Restoring Forest Ecosystems for Sustainable Development in Africa: Challenges and Promises

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Abstract

Ecosystem restoration is at the heart of the Sustainable Development agenda. It is a process designed to revitalize and recuperate degraded, damaged, or destroyed ecosystems and habitats, returning them to a state where they can sustainably support both nature and humanity. Ecosystem restoration is needed on a large scale in order to achieve the Sustainable Development agenda. The United Nations 2030 Agenda for Sustainable Development sets out the ideal of ecosystems restoration. Sustainable Development Goal (SDG) 15 seeks to protect, restore, and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and biodiversity loss. This paper critically examines the need to restore forest ecosystems. It argues that restoring forest ecosystems is vital for the attainment of the Sustainable Development agenda. The paper explores the role of forest ecosystem in fostering Sustainable Development. It also examines some of the key threats facing forest ecosystem and their impacts on sustainability. The paper further offers ideas towards restoring forest ecosystem for Sustainable Development in Africa.

1.0 Introduction

The concept of ecosystems restoration entails improvement of degraded land and ecosystems on a large scale that rebuilds ecological integrity and enhances people's lives¹. Ecosystem restoration aims to recover the ecological functionality and enhance human

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¹ Food and Agriculture Organization., 'The Key Role of Forest and Landscape Restoration in Climate Action.' Available at https://www.fao.org/documents/card/en/c/cc2510en (Accessed on 23/05/2024)

well-being in deforested and degraded landscapes and ecosystems². It is an important process that not only returns landscapes and ecosystems to a healthy state, but also increases the amount of carbon sequestered, improves biodiversity and the quality of soil and water in the ecosystem, and provides economic benefits for communities that depend on such landscapes and ecosystems³.

Ecosystem restoration is at the heart of the Sustainable Development agenda⁴. It is an imperative action designed to revitalize and recuperate degraded, damaged, or destroyed ecosystems and habitats, returning them to a state where they can sustainably support both nature and humanity⁵. Ecosystem restoration entails the active management of an environment to re-establish its ecological integrity, resilience, and functionality, thus leading to a balanced coexistence of both nature and humans⁶. It has been noted that by enhancing the capacity of nature to cater to human needs and by fostering a symbiotic relationship between man and environment, ecosystem restoration directly and indirectly influences the attainment of several Sustainable Development Goals (SDGs)⁷.

According to the United Nations Environment Programme (UNEP), ecosystem restoration is needed on a large scale in order to achieve the Sustainable Development agenda⁸. UNEP notes that over-exploitation of natural resources is embedded in

² Ibid

³ World Economic Forum., 'What are Natural Climate Solutions?' Available at https://www.weforum.org/agenda/2021/09/what-are-natural-climate-solutions https://www.weforum.org/agenda/2021/09/what-are-natural-climate-solutions https://www.weforum.org/agenda/2021/09/what-are-natural-climate-solutions https://www.weforum.org/agenda/2021/09/what-are-natural-climate-solutions https://www.weforum.org/agenda/2021/09/what-are-natural-climate-solutions <a href="mailto:100mailt

⁴ SDG Resource Centre., 'Ecosystem Restoration' Available at https://sdgresources.relx.com/ecosystem-restoration-0 (Accessed on 23/05/2024)

⁵ Ibid

⁶ Ibid

⁷ Ibid

⁸ United Nations Environment Programme., 'Ecosystem Restoration for People, Nature and Climate' Available at https://www.unep.org/resources/ecosystem-restoration-people-nature-climate (Accessed on 23/05/2024)

economies and governance systems, and the resulting degradation is undermining hard-won development gains and threatening the well-being of future generations. It further posits that ecosystem restoration is one of the most important ways of delivering nature-based solutions for food insecurity, climate change mitigation and adaptation, and biodiversity loss⁹.

Ecosystem restoration therefore means assisting in the recovery of ecosystems that have been degraded or destroyed, as well as conserving the ecosystems that are still intact¹⁰. This process is very vital for Sustainable Development. Healthier ecosystems, with richer biodiversity, yield greater benefits such as more fertile soils, bigger yields of timber and fish, and larger stores of greenhouse gases therefore enhancing the global response towards climate change¹¹. Restoring ecosystems protects and improves the livelihoods of people who depend on them. It also helps to regulate disease and reduce the risk of natural disasters¹².

