



Grantham  
Research Institute  
on Climate Change  
and the Environment

# A fair deal for the sustainable development of the Congo Basin countries and the protection of the rainforest

Minette Nago, Bob Ward, Dany Pokem  
and Kanta Kumari Rigaud

Policy report

November 2025



Grantham Foundation  
for the Protection of the Environment

The **Grantham Research Institute on Climate Change and the Environment** was established in 2008 at the London School of Economics and Political Science. The Institute brings together international expertise on economics, as well as finance, geography, the environment, international development and political economy to establish a world-leading centre for policy-relevant research, teaching and training in climate change and the environment. It is funded by the Grantham Foundation for the Protection of the Environment, which also funds the Grantham Institute – Climate Change and the Environment at Imperial College London. [www.lse.ac.uk/granthaminstitute](http://www.lse.ac.uk/granthaminstitute)

### About the authors

**Minette Nago** is the Africa Policy Fellow at the Grantham Research Institute on Climate Change and the Environment.

**Bob Ward** is the Policy and Communication Director at the Grantham Research Institute on Climate Change and the Environment.

**Dany Pokem** is the Technical Coordinator at the Congo Basin Forest Partnership (CBFP).

**Kanta Kumari Rigaud** is Lead Climate Change Specialist at the World Bank Group.

### Acknowledgements

We would like to express our sincere gratitude to Giles Atkinson, Maria Ayuk and Ida Djenontin for their thorough review of this work. We would also like to thank the African Natural Resources Centre for providing us with the latest data on the contribution of the forestry sector to the GDP of the Congo Basin countries, without which we would not have been able to complete this analysis. We would like to thank Ben Filewod for sharing the results of his work on natural capital in the Congo Basin with us at an early stage, encouraging us to pursue this analysis.

Finally, we would like to thank the FCDO for inviting us to a meeting on the 'pledge', where we saw how much of a priority the 'fair deal' is for the Congo Basin countries and their partners. This meeting gave us additional motivation to finalise this report in order to contribute to this important discussion for our planet.

The Grantham Research Institute would like to acknowledge funding for this report from the Grantham Foundation for the Protection of the Environment, Quadrature Climate Foundation and Howell Ferguson.

Sarah King edited the report and Georgina Kyriacou provided editorial oversight.

The views expressed in this report represent those of the authors and do not necessarily represent those of the host institutions or funders. The authors declare no conflict of interest in the preparation of this report.

This paper was first published in November 2025 by the Grantham Research Institute on Climate Change and the Environment.

© The authors, 2025

Licensed under [CC BY-NC 4.0](https://creativecommons.org/licenses/by-nc/4.0/). Commercial permissions requests should be directed to [gri@lse.ac.uk](mailto:gri@lse.ac.uk).

**Suggested citation:** Nago M, Ward B, Pokem D and Rigaud KK (2023) *A fair deal for the sustainable development of Congo Basin countries and the protection of the rainforest*. London: Grantham Research Institute on Climate Change and the Environment, London School of Economics and Political Science.

# Contents

<b>Summary</b>	<b>4</b>
<b>1. Introduction</b>	<b>6</b>
<b>2. Deforestation and degradation in the Congo Basin</b>	<b>8</b>
<b>3. Major action to tackle deforestation in the Congo Basin forests</b>	<b>17</b>
<b>4. New estimates of the value of the natural capital of the Congo Basin forests</b>	<b>22</b>
<b>5. The economic benefits from forestry for the Congo Basin countries</b>	<b>25</b>
<b>6. Conclusions and recommendations</b>	<b>27</b>
<b>References</b>	<b>29</b>

# Summary

## The importance of the Congo Basin forests and the challenges they face

The Congo Basin forests, including the world's second largest rainforest after the Amazon, cover more than 300 million hectares across 11 countries in Central Africa. They represent the world's largest land-based carbon sink, and provide a unique and vital biodiversity haven.

Development, commercial and demographic pressures have increased considerably in the Congo Basin, particularly since 2010, leading to rising deforestation and degradation in its forests. Recent analysis has suggested, however, that the rate of deforestation has decreased significantly over the past five years, and that it is now less than half, in percentage terms, of that experienced in the Amazon Basin. Nevertheless, nearly 10% of the forest area of the Congo Basin was lost between 1990 and 2025. There are also signs that the impacts of climate change are beginning to adversely affect the absorption of carbon dioxide by the Congo Basin forests. Given these threats, this is a critical moment for the forests' future.

The countries that are home to the Congo Basin forests have recognised the challenge of its sustainable management. The member governments of the Central African Forest Commission (COMIFAC) and Economic Community of Central African States (ECCAS) signed a joint 'declaration of commitment' and 'call for fair financing' in 2021, subsequently referred to as the 'Fair Deal agreement'. It committed the governments to "make the necessary and verifiable efforts to preserve our tropical forests and conserve biodiversity", and called on the international community "to increase their technical financial and diplomatic support in an effective manner and on appropriate terms". This agreement was followed by some efforts to provide support for the Congo Basin nations, including through the 'COP26 Congo Basin Joint Donor Statement' made in 2021, but the rest of the world is yet to make any long-term commitment of support.

## New research findings: forestry earnings, value of the forests and financial flows for protection

In this report we highlight new analysis and research which finds that the six main Congo Basin countries of Cameroon, Central African Republic, Democratic Republic of the Congo, Equatorial Guinea, Gabon and Republic of the Congo collectively earned around US\$14 billion in 2023 from forestry, including from unsustainable practices. Other work on the natural capital of the Congo Basin has estimated that the economic value of its forest ecosystem services, not including climate regulation from the sequestration of carbon, is about US\$8 billion per year. Including the value of the sequestered carbon, the World Bank estimates the global value of the forests' ecosystem services is US\$1.15 trillion per year, and the total asset value is US\$23.2 trillion. It is clear from these numbers that destructive, degrading forestry practices exercised in the Congo Basin nations are currently producing only a fraction of the available natural capital value, and this fraction is declining. In addition, to date, the scale of financial resources that have flowed to the Congo Basin nations from external sources to protect the rainforest has been inadequate. Hence, it is critical that the Congo Basin nations receive a 'fair deal' through an increase in investment from all sources to help them safeguard their forests by pursuing sustainable economic development and growth.

## Recommendations

We make the following recommendations for the protection of the Congo Basin rainforest:

1. Given the importance of the Congo Basin forests, there should be further enhanced efforts by the host nations, strongly supported by the international community, to assess and monitor their extent and rates of deforestation, degradation and restoration, to reduce the current high levels of uncertainty and disagreement around estimates.
2. The governments of the Congo Basin nations should develop a collective strategy for the protection and sustainable management of their forests, investing their own resources and

seeking investment from their international partners, including donor governments and the private sector.

3. To provide the basis for a fair deal, the Congo Basin nations, with support from their international partners, should make the collective case and set out details of the long-term support — including financing from public and private sources — they need in order to implement a collective strategy for the protection and sustainable management of their forests and accelerate their sustainable development.
4. The collective strategy for the protection and sustainable management of the Congo Basin forests should include specific timebound goals for what the nations would like to achieve, consistent with their ambitions for accelerating their sustainable development and growth.
5. The governments of the Congo Basin nations should provide a breakdown of the investments required to achieve their goals within the specified timeframes and identify what finances they need from domestic public and private sources, and external public and private sources (including donor governments and development banks) for each investment.
6. An example breakdown of investments could include: (i) policy development, (ii) ending illegal deforestation (e.g. through monitoring and surveillance; enforcement), and (iii) development of sustainable forest-related incomes and revenues, including carbon markets.
7. The international community should provide the long-term financial support from public and private sources to allow the Congo Basin nations to accelerate their sustainable development while protecting their forests.
8. The Congo Basin countries should ensure that COMIFAC and the Congo Basin Forest Partnership effectively represent their interests.
9. The Congo Basin nations should continue to participate fully in other relevant regional and global fora and organisations concerned with the protection of the world's rainforests, including the United Nations Framework Convention on Climate Change, the United Nations Convention on Biological Diversity, and the Coalition of Finance Ministers for Climate Action.
10. Decisions about investments in the Congo Basin forests should be made in partnership with the host nations, who should be represented, for instance, on the executive board of the Central African Forest Initiative.
11. The Congo Basin nations should support and participate in the new Tropical Forest Forever Facility, advising on its development to provide the investments it needs.
12. The investor nations of the Tropical Forest Forever Facility should ensure that the Congo Basin nations receive substantial support, including in improving their readiness to apply and receive funds.

# 1. Introduction

Although recent analysis has shown that the rate of deforestation in the Congo Basin has decreased significantly over the past five years, nearly 10% of the Basin's forest area was lost between 1990 and 2025. As the impacts of climate change are also now beginning to show signs of adversely affecting the absorption of carbon dioxide by the forests, we have arrived at a critical moment in determining the forests' future. This report provides a detailed summary of deforestation and degradation in the Congo Basin forests, providing estimates for three key periods, explaining the forests' role as a carbon sink, describing action that has been undertaken to tackle deforestation activity, estimating the natural capital value of the forests and quantifying the economic benefits of forestry for the Congo Basin. It concludes by presenting recommendations for how the Congo Basin nations and the global community can help protect the region's forests into the future.

## Where is the Congo Basin and why are its forests so important?

The Congo Basin forests are spread across 11 countries in Central Africa, extending from the Atlantic Ocean in the west to the mountains of the Albertine Rift in the east: Angola, Burundi, Cameroon, Central African Republic, Democratic Republic of the Congo, Equatorial Guinea, Gabon, Republic of the Congo, Rwanda, Tanzania and Zambia. In 2010, the forests covered more than 300 million hectares (FAO and ITTO, 2011). More recent estimates indicate that the six main Congo Basin nations of Cameroon, Central African Republic, Democratic Republic of the Congo, Equatorial Guinea, Gabon and Republic of the Congo have a forest cover of just over 250 million hectares in 2025 (FAO, 2025). The forest area includes the second largest area of rainforest in the world, after the Amazon, consisting of tropical rainforests and tropical moist deciduous forests. Most of the rainforest is located in the six countries mentioned above.

The World Bank classifies the Central African Republic and the Democratic Republic of the Congo as low-income countries, Cameroon and the Republic of the Congo as lower-middle-income, and Equatorial Guinea and Gabon as upper-middle income. The Congo Basin region is characterised by weak governance, political and social instability and a high level of government debt (Karsenty and Ongolo, 2012). All the countries in the Congo Basin are fragile states, with many losing physical control over parts of their territory, or showing a clear erosion of legitimate authority to make collective decisions, as well as being unable to provide reasonable public services (Chami et al., 2021).

It was estimated in 2010 that the forest area of the six main Congo Basin countries, plus Burundi and Rwanda, consisted of 187 million hectares of dense moist forest and 138 million hectares of other forest (de Wasseige et al., 2012). The forests also include the Cuvette Centrale peatland, which is believed to be the largest continuous tropical peatland complex in the world, covering an area of around 14.5 million hectares (Dargie et al., 2017), typically in hardwood swamp forest and palm-dominated swamp forest, and containing about 2 billion tonnes of carbon.

The Congo Basin forests represent the world's largest land-based carbon sink and a unique and vital biodiversity haven, benefiting both the countries they cover and the wider world (Eba'a Atyi et al., 2022; Streck et al., 2023).

