

Desk Report, August 2023 By Agostinho Chicaia

FAO- Consultant

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List of Abbreviations and Acronyms

|  |  |
| --- | --- |
| AFR100 | The African Forest Landscape Restoration Initiative |
| ARLI | African Resilient Landscapes Initiatives |
| ARR | Afforestation, Reforestation and Revegetation |
| AU | African Union |
| AUC | African Union Commission |
| CAR | Central African Republic |
| CIFOR | Center for International Forestry Research |
| COMIFAC | Commission des Forêts d'Afrique Centrale |
| COP | Congress of Parties |
| DRC | Democratic Republic of Congo |
| ECCAS | Economic Community of Central African States |
| ECOWAS | Economic Community of West African States |
| FAO | Food and Agricultural Organisation of the United Nations |
| FAOSTAT | FAO Statistics |
| GHG | Greenhouse Gas Emission |
| ha | Hectare |
| IGAD | Intergovernmental Authority on Development |
| IUCN | International Union for Conservation of Nature |
| NGO | Non-governmental organisation |
| RECs | Renewable energy credits |
| SADC | Southern Africa Development Community |
| SDG | Sustainable Development Goal |
| SFM | Sustainable Forest Management |
| Sq Km | Square kilometres |
| UN | United Nations |
| UN | United Nations |
| UNDP | United Nations Development Programme |
| UNEP | United Nations Environmental Programme |
| WCS | Wildlife Conservation Society |
| WCS | Wild Life Conservation Society |

# Introduction

Africa is endowed with 624 million hectares of forest cover, comprising 20.6 percent of its land area and representing 15.6 percent of the world’s forest cover (Global Forest Assessment Report, 2020, P. 32). Forests are crucial for maintaining environmental quality and stability. They provide globally important ecosystem services and are indispensable for the achievement of the UN Sustainable Development Goals including SDG 1, SDG 2, SDG 13, SDG 14 and SDG 15. Furthermore, Sustainable Forest Management also contributes towards the realization of the global objectives of the United Nations Forum on Forests and those of other global and regional forest related frameworks and instruments. Under its Goal Number 7, “Environmentally sustainable climate resilient economies and communities”, priority area “Bio-diversity, conservation and sustainable natural resource management”, the AU Agenda 2063 envisions that “all national parks and protected areas are well managed on the basis of master and national plans”.

The AU Sustainable Forest Management (SFM) Framework for Africa (AUC, 2019) was approved by the second Specialized Technical Committee for Agriculture, Rural Development, Water and Environment in 2019.The onus is now on the AUC to identify pathways for implementation by member states of this framework. There are two main types of forests in Africa, depending on the climatic zones: the forest of equatorial and tropical regions and the forest of temperate zones. The United Nations Environment Programme (1992) defines a natural forest as a forest composed of indigenous trees and not classified as forest plantation. In contrast, a forest plantation is an area consisting of introduced plants or seedlings for afforestation or reforestation purposes.

Deforestation is the ratio of the area cleared over a period, divided by the initial forest area and by the number of years in the period (Menon & Bawa, 1997; Ramesh, Menon, & Bawa, 1997; Narendra Prasad, 1998). Forest degradation is a process in which the biological diversity of a forest area is permanently diminished by one factor or a combination of factors. This does not imply a reduction in forest area, but rather a reduction in its quality. The forest is still there, but with fewer trees, or fewer species of trees, plants or animals, or some of them affected by disease. This degradation makes the forest less rich and diverse and can lead to deforestation. In this report, we consider that afforestation/Reforestation/Revegetation (ARR) as similar concepts with different meanings.

These processes are often used as part of a carbon offset project where trees are planted in order to sequester carbon dioxide from the atmosphere and then sold to international markets as renewable energy credits (RECs). The key difference between these terms is whether the land was previously forested or not before being converted into something else like pastureland for cattle ranching or cropland for farming purposes. The ARR was employed for creating a new forest, recreating a forest has disappeared and replanting and rebuilding the soil of disturbed land, respectively. Afforestation, reforestation and revegetation are terms used to describe the process of restoring an area that was previously cleared or converted into farmland back to its natural state.

This report examines both forest types as the target to be evaluated. First, it is important to acknowledge that data compliance is not uniform across the continent. Second, collecting both qualitative and quantitative information on the state, use and management of forests and other natural resources, and the stages of this collection in order to assess and monitor these resources and ecosystems on the continent, is an arduous task. It is also important to understand that this report is based more on a quantitative method of data collection, as qualitative information that would allow carrying out a more in-depth study, was lacking. The choice of a quantitative method has made it possible to develop an approach that will serve as a tool for managing the monitoring indicators previously identified, in order to enable comparative bibliographical research. Collecting and analysing data from tropical, equatorial and temperate forests to produce a status report on the forestry sector in Africa, carried out through desk research, has always been a challenge. However, these data are essential for understanding the state of the continent's forests and the ability to report on these resources at a continental level.

In this context, the preparation of this report on the state of forestry in Africa, however concise and refined this document may be, remains of interests. This is despite the shortage of time and the diversity of the data analysed. The report is based on data available from online sources as reported by different countries in Africa. The report attempted to produce information that would help in formulating decisions and making policy. It would also made in formulating future studies that would be more comprehensive and extensive study in terms of time and bringing together more actors or stakeholders.

This report is based on a compilation of available data from 53 African Union Member States to provide a synopsis of the current state of the forest sector in Africa between 2010 and 2020. It endeavours to understand the main drivers of deforestation and forest degradation, on the one hand, and reforestation efforts in Africa, on the other, as assessment parameters. In this contribution, a short overview was given on the status of forest surface in Africa, and using deforestation, degradation and afforestation rates as parameters of evaluation.

The regular production of the report on the state of the forest sector in Africa, as part of the implementation of Agenda 2063, the Africa we want, underpins the development of policies, adapted practices and targeted investments affecting forests and forestry, to better manage the available forest area and report on progress towards sustainable forest management, favouring poverty alleviation and improving the livelihoods of our populations.

# Aims and Rationale

This report provides an overview of the state/outlook of the forestry sector in Africa based on a desk analysis of secondary data collected from different national surveys across the continent between 2010 and 2020. The desk analysis focused on estimating the forest cover of each member state to provide indications of the health of the continent’s forests in a bid to assess forest resources over the period under reporting. Specifically, the analysis covered the rate of deforestation, degradation and afforestation in each country, and assessed trends of forest cover, taking forest canopies as the basic unit of reference for determining the countries that are losing or gaining forested areas.