The ideal of ecosystem restoration is set out under the United Nation's 2030 Agenda for Sustainable Development¹³. The Agenda identifies natural resource depletion and environmental degradation as a key threat to sustainability as evidenced by problems such as desertification, drought, land degradation, freshwater scarcity, and loss of biodiversity¹⁴. It seeks to protect the planet from degradation, including through sustainable consumption and production, sustainably managing its natural resources and taking urgent action on climate change so that the planet can support the needs of the

⁹ Ibid

¹⁰ United Nations Environment Programme., 'What is Ecosystem Restoration?' Available at https://www.decadeonrestoration.org/what-ecosystem-restoration (Accessed on 23/05/2024)

¹¹ Ibid

¹² Ibid

¹³ United Nations General Assembly., 'Transforming Our World: the 2030 Agenda for Sustainable Development.' 21 October 2015, A/RES/70/1., Available at https://sustainabledevelopment.un.org/content/documents/21252030%20Agenda%20for%20Sustainablew20Development%20web.pdf (Accessed on 23/05/2024)

¹⁴ Ibid

present and future generations¹⁵. SDG 15 seeks to protect, *restore*, and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and biodiversity loss¹⁶. The targets under SDG 15 include ensuring the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands; promoting the implementation of sustainable management of all types of forests, halt deforestation, *restore degraded forests* and substantially increase afforestation and reforestation globally; combating desertification, *restoring degraded land and soil*, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world(Emphasis added); ensuring the conservation of mountain ecosystems, including their biodiversity, in order to enhance their capacity to provide benefits that are essential for sustainable development; and taking urgent and significant action to reduce the degradation of natural habitats, and halting the loss of biodiversity¹⁷.

This paper critically examines the need to restore forest ecosystems. It argues that restoring forest ecosystems is vital for the attainment of the Sustainable Development agenda. The paper explores the role of forest ecosystem in fostering Sustainable Development. It also examines some of the key threats facing the forest ecosystem and their impacts on sustainability. The paper further offers ideas towards restoring the forest ecosystem for Sustainable Development in Africa.

¹⁵ Ibid

¹⁶ Ibid

¹⁷ Ibid

2.0 Forest Ecosystems and Sustainable Development

Forests provide vital ecosystem services to both people and the planet, bolstering livelihoods, providing clean air and water, conserving biodiversity and responding to climate change¹⁸. It has been noted that forests hold more than three-quarters of the world's terrestrial biodiversity, provide many products and services that contribute to socio-economic development, and are a critical lifeline for hundreds of millions of people in rural areas, including many of the world's poorest¹⁹.

It has been argued that forests and trees make the planet habitable²⁰. They provide us with clean air and water²¹. Further, by storing vast amounts of carbon and moderating the climate, they are a critical defence against global warming²². It has been noted that forests are home to most of the planet's biodiversity²³. They provide shade, recreation and a sense of well-being and also support the livelihoods of billions of people around the world²⁴. Forests provide a natural habitat for a vast range of animals, plants and other living organisms, allowing them to thrive²⁵. In addition, it has been asserted that forests embed the principle of circularity. They provide commercially valuable renewable wooden materials and goods, regulate critical global cycles (in particular the oxygen, nitrogen, carbon and water cycles) and play a vital role in soil conservation²⁶. It has been pointed out that forests provide important ecosystem services, such as clean air, water

¹⁸ Greenpop., 'Forest Restoration' Available at https://greenpop.org/forest-restoration/ (Accessed on 23/05/2024)

¹⁹ Ibid

²⁰ United Nations Environment Programme., 'Forests' Available at https://www.decadeonrestoration.org/types-ecosystem-restoration/forests (Accessed on 23/05/2024)

²¹ Ibid

²² Ibid

²³ Ibid

²⁴ Ibid

²⁵ European Investment Bank., 'Forests at the Heart of Sustainable Development: Investing in Forests to Meet Biodiversity and Climate Goals' Available at https://www.eib.org/attachments/lucalli/20220173_forests_at_the_heart_of_sustainable_development_en.pdf (Accessed on 23/05/2024)

flow regulation and flood control, carbon sequestration and storage, soil protection from water and wind erosion, and natural resilience to the effects of climate change²⁷. They also sustain livelihoods, communities, and infrastructure²⁸. It has been noted that forests provide subsistence, employment opportunities and income to about 25 per cent of the world's population²⁹.