## A brief history of forest protection

Since the publication in 1987 of the landmark Brundtland Commission Report, *Our common future* (WCED, 1987), negotiations have taken place at international and national levels to define and strengthen a set of policy measures (i.e. rules, principles and standards) and instruments (Nago and Ongolo, 2021) to safeguard forests, including the tropical forests of the Congo Basin. This objective is also embedded in the UN Sustainable Development Goals, agreed in 2015. Sustainable development is defined as development that meets the needs of the present without compromising the ability of future generations to meet their own needs. Goal 15 is: "Protect,

restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.” It includes a target to “by 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally”.

At a meeting in Yaoundé, Cameroon in March 1999, the Heads of State of Central Africa officially committed themselves to work together for the conservation and sustainable management of their countries’ forest ecosystems. At the end of this summit, they signed a joint declaration of 12 resolutions, known as the ‘Yaoundé Declaration’. This provided a mandate to monitor implementation of the Declaration by the countries’ ministers in charge of forests: the Commission des Forêts d’Afrique Centrale (COMIFAC). COMIFAC was re-named the Central African Forests Commission in September 2004, but retained its acronym.

In February 2000, the United Nations General Assembly passed [Resolution 54/214](#) on ‘Conservation and sustainable development of Central African forest ecosystems’, inviting the international community to “support the countries of Central Africa in these efforts, including through the provision of financial and technical assistance on a regional basis”. In response to this Resolution, the then United States Secretary of State, Colin Powell, launched the Congo Basin Forest Partnership (CBFP) at the World Summit on Sustainable Development in Johannesburg in 2002. The CBFP works closely with COMIFAC to promote the conservation and sustainable management of the forest ecosystems of the Congo Basin. It has 132 members, which are grouped into seven colleges according to the types and roles of members.

In response to the growing pressures on the forests in Central Africa, the Central African Forest Initiative (CAFI) was established on the margins of the United Nations General Assembly in 2015. It brings together a coalition of 10 donor countries from Europe, South Korea and the United States, together with the six main Congo Basin nations, implementing organisations (including the World Bank and the UN Food and Agriculture Organization [FAO]), and partners from the Global South. CAFI describes itself as “a Trust Fund that supports direct investments on the ground and a political negotiation platform that aims to drive high-level policy dialogue”. According to its 2023 annual report, the donors have so far deposited US\$748.8 million, and US\$374.0 million has been transferred to 14 participating organisations (CAFI, 2023). Membership of the CAFI Executive Board includes representatives of the 10 donor countries and two United Nations bodies, but no representatives of the Congo Basin nations. The CBFP is a permanent observer organisation.

This report contributes to this effort by highlighting the gap between the value of the natural capital of the Congo Basin rainforest and the forestry revenues of the countries that cover it. Its objective is to show how destructive and degrading forestry practices in the countries of the Congo Basin currently produce only a fraction of the value of the available natural capital and to call, through its recommendations, for a genuine ‘fair deal’ that would enable the protection of the Congo Basin and the sustainable development of the countries that cover it.

## Structure of the report

**Section 2** provides a summary of the basin-wide deforestation and degradation estimates for pre-2010, 2010–19, and 2020–present, followed by other significant studies on deforestation and degradation in the area and those detailing the Congo Basin forests’ role as a carbon sink.

**Section 3** explains the action that has been taken to tackle deforestation in the Congo Basin.

**Section 4** details new estimates of the value of the natural capital of the Congo Basin forests.

**Section 5** quantifies the economic benefits of forestry for the Congo Basin.

**Section 6** concludes the report and offers recommendations for how the Congo Basin nations and the rest of the world can help protect the Congo Basin forests into the future.

## 2. Deforestation and degradation in the Congo Basin

Forest conservation efforts over the past 25 years have been successful to some extent, maintaining relatively low rates of deforestation and degradation in the Congo Basin compared with other major rainforest areas around the world. Estimates of the basin-wide area of the forests of the Congo Basin, and hence rates of deforestation and degradation, vary widely. Here we provide a summary of the basin-wide estimates for pre-2010, 2010–19, and 2020–present.

### **Deforestation and degradation rates: pre-2010 estimates**

A preliminary assessment by the Congo Basin Forest Partnership (CBFP, 2005) of the six main nations containing the Congo Basin rainforest was distributed at the 2005 Summit of the Heads of State of Central Africa in Brazzaville, Republic of the Congo. It noted that the Congo Basin rainforest covered about 227 million hectares, and consisted of six different “ecological regions”. It also estimated that nearly 60% of the total forest area was thought to be productive or commercially valuable. The report indicated that forestry activities contributed 3–8% of the gross domestic product (GDP) of Central African nations, and as much as 20% of employment. It noted that log production in the forests of Central Africa had increased over the previous two decades. Overall production of logs in the region was between 12.0 and 13.5 million cubic metres in 2003.

Although the report did not offer any estimate of the health of the forest, it stated: “The next decade represents a critical time for conservation and development in Central Africa. Population growth, immigration, and the need to enhance livelihoods for the people of the Congo Basin will undoubtedly put increasing pressure on natural resources” (CBFP, 2005: 8). The report stated that the forest codes of all six of the major Congo Basin nations now required the development and implementation of forest management plans. It added: “In many cases the threats to the forests of the Congo Basin are closely tied to critical economic development opportunities in the region. With a sound understanding of threats and the drivers behind them — and more attention to potential ecological impacts, development of mitigation strategies, and compensation schemes — a sustainable future for the forests of the Congo Basin can become more clear” (ibid.).

An assessment of the world’s forests by the FAO, published in 2005, estimated that the total forest area of the six major Congo Basin nations was 227.6 million hectares, and 822,000 hectares, or 0.36%, per year were lost between 1990 and 2000 (FAO, 2005).

A further assessment published by the CBFP in 2006 estimated from satellite data that the area of dense rainforest in the six main Congo Basin nations was 180.5 million hectares. It noted that estimates of the area of the forest “vary considerably”, and stated: “Certain estimates are at the least surprising, but even the weakest estimates vary depending on what one considers to be forests” (CBFP, 2006: 9). It classified more than 80% of the forest as being located at between 300 and 1,000 metres of elevation.

It pointed out that 18.5 million hectares, or about 10%, of the forest area of the six major Congo Basin nations were located inside national parks or other protected areas. However, it also highlighted that the area allocated to logging had increased over the previous few decades to 49.4 million hectares in 2004, equivalent to 36% of the total area of production forests (forests designated primarily for the production of forest products such as timber, pulp, and fuelwood. They can be natural or planted and are crucial for meeting the global demand for wood products [Richter et al., 2024]) and 27% of the total area of dense rainforests. The contribution of the timber sector to economic output differed significantly across the six Congo Basin nations, from 10–13% of GDP in the Central African Republic to 0.7% in the Democratic Republic of the Congo. The report calculated that net deforestation rates for the six Congo Basin nations together was likely 0.19% per year between 1990 and 2000, with a net degradation rate of 0.10%. The assessment warned that the drivers of deforestation, degradation and fragmentation of the

rainforest were increasing, and would grow as the population of the six main Congo Basin nations was projected to rise from 76.7 million in 2005 to 188.0 million in 2050.

Duveiller et al. (2008) examined satellite images from 1990 and 2000 from 165 sample sites of the Congo Basin and estimated the annual net deforestation rate to be 0.16% and the net degradation rate to be 0.09%. The authors found that rates of deforestation and degradation were lower in landscapes designated after 2000 as high priority conservation zones by the CBFP.

Hansen et al. (2008) analysed satellite images for 20.4 million kilometres of three of 12 priority landscapes identified by the CBFP and the United States Agency for International Development's (USAID) Central African Regional Program for the Environment for monitoring biodiversity, deforestation and other measures of disturbance within the remaining intact forest zones of the Congo Basin. The authors estimated that the Maringa-Lopori-Wamba landscape had lost 0.98% of its forest area between 1990 and 2000, while Salonga-Lukenie-Sankuru lost 0.39%, and Sangha Tri-National lost 0.42%. The authors attributed the forest loss to the expansion of human settlements in and around this landscape, leading to more rotational agricultural activities along the primary trunk roads. They also suggested forest was cleared for hunting camps as well as commercial logging activities.

A further assessment of the state of the Congo Basin forest in 2008 was published by the CBFP and Observatoire des Forêts d'Afrique centrale (OFAC) in 2009 (de Wasseige et al., 2009). It estimated that the total area of dense forest in the six main Congo Basin nations in 2008 was 162.0 million hectares. A further 126.3 hectares were covered by other types of forest. It also concluded that the average annual rate of net deforestation in the dense forest across the Congo Basin nations was 0.16% between 1990 and 2000, driven mainly by Cameroon and the Democratic Republic of the Congo. The report stated: "These findings are largely explained by the fact that both countries have the highest densities, in Central Africa, of rural populations who practice slash-and-burn shifting cultivation. The relatively high population growth rate in these two countries exerts an increasing demand on surrounding land for agricultural development to meet consummate growing food needs." The report also pointed out: "To date, there is little economic valuation of biodiversity in the sub-region. This absence of any directly linked economic incentive to conserve biodiversity, often results in a general lack of interest amongst the population to engage in such activities — in the context of a sub-region facing immediate large-scale development demands." It estimated that the net annual degradation rate was 0.09% between 1990 and 2000.

### **Deforestation and degradation rates: 2010–19 estimates**

The rate of forest loss in the Congo Basin was 0.23%, or 706,000 hectares, per year between 2000 and 2010, according to a report by the FAO and the International Tropical Timber Organization (FAO and ITTO, 2011). The overall size of the forest decreased from 316.1 million hectares in 1990 to 301.8 million hectares in 2010. The report noted that the annual rates of forest loss in the Amazon and Southeast Asia were significantly higher at 0.44% and 0.41%, respectively.

The report classified the Congo Basin forests across the 11 countries of Central Africa (Angola, Burundi, Cameroon, Central African Republic, Democratic Republic of the Congo, Equatorial Guinea, Gabon, Republic of the Congo, Rwanda, Tanzania and Zambia) in 2010 as 59% dense humid forest, 23% dense dry forest, 4% flooded forest and 15% mosaic of forest and other land. Only 35% of the Congo Basin was primary rainforest (FAO and ITTO, 2011), while 0.3% was classified as planted forest.

The report noted 99% of the Congo Basin rainforest was publicly owned. Just 12% of the Congo Basin rainforest in 2010 was primarily designated for conservation of biological diversity, and 0.2% was prioritised for the protection of water and soil. It also noted that 20% was primarily designated for production of wood and non-wood forest products, and that 122 million cubic metres of wood were removed in 2009. The forestry sector in the Congo Basin employed 57,000 people, or 0.1% of the total labour force. The sector contributed US\$1.4 billion in gross value added and 1.4% to the GDP of the Congo Basin countries in 2006.

An assessment of the state of the Congo Basin forest in 2010 was published by the CBFP and OFAC in 2012 (de Wasseige et al., 2012). It estimated that the rate of net deforestation in the dense forest of the six main Congo Basin nations (measuring 186.4 million hectares in 2010) rose from 0.09% per year between 1990 and 2000 to 0.17% per year between 2000 and 2005. The annual net degradation rate in the dense forests of these countries was estimated to be 0.05% between 1990 and 2000, and 0.09% between 2000 and 2005. The increased rates of deforestation and degradation were mainly driven by loss and damage, particularly in primary forest, in the Democratic Republic of the Congo.