Assessing the state of Africa's forests has dual benefits. On the one hand, it explains whether a progress has been made or not in sustainable management of our forests. On the other hand, it helps in identifying the factors that contributed to the state a country’s forest depletion or gain. The study aims at providing a clear understanding of the triangular facets of forestry, namely; deforestation, degradation and afforestation. Therefore, it calls for providing answers to four probing questions: First, what are the signs or indications of depletion or loss of forests in Africa? Second, what are major factors causing forest degradation in Africa? Third, what are the consequences or repercussions of the depletion of forest cover? And, fourth, what are the potential solutions to regaining forest cover through reforestation and afforestation?

The answers to these four questions are intended to serve two purposes. First, to guide in planning and taking actions for reversing the loss of forests. It is hoped that the findings of the study would result in enhancing the implementation of priority strategies and measures outlined in existing continental frameworks and action plans for conserving Africa’s forests. Second, the report is aimed at unlocking the present and future benefits of forests in contributing to poverty reduction and improvement of livelihoods of Africa’s populations through sustainable use and management of biodiversity and ecosystems.

# Methods

The report adopted a desktop analysis of data collected from secondary sources available in online published reports and online data repositories such as FAOSTAT (FAO, 2021) and the GlobalEconomy.com (2020). A quantitative data analysis scheme based on descriptive statistical methods to examine and show the extent to which forest land cover has changed over the ten-year period (2010-2020). This then helps in providing indications of the disparities and trends in forest cover along the triple effects of afforestation, deforestation and degradation based on descriptive parameters.

In a nutshell, the analysis is intended to provide an understanding of the dynamics of Africa’s forests and in mapping changes over the 2010-2020 decade. It is heavily based on FAO publications on the subject of forestry and the Global Forest Resource Assessment 2020, as the main sources of the raw data. The analysis seized the opportunity of having data for the period 2010-2020 for 53 AU countries (the exception ones being South Sudan and the Sahrawi Democratic Republic which were not yet independent in 2010). The disparity was obviously determined by simply calculating the difference in absolute values (in square kilometres) shown between the extreme years of 2010 and 2020. The percent difference was also computed. This helped in showing the countries that conserved their forests better and those that lost more over the 10-year period.

Using this descriptive approach, it was possible to easily identify the top 10 countries that had managed their forests better and also the top 10 countries that had suffered forest loss. More focus was given to the top10 so-called forest countries distributed in three zones, namely: the rainforests of the Congo Basin, the "Upper Guinea" forests of West Africa (separated from the Congo Basin by an arid zone between Nigeria and Ghana), and the isolated forest "islands" in the mountains and along the coast of East Africa.

A standardised data collection method was used that allowed monitoring of change based on quantitative parameters for measuring deforestation, degradation and afforestation over time, in terms of forest area, management and use, and to aggregate the data collected at continental level. These measures formed the gist of the study. The report aims to generate findings for determining how the broad, inter-related groups of factors drive deforestation and forest degradation, including: biophysical factors that determine forest is used; institutional factors that govern broader forest use policies; and socioeconomic factors that affect the demand for forest products and sustainable management of forest. Data was also mainly collected from multiple sources and were cross-referenced to estimate the change in forest cover. These data sources included reports from the FAO Global Resource Forest Assessment 2020 (FAO, 2020) and sub-regional institutional frameworks, including, ECOWAS Convergence Report (ECOWAS, 2015) and ECCAS Convergence Plans (United Nations Forum on Forests, 2019), the and IGAD Regional Forestry Policy and Strategy (IGAD, 2020).

Interpretation of the data was based on analysing data previously grouped in terms of the three indicators chosen as evaluation parameters along the domains of deforestation, degradation and reforestation, depending on whether the country has contributed to efforts to improve conservation or whether it has lost forest area due to these factors during the period under consideration. It must be acknowledged that forest is conserved for its own use, and, in this case interests of local communities that depend partly depend on its, must not conflict with the need of the forest or the planet to survive. In other words, there must be a perfect or balanced ecosystem survival.

# Outlook of the State of African Forests

## Africa at risk of forest degradation and threatened biodiversity

This report aggregates information on forest disturbances or gains during the 10-year period under examination to establish the impacts of many factors that affect the health and vitality of forests. Data were collected from surveys and published on web pages by institutions supporting forestry conservation and protections, as well as dedicated forest research organizations covering the period 2010-2020. The data analysis approach was to compare data collected in 2010 with those collected in 2020 (forest inter-survey period), in order to get an idea in percentage terms of the countries that lost the most through degradation or deforestation or those that have made an effort in the field of reforestation and have managed to conserve their forests or maintain the same forest area.

The section then presents and discusses these data. The available data is analysed by comparing areas covered by forests in square kilometres in 2010 and then in 2020. The change was then noted down. A positive value of change indicates that there was an increase in forest cover. A larger positive value (volume of forest cover) or the corresponding percentage point, indicates substantial effort of afforestation or reforestation made by a country, which is commendable and calls for knowing the drivers of success. Conversely, a no-change or a negative value is a call for concern, as it is an indication that a country under reporting either made no efforts to curtail deforestation and/or forest degradation, or there were large-scale encroachments into forested lands through projects such as large-scale farming, new roads, mining activities, and/or large-scale logging. It could also mean extensive destruction of forests by natural causes such as wild fires, droughts and mudslides. In either case, it indicates that there were no efforts made in the 10-year period to replenish or restore forests through tree planting.

Presentation, analysis and interpretation of data centred around identifying countries based on three criteria; those with positive increase of one percent or higher; those showing no change (i.e., 0% change) or almost no change (i.e., a percent change of less than one percent increase), and those with large negative change or substantial decrease of -1 percent or less. This then led to distributing the countries into three cohorts based on the three criteria.

Countries in Cohort 1 can be a case for positive lesson learning. In other words, they fall in the “*on growth path*” category. The positive lessons could be in the form of enforcement of strict regulations, implementation of activities for large-scale systematic reforestation and afforestation, banning of logging, or other forest protection and conservation measures. It could mean that the affected countries allocated and dispensed substantial budgetary allocations to the forestry sector. Such successful and desirable policies deserve to be commended, advocated and disseminated to influence positive policy changes in countries with low performance or decrease in forest cover over the 10-year period of the study. The factors that led to this success (or drivers of the big gain) could be explored from review of literature (periodic reports) on the country such as FAO’s Global Forest Assessment Reports.

Countries in Cohort 2 could indicate similar policies to stop deforestation and/or restore forests, but no substantial activities were carried out in the period under study. This cohort could be a case for an “*alert*” signal. It could, therefore, be advocated or recommended that this category of countries could be targeted by way of advocacy strategies, including informing them of the opportunities they would miss if the trend continues, or the status of forestry in their country could gravitate towards substantial forest losses, such when effects of climate change and rising heats due to global warming keep escalating.

Countries in Cohorts 3 are definitely in the “*at risk*” category in terms of the status of forestry. These countries lost forest cover by one percent or more in the 10-year period. They are a case for serious concern. As shown in Table 1 below, there are, unfortunately, a significant number of countries with high percentage of negative change. These countries need to be target by a carefully designed strong advocacy mechanism or strategy.