Despite the importance of forest ecosystems, they are increasingly threatened by a wide range of pressures, including deforestation, land-use change and invasive alien species, as well as severe droughts and wildfires that are worsened by climate change³⁰. Forest ecosystems are under intense pressure from humanity's rising population and its hunger for more land and resources³¹. It is estimated that globally, the world is losing about 4.7 million hectares of tropical forest every year³². Further, it has been noted that as a continent, Africa had the highest global net loss of forests³³. It has further been observed that many remaining forests are degraded because of logging, firewood cutting, pollution and invasive pests³⁴. In addition, trees outside forest ecosystems are also disappearing to make way for houses, roads and dams and for intensive agriculture³⁵. Wildfires, which are made worse by climate change, are also devastating forest ecosystems³⁶.

²⁷ Ibid

²⁸ Ibid

²⁹ Ibid

³⁰ International Union for Conservation of Nature., 'Restoring Forest Ecosystems Provides Multiple Benefits to Society' Available at https://www.iucn.org/news/europe/201905/restoring-forest-ecosystems-provides-multiple-benefits-society (Accessed on 23/05/2024)

³¹ United Nations Environment Programme., 'Forests' Op Cit

³² Ibid

³³ Greenpop., 'Forest Restoration' Op Cit

³⁴ United Nations Environment Programme., 'Forests' Op Cit

³⁵ Ibid

³⁶ Ibid

According to the International Union for Conservation of Nature (IUCN), nearly 30 per cent of global forest cover has been cleared and a further 20 per cent degraded³⁷. IUCN notes that deforestation is the second leading cause and currently accounts for approximately 24 per cent of total greenhouse gas emissions, more than the entire global transportation sector³⁸. In addition, it points out that forest and land degradation also increases competition for scarce resources and contributes to human migration, both of which can lead to increased instances of conflict³⁹.

As a result of the foregoing challenges, restoring forest ecosystem is a vital agenda. It has been noted that large-scale forest restoration, in addition to restoration of other critical ecosystems, is needed to meet the SDGs and to prevent, halt and reverse the loss of biodiversity⁴⁰. Forest restoration, when implemented appropriately, helps restore habitats and ecosystems, create jobs and income and is an effective nature-based solution to climate change⁴¹. IUCN opines that forests and other nature-based solutions for climate change, such as wetlands, can provide over one third of the climate change mitigation goals needed by 2030⁴². IUCN further notes that conserving and restoring forest landscapes is not only a cost-effective way to mitigate climate change, but it also means that many other benefits are provided to local communities and the wider society⁴³. Healthy forests filter sediments and pollutants from rainwater runoff, protecting the quality of rivers and lakes, including drinking water sources⁴⁴. In addition, restored

https://unece.org/fileadmin/DAM/timber/meetings/2019/20191216/Forest_landscape_restoration_pathways_to_achieving_the_SDGs.pdf (Accessed on 23/05/2024)

³⁷ International Union for Conservation of Nature., 'Forest Landscape Restoration Pathways to Achieving the SDGs' Available at

³⁸ Ibid

³⁹ Ibid

⁴⁰ Greenpop., 'Forest Restoration' Op Cit

⁴¹ Ibid

 $^{^{\}rm 42}$ International Union for Conservation of Nature., 'Restoring Forest Ecosystems Provides Multiple Benefits to Society' Op Cit

⁴³ Ibid

⁴⁴ Ibid

forests and landscapes increase food and water security, sequester carbon, enhance adaptability and resilience to climate change, and minimise the risks associated with conflicts over natural resources and large-scale migration⁴⁵. It is therefore necessary to restore forest ecosystems for Sustainable Development.

3.0 Restoring Forest Ecosystems for Sustainable Development in Africa

It has been noted that in many countries, deforestation and the degradation of natural forest ecosystems are causing a substantial decline in the effectiveness of these ecosystems to store water, sequester carbon and protect against erosion⁴⁶. Measures for the restoration and ecosystem-based adaptation of forests not only make a decisive contribution to climate change mitigation but also work to conserve biodiversity and support Sustainable Development⁴⁷. Forest restoration is a process that aims to regain ecological functionality and enhance human well-being in deforested or degraded landscapes⁴⁸. It entails actions to re-instate ecological processes, which accelerate recovery of forest structure, ecological functioning and biodiversity levels⁴⁹.