Ernst et al. (2013) produced national estimates of deforestation, degradation, regeneration and reforestation between 1990 and 2000, and 2000 and 2005 for the entire Congo Basin using freely available satellite imagery and advanced image processing techniques. They estimated that the annual net deforestation rate in the dense rainforests of the six main Congo Basin nations was 0.09% between 1990 and 2000, and the annual net degradation rate was 0.05%. Between 2000 and 2005, the annual net deforestation rate was higher at 0.17%, and the net degradation rate was 0.09%. The net deforestation rates represented a loss of 167,000 hectares per year between 1990 and 2000, and 317,000 hectares per year from 2000 to 2005. The increase in Basin deforestation and degradation rates was driven almost entirely by rises in the Democratic Republic of the Congo.

A paper by Mayaux et al. (2013) presented results of an analysis of the loss of humid rainforest in Central Africa, which measured 178.6 million hectares in 2010. It showed that the net deforestation rate annually between 2000 and 2010 was 0.10%, a drop from the period between 1990 and 2000. The authors suggested that sustainable forestry management practices in the Congo Basin had slowed the rate of deforestation, with Cameroon having implemented the first of Central Africa's forest management plans in 2000.

A major report by the World Bank in 2013 (Megevand, 2013) assessed the forests of the six main Congo Basin nations to consist of 186.4 million hectares of dense forest, with a further 168.4 million hectares of other forest and woodland. It cited the deforestation and degradation rates found by Wasseige et al. (2012), but warned that the drivers of deforestation are likely to grow in the Congo Basin region in the future. It noted that 44 million hectares of forest, representing 8.3% of the total land area of the Congo Basin forest, was under concession for industrial logging. The sector produced on average 8 million cubic metres of timber each year, and contributed significantly to employment and government revenues. It noted: "Domestic demand for construction timber is booming and is currently quasi-exclusively supplied by the unregulated, underperforming, and unsustainable informal sector" (Megavend, 2013: 12).

It also pointed out that sustainable forestry management practices in the Congo Basin meant that 25.6 million hectares were managed under state-approved plans, as of 2010, and wood extraction rates were at the relatively low rate of less than 0.5 cubic metres per hectare. The report stated: "Unlike in other tropical regions, logging in the Congo Basin usually does not result in conversion to other land uses such as cattle ranching or plantations" (ibid.).

However, the report also warned that the population of the Congo Basin was projected to double to 170 million between 2000 and 2030, with urban centres already growing at a rate of 3–5% per year, with the larger cities expanding even more quickly. The increase in domestic demand for forestry and agricultural products is likely to drive higher rates of deforestation unless there are concerted efforts to provide alternative and sustainable opportunities for development in the Congo Basin nations.

A further assessment of the state of the Congo Basin forest in 2013 was published by the CBFP and OFAC in 2014 (de Wasseige et al., 2014). It noted that the forests of Central Africa provided livelihoods (e.g. food, medicinal products, fuel, fibre, non-timber products, etc.) to 60 million people who live in or near them, and contribute indirectly to the food supply for another 40 million people who live in regional urban centres. It estimated that the annual rate of net deforestation for all the rainforests of the Congo Basin was 0.14% between 2000 and 2010, compared with 0.16% between 1990 and 2000. However, it did not specify the exact area that was considered. It

also concluded that the annual net loss of area of dry forests of Central Africa in Cameroon, Chad, Central African Republic and Democratic Republic of the Congo increased to 0.39% between 2000 and 2010, compared with 0.22% from 1990 to 2000. It identified increases in “small scale deforestation phenomena”, including slash-and-burn agricultural activities, artisanal timber logging, artisanal charcoal production and firewood harvesting. It noted: “Industrial logging has not yet been determined to be an important direct factor in deforestation because of low logging densities concentrated on a few high-value species” (ibid., 44). It indicated that the main underlying causes of forest degradation were rural and urban demographic pressure, rural property, the development of new infrastructure, and inadequate control over the governance of the forest sector.

The Center for International Forestry Research and World Agroforestry (CIFOR-ICRAF) published a review of recent analyses of the Congo Basin forests (Tchatchou et al., 2015), and concluded: “Slash-and-burn agriculture practiced by the rural populations for subsistence, commercial agriculture and the development of infrastructure constitute the main causes of deforestation. Other factors include urban expansion due to the rural exodus and population growth.” It also warned that the economic development plans of the Congo Basin nations were mainly based on infrastructure and industrial development: “If not properly implemented, these development programs will be responsible for massive destruction of the forest.”

Tyukavina et al. (2018) estimated that the area of forest loss was  $16.6 \pm 0.5$  million hectares in the six main Congo Basin countries between 2000 and 2014, compared with a total forest cover of 248 million hectares in 2000. Hence almost 7% of the forest (defined as any woody vegetation exceeding 5 metres in height and 25% in canopy cover at a resolution of 30 metres) was disturbed between 2000 and 2014. They found that 84% of the disturbance area of the forests was due to small-scale clearing for agriculture. The annual rates of small-scale clearing for agriculture in primary forests and woodlands doubled between 2000 and 2014, driven by population growth, according to the authors. Smallholder clearing in the Democratic Republic of the Congo was responsible for nearly two-thirds of total forest loss in the Congo Basin. Selective logging accounted for about 10% of the forest disturbance.

### **Deforestation and degradation rates: 2020–present**

An assessment by the FAO (2020) concluded that the forest area of the six main Congo Basin nations was 216.7 million hectares in 2020, a reduction of 12.2 million hectares, or 5.3%, compared with 2010, and an average annual rate of loss of 0.55%. This compared with average annual rates of loss of 0.34% between 2000 and 2010, and 0.34% between 1990 and 2000. The loss of forest in the six nations was 28.4 million hectares, or 11.6%, between 1990 and 2020. The most recent increase in the rate of forest loss was almost entirely due to a significant rise in the Democratic Republic of the Congo, which hosts the largest area of forest, and where the annual rate of deforestation increased from 0.48% between 2000 and 2010 to 0.83% between 2010 and 2020.

These figures meant that the annual rate of forest loss for the six Congo Basin nations was higher, at 0.55%, between 2010 and 2020 than the combined annual rate of deforestation of 0.36% over the same period in the three main Amazon countries of Brazil, Colombia and Peru, which together host more than 80% of the rainforest.

Vancutsem et al. (2021) provided an analysis of forest losses across the world. Their figures showed that the rate of forest loss in central Africa had accelerated recently, reaching an annual loss rate for undisturbed forest of 0.85% per hectare per year between 2010 and 2020, compared with 0.72% per hectare per year between 2000 and 2010. The most recent measurements for 2015 to 2020 showed an increase to 0.95% per hectare per year. This indicated that the rate of deforestation in Central Africa was now faster than in South America, in percentage terms, where annual losses of undisturbed forests fell from 0.75% per hectare per year between 2000 and 2010 to 0.62% between 2010 and 2020. However, the annual loss of area in absolute terms was still higher in South America, which has a significantly larger forest. The authors noted that Central

Africa lost about 17% of its area of undisturbed forest between 1990 and 2020, decreasing from 223.1 million to 184.7 million hectares.

The authors also pointed out that much of the acceleration in deforestation in Central Africa was due to increased losses of undisturbed forest in the Democratic Republic of the Congo. They pointed out that at current loss rates, the country would lose a further 33% by 2050, with the area shrinking from 105.8 million hectares in 2020 to 71.4 million hectares by the middle of the century.

Considering both undisturbed and degraded forest, the rates of forest loss were much lower, according to Vancutsem et al. (2021). They found that the annual rate of loss in Central Africa fell slightly from 0.45% per hectare per year between 2000 and 2010 to 0.44% between 2010 and 2020. However, this was also still higher, in percentage terms, than in South America, which recorded an annual loss rate of 0.33% per hectare per year between 2010 and 2020. The area of undisturbed and degraded forest in Central Africa reduced by about 10% between 1990 and 2020 from 223.1 million to 199.9 million hectares.

An assessment of the state of the Congo Basin forest in 2021 by CIFOR-ICRAF (Eba'a Atyi et al., 2022) found that 18 million hectares, or almost 9%, of the tropical moist forest area of Central Africa was lost between 2000 and 2020. Of the 200 million hectares of evergreen and semi-deciduous forests left in 2020, 184.7 million hectares showed no sign of disturbance. The authors noted that Central Africa's forests provide livelihoods for to 60 million people, and help to feed a further 40 million in nearby towns and cities.

Eba'a Atyi et al. (2022) estimated that the annual disturbance rate in the tropical moist forests of Central Africa increased from 1.36 million hectares per year between 2005 and 2015 to 1.79 million hectares per year between 2015 and 2020.

However, there have been warnings of increasing demographic and commercial pressures to convert forest land in the Congo Basin, particularly since 2010. As a result, the annual rate of tropical forest disturbance has increased significantly, according to the CIFOR-ICRAF study (ibid.). The authors estimated that an average of 1.79 million hectares of rainforest area per year suffered disturbance between 2015 and 2020 across Central Africa, including the Congo Basin, and projected that a further 27% of the forest area present in 2020 would disappear by 2050 if the current rate of deforestation and forest degradation continues (ibid.).

Shapiro et al. (2021) estimated that the proportion of the Congo Basin rainforest that could be classified as intact decreased from 78% in 2000 to 67% in 2016, with over 24 million hectares of forest degraded in that time. The authors noted that the Congo Basin forests covered more than 210 million hectares in the six main Congo Basin nations and Angola in 2000 and were at that time predominantly lowland, equatorial semi-deciduous forests with a significant swamp forest ecosystem in the central region, which covered more than 29 million hectares.

Tameko (2024) cited data from the FAO in 2022 pointing out that over 27 million hectares of forest were lost in the six main countries of the Congo Basin between 1990 and 2020. The author concluded that more than 12.46% of the forest was lost between 1990 and 2020, and 7% disappeared between 2005 and 2020, equivalent to an average annual deforestation rate of 0.5%. They suggested that an increase in trade openness was associated with a higher rate of deforestation in the Congo Basin between 1990 and 2020.

An updated analysis published by the FAO in October 2025 heavily revised some of the historical figures of the global extent of the forests, and also found a dramatic drop in the rate of forest loss in the Congo Basin over the previous five years. The average annual rate of forest loss in the six main nations of the Congo Basin declined from 0.33% between 2010 and 2020 to 0.19% between 2015 and 2025. By comparison, the average annual rate of forest loss for the three main Amazon nations of Brazil, Colombia and Peru increased from 0.41% from 2010 to 2020 to 0.53% between 2015 and 2025. This means that the rate of forest loss in the Congo Basin is now less than half the rate in the Amazon. Overall, about 9.7% of the forest area of the six main Congo Basin nations was lost between 1990 and 2025.

The FAO (2025) figures showed that the significant decline in the Congo Basin was due to very large reductions in the area of forest lost in the Democratic Republic of the Congo between 2015 and 2025 compared with the period from 2010 to 2020.