Table 1: Desegregated data collection on square kilometres and respective percentage of total forest area to identify underlying trends and patterns in the African forestry sector from 2010 to 2020

| **No** | **Country** | **2010** | | **2020** | | **Gain/Loss** | |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Km Sq** | **%** | **Km Sq** | **%** | **Km Sq** | **%** |
| **1** | Algeria | 19,180.0 | 0.7 | 19,490.0 | 0.8 | 310.0 | 1.60 |
| **2** | Angola | 721,580.0 | 57.9 | 666,073.8 | 53.4 | -55,506.2 | -7.70 |
| **3** | Benin | 36,351.5 | 32.2 | 31,351.5 | 27.8 | -5,000.0 | -13.80 |
| **4** | Botswana | 164,377.0 | 29.0 | 152,547.0 | 26.9 | -11,830.0 | -7.20 |
| **5** | Burkina Faso | 67,165.0 | 24.5 | 62,164.0 | 22.7 | -5,001.0 | -7.40 |
| **6** | Burundi | 1,939.4 | 7.6 | 2,796.4 | 10.9 | 857.0 | 44.20 |
| **7** | Cameroon | 209,004.8 | 44.2 | 203,404.8 | 43.0 | -5,600.0 | -2.70 |
| **8** | Cape Verde | 427.2 | 10.6 | 457.2 | 11.3 | 30.0 | 7.00 |
| **9** | Central Africa Republic | 226,030.0 | 36.3 | 223,030.0 | 35.8 | -3,000.0 | -1.30 |
| **10** | Chad | 55,300.0 | 4.4 | 43,130.0 | 3.4 | -12,170.0 | -22.00 |
| **11** | Comoros | 373.0 | 20 | 329.2 | 17.7 | -43.8 | -11.7 |
| **12** | Democratic Republic of Congo | 1,371,690.0 | 60.5 | 1,261,552.4 | 55.6 | -110,137.6 | -8.0 |
| **13** | Djibouti | 56.0 | 0.2 | 58.0 | 0.3 | 2.0 | 3.6 |
| **14** | Egypt | 656.4 | 1.5 | 449.8 | 0 | -206.6 | -31.5 |
| **15** | Eswatini | 4,854.3 | 28.2 | 4,975.6 | 28.9 | 121.3 | 2.5 |
| **16** | Equatorial Guinea | 25,320.1 | 90.3 | 24,484.2 | 87.3 | -835.9 | -3.3 |
| **17** | Eritrea | 10,868.6 | 9.0 | 10,552.6 | 8.7 | -316.0 | -2.9 |
| **18** | Ethiopia | 177,985.0 | 15.8 | 170,685.0 | 15.1 | -7,300.0 | -4.1 |
| **19** | Gabon | 236,494.1 | 91.8 | 235,306.0 | 91.3 | -1,188.1 | -0.5 |
| **20** | Gambia | 3,000.0 | 29.6 | 2,426.7 | 24.0 | -573.3 | -19.1 |
| **21** | Ghana | 79,429.3 | 34.9 | 79,857.1 | 35.1 | 427.8 | 0.5 |
| **22** | Guinea | 65,690.0 | 26.7 | 61,890.0 | 25.2 | -3,800.0 | -5.8 |
| **23** | Guinea Bissau | 20,644.3 | 73.4 | 19,800.1 | 70.4 | -844.2 | -4.1 |
| **24** | Ivory Coast | 39,655.8 | 12.5 | 28,367.1 | 8.9 | -11,288.7 | -28.5 |
| **25** | Kenya | 36,163.4 | 6.3 | 36,110.9 | 6.3 | -52.5 | -0.1 |
| **26** | Lesotho | 345.2 | 1.1 | 345.2 | 1.1 | 0 | 0.0 |
| **27** | Liberia | 79,200.4 | 82.2 | 76,174.4 | 79.1 | -3,026.0 | -3.8 |
| **28** | Libya | 2,170.0 | 0.1 | 2,170.0 | 0.1 | 0 | 0.0 |
| **29** | Madagascar | 125,619.8 | 21.6 | 124,298.1 | 21.4 | -1,321.7 | -1.1 |
| **30** | Malawi | 26,617.0 | 28.2 | 22,417.0 | 23.8 | -4,200.0 | -15.8 |
| **31** | Mali | 132,960.0 | 10.9 | 132,960.0 | 10.9 | 0 | 0.0 |
| **32** | Mauritania | 3,672.4 | 0.4 | 3,128.0 | 0.3 | -544.4 | -14.8 |
| **33** | Mauritius | 383.9 | 18.9 | 387.7 | 19.1 | 3.8 | 1.0 |
| **34** | Morocco | 56,745.7 | 12.7 | 57,424.9 | 12.9 | 679.2 | 1.2 |
| **35** | Mozambique | 389,721.4 | 49.6 | 367,437.6 | 46.7 | -22,283.8 | -5.7 |
| **36** | Namibia | 73,489.9 | 9.0 | 66,389.0 | 8.1 | -7,100.9 | -9.7 |
| **37** | Niger | 12,039.0 | 1.0 | 10,797.0 | 0.9 | -1,242.0 | -10.3 |
| **38** | Nigeria | 232,599.8 | 25.5 | 216,269.5 | 23.7 | -16,330.3 | -7.0 |
| **39** | Republic of Congo | 220,750.0 | 64.6 | 219,460.0 | 64.3 | -1,290.0 | -0.6 |
| **40** | Rwanda | 2,650.0 | 10.7 | 2,760.0 | 11.2 | 110.0 | 4.2 |
| **41** | São Tome E Principe | 581.0 | 60.5 | 519.0 | 54.1 | -62.0 | -10.7 |
| **42** | Senegal | 84,681.6 | 44.0 | 80,681.6 | 41.9 | -4,000.0 | -4.7 |
| **43** | Seychelles | 337.0 | 73.3 | 337.0 | 73.3 | 0 | 0.0 |
| **44** | Sierra Leone | 27,321.6 | 37.9 | 25,348.8 | 35.1 | -1,972.8 | -7.2 |
| **45** | Somalia | 67,475.0 | 10.8 | 59,800.0 | 9.5 | -7,675.0 | -11.4 |
| **46** | South Africa | 174,140.9 | 14.4 | 170,500.9 | 14.1 | -3,640.0 | -2.1 |
| **47** | Sudan | 272,381.7 | 11.5 | 183,595.5 | 9.8 | -88,786.2 | -32.6 |
| **48** | Tanzania | 499,500.1 | 56.4 | 457,450.0 | 51.6 | -42,050.1 | -8.4 |
| **49** | Togo | 12,388.7 | 22.8 | 12,092.7 | 22.2 | -296.0 | -2.4 |
| **50** | Tunisia | 6,874.3 | 4.4 | 7,027.3 | 4.5 | 153.0 | 2.2 |
| **51** | Uganda | 27,504.2 | 13.7 | 23,379.0 | 11.7 | -4,125.2 | -15.0 |
| **52** | Zambia | 466,960.0 | 62.8 | 448,140.3 | 60.3 | -18,819.7 | -4.0 |
| **53** | Zimbabwe | 179,052.8 | 46.3 | 174,445.8 | 45.1 | -4,607.0 | -2.6 |
|  | Africa | 6,752,398.60 |  | 6,287,025.70 |  | -465,372.9 | -6.9 |

