none"> • Promoting agroforestry and woodlots • Facilitating natural regeneration
TOTAL	110		

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Annex III
Africa's biodiversity priorities

- Ecosystem restoration
 - Coastal and marine biodiversity and the blue economy
 - Invasive alien species
 - Access and benefit-sharing and traditional knowledge
 - Strategic environmental assessment (Article 14 of the Convention on Biological Diversity)
 - Climate change and biodiversity
 - Mainstreaming biodiversity into relevant sectors
 - Natural capital accounting
 - Biosafety
 - Poaching and illegal wildlife trade
 - Enabling mechanisms for implementation:
 - Education, awareness-raising and knowledge management
 - Capacity-building
 - Technology transfer
 - Resource mobilization
 - Gender mainstreaming and youth engagement
 - Compliance and enforcement of environmental regulations
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