### **Other significant studies on deforestation and degradation in the Congo Basin**

A study by Putzel and Kabuyaya in 2011 warned that Chinese investments in mining, forestry and agriculture in Cameroon, Democratic Republic of the Congo and Gabon were driving more deforestation. A study by Ladewig et al. (2024) warned that artisanal mining in the Democratic Republic of the Congo was leading to further deforestation, including through agricultural development around mining sites, covering up to 28 times the area occupied by a mine itself.

A study by Piabuo et al. (2021) concluded that the empirical evidence indicates that timber-producing countries in the Congo Basin were characterised by an increasing trend of illegal logging, poor governance effectiveness and corruption. A paper by Lescuyer et al. in 2021 described interviews with experts in Cameroon, Gabon and Republic of the Congo and found that the Forest Stewardship Council (FSC) has had two broad, but contrasting, impacts on governance of the Congo Basin rainforest. First, FSC had positively affected stakeholder participation and timber traceability. Second, it had a limited impact on improving national governance, demonstrated by the lack of global improvement in resource management practices or in biodiversity conservation. Moreover, the interviewees pointed out that the battles around corruption and transparency had not been significantly impacted.

Spracklen et al. (2018) summarised studies of the impact of deforestation in the Congo Basin on the local climate and concluded that it would increase local temperatures, through the loss of albedo – which is the measure of how much sunlight a surface reflects, with a value ranging from 000 (absorbing all sunlight) to 111 (reflecting all sunlight) – and reduce rainfall by 16–17%, similar to changes projected for the Amazon. However, Beekman et al. (2024) pointed out that some studies that also consider climate projections suggest that there could also be increases in rainfall, and that there are high uncertainties around all model projections for the region, including the impacts on biodiversity.

Tritsch et al. (2020) investigated whether Forest Management Plans in logging concessions affected deforestation rates. They found that between 2000 and 2010, deforestation was 74% lower in concessions with a Forest Management Plan, suggesting that they “help avoid deforestation by allowing logging companies to rotate cycles of timber extraction, thereby avoiding the overexploitation of areas that were previously logged, and by the better regulation of access to concessions by closing former logging roads to limit illegal activities such as shifting agriculture, hunting and the illegal harvest of timber or fuel-wood”.

In a review by Cerutti and Nasi (2021), the authors concluded that the current legal framework, including laws, decrees and regulations, governing the conservation of the rainforest in the Congo Basin had been shaped by an understanding of modern practices of sustainable forestry management, but implementation remained patchy and weak, largely due to a lack of local capacity and relevant institutions. The authors noted that as a result there is a general absence of detailed forest information (e.g. inventories) that could assist decision-making, and “a lack of serious engagement between the contractual manager of the forest and the populations living in, around and off the forest”. They warned: “The volumes of timber harvested and the areas touched by logging activities are growing and will keep growing, notably so in relation to demography and national and international demand. If the current situation on the ground does not change quickly, the fate of production forest in the Congo basin will be left in the unchecked hands of whomever is granted access to it.”

Shapiro et al. (2023) indicated that a combination of small-scale agriculture, villages and roads was the main driver of deforestation and degradation observed by remote sensing in the six main Congo Basin nations between 2015 and 2020. They concluded: that “more resources need to be invested towards sustainable, climate smart agriculture, to meet the needs of local populations, while conserving forest resources”. Vizy et al. (2023) warned that reductions in moisture due to

climate change were making the northern and southern forest margins less able to support the tropical rainforest ecosystem. They also pointed out that roads along the interior of the forest were also adversely affecting moisture levels on which the rainforest depends.

Streck et al. (2023: 4) indicated that the “most prominent direct deforestation driver” in all Congo Basin countries, except Gabon, is small-scale clearing for farming. It also identified selective logging and, to a lesser extent, fire and infrastructure as other drivers. It stated: “Although, historically, large-scale agriculture and mining have been relatively minor deforestation drivers in the Congo Basin, they are expected to lead to larger-scale deforestation if no protective measures are taken.” The authors warned: “This region is particularly attractive for expanding oil palm plantations, which land availability and regulations are limiting in other regions (such as Malaysia and Indonesia) that have similar climate and soil conditions. Weak governance indirectly favours deforestation and forest degradation, including through insufficient legal frameworks, uncoordinated sectoral policies, lack of transparency in issuing logging concessions, and insecurity and competition over land tenure.”

Ngoma and Yang (2024) explored the relationship between economic activity and forest loss in the Congo Basin, and concluded that “deforestation rates can be reduced by enhanced educational attainment in collaboration with agricultural and mining technology improvement while strengthening governance will curtail deforestation and pave the way for sustainable exploitation of forest resources”. Aquilas et al. (2022) carried out a similar analysis and reached the same conclusions.

A synthesis by Besisa Nguba et al. (2025) of published research on the degradation and deforestation in the Congo Basin concluded that “research on forest degradation in the Congo Basin does not yet sufficiently focus on the most significant anthropogenic drivers of degradation in the region, particularly small-scale agriculture and illegal or artisanal logging for timber and fuelwood”. It added: “While industrial logging is well documented, it is not a major driver of degradation. Most indicators used to assess forest degradation primarily focus on changes in forest structure and carbon storage, but they often overlook the temporal scale, particularly in evaluating long-term effects.”

Wang et al. (2025) found, based on empirical evidence from the Republic of the Congo, that deforestation in the Congo Basin has been closely tied historically to timber and agricultural export prices, the real effective exchange rate, dry weather and demographic trends.

An assessment in 2022 (Forest Declaration Assessment Partners, 2022) of the Forests Declaration at the 26th meeting of the Conference of the Parties (COP26) in Glasgow in 2021 concluded that although deforestation rates in Tropical Africa decreased in 2021 relative to the 2018–20 baseline, those reductions were still insufficient to meet the 2030 goal of halting deforestation. It also warned: “The gravest forest risk comes from so-called megaprojects, which combine multiple types of transportation and energy infrastructure with agricultural commodity production, natural resource extraction, and planned urbanization” (ibid.: 5).

The most recent assessment (Forest Declaration Assessment Partners, 2025) highlighted the ForestLink system introduced in the Congo Basin by the Rainforest Foundation UK because it allows communities to report illegal deforestation in real-time.

### **The Congo Basin forests as a carbon sink**

Many studies have found that the Congo Basin forest is the largest land-based carbon sink in the world, absorbing more than any other single sink, including the Amazon rainforest. However, estimates of the carbon storage densities of the Congo Basin forests, like estimates of the size and deforestation rates, vary widely between studies, and are subject to significant uncertainties.

Mayaux and Saracco (2007) estimated that the Congo Basin forests sequestered around 610 million tonnes of carbon dioxide equivalent each year.

The FAO and ITTO report (2011) calculated that the total carbon stock in the Congo Basin was 56.7 billion tonnes of carbon dioxide in 2010, down from 59.8 billion tonnes in 1990. Saatchi et al. (2011) calculated that the 447 million hectares of forest (with at least 30% canopy cover) in the five countries of Cameroon, Central African Republic, Democratic Republic of the Congo, Gabon and Republic of the Congo sequestered 48 billion tonnes of carbon. This compared with 107 billion tonnes of carbon sequestered by the 893 million hectares of forest (at least 30% canopy cover) in the five Amazon countries of Bolivia, Brazil, Colombia, Peru and Venezuela.

Verhegghen et al. (2012) estimated that 32.45 trillion tonnes of carbon were stored in the 186.9 million hectares of dense forests of the eight Central African countries of Burundi, Cameroon, Central African Republic, Democratic Republic of the Congo, Equatorial Guinea, Gabon, Republic of the Congo and Rwanda. A further 16.91 trillion tonnes were stored in other types of forest (with at least 10% tree cover), resulting in a total carbon stock of 49.36 trillion metric tonnes.

Sullivan et al. (2017) found that the average density of carbon stocks in African forests was 183 tonnes per hectare, compared with 140 tonnes per hectare in South America and 197 tonnes per hectare in Asia. However, the diversity of species in African forests was less than half that in the other major areas of rainforest in the world. Eba'a Atyi et al. (2022: 10) noted that the structure of the Congo Basin forests is different from the Amazon, such that "the density of trees per hectare is lower, but there are more large-diameter trees and trees at a similar diameter are larger". The authors added: "This results in a higher average level of carbon or biomass per hectare than that of Amazonian forests."

Hubau et al. (2020) found that the structurally intact old-growth tropical forests in Africa had been storing between 0.66 and 0.70 tonnes of additional carbon per hectare on average more or less consistently each year in aboveground live biomass between 1990 and 2015, although the annual total of carbon stored each year decreased from 500 million tonnes between 1990 and 2000, to 400 million tonnes between 2010 and 2015. The authors calculated that carbon storage rates for the Amazon decreased from 0.53 tonnes of additional carbon per hectare per year between 1990 and 2000 to 0.24 tonnes per hectare per year between 2010 and 2015. This meant that the annual total of carbon stored each year by the Amazon fell to 270 million tonnes of carbon per year, far less than the total for Africa. The authors attributed the declines in the Amazon to slower growth and increased tree mortality due to rising temperatures and more severe droughts. However, they warned that there were already signs that the African forests were beginning to follow the trend observed in the Amazon: "Thus, a mortality-dominated decline of the African carbon sink appears to have begun very recently." They pointed out that the trees of Central Africa are currently less exposed to drought conditions and higher temperatures because they are largely growing at higher elevations.

Harris et al. (2021) found that the 514 million hectares of forests across nine countries in the Amazon River Basin were a net carbon sink of 0.10 billion tonnes of carbon dioxide equivalent per year between 2001 and 2019. However the 298 million hectares of the forests of Africa's Congo River Basin provided a carbon sink that was about six times stronger, 0.61 billion tonnes of carbon dioxide equivalent per year, reflecting nearly identical gross removals (1.1 billion tonnes of carbon dioxide equivalent per year versus 1.2 billion tonnes of carbon dioxide equivalent per year), but gross emissions that were half those of the Amazon Basin (0.53 billion tonnes of carbon dioxide equivalent per year versus 1.1 billion tonnes of carbon dioxide equivalent per year).

Mitchell and Pleeck (2022: 6) applied a social cost of carbon of US\$50 per tonne to the results of Harris et al. (2021) to calculate that the gross annual removals of 1.1 billion tonnes by the Congo Basin "represents a service with an annual value of some \$55 billion, or 36 percent of the GDP of the region covered by the forest in 2021".

Many estimates of the carbon sink of the Congo Basin have not taken into account the additional volumes sequestered by the Cuvette Peatland. Dargie et al. (2017) pointed out that the peat deposits beneath the swampland areas in the Cuvette Central of the central part of the Congo Basin likely stored significant additional volumes of carbon. They estimated that the peatland complex extended over about 14.6 million hectares and stored between 6.3 and 46.8 billion tonnes

of carbon. Crezee et al. (2022) provided an updated assessment of the peatland complex in the Congo Basin, concluding that it covers 16.8 million hectares and stores between 26.3 and 32.2 billion tonnes of carbon. The authors warned: "Only 8% of this peat carbon lies within nationally protected areas, suggesting its vulnerability to future land-use change."