Source: extracted from FAO data, Global Forest Resources Assessment (2020)

Table 1 shows a number of interesting findings as follows:

1. Although a crude measure, the average forest cover for 2020 for the 53 countries was 118,623.1 square kilometres. The highest coverage by forested land was in the Democratic Republic of the Congo, which amounted to 1.261,552.4 square kilometres, and the lowest value was in Djibouti (58 square kilometres). In comparison (in 2010, the Democratic Republic of the Congo had the largest forest area of 1,371690 square kilometres), while Djibouti had the smallest forest area of 56 square kilometres. This shows that the DRC, which has lost 8 percent of its forest area, corresponding to 110,137.6 square kilometres, almost 1,900 times the area of the Republic of Djibouti, which has the smallest forest area on the continent.
2. Overall, Africa lost about 7 percent of its forest cover between 2010 and 2020, amounting 465,372.9 square kilometres which is larger than the size of Ethiopia.
3. In the period under study, the continent lost around 7 percent of its forest area, i.e., 46,537,290 hectares, which represents an average of 4.5 million hectares per year, i.e., 12,750 per day, which is somewhat worrying, considering that it is the most arid continent in the world with around 45 percent of its land mass covered by dryland.

These findings call for to two recommendations for urgent action as follows:

1. Urgently develop priority action areas towards avoiding further degradation, integrating biodiversity conservation and sustainable management in climate change actions and other regional policy frameworks of land restoration initiatives such as the Great Green Wall for the Sahara and Sahel Initiative as a transboundary African-led initiative to reserve land degradation and desertification in the Sahel and Sahara, Bonn challenges, AFR100 and the African Resilient Landscapes Initiatives (ARLI).
2. Develop bankable measures for ecosystem protection/ restoration sustainable water resources management and regenerative agriculture.

## Case Study 1: Leading countries that gained significant forest cover in 2010-2020

Table 2 below shows that there were only nine (9) of the countries that gained significantly (above 1 percent of forest cover) most likely due to implementation of strategies for conservation of their forest areas. Such strategies could probably be through reducing the volume of deforestation and degradation of forests, preserving biodiversity and guaranteeing adequate living conditions for the population. Should this be the case, these five countries deserve to be applauded, encouraged and flagged out for lesson learning. Burundi stood out to have gained an enormous area covered by forests.

Table 2: Cohort 1 countries (those that increased in terms of percentage of forest area between 2010 and 2020)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Rank** | **Country** | **2010** | | **2020** | | **Gain/Loss** | |
| **Km sq** | **%** | **Km Sq** | **Km Sq** | **Km Sq** | **%** |
| 1 | Burundi | 1,939.4 | 7.6 | 2,796.4 | 10.9 | 857.0 | 44.2 |
| 2 | Cape Verde | 427.2 | 10.6 | 457.2 | 11.3 | 30.0 | 7.0 |
| 3 | Rwanda | 2,650.0 | 10.7 | 2,760.0 | 11.2 | 110.0 | 4.2 |
| 4 | Djibouti | 56.0 | 0.2 | 58.0 | 0.3 | 2.0 | 3.6 |
| 5 | Eswatini | 4,854.3 | 28.2 | 4,975.6 | 28.9 | 121.3 | 2.5 |
| 6 | Tunisia | 6,874.3 | 4.4 | 7,027.3 | 4.5 | 153.0 | 2.2 |
| 7 | Algeria | 19,180.0 | 0.7 | 19,490.0 | 0.8 | 310.0 | 1.6 |
| 8 | Morocco | 56,745.7 | 12.7 | 57,424.9 | 12.9 | 679.2 | 1.2 |
| 9 | Mauritius | 383.9 | 18.9 | 387.7 | 19.1 | 3.8 | 1.0 |

*Source: extracted from FAO data, Global Forest Resources Assessment (2020)*

Table 2 shows that Burundi (44.2%), Cape Verde (7.0%), Rwanda (4.2%), Djibouti (3.6), Eswatini (2.5%), and Tunisia (2.2%) were the top-5 leading achievers over the 10-year period in terms of forested land gain. Burundi gaining a whooping 44.2 percent of its land cover, raises eyebrows and could be a case study for drawing lessons with regards to drivers of success. There could also be some peculiarities that Burundi has compared to the rest of the 53 countries that were covered in the study. The country is picked out for focused discussion. Similarly, Rwanda and Eswatini could be discussed separately as study cases, but focus was given to Burundi, Cape Verde, Rwanda, Eswatini and Tunisia as case studies. Overall, the gain in the nine countries could largely be due to compliance with stricter observation, compliance or enforcement of legislation. Discussion of the five countries was based on review of literature, covering their policies, legislations, strategies, plans, enforcement of laws and funding of forest and environmental conservation, protection and recovery.

### Burundi

Burundi is a landlocked country that ranks among the 10 leading countries with the lowest Human Development Index (UNDP, 2023). Its population is estimated at 11.89 million in 2020 with only 14 percent living in urban areas. The country almost entirely depends on subsistence agriculture. Ironically, despite having been reported by FAO’s Global Forest Assessment (FAO, 2020) to have gained 44.2 percent of its forest cover, as shown in Table 1, UNDP (2023) reveals that Burundi suffers from “uncontrolled cutting of trees for fuelwood coupled with agricultural clearing and grazing lands has resulted in nearly complete deforestation efforts”. This information suggests that the data shown on Burundi must be taken with a pinch of salt.

### Cape Verde

From 2010, in ‘’ I Série nº 40 Sup. «B.O.» República de Cabo Verde- 19 de Outubro de 2010’’, on forestry activities stipulates that: Forestry activities shall be subject to the provisions of the ***Law No. 48/V/98 of 6 April***, which regulates forestry activities. In this regard, the strategic character of forests, whether in protected areas or in other contexts, derives from the maintenance of the water cycle, protection against soil erosion and the enhancement of biodiversity. That is why in the said resolution, multi-sectoral policies must create the conditions for the protection and valorisation of forest resources in order to ensure the sustainability of forest areas and their proper integration in the creation of added value.

