

联合国 粮食及 农业组织 Food and Agriculture Organization of the United Nations Organisation des Nations Unies pour l'alimentation et l'agriculture

Продовольственная и сельскохозяйственная организация Объединенных Наций Organización de las Naciones Unidas para la Alimentación y la Agricultura منظمة الأغذية والزراعة للأمم المتحدة

# FAO REGIONAL CONFERENCE FOR AFRICA

# **Thirty-second Session**

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Investing in Ecosystem Restoration for a more efficient, inclusive, resilient, and sustainable agrifood systems transformation in Africa

#### **Executive Summary**

The ongoing loss and degradation of the terrestrial and marine ecosystems in Africa, combined with the impacts of climate change, are putting at risk the sustainability of agriculture production systems (including crops and livestock production, forestry, fisheries and aquaculture) and the likelihood of achieving the transformation of agrifood systems for increased resilience and improved livelihoods of millions of farmers, pastoralists, livestock herders, forest dependent people and fishers.

While important challenges remain, many African governments have initiated action on the ground and have further pledged ambitious commitments to stop degradation and restore degraded terrestrial and marine ecosystems through a wide range of programmes and initiatives such as Africa's Great Green Wall and the African Forest Landscape Restoration Initiative (AFR100). Ecosystem-based management and restoration approaches and climate-smart and agro-ecological approaches have been tested and showed that success is possible and can be scaled-up, turning degraded land and aquatic areas into life, increasing production and economic opportunities.

With the launch of the UN Decade on Ecosystem Restoration 2021-2030 in 2021, this Ministerial roundtable will provide an opportunity for Members and partners to share experiences and lessons learned from implemented ecosystem restoration approaches and results achieved in their respective countries and discuss ways for scaling-up such initiatives to achieve a more efficient, inclusive, resilient and sustainable agrifood systems transformation in Africa.

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## Suggested action by the Regional Conference

The Regional Conference may wish to encourage Members to:

- move away from unsustainable agricultural practices and scale up their actions and funding allocations for ecosystem restoration and addressing drivers of degradation;
- seize the opportunity of the UN Decade on Ecosystem Restoration to strengthen country and regional level action and coordination across sectors and countries (for example through the Great Green Wall and the AFR100); and
- recommend that FAO continue its technical and resource mobilization support including through (Green Climate Fund [GCF], Global Environment Facility [GEF]) to Members for the formulation and implementation of large-scale restoration investment programmes for increasing agricultural production across sectors (crops, livestock, forestry, fisheries and aquaculture) and the resilience of livelihoods.

Queries on the content of this document may be addressed to:

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## I- Background

1. Africa's aspiration for an efficient, inclusive, resilient and sustainable agrifood systems transformation cannot be realized without the conservation, sustainable use and restoration of its terrestrial and marine ecosystems. Well managed and restored biodiversity at all levels – genetic, species and ecosystems – is crucial for food security, underpinning healthy and nutritious diets, improving rural livelihoods and enhancing the resilience of people and communities.