Jiang et al. (2023) found that the Congo Basin becomes a net carbon source during the dry season, resulting in a higher concentration of atmospheric carbon dioxide (by about 2 parts per million) than the surrounding area, which they attribute to enhanced biomass burning and reduced photosynthetic activity. They point out that "better seasonal fire management in this region is an important strategy for achieving timely reductions in global carbon emissions".

Wongchuig et al. (2025) analysed 42 years of atmospheric and hydrological data for the period between 1981 and 2022, and found a drying trend in Central Congo that is linked to reductions in atmospheric moisture convergence and precipitation, mainly during the rainiest period of the year. They pointed out that "the persistence of the Congo rainforest itself is closely tied to adequate rainfall; reductions in precipitation and other climatic factors, including rising temperatures, increase the risk of a critical ecological transition from tropical forest to savanna." The authors warned: "It has been demonstrated that this transition would have profound impacts on biodiversity, carbon storage, and regional climate regulation."

The authors also noted that surface air temperature in the Congo River Basin has risen by about 0.17 degrees Celsius per decade since the 1980s, and that the Congo rainforest is becoming increasingly fragmented "mainly due to climate change associated with the lengthening of the dry season over the last 35 years".

### 3. Major action to tackle deforestation in the Congo Basin forests

The six main Congo Basin countries (Cameroon, Central African Republic, Democratic Republic of the Congo, Equatorial Guinea, Gabon and Republic of the Congo) have responded to the threat posed to their forests, but have so far received relatively little support from the international community. This is despite the global value of the Congo Basin's biodiversity and carbon sequestration. The Congo Basin countries are also among the poorest countries of the world. The Democratic Republic of the Congo, which hosts about 60% of the Congo Basin rainforest, is one of the world's five poorest nations (Donn et al., 2016). An estimated 74.6% of its population lived on less than US\$2.15 a day in 2023, and about one out of every six were living in extreme poverty (World Bank Group, 2023).

#### **The Congo Basin Forest Fund**

In February 2008, the African Development Bank, together with COMIFAC and the United Kingdom's Department for International Development (DFID), held an international conference in Tunis on Funding for Sustainable Management of the Congo Basin Forests Ecosystems. The participants agreed to intensify their efforts in coordination and dialogue through the Congo Basin Forest Partnership (CBFP) and to support COMIFAC and its sub-regional partner institutions by establishing the Congo Basin Forest Fund. The main objective of the Fund was "alleviating poverty [and] mitigating climate change by reducing the rate of deforestation in the Congo Basin through sustainable forest management" (African Development Bank Group, 2018). The Fund was set up in June 2008 to provide a source of accessible funding, and encouraged governments, civil society, nongovernmental organisations and the private sector to collaborate and share expertise. In November 2014, the Norwegian and British governments, which had, respectively, committed about US\$90 million and US\$80 million, announced that they would not be releasing outstanding commitments to the Fund, which subsequently closed in 2018. An independent evaluation found that the performance of the Fund in terms of both "improved forest management and sustainable practices" and "improved livelihoods and economic development" had been "unsatisfactory" (African Development Bank Group, 2018).

#### **The REDD+ framework**

The 2015 Paris Agreement, which has been ratified by each of the six main nations of the Congo Basin, incorporated the REDD+ (Reducing Emissions from Deforestation and Degradation) framework agreed at the 19th meeting of the Conference of the Parties (COP19) in Warsaw in 2013. This framework aims to reduce emissions from deforestation and forest degradation in developing countries, with the '+' signifying additional forest-related activities that protect the climate, such as sustainable management of forests and the conservation and enhancement of forest carbon stocks. Under this framework, developing countries can receive results-based payments for emission reductions when they reduce deforestation.

However, an assessment in 2022 (Forest Declaration Assessment Partners, 2022) concluded that the Congo Basin nations had engaged significantly with the REDD+ framework, but had largely not benefited from it, stating: "The preservation of forests that are not in immediate danger — which is the case for most forests in the Congo Basin — is not yet rewarded by the REDD+ process." It stated: "This payment structure disadvantages countries with historically lower deforestation rates, since the required effort for receiving REDD+ performance-based payments may be considered too great." It also pointed out that "the REDD+ process also suffers from a lack of substantial funding at international and national levels, which cannot compete financially with revenue from other land uses". It argued that "at the local level, the involvement and participation of non-state actors (such as forest communities and women) in the REDD+ process is insufficient".

## A commitment to fair financing

An analysis by Favada et al. (2019) found that total financial flows from official development assistance to support the forestry and environmental sectors (FEODA) in Central Africa were approximately US\$1.7 billion between 2008 and 2017. Central Africa received just 11% of the US\$14.9 billion in FEODA for the three main rainforest basins of the Amazon, Southeast Asia and the Congo between 2008 and 2017. A follow-up analysis by Favada et al. (2025) found that financial flows (FEODA) in Central Africa had increased to US\$3.1 billion between 2008 and 2022. Bilateral and multilateral sources overall contributed almost equal amounts. However, of the US\$20 billion of FEODA for the three main rainforest areas between 2008 and 2022, the Congo Basin received just 16%, compared with 47% for the Amazon and 38% for Southeast Asia.

To draw attention to the challenges of protecting the Congo Basin rainforest, the member countries of the Economic Community of Central African States (ECCAS) and COMIFAC agreed in July 2021, and signed in August 2021, a “declaration of commitment by COMIFAC member states of Central Africa and call for fair financing” (COMIFAC, 2021). This Declaration committed the countries to “undertake to exercise extreme caution in all policies likely to impact forest areas, when dealing with the current forest cover and prospects for maintaining it, in order to preserve the potential of these areas to fight climate change and preserve global biodiversity, and sustainably increase the well-being of the people who live in and depend on it” (ibid.: 5). The countries agreed also to promote “an appropriate and comprehensive approach” to logging for timber, including “a ban on the export of timber logs, the creation of special economic zones and the development of woody plantations outside forests that respect biodiversity principles” (ibid.: 5–6).

The Declaration asked for the support of the international community, including “continuous fund raising geared specifically towards implementing commitments made by the Congo Basin countries” (ibid.: 7). Among the other specific actions requested from other countries were: “Greater consideration, in international economic and trade relations, of issues relating to the conservation and sustainable management of the Congo Basin’s natural resources. This increased consideration should be underpinned by favourable pricing conditions aimed at promoting sustainable value-added chains (ecologically and socially sustainable wood / zero deforestation commodities / nontimber forest products), especially by increasing the value of forest certification in international public contracts” (ibid.).

The Declaration also stated: “The countries of the Congo Basin, the ‘second largest tropical forest lung’ on earth, request a share in the climate financing mobilised in proportion to the Congo Basin’s contribution to maintaining the planet’s equilibrium, as decided by the Paris Agreement, in support of the conservation and sustainable management efforts made” (ibid.). However, the Declaration did not specify the precise meaning of “in proportion to the Congo Basin’s contribution to maintaining the planet’s equilibrium”.

Article 9, Paragraph 3 of the Paris Agreement states: “As part of a global effort, developed country Parties should continue to take the lead in mobilizing climate finance from a wide variety of sources, instruments and channels, noting the significant role of public funds, through a variety of actions, including supporting country-driven strategies, and taking into account the needs and priorities of developing country Parties. Such mobilization of climate finance should represent a progression beyond previous efforts.” Decision 1/CP.21 of the 21st meeting of the Conference of the Parties (COP21) in Paris in 2015, which adopted the Paris Agreement, states that the Parties “Also decides that, in accordance with Article 9, paragraph 3, of the Agreement, developed countries intend to continue their existing collective mobilization goal through 2025 in the context of meaningful mitigation actions and transparency on implementation; prior to 2025 the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement shall set a new collective quantified goal from a floor of USD 100 billion per year, taking into account the needs and priorities of developing countries.”

In September 2021, the Government of Germany hosted a Congo Basin Forest Day for the CBFP. Participants included the ministers of forests and the environment from the member countries of

COMIFAC, along with representatives from international organisations, donors, the COMIFAC Executive Secretariat and civil society organisations. They signed a memorandum calling on “sub-regional institutions to monitor the implementation of this declaration [Declaration of Commitment by COMIFAC member states in favour of central African forests and call for fair financing] with COMIFAC Member States and international partners to mobilise the necessary support to finance the sustainable management of central African forests”. This memorandum has since become known as the [Congo Basin Fair Deal agreement](#).

The six main Congo Basin nations were among 144 signatories to the ‘Glasgow Leaders’ Declaration on Forests and Land Use’ (COP26 Presidency, 2021), which was published in November 2021 at the 26th meeting of the Conference of the Parties (COP26). It included a commitment to “working collectively to halt and reverse forest loss and land degradation by 2030 while delivering sustainable development and promoting an inclusive rural transformation”.

The European Union and ten donor countries, including the United Kingdom and the United States, together with the Bezos Earth Fund, released a ‘[COP26 Congo Basin Joint Donor Statement](#)’ at the same summit, supporting the protection and sustainable management of the Congo Basin forests. It included “an initial collective pledge” of US\$1.5 billion in financing between 2021 and 2025 to support “ambitious efforts and results in the region to protect and maintain the Congo Basin forests, peatlands and other critical global carbon stores”. It also stated that the donors “intend to build on this in subsequent years, by seeking increased finance and investment from a wide variety of public and private sources while also improving coordination, effectiveness and accessibility”. Three annual reports have been published so far on the progress towards delivering on the pledge, the most recent of which (Congo Basin Pledge Donors, 2024) concluded that the 12 donors had collectively spent US\$1,798,593,469 in the three years between 2021 and 2023 since COP26.

A meeting of some donors and recipients of the Pledge discussed some of its successes at a meeting in Wilton Park, UK, in March 2025, including that it “had served to raise the profile of the region internationally, improving understanding of the global importance of its forests, both internationally and in the region” (Wilton Park, 2025). The meeting also noted that “political will amongst the region’s leaders to protect and improve management of the region’s forests was also considered to have increased, and a wide range of governance reforms had resulted”.

However, the meeting agreed that implementation of the Pledge could have been improved, including coordination between donors and more predictable funding. They agreed that “the region continues to face a huge shortfall in both financial resources and in capacity despite the importance of its forests”. In future “there is a need to move away from donor-recipient relationships, both in the language used and in practice”, and “any future commitment should not only focus on the provision of funding but should also include other forms of cooperation, such as policy and technical dialogues and exchanges, and capacity building”.

The meeting concluded: “In considering the scope of a future partnership, this needs to look beyond conservation, to also encompass livelihoods, prosperity and economic development. Meeting the priorities of those living in and around the region’s forests are fundamental to ensuring their protection, and these forests should be considered for their potential in enabling sustainable economic growth.”

On 6 November 2025, the Élysée (2025) announced during the Heads of State and Government Summit at the 30th meeting of the Conference of the Parties (COP30) in Belém, Brazil, that the countries of Central Africa, partner countries, development banks, private partners and philanthropic organisations had renewed their commitment to the Congo Basin Pledge. The announcement stated: “Donors are committed to raising more than \$2.5 billion over the next five years, in addition to the domestic resources that will be mobilized by countries of central Africa to support the protection and sustainable management of the Congo Basin forests.”