According to IUCN, restoring forest ecosystems is a process of regaining ecological functionality and enhancing human well-being across large-scale degraded and deforested areas comprised of overlapping ecological, social and economic activities and values⁵⁰. It further notes that restoring forest ecosystems is a forward-looking and dynamic process, focusing on strengthening the resilience of forest ecosystems and creating future options to enhance and further optimise ecosystem goods and services as

 $^{^{\}rm 45}$ International Union for Conservation of Nature., 'Forest Landscape Restoration Pathways to Achieving the SDGs' Op Cit

⁴⁶ International Climate Initiative., 'Restoring Forest Landscapes' Available at https://www.international-climate-initiative.com/en/topics/restoring-forest-landscapes/ (Accessed on 23/05/2024)

⁴⁸ Forest Restoration., Available at https://www.cfwt.sua.ac.tz/ecosystems/forest-restoration (Accessed on 23/05/2024)

⁴⁹ Ibid

 $^{^{\}rm 50}$ International Union for Conservation of Nature., 'Forest Landscape Restoration Pathways to Achieving the SDGs' Op Cit

societal needs change or new challenges arise⁵¹. It has been noted that restoring forests and landscapes is more than just planting trees⁵². For example, a restored landscape could include naturally regenerated areas, agroforestry, on-farm trees, mangroves, protected areas, plantings of trees and other woody plants like bamboos among others⁵³. Restoring forest ecosystems takes place through an active process that allows the integration of various sectors, plans, and programmes, bringing local communities and other stakeholders together to identify and implement appropriate restoration activities⁵⁴.

UNEP notes that restoring forest ecosystems involves returning trees to former forest land and improving the condition of degraded forests⁵⁵. In addition, restoring forest ecosystems means replanting and reducing the pressure on forests so that trees re-grow naturally⁵⁶. It involves actions such as planting native tree species as well as conserving wild plants and animals and protecting the soils and water sources that are part of the forest ecosystem⁵⁷. Further, it has been observed that in existing forests, native tree species can be planted to regenerate the tree cover⁵⁸. Forest trees can also re-grow naturally in some cases⁵⁹. UNEP further notes that forest restoration can also entail nurturing patches of forest and woodland in landscapes that also include busy farms and villages⁶⁰. According to the United Nations, restoring forest ecosystems entails more than just planting trees⁶¹. It notes that restoring forest ecosystems is about reinstating the

⁵¹ Ibid

⁵² Ibid

⁵³ Ibid

⁵⁴ Ibid

⁵⁵ United Nations Environment Programme., 'Forests' Op Cit

⁵⁶ United Nations Environment Programme., 'A Beginner's Guide to Ecosystem Restoration' Available at https://www.unep.org/news-and-stories/story/beginners-guide-ecosystem-restoration (Accessed on 23/05/2024)

⁵⁷ United Nations Environment Programme., 'Forests' Op Cit

⁵⁸ Ibid

⁵⁹ Ibid

⁶⁰ Ibid

⁶¹ United Nations., 'Forest Restoration: A Path to Recovery and Well-Being' Available at https://www.un.org/en/un-chronicle/forest-restoration-path-recovery-and-well-being-0 (Accessed on 23/05/2024)

balance of the ecological, social and economic benefits of forests and trees within a broader pattern of land use⁶². In some cases, restoring forest ecosystems is best achieved by assisting the natural regeneration of local plant species, while in others, the planting of trees and other vegetation helps speed up the process of restoring the health and productivity of degraded forests and landscapes⁶³.

Restoring forest ecosystems is vital for Sustainable Development. It has been noted that the degradation of ecosystems reduces habitats for many species and is a key driver of biodiversity loss⁶⁴. As a result of forest degradation, loss of trees and vegetation contributes to climate change through reduced carbon sequestration, reduces resilience and increases the risk of desertification in terrestrial ecosystems⁶⁵. Restoring forest ecosystems can generate employment, benefit livelihoods, provide a habitat for threatened species, sequester carbon and contribute to the adaptation to and mitigation of the effects of climate change⁶⁶.