Indeed, the Cape Verdean experience of the positive leap in the growth of more forest areas could be worthy of showcasing for lesson learning. There is need to delve into how the country enforces legislation, how it implemented plans and managed its forest system in order to promote a balance in the functioning of ecosystems in general, resulting in a positive impact on sustainability and adaptability to climate change trends.

However, it is also important to investigate whether this positive gains in the country’s forest conservation efforts have impacted positively on the livelihoods of the population. It is equally important to explore whether the needs of local communities and environmental issues were given priority in the management of forest areas. Furthermore, it is of essence obtaining information on the relationships between the state, rural communities and the private sector in a management process aimed at achieving a dynamic balance. Strategic and economic considerations may conflict, and strategic considerations should prevail. This dialogue between stakeholders must have been a great learning experience.

### Rwanda

Rwanda is a mountainous country with 14 million people who mostly depend on crop farming and animal husbandry. According to Rapid Transformation Alliance (2022), Rwanda’s government environment policy sets out to reverse years of forest degradation through restoration of nature. The report goes on to state that “Rwanda has led the way on nature restoration, setting ambitious targets, garnering substantial investment, and implementing strong policies that have enabled and empowered Rwandan citizens, and especially women, to lead healthier, happier and more prosperous lives. These government efforts must have yielded dividends that led to the country recovering substantial amount of its forest land (4.2%).

### Eswatini

According to the FAO (2021), 32.7 percent or about 563,000 hectares of Eswatini is forested and (pine and eucalyptus) are among the world's largest planted forests, covering 161,000 hectare or about 9 percent of the land area. The total forest area in 2000 was 522,000 hectares or 30 percent of the land area. The Usutu Forest in Eswatini remains one of the most intensive forms of plantation forestry in the tropics and the subtropics. Short rotations, no thinning, high productivity and large areas of pine monoculture. The closest comparison of growth between rotations showed no widespread or significant decline in productivity. So, for Eswatini, afforestation has played a role in the growth of its forest area. Cape Verde and Eswatini, two small countries, have shown that it is possible for people to live in harmony with nature, respecting the needs of local communities and the laws that govern the management of nature.

### Tunisia

Tunisia’s total surface area covered by forests is 1.3 million hectares (8%) according to FAO’s State of Forestry Report 2015 (Daly, 2016). The report states that the country’s forest area increased by 62 percent in the period 1990-2015. This remarkable achievement was attained event though a pastoral expansion of 6,000 hectares per year, and forest fires affected about one thousand hectares per year during the period 1996-2010, and annual forest increase from 400 ha in 1996-2010 to 800 ha in 2011-2014. This progress was recorded thanks to government commitments resulting in funding forest and pastoral plantation projects, replanting of burned forest areas, reforestation of harvested areas, replacement of shrubs amounting to 1400 ha per year, planting the banks of ravines and soil conservation. Tunisia is distinguished as the country that leads the way in planting forage species in pastoral lands.

Besides the noted efforts, the Government of Tunisia also made solid and active commitments to climate change effects through budgetary allocations. In a news report by Wansi (2023), it is stated that the Government of Tunisia allocated 2.1 billion Euros over the next two years for investing in green projects in order to contribute to reduction of greenhouse gas (GHG) emissions and boost socio-economic development in the country. The funds are also aimed at controlling atmospheric pollution, the improvement of drinking water supply and the protection of biodiversity.

Table 3: Cohort 2 countries (those with either no change or experienced minimal percent change increase in forest area between 2010 and 2020)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Rank** | **Country** | **2010** | | **2020** | | **Gain/Loss** | |
| **Km sq** | **%** | **Km Sq** | **%** | **Km Sq** | **%** |
| 1 | Ghana | 79,429.3 | 34.9 | 79,857.1 | 35.1 | 427.8 | 0.5 |
| 2 | Lesotho | 345.2 | 1.1 | 345.2 | 1.1 | 0 | 0.0 |
| 3 | Libya | 2,170.0 | 0.1 | 2,170.0 | 0.1 | 0 | 0.0 |
| 4 | Mali | 132,960.0 | 10.9 | 132,960.0 | 10.9 | 0 | 0.0 |
| 5 | Seychelles | 337.0 | 73.3 | 337.0 | 73.3 | 0 | 0.0 |
| 6 | Kenya | 36,163.4 | 6.3 | 36,110.9 | 6.3 | -52.5 | -0.1 |
| 7 | Gabon | 236,494.1 | 91.8 | 235,306.0 | 91.3 | -1,188.1 | -0.5 |
| 8 | Republic of Congo | 220,750.0 | 64.5 | 219,460 | 64.3 | -1,290.0 | -0.6 |

Source: extracted from FAO data, Global Forest Resources Assessment (2020)

As stated above, the eight countries in Cohort 2 showed no change or minute change in their percentage of forest cover. Kenya, Gabon and Republic of Congo (Congo Brazzaville) have slipped slightly, losing 0.1, 0.5 and 0.6 percent of their forest cover, respectively. They might slide drastically should some major disaster or a series of forest threating adverse climatic events, such as droughts or human activities, occur. Five counties (Ghana, Lesotho, Libya, Mali and Seychelles) had practically not gained, nor lost in their forest cover. This could be due to strict conservation practices of no expansion, no encroachment into existing forested land and national parks, or quick reforestation of forest land lost in (strict adherence to the “cut-one, plant one” policy).

While Table 2 presents the nine countries that had scored significant gains and Table 3 showed only one country (Ghana) that had some marginal gain, four that had stagnated or not showing no progress in their forest cover, and three countries that had marginal loss in their forest cover, Table 4 below presents 13 countries that had lost substantial amount (above 10%) of their forest cover during the period under review.

Table 4: Cohort 3 (Countries that decreased in terms percentage of forest area from 2010-2020)

| **Rank** | **Country** | **2010** | | **2020** | | **Gain/Loss** | |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Km Sq** | **%** | **Km Sq** | **%** | **Km Sq** | **%** |
| **1** | Benin | 36,351.5 | 32.2 | 31,351.5 | 27.8 | -5,000.0 | -13.80 |
| **2** | Chad | 55,300.0 | 4.4 | 43,130.0 | 3.4 | -12,170.0 | -22.00 |
| **3** | Comoros | 373.0 | 20 | 329.2 | 17.7 | -43.8 | -11.7 |
| **4** | Egypt | 656.4 | 1.5 | 449.8 | 0 | -206.6 | -31.5 |
| **5** | Gambia | 3,000.0 | 29.6 | 2,426.7 | 24.0 | -573.3 | -19.1 |
| **6** | Ivory Coast | 39,655.8 | 12.5 | 28,367.1 | 8.9 | -11,288.7 | -28.5 |
| **7** | Malawi | 26,617.0 | 28.2 | 22,417.0 | 23.8 | -4,200.0 | -15.8 |
| **8** | Mauritania | 3,672.4 | 0.4 | 3,128.0 | 0.3 | -544.4 | -14.8 |
| **9** | Niger | 12,039.0 | 1.0 | 10,797.0 | 0.9 | -1,242.0 | -10.3 |
| **10** | São Tome E Principe | 581.0 | 60.5 | 519.0 | 54.1 | -62.0 | -10.7 |
| **11** | Somalia | 67,475.0 | 10.8 | 59,800.0 | 9.5 | -7,675.0 | -11.4 |
| **12** | Sudan | 272,381.7 | 11.5 | 183,595.5 | 9.8 | -88,786.2 | -32.6 |
| **13** | Uganda | 27,504.2 | 13.7 | 23,379.0 | 11.7 | -4,125.2 | -15.0 |