A ‘Fair Deal Task Force’ was officially launched on 14 November 2022 at the 27th meeting of the Conference of the Parties (COP27) in Sharm El Sheikh. This initiative was led by the ministers of

COMIFAC, the Federal Republic of Germany, the United Kingdom, along with senior officials from various governments and members of the CBFP. The task force aims to promote the long-term sustainable financing of the ecological services provided by the forests and peatlands of the Congo Basin, consistent with the Congo Basin Fair Deal agreement. The task force has emphasised the importance of recognising the value of an intact forest or a high-integrity forest.

In its summary of the work of the task force, the CBFP (2023: 1) reiterated the Declaration's request that the Congo Basin countries "should receive the fair share and allocation of international climate and biodiversity finance that is proportionate to the Congo Basin's ecological services and their role in maintaining planetary climate equilibrium". It stated: "Measured by forest area and total climate mitigation potential of tropical forests, a fair share for the Congo Basin would amount to a minimum of 5% of international climate finance on the basis of the 2015 Paris Agreement" (ibid.). However, it is not clear how the figure of 5% was calculated. One interpretation of this suggestion is that the Congo Basin countries should receive a minimum of 5% of the US\$100 billion per year (i.e. US\$5 billion per annum) that developed countries committed at the 21st meeting of the Conference of the Parties (COP21) in Paris to mobilise for developing countries between 2020 and 2025.

Streck et al. (2023: 21) warned that the Congo Basin nations face challenges of governance and public debt which undermine investment. They stated: "Congo Basin countries suffer from high levels of foreign debt and limited fiscal space, which limit the budget available to raise spending for certain purposes without jeopardizing their fiscal sustainability." The authors stated: "It is clear that the Congo Basin forests are underfinanced" (ibid.: 23), with most of the finance flowing to forest- and climate-related sectors from official development assistance grants (68%) and loans (24%), although there are several existing and new initiatives designed to further financial support to the Congo Basin countries.

Streck et al. (2023: 37) suggested a range of new initiatives to mobilise more finance, such as a Sustainable Forest Trust for the Congo Basin to "increase public finance for budget support and development policy financing using a performance-based logic for green growth and sustainable development". The authors also stated: "Governments need to consider blended finance or innovative financial instruments that deliver funding without creating incentives to pursue development pathways that result in forest loss" (ibid.: 41). Mixed financing approaches could use public or philanthropic capital to attract private investment in projects that would otherwise be deemed too risky.

The authors also recommended the de-risking of private investments through the creation of a Congo Basin Guarantee Facility to attract private finance in sustainable forest management, deforestation-free supply chains and other opportunities. One of the advantages of guarantees to promise completion of the financial obligation, should a borrower default, is that they can be customised to meet one or more investment and development priorities. They do not require immediate cash flow and have proven effective in mobilising private finance and facilitating credit in the face of commercial, credit or political risks (Streck et al., 2023).

The Facility could help to overcome two of the major financial barriers in the region. Commercial barriers are associated with loans made by financial institutions to local investors with limited access to market capital, to smallholder farmers or to entrepreneurs in agroforestry, clean cooking, decentralised renewable energy systems and community forest management; the political barriers comprising the risk associated with attracting international investment in sustainable forest management, sustainable resource extraction, sustainable tourism or renewable energy infrastructure projects.

The World Bank has argued that it is important to reform forest taxes to reflect the full economic benefits provided by forests, and to help mobilise national resources and encourage greater investment in sustainable forest management (Kanté, 2024; World Bank Group, 2024a). Gabon, for example, has introduced land royalties for forestry companies, reformed conflicting subsidies and introduced an auction system for forest concessions (Zerbo, 2021). Some Economic and Monetary Community of Central Africa (CEMAC) countries have banned the export of logs to

promote local wood processing, joining the global movement for the sustainable management of forests (Bodjongo and Mbobda, 2023). The World Bank also argues that strengthening regional cooperation through harmonised regulations, improved law enforcement and better alignment of forest tax policy will enable Congo Basin countries to attract more international funding (World Bank Group, 2024b).

### **The Tropical Forest Forever Facility**

Ahead of the 30th meeting of the Conference of the Parties (COP30) in Belém, Brazil, in November 2025, the Brazilian Presidency proposed the creation of a new Tropical Forest Forever Facility (Government of Brazil, 2025b). The aim of the Facility, according to the Government of Brazil (2025a: 2) is to “raise substantial and permanent funding from both public and private sources”, and to “provide long-term, results-based financial support to Tropical Forest Countries (TFCs) for the conservation and restoration of their tropical and subtropical moist broadleaf forest (TSMBF), delivering benefits for the entire global community”.

At its official launch on 6 November 2025, the Facility had been endorsed by 34 tropical forest nations, including Brazil, along with 19 potential investor countries (Government of Brazil, 2025c). It is expected that investor nations will collectively provide an initial contribution of US\$25 billion, with which an additional US\$100 billion could be leveraged from the private sector over the next few years, to a Tropical Forest Investment Fund. The Government of Brazil (2025a) has projected that the Facility could generate US\$4 billion annually for environmental preservation, which is almost three times the amount invested globally in the protection of tropical forests through concessional resources. The World Bank is trustee and interim host of the Facility.

Whatever the strategy for attracting more external finance for sustainable investment in the Congo Basin, transparency and good governance will be crucial, along with the participation of all key stakeholders.

The following sections highlight new estimates of the value of the natural capital of the Congo Basin forests as well as the economic contribution of the forest sector to the economies of the Congo Basin countries. This information further strengthens the case for a fair deal which increases investment from all sources to promote sustainable development in the Congo Basin nations while avoiding degradation and deforestation.

## 4. New estimates of the value of the natural capital of the Congo Basin forests

A recognition of the true value of the Congo Basin's intact forests should be the cornerstone of a fair deal that promotes sustainable development. However, there has been relatively little research on this issue, which requires an evaluation of 'natural capital', defined by Dasgupta (2021: 506) as: "The stock of renewable and non-renewable natural assets (e.g. ecosystems) that yield a flow of benefits to people (i.e. ecosystem services). The term 'natural capital' is used to emphasise it is a capital asset, like produced capital (roads and buildings) and human capital (knowledge and skills)."

A recent article by the World Bank's Country Director for Cameroon, Congo, Gabon, the Central African Republic and Equatorial Guinea (Kanté, 2024) stated: "To preserve the Congo Basin Forest as a global public good, it is essential to measure and value forest ecosystems and their services, ensuring that the true value of the forests is recognized. This includes the value provided to forest-based communities, the national economy, and the global community."

### The value of forest ecosystem services

A new synthesis of the forest ecosystem accounts has been compiled by the World Bank for each of the main six Congo Basin countries, recording the value of forest ecosystem services (World Bank Group, 2025). It is measured through changes in the extent and condition of ecosystems, and the supply and value of selected ecosystem services in the years 2000, 2010 and 2020, across six ecosystem forest types covering 205.5 million hectares in 2020.

The report found that the overall forest ecosystem extent in the Congo Basin decreased by more than 8.6 million hectares by 2020, or by 10.7% relative to 2000. The Democratic Republic of the Congo had the highest loss, at 5.9%, and also accounted for 85% of the losses across the six countries. Gabon had the lowest rate of forest loss, and forest extent increased in the Central African Republic, likely due to a combination of long-term climate changes and carbon fertilisation (World Bank Group, 2025).

It noted that the harvest of non-timber forest products is key for local communities and reflects both a demand (due to lack of alternatives) and demographic pressure. The amount of poles and fuelwood harvested is now higher than of timber in most cases.

The total monetary value of forest ecosystem services rose from US\$590 billion in 2000 to nearly US\$1.15 trillion in 2020, with climate regulation through carbon retention making up over 99% of the total. These figures show that the annual monetary value and the total asset value of the Congo Basin forests increased significantly between 2000 and 2020. Annual domestic benefits from forest ecosystem services, excluding global climate regulation, were calculated to be about US\$8 billion in 2020. The report pointed out that "these distinct domestic services have not been captured in national economic values" (ibid.).

This assessment assumed that the forest ecosystems in the Congo Basin retained around 90.6 billion tonnes of carbon in 2020. The report noted: "Collectively these forests store nearly ten times the amount of carbon released by annual global energy-related emissions, indicating their significance in global climate regulation" (ibid.). The value of global climate regulation through carbon retention was calculated using an assumption of a global social cost of carbon of US\$79.86 per tonne of carbon dioxide equivalent. The overall asset value including the value of global climate regulation to the global public good was estimated to be US\$11.4 trillion in 2000 and US\$23.2 trillion in 2020.

The report pointed out: "Much of the value of forest ecosystem services remains unrealized, both in terms of regulating services (sedimentation retention, carbon retention) and provisioning services (bushmeat, wild plants). This presents significant opportunities to grow countries' wealth and sustain increasing asset values per capita in a sustainable way" (ibid.).

However, the report noted that 10.7%, or more than 8.6 million hectares, of the forest area was lost between 2000 and 2020 due to agricultural expansion, illegal logging and mining. It stated: “While natural forests in the Congo Basin remain extensive, the pace of forest loss increased in the last decade” (ibid.).

### **The natural capital value of ecosystem services**

In addition, Filewod et al. (2025) provided new estimates of the natural capital value of ecosystem services from tropical moist forests, as mapped by Vancutsem et al. (2021), within five of the six main nations: Cameroon, Central African Republic, Democratic Republic of the Congo, Gabon and Republic of the Congo. Insufficient data was available to include Equatorial Guinea. The authors considered four provisioning services (industrial timber, artisanal timber, fuelwood, and bushmeat), one cultural service (tourism), and one regulating service (carbon sequestration). They analysed all forest areas currently exploited for economic use (except mining tenures) to calculate a total (i.e. regional) gross annual value (obtained by multiplying physical output volumes by market prices per unit of output), not including carbon sequestration, for the Congo Basin forests in 2019 of US\$7.8 billion.

The authors also attempted to estimate the annual value of carbon sequestration by the Congo Basin forests, using three different methods:

- counting carbon sequestration in living trees plus sequestration or emissions from annual land-use change (‘net flux’)
- comparing current year stocks against a lagged five-year average (‘average baseline’)
- comparing current year stocks against a projected five-year nonlinear trend (‘trend baseline’).

The three methods produced very different results. The ‘net flux’ method, which evaluates only physically observable changes in climate regulation by forests, resulted in emissions cuts for Gabon only. In the other four countries, where growing rural populations continue to convert forests for agriculture, counting only observed flows of carbon results in a net overall increase for the five countries of 121.07 million tonnes of carbon dioxide equivalent. The ‘average baseline’ method, intended to reward countries for improving on past performance as in REDD+, indicates emissions increases for all five countries, and an overall increase of 1,899.52 million tonnes of carbon dioxide equivalent. The ‘trend baseline’ method, a similar approach used in REDD+ that attempts to improve the ‘model’ of past performance beyond a simple average, indicated emissions increases for the Republic of the Congo, and emissions cuts for the other four countries, with a net regional cut in emissions of 89.03 million tonnes of carbon dioxide equivalent.

Filewod et al. (2025) applied a ‘carbon service value’ of US\$5 for purely illustrative purposes, much lower than the social cost of carbon used by the World Bank Group (2025), indicating that the ‘net flux’ and ‘average baseline’ would result in negative total carbon sequestration values of US\$605.35 million and US\$9,497.60 million, respectively. The ‘trend baseline’ method would result in a positive carbon sequestration value of US\$445.15 million.