The United Nations Decade on Ecosystem Restoration aims to prevent, halt and reverse the degradation of ecosystems on every continent and in every ocean⁶⁷. It is a rallying call for the protection and revival of ecosystems all around the world, for the benefit of people and nature⁶⁸. It aims to halt the degradation of ecosystems, and restore them to achieve the SDGs⁶⁹. It has been noted that it is only through healthy ecosystems can we

⁶² Ibid

⁶³ Ibid

⁶⁴ Secretariat of the Convention on Biological Diversity., 'The Forest Ecosystem Restoration Initiative on the Ground: Case Studies from Twelve Small-Scale, Innovative Ecosystem Restoration Projects around the World' Available at https://www.cbd.int/doc/publications/CBD-FERI-Case-Studies-en.pdf (Accessed on 23/05/2024)

⁶⁵ Ibid

⁶⁶ Ibid

⁶⁷ United Nations Environment Programme., 'Preventing, Halting, and Reversing Loss of Nature' Available at https://www.decadeonrestoration.org/ (Accessed on 23/05/2024)

⁶⁸ Ibid

⁶⁹ Ibid

enhance people's livelihoods, counteract climate change, and stop the collapse of biodiversity⁷⁰. Achieving the United Nations Decade of Ecosystem Restoration can help to end poverty, combat climate change and prevent a mass extinction⁷¹. Restoring forest ecosystems can therefore help to advance the United Nation Decade on Ecosystem Restoration.

Restoring forest ecosystems is also part of the implementation mechanisms of the United Nations Framework Convention on Climate Change (UNFCCC) and the Paris Agreement⁷². Countries established the 'REDD+' framework to protect forests as part of the implementation mechanisms under the Paris Agreement⁷³. 'REDD' stands for 'Reducing Emissions from Deforestation and Forest Degradation in Developing Countries⁷⁴. The '+' under this framework stands for additional forest-related activities that protect the climate, namely sustainable management of forests and the conservation and enhancement of forest carbon stocks⁷⁵. It has been noted that REDD+ activities have played a prominent role in restoring forest ecosystems and promoting sustainable forest management practices that reduce the depletion of carbon stock and enhance resilience of forest ecosystems⁷⁶. It is therefore imperative to strengthen REDD+ activities such as restoration, reforestation and afforestation for Sustainable Development⁷⁷.

⁷⁰ Ibid

⁷¹ Ibid

⁷² United Nations Climate Change., 'What is REDD+?' Available at https://unfccc.int/topics/landuse/workstreams/redd/what-is-redd (Accessed on 23/05/2024)

⁷³ Ibid

⁷⁴ Ibid

⁷⁵ Ibid

⁷⁶ Muigua. K., 'Boosting Biodiversity Conservation Through Sustainable Forest Resources Management' Available at https://kmco.co.ke/wp-content/uploads/2021/11/Boosting-Biodiversity-Conservationthrough-improved-Forest-Resources-Management-Kariuki-Muigua-November-2021.pdf (Accessed on 23/05/2024)

⁷⁷ United Nations Environment Programme., 'REDD+' Available at https://www.unep.org/exploretopics/climate-action/what-we-do/redd (Accessed on 23/05/2024)

The Convention on Biological Diversity⁷⁸ also emphasizes the need to restore landscapes and ecosystems for Sustainable Development. It urges contracting parties to rehabilitate and restore degraded ecosystems and promote the recovery of threatened species⁷⁹. It has been noted that the well-being of the world population in the coming decades will in large part depend on conservation and restoration of ecosystems to maintain and enhance biodiversity and ecosystem services thereby contributing to Sustainable Development while reducing environment-related risks such as climate change⁸⁰. Restoring forest ecosystems is a key measure towards achieving the objectives of the Convention on Biological Diversity by halting the loss of biodiversity and ensuring healthier ecosystems, with richer biodiversity⁸¹.

The *United Nations Convention to Combat Desertification*⁸² also sets out the need to restore forest ecosystems. The Convention envisages restoring degraded and desertified land⁸³. It requires contracting parties to implement effective strategies aimed at rehabilitation, conservation and sustainable management of land and water resources, leading to improved living conditions, in particular at the community level⁸⁴.