- 2. In Africa, as much as 65 percent of productive land is degraded, while desertification affects 45 percent of the land area. Out of the one billion ha of drylands, 393 million ha are in need of restoration<sup>1</sup>; and between 2015 and 2020, Africa lost 4.4 million ha<sup>2</sup> of forest each year primarily due to agriculture expansion and overexploitation. Furthermore, 34 percent of marine fisheries are unsustainably exploited. The Sustainable Development Goal (SDG) target 14.4 calls for all marine resources to be restored to levels that can produce maximum sustainable yield.
- 3. Adding to the increasing pressure on natural resources and biodiversity, Africa is highly vulnerable to the impacts of climate change, resulting in a reduction of the ability of its natural and production ecosystems (forests, oceans, seas, wetlands and grasslands) to sustain livelihoods and ecosystem goods and services for sustainable agriculture, food security and nutrition.
- 4. To respond to the increasing degradation and loss of Africa's ecosystems, African governments have pledged their commitments to stop degradation and restore degraded terrestrial and marine ecosystems through a wide range of programmes and initiatives. The major ones include, among others:
  - the Great Green Wall for the Sahara and Sahel Initiative<sup>3</sup>, launched in 2007 and aimed to restore 100 million hectares, create 10 million jobs, and sequester 250 million tons of greenhouse gas emissions;
  - the African Forest Landscape Restoration Initiative (AFR100) launched in 2015, committing over 31 countries to restore 128 million ha by 2030.
  - The Pan-African Action Agenda on Ecosystem Restoration for Increased Resilience, launched at Sharm El Sheikh in Egypt at the Convention on Biological Diversity 15th Conference of the Parties (CBD COP 15), in which countries committed themselves to restore at least 200 million ha of critically degraded ecosystems of various types (forests, wetlands, and coastal marine, mangroves, agroecosystems, rangelands, deserts and others).

<sup>1</sup> https://www.fao.org/3/cb5896en/cb5896en.pdf

<sup>&</sup>lt;sup>2</sup> https://www.fao.org/forest-resources-assessment/en/

<sup>&</sup>lt;sup>3</sup> <u>https://www.grandemurailleverte.org/</u>

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#### II- The UN Decade on Ecosystem Restoration and production systems perspectives

- 5. The above-mentioned African led restoration initiatives contribute to the commitments to the UN Decade on Ecosystem Restoration 2021-2030<sup>4</sup> that was proclaimed by the United Nations General Assembly (UNGA) through resolution A/RES/73/284 on 1 March 2019. FAO co-leads with the United Nations Environment Programme (UNEP) the implementation of the UN Decade and the implementation strategy for the Decade, which defines ecosystem restoration as "encompassing a wide continuum of practices that contribute to conserving and repairing damaged ecosystems".
- 6. FAO takes an active role in framing a vision for the implementation of the Decade for systems that people rely on for food, feed and fibre production. FAO's position paper on ecosystem restoration<sup>5</sup> provides specific guidance on the concept, needs and priorities for "ecosystem restoration" for forest landscapes, farming, livestock and fish-producing ecosystems, as the focus, scale, priorities and trade-offs of restoration interventions will differ between them.
- 7. The UN Decade on Ecosystem Restoration provides a unique opportunity to transform food, fibre and feed production systems to the needs of the 21st century, and to eradicate poverty, hunger and malnutrition through effective and innovative landscapes and seascapes management. The restoration of forest landscapes, farming, livestock and fish-producing ecosystems should primarily contribute to a healthy and stable state of these ecosystems, so that they are able to support human needs for sustainable food production and livelihoods. The ultimate objective of these restorative efforts should be to reverse the trend in many unsustainable agricultural systems, optimizing the ecological interactions between plants, animals, humans and the environment, while leaving no one behind.

## III- The forest and landscape restoration perspective

- 8. Restoration of degraded forests and reintroduction of trees in landscapes, including in degraded agricultural land, can help take the pressure off existing forest land, provide forest products, conserve biodiversity, improve hydrological flows and soil fertility, and reduce soil erosion, in addition to contributing to climate change mitigation through carbon sequestration, substitution and conservation. The nature of restoration will vary across a landscape, depending on the local context and societal needs. It can range from repairing selected ecosystem functions in, for example, agro-ecosystems, to fully restoring native ecosystems. It is important to note that restoring forest ecosystems goes beyond the planting or assisted natural regeneration of trees. Forest and landscape restoration is more than a technical approach; it involves stakeholders in all affected land-use sectors and applies participatory decision-making processes.
- 9. As drylands are among the ecosystems most affected by environmental degradation in Africa, FAO has stepped up its restoration efforts in support of Africa's Great Green Wall Initiative.<sup>6</sup> This investment is paying off and FAO now has a blueprint for large-scale land restoration for small scale farming, putting the latest innovations in land reclamation/rehabilitation and in plant science at the service of local communities, and showing that land degradation is not necessarily irreversible. Its approach puts local, resource-poor communities who depend on low-cash