The different results Filewod et al. (2025) obtained for the ‘average baseline’ and ‘trend baseline’ approaches reflect the fact that rates of loss of forest cover and degradation were decreasing during the 2014–19 accounting period used by Vancutsem et al. (2021). Their figures are based on Tier 1 data from the Intergovernmental Panel on Climate Change to enable simple cross-country comparisons, and local data (e.g. higher sequestration rates in regrowing forest) could alter country-level results. While being the most robust scientifically, the ‘net flux’ method required a mechanism to address equity problems: valuing carbon this way tended to assign emissions cuts (i.e. credits) to industrial concessions, protected areas and Pygmy areas, and emissions increases (i.e. debits) to community forests and customary tenure areas. According to Filewod et al. (2025: 28) “this pattern is consistent with extraction rates (biomass per unit area) increasing in proximity to (forest dependant) human settlements”.

It is clear that the natural capital value of the intact forests of the Congo Basin is very substantial, particularly compared to the size of the economies of the six main Congo Basin nations. Even conservative estimates of the value of carbon sequestration by the forests are much higher than the value of other ecosystem services. However, it is increasingly apparent that the forests are being destroyed and degraded by a wide range of activities, particularly for industrial and artisanal logging, which is creating large losses in the natural capital value of the forests for the Congo Basin nations. How much are the Congo Basin nations benefiting from the forestry sector?

## 5. The economic benefits from forestry for the Congo Basin countries

Figures provided by the African Development Bank and the World Bank (see Table 5.1) show that the forestry sector made a significant contribution to the GDP of some of the main countries of the Congo Basin, and almost US\$14 billion, or 8% of GDP, for the region as a whole in 2023. While the sector generates 1–3% of the GDP of Cameroon, Equatorial Guinea, Gabon, and Republic of the Congo, it adds 11% in the Central African Republic and 17% in the Democratic Republic of the Congo. These contributions include the exploitation of forest land, whether for timber transactions or for conversion to other uses (e.g. agriculture, mining).

**Table 5.1. Contributions of the forestry sector to the GDP of Congo Basin countries in 2023**

Countries	Forestry sector contribution to GDP (%)	GDP (US\$ billion)	Forestry contribution to GDP (US\$ billion)
Cameroon	3	49.28	1.48
Central African Republic	11	2.56	0.28
Democratic Republic of Congo	17	67.01	11.39
Equatorial Guinea	1	12.34	0.12
Gabon	2	20.06	0.40
Republic of Congo	3	15.32	0.46
Total	8	166.6	14.1

*Source: Data compiled by the authors from databases of the African Development Bank and World Bank*

These figures are consistent with an analysis by the African Natural Resources Centre (2021), which found that between 1978 and 2017, the forestry sector contributed on average between 1% and 20% to the GDP of the main countries in the Congo Basin. These contributions are different for each country and have changed over time. The contributions from the forestry sector to GDP have been less than 5% for Cameroon, the Republic of the Congo and Gabon. However, the sector's contribution to the Democratic Republic of the Congo increased steadily from about 6% in the period between 1978 and 1987, then exceeded 20% between 1998 and 2007, before falling to 18% on average from 2008 to 2017.

There were steady increases for the Central African Republic over the four decades, from about 9% in the period between 1978 and 1987, to an average of 12% from 2008 to 2017. Meanwhile, the contribution of the forestry sector in Equatorial Guinea decreased from about 20% from 1988 to 1997 to about 4% in the period between 1998 and 2007, and just 1% from 2008 to 2017.

The African Natural Resources Centre (2021: 7) pointed out that “these trends suggest industrial stagnation or lack of innovation and investments in some countries and the lack of prioritization of the forestry sector in some others”. The authors noted that almost a third of the 178 million hectares of the dense humid forests of the Congo Basin were earmarked for timber production, with another 100 million hectares unallocated and 18 million hectares set aside for conservation.

The authors pointed out that the Congo Basin “occupies an extremely marginal place in the world despite its magnitude”, with most of its timber exported as logs, and some sawnwood and other primary processed products (ibid.: 4). The six main Congo Basin nations account for just 1% of global sawnwood production, 5% of the world's production of tropical logs, 6% of global tropical sawnwood production, 7% of the world's tropical veneer production, 1% of global tropical plywood

production, and little or no secondary or tertiary wood transformation. The study highlighted research suggesting that adding value to primary processed products before export could generate additional margins for the Congo Basin nations of between 350% and 1,000% and 4–12 times more jobs. It stated: “This value addition would be a driver towards green and sustainable economic and social development, supporting the resilience of economies in the post COVID-19 era” (ibid.).

In its assessment of the contribution of the forestry sector to the member countries (Cameroon, Central African Republic, Chad, Equatorial Guinea, Gabon and Republic of the Congo) of the Economic and Monetary Community of Central Africa (CEMAC), the World Bank Group (2024a: 4) stated: “The contribution of the forestry industry to GDP and national budgets has stagnated in recent decades, in particular, because of the scale of illegal logging and a focus on exporting logs rather than developing local wood processing in most countries. The Congo Basin countries face difficult trade-offs between preserving forest ecosystems and using forests for other economic activities, and the lack of sufficient and consistent international funding to adequately compensate the region for the climate services it provides makes this task even more challenging.”

An accompanying commentary (World Bank Group, 2024b) stated: “The forestry sector’s contribution to public revenues in all CEMAC countries is modest. Across CEMAC, forestry taxation relies mainly on three main tools: royalty or surface area tax, felling tax, and exit duty taxes. Due to illegal logging, a large informal logging sector, revenue losses from indiscriminate use of tax incentives, and corruption, a significant portion of potential forestry revenue is lost.”

The World Bank Group (2024a: 4) suggested: “Fiscal policy reforms such as adjusting forestry taxes based on the ecological footprint of wood production, providing targeted incentives for sustainable practices, offering tax rebates for forestry certification and agroforestry, and reinvesting natural resource revenues can play a vital role in protecting Congo Basin forestlands. However, tax strategies are not standalone solutions. Combining fiscal instruments with better forest governance through improved enforcement, monitoring, and transparency will help Congo basin countries safeguard their forests while enhancing the forestry sector’s role in their economies.”

## 6. Conclusions and recommendations

The forests of the Congo Basin, which provide the world's largest land-based carbon sink, are clearly under severe threat, even though the most recent analyses show that they have successfully reduced rates of net deforestation in recent years. Deforestation and degradation are being driven by a variety of factors, including clearing forest for agriculture and other activities by local communities, but also industrial activities, including the timber trade and mining in some places. There are also signs that global climate change is beginning to have a negative effect on the capacity for the Congo Basin forests to take up carbon dioxide, and if trends continue, they could become a net source of carbon dioxide if widespread die-back occurs.

The destruction of the rainforest from unsustainable agricultural and timber practices robs the Congo Basin nations of their natural capital wealth and undermines implementation of the Paris Agreement. The governments of the six main Congo Basin nations have been attempting to protect their forests, but have been hampered by many obstacles, including governance issues and a lack of resources. Financial support from external sources has been patchy and inadequate.

The world cannot afford to force the Congo Basin nations to choose between economic development and preservation of the rainforest. Deforestation is increasing in the Congo Basin rainforest due to unsustainable economic development. Increased investment from domestic and external sources, including both public and private finance, is required to promote and support sustainable economic development and growth in the Congo Basin that does not require destruction of the rainforest. This means providing local communities that are currently forced to destroy the rainforest for income and resources with alternative options for accelerated sustainable development.

The analyses we have presented in this report suggest that the forestry sector, which includes both sustainable and unsustainable practices, contributes about US\$14 billion a year, equivalent to 8% of the region's GDP. However, annual ecosystem services, not including climate regulation, are worth about US\$8 billion per year. When the value of the sequestration of carbon is accounted for, the World Bank estimates that the ecosystem services of the Congo Basin forests were worth US\$1.15 trillion to the world in 2020, and the total value of the Congo Basin assets was US\$23.2 trillion. The Congo Basin nations perform a vital service to the rest of the world through their stewardship of the rainforest. Hence, the activities that destroy and degrade the forests represent extremely bad value for money, and are robbing the Congo Basin nations and the world of an important source of wealth at an increasing pace.

The Congo Basins nations, which include some of the world's poorest countries, need an increase in flows of long-term and sustainable investment from external public and private sources to accelerate their sustainable development while protecting their forests and other natural capital. However, these flows are currently hampered by a lack of clarity about the investment needs of the Congo Basin nations. While there have been several initiatives to increase funding, these have often turned out to be short-term and unpredictable. In some cases, it appears that funding initiatives have been determined by donors without sufficient input from the recipient countries.

Investment from external sources is required to help the Congo Basin nations avoid unsustainable development that destroys the rainforest. This investment would have significant and substantial returns both for the Congo Basin and for the rest of the world, and should be used to promote sustainable development, to protect the rainforest, and to pay the Congo Basin nations for the service they provide to the rest of the world as its stewards. The investment should be used to provide an alternative and commensurate source of income to unsustainable development that destroys the rainforest.

The 'Fair Deal Task Force' has proposed that the Congo Basin nations should receive "a minimum of 5% of international climate finance on the basis of the 2015 Paris Agreement" CBFP (2023: 1). This would amount to US\$5 billion of the US\$100 billion per year that developed countries have agreed to mobilise from public and private sources between 2020 and 2025, and US\$15 billion per

year by 2035 as part of the new collective quantified goal of at least US\$300 billion agreed at the 29th meeting of the Conference of the Parties (COP29) in Baku, Azerbaijan, in November 2024. It was also agreed at COP29 that developing countries should receive US\$1.3 trillion per year “from all public and private sources”, 5% of which would be US\$65 billion.

With protection of the Amazon and the rest of the world’s rainforests firmly on the agenda for the 30th meeting of the Conference of the Parties (COP30) in Belém, Brazil, in November 2025, it is time for the rest of the world to offer the Congo Basin nations a fair deal for their stewardship of the rainforest.

Based on our analysis, we make the following recommendations for the protection of the Congo Basin forests:

1. Given the importance of the Congo Basin forests, there should be further enhanced efforts by the host nations, strongly supported by the international community, to assess and monitor their extent and rates of deforestation, degradation and restoration, to reduce the current high levels of uncertainty and disagreement around estimates.
2. The governments of the Congo Basin nations should develop a collective strategy for the protection and sustainable management of their forests, investing their own resources and seeking investment from their international partners, including donor governments and the private sector.
3. To provide the basis for a fair deal, the Congo Basin nations, with support from their international partners, should make the collective case and set out details of the long-term support — including financing from public and private sources — they need in order to implement a collective strategy for the protection and sustainable management of their forests and accelerate their sustainable development.
4. The collective strategy for the protection and sustainable management of their forests should include specific timebound goals for what the Congo Basin nations would like to achieve, consistent with their ambitions for accelerating their sustainable development and growth.
5. The governments of the Congo Basin nations should provide a breakdown of the investments required to achieve their goals within the specified timeframes and identify what finances they need from domestic public and private sources, and from external public and private sources (including donor governments and development banks) for each investment.
6. An example breakdown of investments could include: (i) policy development, (ii) ending illegal deforestation (e.g. through monitoring and surveillance; enforcement), and (iii) development of sustainable forest-related incomes and revenues, including carbon markets.
7. The international community should provide the long-term financial support from public and private sources to allow the Congo Basin nations to accelerate their sustainable development while protecting their forests.
8. The Congo Basin countries should ensure that COMIFAC and the CBFP effectively represent their interests.
9. The Congo Basin nations should continue to participate fully in other relevant regional and global fora and organisations concerned with the protection of the world’s rainforests, including the United Nations Framework Convention on Climate Change, the United Nations Convention on Biological Diversity, and the Coalition of Finance Ministers for Climate Action.
10. Decisions about investments in the Congo Basin forests should be made in partnership with the host nations, who should be represented, for instance on the executive board of the Central African Forest Initiative.
11. The Congo Basin nations should support and participate in the new Tropical Forest Forever Facility, advising on its development to provide the investments it needs.
12. The investor nations of the Tropical Forest Forever Facility should ensure that the Congo Basin nations receive substantial support, including in improving their readiness to apply and receive funds.