Source: extracted from FAO data, Global Forest Resources Assessment (2020)

Literature reviewed on which this report is based shows that many of the countries that have substantially lost their forest cover over a decade, have common factors such as deforestation and forest degradation, the causes of which vary from country to country. In some of them, the cause was mainly linked to anthropogenic actions, i.e., human actions in the development of productive activities. This is the case in São Tomé and Príncipe – a tiny island – which apart from the influence of Climate Change, the country had decided to intensify palm oil production on large areas, increasing the rate of deforestation and reducing biodiversity through monoculture. In the case of the Democratic Republic of Congo, which is the country with largest forested land in Africa, but losing eight percent of it, the cause was characterized by the actions of major economic players. The state was unable to promote policies to prevent and control deforestation through the extraction and illegal exploitation of timber or charcoal production, especially on the outskirts of major cities such as Kinshasa, Lubumbashi, Kisangani, Matadi, Bukavu, etc. According to Jeremy Hance (2014), the forestry sector in the Democratic Republic of Congo (DRC) was completely out of control. This report estimates that at least 87 percent of logging in the DRC was illegal in 2011, making the DRC possibly the most high-risk country in the world for purchasing legal wood products. This could justify the massive loss of forest area during this period, 4.9 percent (110,137.6 square kilometres), almost two times the territory of the Republic of Togo.

To get the situation under control, in DRC for example, the Chatham House report (Lawson, 2014) recommends that the DRC should drastically improve transparency, increase enforcement efforts, and maintain the moratorium on new licenses for industrial logging. Finally, the DRC needs to deal with its small-scale logging. In this case, policies are needed to protect natural resources, biodiversity and ecosystems. One solution is to implement sustainable production models that combine economic development with environmental protection.

The consequences of deforestation are linked to the loss of biodiversity and the consequent extinction of species. In addition, deforestation causes a wide range of negative environmental impacts and is recognised as one of the main causes of climate change. For others, deforestation is also driven by land use. Agricultural and livestock practices are an example of this type of use, where vegetation is removed, either by machinery or by burning, to make way for large monocultures or even cattle ranching. This is the case on the Ivory Coast.

Overall, according to data collected online, this loss of forest cover in recent years, through an increase in the rate of deforestation, is due to the actions of loggers, miners and agricultural producers who take advantage of the sluggishness of governments in controlling logging and protecting forested areas. Regarding the countries of the Congo Basin, 3.7 million square kilometres are drained by the Congo River. Nine countries (Angola, Cameroon, Central African Republic, Democratic Republic of Congo, Republic of Congo, Burundi, Rwanda, Tanzania and Zambia) have part of their territory within the Congo Basin.

However, the Congolese rainforest is generally associated with six countries with extensive forest cover in the region: Cameroon, the Central African Republic, the Republic of Congo, the Democratic Republic of Congo (DRC), Equatorial Guinea and Gabon. Of these six countries, the DRC contains the largest area of tropical forest, with 107 million hectares, or 60 percent of Central Africa's lowland forest cover.

Much of the basin is covered by rich tropical rainforests and swamps. Together, these ecosystems make up most of the Central African rainforest, which at 178 million hectares, is the second largest tropical forest in the world.

The statistics expressed as percentages of area lost, but do not show the extent of the loss. This is especially for small countries, most of which were not categorised as “forest countries” and whose forests are not part of the national budget. However, special attention has been paid to so-called “forest countries”, where these percentages represent huge areas in hectares.

Table 5: Top10 of countries with largest forest in Africa

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Rank** | **Country** | **Square Kilometres** | | | |
| **2010** | **2020** | **Change** | **% Change** |
| 1 | Republic of Congo | 1,371,690.0 | 1,261,552.4 | -110,137.6 | -8.0 |
| 2 | Angola | 721,580.0 | 666,073.8 | -55,506.2 | -7.7 |
| 3 | Tanzania | 499,500.1 | 457,450 | -42,050.1 | -8.4 |
| 4 | Zambia | 466,960.0 | 448,140.3 | -18,819.7 | -4.0 |
| 5 | Mozambique | 389,721.4 | 367,437.6 | -22,283.8 | -5.7 |
| 6 | Gabon | 236,494.1 | 235,306 | -1,188.1 | -0.5 |
| 7 | Central African Republic | 226,030.0 | 223,030 | -3,000.0 | -1.3 |
| 8 | Nigeria | 232,599.8 | 216,269.5 | -16,330.3 | -7.0 |
| 9 | Congo | 220,750.0 | 219,460 | -1,290.0 | -0.6 |
| 10 | Cameroun | 209,004.8 | 203,404.8 | -5,600.0 | -2.7 |

Source: extracted from FAO data, Global Forest Resources Assessment (2020)

It is worth noting that there are three major forest zones in Africa. As shown in Table 10, the top 10 so-called “forest countries” lost the most forest cover during 2010-2020 period is in these zones. This could be attributable to the so-called “resource curse”, implying that countries endowed with abundance of resources tend to become targets for illegal exploitation, as government authorities get tempted through bribing and indulging in corrupt practices.

## Case Study 2: Outlook of the five Congo Basin countries not tapping adequately into their abundant natural habitats

Five countries are conventionally referred to as the Congo Basin countries: DRC, Gabon, Congo, CAR and Cameroon, while two countries, namely; Angola and Zambia, have part of their territory in the Congo Basin. However, two come from the mountain forests of the coast of East Africa, Tanzania and Mozambique. From West Africa, only Nigeria is part of the Congo Basin.

According to Rhett A. Butler (2020) in his article the Congo Rainforest, "the rate of deforestation in Central Africa between 1990 and 2010 was the lowest of any major forest region in the world. Deforestation has tended to increase during the 2010s with the expansion of industrial logging and conversion to large-scale agriculture.'' Butler (2020) also points out that the main drivers of deforestation in the Congolese rainforest over the past 30 years have been small-scale subsistence farming, clearing for charcoal and firewood, urban expansion and mining. Industrial logging has been the main driver of forest degradation. However, it is important not to underestimate the impact of logging in the region. Logging roads have opened up vast areas of the Congo to commercial hunting, leading to a poaching epidemic in some areas and a drop of more than 60 percent in the region's forest elephant population in less than a decade. In addition, logging roads have allowed speculators and smallholders to clear land for agriculture.