<sup>&</sup>lt;sup>4</sup> https://www.decadeonrestoration.org/

<sup>&</sup>lt;sup>5</sup> Position paper on "Ecosystem Restoration" of production ecosystems, in the context of the UN Decade of Ecosystem Restoration 2021-2030. <a href="https://www.fao.org/3/nd425en/nd425en.pdf">https://www.fao.org/3/nd425en/nd425en.pdf</a>

<sup>&</sup>lt;sup>6</sup> www.fao.org/in-action/action-against-desertification/en

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livelihoods, at the heart of the restoration effort, delivering multiple ecological and socioeconomic benefits. FAO also recognizes that restoration of mangrove ecosystems is an urgent need and opportunity. They are vital nursery and breeding habitats for aquatic fauna, natural barriers and defence against storm surges, tsunamis, rising sea levels and coastal erosion.

## IV- Restoration from an agriculture production perspective

- 10. Ecosystem restoration demands an integrated approach, which recognizes the complex social, political, economic and environmental factors leading to degradation of agricultural landscapes. Such approaches can also empower stakeholders to find and apply sustainable restorative solutions. Understanding the root causes and drivers of degradation by using inclusive consultation processes through participatory assessments of land degradation, is critical for the design of effective ecosystem restoration strategies through soils, crops, livestock and wildlife management.
- 11. Efforts should be devoted to the restoration of degraded soils and landscapes by using regenerative approaches that promote system diversification and sustainable land management (SLM) practices and rangeland management. Such practices enhance the recycling of organic matter, including from manure, into soil. Regenerative grazing with different ruminant species can also reverse bush encroachment in rangelands and improve pasture productivity. Better livestock management contributes to enhancing overall biodiversity and hence restoring agroecosystems. Legume cover can also contribute simultaneously towards greater carbon sequestration and soil nitrogen availability to crops and pastures, as well as protein sources for human and animal nutrition. Such practices enhance soil health as they are based on the addition of soil organic matter and the functioning of soil biodiversity and the recycling of organic matter.
- 12. The inclusion of trees, shrubs and fodder trees in agricultural land through different forms of agroforestry practices has shown to contribute to enhanced climate resilience of farming systems through improved soil moisture conditions in dryland areas, enhanced biological control services by fostering suitable habitats for predators and natural enemies of pathogens, enhanced nutrition and livelihoods through silvopastoral systems, enhanced erosion control through soil stabilization and deep soil nutrient capture by tree roots, and reduced crop yield variability, enhanced crop productivity in degraded lands, and provision of more feed to livestock in the form of crop residues under drastic climatic regimes.

## V- Restoration from a fisheries and aquaculture perspective

- 13. Direct restorative actions in this context would include efforts to minimize impacts on structure and function of ecosystems by collateral effects of human activities. This includes rebuilding fish stocks "to maintain or restore populations of harvested species at levels which can produce the maximum sustainable yield" (UNCLOS, Article 61.3), thus supporting existing international agreements. However, the narrow view of maximizing yield is neither sufficient nor desirable, and a broader ecosystem level consideration is needed, which includes ecosystem integrity, biodiversity, structure and functioning, as well as additional ecosystem services other than food provision.
- 14. Large/oceanic marine ecosystems supporting or affected by fisheries production require interventions primarily to rebuild fish stocks to levels which can produce their maximum sustainable yield (MSY), and reduce adverse impacts on the environment, such as impacts on Vulnerable Marine Ecosystems (VMEs), especially in areas beyond national jurisdiction, incidental catch of non-target species or impacts of abandoned, lost or otherwise discarded gears.