Further, the *Bonn Challenge*⁸⁵ is a global goal that seeks to restore 350 million hectares of the world's degraded and deforested lands by 2030. More than 61 countries or jurisdictions have made pledges to the Bonn Challenge demonstrating global

84 Ibid

⁷⁸ United Nations., 'Convention on Biological Diversity.' Available at https://www.cbd.int/doc/legal/cbd-en.pdf (Accessed on 23/05/2024)

⁷⁹ Ibid

⁸⁰ Convention of Biological Diversity., 'Ecosystem Restoration.' Available at https://www.cbd.int/restoration/ (Accessed on 23/05/2024)

⁸¹ International Institute for Sustainable Development., 'Forest Ecosystem Restoration – A Crucial Piece of the New Global Biodiversity Framework' Op Cit

⁸² United Nations Convention to Combat Desertification., Available at https://catalogue.unccd.int/936_UNCCD_Convention_ENG.pdf (Accessed on 23/05/2024)

⁸³ Ibid

⁸⁵ The Bonn Challenge., Available at https://www.bonnchallenge.org/ (Accessed on 24/05/2024)

commitments towards restoring forest ecosystems⁸⁶. In addition, the *New York Declaration on Forests*⁸⁷ is a political declaration calling for global action to protect and restore forests. The Declaration offers a common, multi-stakeholder framework for forest action, consolidating various initiatives and objectives that drive forest protection, restoration, and sustainable use⁸⁸. The goals of the Declaration include halting natural forest loss by 2030, restoring 350 million hectares of degraded landscapes and forestlands, improving governance, increasing forest finance, and reducing emissions from deforestation and forest degradation⁸⁹. Fulfilling these global commitments is vital in restoring forest ecosystems for Sustainable Development.

Restoring forest ecosystems is a key priority for Africa. It has been noted that Africa's rainforest cover is the second-largest in the world, after the Amazon⁹⁰. However, Africa's rich and diverse forest ecosystems are in danger of collapsing, risking ecological stability globally⁹¹. Forest ecosystems in Africa are being affected by factors such as climate change and deforestation resulting in the loss of millions of hectares of forests in the continent every year⁹². According to UNEP, nearly 3 million hectares of rainforests in Africa are lost each year, resulting in soil degradation and unstable weather patterns that reduce the region's gross domestic product by 3 per cent annually⁹³. In addition, it is

⁸⁶ Ibid

⁸⁷ New York Declaration on Forests., Available at https://forestdeclaration.org/about/new-york-declaration-on-

 $[\]frac{forests/\#:\sim:text=The\%20New\%20York\%20Declaration\%20on\%20Forests\%20(NYDF)\%20is\%20a\%20political,\%2C\%20restoration\%2C\%20and\%20sustainable\%20use.}{(Accessed on 24/05/2024)}$

⁸⁸ Ibid

⁸⁹ Ibid

⁹⁰ United Nations Environment Programme., 'In Africa, Restoring Ecosystems is Central to Green Recovery' Available at https://www.unep.org/news-and-stories/story/africa-restoring-ecosystems-central-green-recovery (Accessed on 23/05/2024)

⁹¹ Anwanaodung. E., 'Deforestation and the Loss of Africa's Vital Forest Ecosystems' Available at https://blog.mustardinsights.com/in-africa/deforestation-and-the-loss-of-africas-vital-forest-ecosystems (Accessed on 24/05/2024)

⁹² Ibid

⁹³ United Nations Environment Programme., 'In Africa, Restoring Ecosystems is Central to Green Recovery' Op Cit

estimated that deforestation in Africa happens at almost double the speed of the world's average, with 4 million hectares of forests cut down each year⁹⁴. This has been attributed to factors such as agricultural expansion, commercial logging, charcoal burning, and encroachment of forest ecosystems for settlement⁹⁵.

Africa Union's *Agenda* 2063⁹⁶ notes that the continent has lost over 4 million hectares of forests annually over the past two decades due to extensive agricultural practices, unregulated and unsustainable wood harvesting and illegal commercial logging. Agenda 2063 further points out that deforestation results in significantly environmental degradation, diminished earnings with negative social and environmental consequences, including: deterioration of ecological systems with resulting negative impacts on soil fertility, water availability and biological resources and acute shortages of fuel wood and construction material in many parts of the continent⁹⁷. It is therefore necessary to restore forest ecosystems for Sustainable Development in Africa.