Worldwide, illegal logging is worth $30-$100 billion in ill-gotten gains, according to a 2012 report by INTERPOL and the United Nations Environment Programme (UNEP). It is also responsible for 15-30 of total forest loss in the tropics. The practice not only harms local communities, threatens biodiversity, and worsens climate change, but also results in loss of revenue for often poorer governments. Conflict between illegal loggers and forest communities often results in violence and sometimes murder. In the future, the greatest threats to the Congolese rainforest will come from industrial plantations, particularly for the production of palm oil, rubber and sugar.

### Angola

Angola is the most densely forested country in the Congo basin (FAO 2010), with tropical rainforests in the north, where the Mayombe Forest is located, part of the Mayombe National Park in a vast protected area on the north-west-east border with the Republic of Congo and the Democratic Republic of Congo. This vast Mayombe tropical forest is part of the Congo Basin and covers an area of 290,000 hectares.



*This picture shows how the Mayombe forest in Cabinda is still devasted by gold exploration*

Angola also had large areas of miombo forest. These were preserved and even slightly expanded during the long civil war, but are now being converted on a large scale, mainly for subsistence farming, but also for large-scale cultivation and charcoal production. According to the FAO, 46.9 percent of Angola's territory, or about 58,480,000 ha, was covered by forest. Angola had 128,000 hectares of planted forests. Every year, Angola lost about 124,800 hectares, or 0.20 percent per year.

Angola is the second most forested country on the continent after the Democratic Republic of Congo. Unfortunately, among the so-called forest countries, it is the second country to have lost the most forest area during the period under study (2010-2020), after the Democratic Republic of Congo. The reasons for this large loss were related to deforestation, which included small-scale agriculture, firewood and charcoal, transport infrastructure, timber extraction, large-scale agriculture, fires, urban expansion and mining.

However, the main driver of change since the end of hostilities had been the conversion of Miombo forests to agricultural land as people returned to former conflict areas, while charcoal and firewood were important priorities for many rural people and affected large areas of Miombo. Charcoal was particularly important along the roads. At the same time, deforestation has been exacerbated by the construction of new roads, including the Benguela railway. In addition, uncontrolled fires had destroyed large areas of forest, damaging the livelihoods of local communities. The timber trade had also been a key factor, increasing during this period in the east and north of Angola, particularly in Cabinda province. Illegal logging is widespread, including on behalf of Chinese companies.

### Tanzania

Forests in Tanzania were increasingly subject to deforestation and degradation due to growing demand for arable land, firewood, furniture and infrastructure. Tanzania faced an unprecedented loss of its forests and other wooded areas. The period under review showed that the country lost 4.8 percent of its land area during the decade 2010-2020. Various reports revealed that agriculture was the main driver of deforestation in 81 percent of plots, well ahead of charcoal production (12%), timber harvesting (1%) and livestock (1%). Tanzanian policymakers have tried to reduce deforestation by reducing demand for charcoal, but to no avail. The trade in charcoal, produced by burning logs and branches, is fueling deforestation in Tanzania. Global Forest Watch, a project of the Washington-based non-profit World Resources Institute, estimates that the country's total forest cover will shrink by 3.82 million hectares, or 11 percent, between 2000 and 2020.

### Zambia

Zambia’s deforestation rate is estimated at 250,000 to 300,000 hectares per year (Matakala, Kokwe, & Statz, 2015; Phiri, 2021). The strategy attributes the country’s deforestation to wood fuel (firewood and charcoal), agriculture expansion, mining, timber extraction, bush fires and land and infrastructure development. These causes are, according to the strategy, overarched by five underlying factors: poverty, rapidly growing population, the forest sector serving as a source of quick wealth and employment, inadequate policy coherence, and technological practices for agricultural production that do not address long-term soil fertility constraints. At this rate, Zambia became the biggest loser of its forest cover in Africa according to the country’s Green Economy and Environment Minister, Collins Nzuvu (Phiri, 2021). It is against this bleak backdrop that the strategy sought to improve forest management and livelihoods through strategies including, inter alia, instituting local forest management institutional and governance reforms; participation of traditional authorities in forest management and monitoring of forests in open areas, among others.

### Mozambique

According to Global Forest Watch (2010), Mozambique had 27.0 Mega hectares of tree cover, extending over 34 percent of its land area. In 2022, it lost 238 kilo hectare of tree cover, equivalent to 93.7 Metric tons of CO₂ emissions. From 2010 to 2020, according to the Mozambican Civil Society (through key informant interviews), small-scale agriculture continued to be a primary driver of deforestation, while wood energy demand, illegal logging and urban expansion are important secondary drivers. Mozambique remained highly vulnerable to the effects of climate change. Alternating floods and droughts are affecting the ability of forests to regenerate. Mozambique has lost 2.9 percent of its land area, and proportionally more forests will be decimated over time if the situation continues at the same rate.

Scattered across the northern half of the country, most of Mozambique's mountain forests were rapidly disappearing as farmers, hunters and loggers cut down their trees for food and money.

Mozambique was hardest hit over the past decade, as the country's forests had been lost to illegal logging and charcoal production, the exploitation of wood for construction materials, unsustainable agriculture, and the removal of mangroves to make way for rice fields, salt marshes, aquaculture and housing. As the population grows, so does the pressure on the forests. Forests are getting smaller and more trees are being cut down. According to the Civil Society Forum on Transparency in the Extractive Industry (through a phone interview), the authorities have tried to limit and control charcoal production by requiring licences, but production continues illegally around *Gorongosa* National Park. The Forum believes that charcoal production can only be sustainable if rural communities have a way of managing their resources so that trees are not cut down faster than they can grow back, as farmers have no other choice to make a living.

### Nigeria

Nigeria had one of the largest forests in the ECOWAS Region. Its deforestation rate was estimated to have lost 1.8 percent of its forest cover in the last decade. The main drivers of deforestation in Nigeria included rapid agricultural expansion, legal and illegal logging, urban expansion, oil exploration, fuelwood burning, corruption, population growth, grazing and fire. Deforestation remained a serious problem in Nigeria, which is a call for attention! By taking steps to protect forests and promote sustainable practices, Nigeria can help mitigate the negative impacts of climate change. Several institutions worked with the Nigerian Government to propose alternatives to timber and ways to save forests, including reforestation, law enforcement and regulation, alternative sources of fuelwood, the use of sustainable agricultural practices such as crop rotation that can help protect forests, productive restoration, and support for organizations fighting deforestation.