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15. For coastal ecosystems with linkages to fisheries, restoration interventions call for policy development, management strategies and implementation mechanisms focused on: increasing the number of regulated fisheries supported by science-based monitoring and scientific advice; reducing impacts on marine ecosystem components through, *inter alia*, gear selectivity and design, reductions of bycatch and discards, as well as abandoned, lost or otherwise discarded (ALDG) fishing gear; implementing constructive combinations of spatial, seasonal, input and output management measures; restoring damaged marine habitats through protection and zoning; restoring and managing mangroves, seagrasses and reefs; and creating artificial reefs and setting up restocking programmes.

16. There are other examples of restoration opportunities and interventions in freshwater/aquatic coastal ecosystems such as reversing loss of connectivity in freshwater systems and developing fish passage/irrigation reforms, and integrating fisheries and aquaculture into irrigation systems; creating additional refuge/aquatic environments and managing them as environments worthy of protection (e.g. Globally Important Agricultural Heritage Systems, GIAHS); enforcing protected areas (protection propagation and juvenile nursing) and seasonal banning of fishing in inland waterbodies; implementing strict banning of destructive fishing gears and methods; restocking freshwater bodies with native species; use of aquaculture, including integrated agriculture-aquaculture, as a means to mitigate degraded systems and as part of broader agroecological approaches; implementing nutrient stripping (from land-based sources) in coastal waters; and introducing watershed management and erosion control approaches.

#### VI- The Ministerial roundtable

17. A high level Ministerial roundtable is convened to provide a platform for Members, stakeholders and partners to share experiences, lessons learned on good practices in successful ecosystem restoration initiatives and approaches implemented at national and regional levels, as well as discuss challenges faced and solutions to step up ecosystem restoration, building on successes and opportunities.

#### The objectives of the roundtable are to:

- Share knowledge, experience and lessons learnt from regional and country level initiatives on ecosystem restoration and their contribution to resilient and sustainable agrifood systems transformation in Africa.
- Review challenges and opportunities and identify recommendations to step up ecosystem
  restoration in Africa for more efficient, inclusive, resilient and sustainable agrifood systems
  transformation in Africa.

## **Expected Outcomes:**

- Increased awareness of the need for urgent and coordinated action on ecosystem restoration in Africa;
- Experiences and lessons learned shared among the Regional Conference for Africa (ARC)
   Members and partners;
- Recommended actions to the 32<sup>nd</sup> Session of the Regional Conference for Africa (ARC 32)
   Members and FAO for scaling up investment in ecosystem restoration and addressing ecosystem restoration challenges.

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## Proposed Agenda (1h30 event)

| Opening and setting the scene (25 min)  |  |
|---|--|
| Opening remarks by Ms Maria-Helena Semedo, Deputy Director-General,   |  |
| FAO (moderator)   |  |
| Welcoming participants, setting the scene and introducing panellists  |  |
| Keynote presentation on the status of Agriculture, Environment and Land   |  |
| Use in Africa (based on findings of the Africa Open Data on Environment,  |  |
| Agriculture and Land (DEAL) by Abebe Haile-Gabriel, Assistant Director-   |  |
| General and Regional Representative for Africa, FAO   |  |
| High Level Panel  |  |
| Ministerial Dialogue with Ministers in charge of agriculture,   |  |
| forestry, fisheries and environment   |  |
| The below tentative suggested panellists will share their country or regional                                   |  |
| experiences in ecosystem restoration and their views for a way forward for                                      |  |
| scaling-up investment in restoration for more efficient, inclusive, resilient                                   |  |
| and sustainable agrifood systems transformation:  |  |
| • Minister (to share experience on restoration from forest and landscape perspective)                           |  |
| • Minister (to share experience on restoration from fisheries and aquaculture perspective, including mangroves) |  |
| Minister (to share experience on restoration from agriculture)  |  |
| production perspective)   |  |
| •   |  |
| Interactive session, sharing of experiences (Members and participants)  |  |
| Wrap up and closing remarks (Moderator)   |  |
|   |  |