4.0 Conclusion

Restoring forest ecosystems is key for Sustainable Development in Africa. Forests have special place in Africa's economic, social, and cultural wellbeing⁹⁸. They are vital sources of food, energy, construction material, employment, local and foreign trade as well as cultural identity⁹⁹. Forests also provide essential environmental services including

⁹⁴ Igini. M., 'Deforestation in Africa: Causes, Effects, and Solutions' Available at https://earth.org/deforestation-in-africa/ (Accessed on 24/05/2024)

⁹⁵ Ibid

⁹⁶ Africa Union., 'Agenda 2063: The Africa we Want' Available at https://au.int/sites/default/files/documents/33126-doc-framework_document_book.pdf (Accessed on 24/05/2024)

⁹⁷ Ibid

⁹⁸ Ibid

⁹⁹ Ibid

controlling soil and water erosion, regulating climatic variability, conserving lakes and wetlands, and freshwater systems in Africa¹⁰⁰.

The African Forest Landscape Restoration Initiative¹⁰¹ aims to contribute to the Bonn Challenge and African Union's Agenda 2063 through its target of restoring 100 million hectares of land across the continent by 2030. In addition, the Kigali Declaration on Forest Landscape Restoration in Africa¹⁰² urges African countries to take bolder steps across sectors towards sustainable use of forests, protection of their forest reserves, promoting agroforestry among other climate-responsible practices, and restoration of degraded and deforested lands¹⁰³. The Declaration urges African countries to mainstream restoration into their national development policies¹⁰⁴. It further urges African countries to develop and strengthen continental capacity for restoration by developing technical expertise and developing environmental and social standards for the implementation of forest landscape restoration to help tackle climate change effects, improve human well-being, ecosystem health and biodiversity conservation across Africa¹⁰⁵. Implementing these continental commitments is necessary in enhancing efforts towards restoring forest ecosystems for Sustainable Development in Africa.

It is important for African countries to adopt practices geared towards restoring forest ecosystems. Such measures include reforestation, assisted natural regeneration

¹⁰⁰ Ibid

¹⁰¹ African Forest Landscape Restoration Initiative., Available at https://afr100.org/ (Accessed on 24/05/2024)

¹⁰² Kigali Declaration on Forest Landscape Restoration in Africa., Available at https://www.bonnchallenge.org/sites/default/files/resources/files/%5Bnode%3Anid%5D/Kigali%20 Declaration%20on%20Forest%20Landscape%20Restoration%20in%20Africa.pdf (Accessed on 24/05/2024)

¹⁰³ Ibid

¹⁰⁴ Ibid

¹⁰⁵ Ibid

agroforestry, and afforestation¹⁰⁶. It has been pointed out that each of these approaches involves different techniques, such as planting new trees, removing invasive species, or reintroducing native plants and animals in a forest ecosystem¹⁰⁷. Effective restoration requires identifying the causes of forest degradation, developing a restoration plan, implementing restoration strategies, and monitoring and evaluating progress¹⁰⁸. The benefits of restoring forest ecosystems are significant, both for the ecosystem itself and for the people and communities that depend on it¹⁰⁹. Restoring forest ecosystems helps to conserve biodiversity, mitigate climate change, and support sustainable livelihoods for local communities¹¹⁰. It is therefore necessary to restore forest ecosystems for Sustainable Development in Africa.

Muigua. K., 'Restoring Landscapes and Ecosystems for Climate Mitigation' Available at https://kmco.co.ke/wp-content/uploads/2024/02/Restoring-Landscapes-and-Ecosystems-for-Climate-Mitigation.pdf (Accessed on 24/05/2024)

¹⁰⁷ Forest Restoration., Op Cit

¹⁰⁸ Ibid

¹⁰⁹ Ibid

¹¹⁰ Ibid

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African Forest Landscape Restoration Initiative., Available at https://afr100.org/

Anwanaodung. E., 'Deforestation and the Loss of Africa's Vital Forest Ecosystems' Available at https://blog.mustardinsights.com/in-africa/deforestation-and-the-loss-of-africas-vital-forest-ecosystems

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