# Discussion

## A cause for alarm and commonality of factors of forest degradation

Based on the analysis of data available on the state of forestry in Africa, with special focus on the triple dimensions of forestry (deforestation, degradation and afforestation) it is easy to notice that while a few countries are making progress in regaining the land areas covered by forests, while a few appeared stagnated, the bulk of the countries faced the danger of losing substantially the forests and, subsequently, their biodiversity. Analysis show that the country that were endowed with the rich of forests and diversity did even worse than those have larger parts of their lands characterised as arid, semi-arid, dry or desert! It makes one wonder whether the abundance tended to blind-fold the authorities or causing them to relax or be complacent!

In general terms, the findings of the report led to observations that Africa countries that lost their forest areas shared certain commonalities, which could represent the key drivers of deforestation and forest degradation. These are: land use change to agriculture and settlements; increased surface runoffs; increased pressure on forests by fuelwood, mining operations, etc; poor forest management; weak institutions; unpopular conservation laws; and frequently occurring natural disasters.

## The potential solutions for achieving success

According to the DBG Group (2023), the major contributor to deforestation is the increasing demand for paper products. This is in addition to the growing demand for agricultural products that has led to expansion of agricultural land and livestock grazing, causing large-scale destruction of forests. Experts have, therefore recommended radical solutions to the forest destroying activities, including investment in recycling of paper. It is also recommended that Africa focuses on supporting activities that can reduce the rate of deforestation, conserving biodiversity and ensuring decent living conditions for its populations. The six solutions recommended for action by experts in order to reverse the adverse trends in the African forest sector are:

1. The implementation of an economic production model based on sustainable development;
2. The involvement of public authorities and private initiative in the development of environmental protection measures;
3. Enforcing environmental legislation by monitoring and punishing environmental crimes;
4. Bonuses for rural producers and other economic actors who contribute to the conservation of forest areas;
5. Establishment of conservation and environmental protection units with a focus on regions with high biodiversity;
6. Promoting policies to reforest degraded areas with native species and to reintroduce wildlife.

## Regional forest conservation efforts and new initiatives on forest protection

During the 2010-2020 period, Africa played an important role in harmonising its legislation in favour of conservation and, above all, in pooling efforts for combat the loss of its biodiversity and, *ipso facto*, its forests. Several initiatives emerged for integrating conservation efforts such as the COMIFAC Convergence Plan, the ECOWAS Convergence Plan, the development of the SADC Forestry Strategy 2010-2020 and the IGAD Strategic Programme Policy in Forest for the East African Region.

The COMIFAC Convergence Plan is a sub-regional reference and coordination framework for all activities related to the conservation and sustainable management of forest ecosystems in Central Africa. The West African Forest Convergence Plan aims to strengthen sub-regional cooperation in the forestry and wildlife sectors, mobilise political, institutional, financial and technical support and address key issues of common or transboundary interest.

The SADC Protocol on the Forest Sector is a regional decision-making framework aimed at promoting cooperation in the field of forestry and providing a common vision and approach to the management of the region's forest resources. The IGAD Strategy 2021-2025 is unique. It is part of the region's Vision 2050. This strategy is the first in a series of six strategies that together aim to set the course for IGAD's Vision 2050 for the next 30 years.

All these policy dialogues in the different sub-regions aimed at harmonious forest management through the planning and implementation of practices for the responsible management and use of forests and other wooded lands in order to achieve the specific environmental, economic, social and cultural objectives of Agenda 2063. All this cooperation in the implementation of strategic documents on forest management probably contributed to the phenomenal process of conservation efforts for some countries, 15 of them, when 38 countries fell. During the period under review, much effort was put into legislative reform, with the strengthening of the Biodiversity Conservation Act. This led to the creation of new protected areas in different Regional Economic Communities (RECs), with the aim of preserving at least 10 percent of forest resources, in line with IUCN recommendations.

Several international NGOs were established in Africa with the aim of conserving biodiversity. The NGOs such as CIFOR, IUCN and the Wild Life Conservation Society (WCS), are ever present in the scientific and political debate on biodiversity and in actions to protect it, with obvious synergies. They played an important role in the formulation of various conservation policies. They also moved from promoting strictly protected areas to identifying vulnerable zones. In the context of sustainable development, they established biological corridors and protected areas managed by local people.

# Conclusion and Recommendations

The report, heavily based on analysis of secondary data from online sources and desktop review of literature in the form of authoritative reports published by specialist organisations and institutions, led to the conclusion that the current state of our forests during the period under review is a cause for concern. The findings show that Africa had been losing an average of 4.5 million hectares per year in the 2010-2020 period of the study. It is estimated that in 40 to 50 years from now, land cover by forest on the continent might tremendously be depleted, giving rise to serious local and global human and environmental. This rate of decline of in terms of core forest indicators, is quite alarming! It should, therefore, present a challenge to policy makers to support efforts and initiatives for safeguarding the continent’s forests and, *ipso facto*, the survival of both continent’s natural habitat and that of the billions of people living on it.

Indeed, the problem of forest cover loss in Africa needs an urgent and immediate solution and action. The frequent occurrence of climate change events and their adverse and devastating effects on natural resources and sources of livelihoods, especially in low forest areas, call for action. As well, these devastating climate change events impact deforestation and land degradation, are cause for enforcement of policies, laws and legislations based on international conventions on environmental protection, conservation and restoration, such as responsible infrastructure construction, agriculture and sustainable ecosystems. It also calls for investment in projects for cutting down pollution and greenhouse gas emissions.

Meanwhile, there are growing fears that if the current trend (rate of forest loss) is left unchecked, the situation is expected to become worse over time. When the forests are destroyed or degraded by illegal logging, livelihoods are damaged or destroyed. These fears are not misplaced. Illegal logging is a fuel for corruption and conflict, preventing the country as a whole from developing. The poor stay poor as a result.

Furthermore, the findings provided by this report provide a compelling case for policy practitioners and organisations committed to conservation of forests, protection of biodiversity and stoppage of deforestation and forest degradation to utilise the African Climate Change Strategy as a tool for the management of forests. Member states are particularly encouraged to domesticate the strategy to achieve the SDGs 13 and 15.

This report was possible to do some data accessed online. However, there amount of data available on important aspects such as canopy cover to help in determining forest trends in Africa has been rather problematic. In this regard, organisations supporting the forestry sector, natural resource and climate resilience are urged to commit resources (both technical and financial) to enhance their capacities and those of governments which they are supporting to increase the availability, access and use of reliable and accurate data obtained on continuous basis such as satellite imagery and remote sensing. With use of the right equipment, computer software and technical expertise, it is possible to obtain accurate data and maps of land cover, temporal and weather statistics for determining trends according to reflectance observations of the area under forest destroyed by fire, deforested on daily monthly or annual basis. Studies such as this one should no longer be carried out on decade basis. Reliability of data has been an issue since some of the countries could not systematically monitor trends and weather events.

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