# References

- African Development Bank Group (2018) *Independent evaluation of the Congo Basin Forest Fund – summary report*. IDEV Thematic Evaluation, July.  
<https://idev.afdb.org/sites/default/files/Evaluations/2020-03/CBFF%20Evaluation.pdf>
- African Natural Resources Centre (2021) *Economic performance of the Congo Basin's forestry sector*. Abidjan, Côte d'Ivoire: African Development Bank.  
[https://www.afdb.org/sites/default/files/documents/publications/economic\\_performance\\_of\\_the\\_congo\\_basins\\_forestry\\_sector.pdf](https://www.afdb.org/sites/default/files/documents/publications/economic_performance_of_the_congo_basins_forestry_sector.pdf)
- Aquilas N, Mukong A, Kimengsi J, and Ngangnchi F (2022) Economic activities and deforestation in the Congo basin: an environmental kuznets curve framework analysis. *Environmental Challenges* 8, 100553. <https://doi.org/10.1016/j.envc.2022.100553>
- Beekmann M, Gallois S, and Rondinini C (2024) Uncertain future for Congo Basin biodiversity: a systematic review of climate change impacts. *Biological Conservation* 297: 110730.  
<https://doi.org/10.1016/j.biocon.2024.110730>
- Besisa Nguba T, Bogaert J, Makana J-R, Mate Mweru J-P, Sambieni K, Bwazani Balandi J, et al. (2025) Assessing forest degradation in the Congo Basin: the need to broaden the focus from logging to small-scale agriculture (a systematic review). *Forests* 16. <https://doi.org/10.3390/f16060953>
- Bodjongo M and Mbobda J (2023) Economic and environmental effects of the ban on log exports in the CEMAC zone. *International Journal of Agricultural Resources, Governance and Ecology* 19(4): 277–310.
- Central African Forest Initiative [CAFI] (2023) *CAFI annual report*.  
<https://cafi.org/app/uploads/2025/03/CAFI-Annual-Report-Final-English.pdf>
- Cerutti P and Nasi R (2021) Sustainable forest management (SFM) of tropical moist forests: the Congo Basin. In Blaser J and Hardcastle P (eds.) *Achieving sustainable management of tropical forests*. Cambridge: Burleigh Dodds Science Publishing.
- Chami R, Espinoza RA, Espinoza R and Montiel PJ (eds.) (2021) *Macroeconomic policy in fragile states*. Oxford University Press.
- COMIFAC (2021) Declaration of commitment by COMIFAC member states. [https://pfbc-cbfp.org/fileadmin/user\\_upload/pfbc-cbfp/Notre\\_partenariat/Nous\\_connaitre/N\\_Final\\_English\\_Declaration\\_ECCAS-COMIFAC\\_CBFP.pdf](https://pfbc-cbfp.org/fileadmin/user_upload/pfbc-cbfp/Notre_partenariat/Nous_connaitre/N_Final_English_Declaration_ECCAS-COMIFAC_CBFP.pdf)
- Congo Basin Forest Partnership [CBFP] (2005) *The forests of the Congo Basin: A preliminary assessment*.  
[https://carpe.umd.edu/sites/default/files/focb\\_aprelimassess\\_en.pdf](https://carpe.umd.edu/sites/default/files/focb_aprelimassess_en.pdf)
- Congo Basin Forest Partnership [CBFP] (2006) *The forests of the Congo Basin: state of the forest 2006*.  
[https://pfbc-cbfp.org/fileadmin/user\\_upload/pfbc-cbfp/Thematiques/Etat\\_des\\_Forets/EDF2006\\_EN.pdf](https://pfbc-cbfp.org/fileadmin/user_upload/pfbc-cbfp/Thematiques/Etat_des_Forets/EDF2006_EN.pdf)
- Congo Basin Forest Partnership [CBFP] (2023) *First résumé of the work of the Task Force “Fair Deal”*.  
[https://pfbc-cbfp.org/fileadmin/user\\_upload/pfbc-cbfp/Notre\\_partenariat/Nous\\_connaitre/ENGf\\_Task\\_Force\\_Fair\\_Deal\\_First\\_Resume\\_of\\_works\\_FINAL.pdf](https://pfbc-cbfp.org/fileadmin/user_upload/pfbc-cbfp/Notre_partenariat/Nous_connaitre/ENGf_Task_Force_Fair_Deal_First_Resume_of_works_FINAL.pdf)
- Congo Basin Pledge Donors (2024) *Congo Basin pledge report 2023*. [https://pfbc-cbfp.org/fileadmin/user\\_upload/pfbc-cbfp/Thematiques/Congo\\_Basin\\_Pledge/2023\\_Report\\_ENGLISH.pdf](https://pfbc-cbfp.org/fileadmin/user_upload/pfbc-cbfp/Thematiques/Congo_Basin_Pledge/2023_Report_ENGLISH.pdf)
- COP26 Presidency (2021) Glasgow Leaders' Declaration on Forests and Land Use.  
<https://webarchive.nationalarchives.gov.uk/ukgwa/20230418175226/https://ukcop26.org/glasgow-leaders-declaration-on-forests-and-land-use/>
- Crezee B, Dargie G, Ewango C, Mitchard E, Emba O, Kanyama J, et al. (2022) Mapping peat thickness and carbon stocks of the central Congo Basin using field data. *Nature Geoscience* 15(8): 639–644.  
<https://doi.org/10.1038/s41561-022-00966-7>

- Dargie GC, Lewis SL, Lawson IT, Mitchard ETA, Page SE, Bocko YE, et al. (2017) Age, extent and carbon storage of the central Congo Basin peatland complex. *Nature* 542: 86–90. <https://doi.org/10.1038/nature21048>
- Donn P, Ngondi JL, Tieguhong JC, Iponga DM, Tchingsabe O, Fungo R, et al. (2016). Poverty and poor education are key determinants of high household food insecurity among populations adjoining forest concessions in the Congo Basin. *BMC Nutrition* 2: 1–12.
- Dasgupta P (2021) *The economics of biodiversity: The Dasgupta Review*. London: HM Treasury. [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/962785/The\\_Economics\\_of\\_Biodiversity\\_The\\_Dasgupta\\_Review\\_Full\\_Report.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/962785/The_Economics_of_Biodiversity_The_Dasgupta_Review_Full_Report.pdf)
- de Wasseige C, Devers D, de Marcken P, Eba’a Atyi R, Nasi R and Mayaux P (eds) (2009) *The forests of the Congo Basin — state of the forest 2008*. Luxembourg: Publications Office of the European Union.
- de Wasseige C, de Marcken P, Bayol N, Hiol Hiol F, Mayaux P, Desclée B, et al. (eds) (2012) *The Forests of the Congo Basin — State of the Forest 2010*. Luxembourg: Publications Office of the European Union.
- de Wasseige C, Flynn J, Louppe D, Hiol Hiol F and Mayaux P (eds) (2014) *The forests of the Congo Basin — state of the forest 2013*. Belgium: Weyrich, Belgium.
- Duveiller G, Defourny P, Desclée B and Mayaux P (2008) Deforestation in Central Africa: estimates at regional, national and landscape levels by advanced processing of systematically-distributed Landsat extracts. *Remote Sensing of Environment* 112(5): 1969–1981. <https://doi.org/10.1016/j.rse.2007.07.026>
- Eba’a Atyi R, Hiol Hiol F, Lescuyer G, Mayaux P, Defourny P, Bayol N, et al. (2022) *The forests of the Congo Basin: state of the forests 2021*. Bogor, Indonesia: CIFOR.
- Élysée (2025) Joint press release — the Belém call. 6 November. <https://www.elysee.fr/en/emmanuel-macron/2025/11/06/joint-press-release-the-belem-call>
- Ernst C, Mayaux P, Verhegghen A, Bodart C, Christophe M and Defourny P (2013) National forest cover change in Congo Basin: deforestation, reforestation, degradation and regeneration for the years 1990, 2000 and 2005. *Global Change Biology* 19 (4): 1173–1187. <https://doi.org/10.1111/gcb.12092>
- Favada I, Atyi R, Mbonayem L and Guizol P (2019) *Mapping international funding flows to support forest and environmental sectors in Central Africa*. CIFOR. [https://www.cifor-icraf.org/publications/pdf\\_files/Books/BFavada1901.pdf](https://www.cifor-icraf.org/publications/pdf_files/Books/BFavada1901.pdf)
- Favada I, Eba’a Atyi R and Sufo Kankeu R (2025) Mapping of international funding flows to support the forest and environment sectors in Central Africa: an update. Bogor, Indonesia: CIFOR; Nairobi, Kenya: ICRAF. <https://www.cifor-icraf.org/publications/pdf/reports/OFAC-Report-2025.pdf>
- Filewod B, Brutti G and Atkinson G (2025) *Valuing natural capital and its distribution in the Congo Basin forests*. Grantham Research Institute on Climate Change and the Environment Working Paper, No. 426. <https://www.lse.ac.uk/granthaminstitute/publication/valuing-natural-capital-and-its-distribution-in-the-congo-basin-forests/>
- Food and Agriculture Organization of the United Nations [FAO] (2005) *State of the world’s forests 2005*. Rome: FAO. <https://openknowledge.fao.org/handle/20.500.14283/y5574e>
- Food and Agriculture Organization of the United Nations [FAO] (2020) *Global forest resources assessment 2020: main report*. Rome. <https://doi.org/10.4060/ca9825en>
- Food and Agriculture Organization of the United Nations [FAO] (2025) *Global forest resources assessment 2025: main report*. Rome. <https://doi.org/10.4060/cd6709en>
- Food and Agriculture Organization of the United Nations [FAO] and International Tropical Timber Organization [ITTO] (2011) *The state of forests in the Amazon Basin, Congo Basin and Southeast Asia: a report prepared for the Summit of the Three Rainforest Basins Brazzaville, Republic of Congo, 31 May–3 June 2011*. <https://openknowledge.fao.org/handle/20.500.14283/i2247e>
- Forest Declaration Assessment Partners (2022) *Forest declaration assessment 2022*. Climate Focus (coordinator and editor). <https://forestdeclaration.org/resources/forest-declaration-assessment-2022/>

- Forest Declaration Assessment Partners (2025) *Forest declaration assessment 2025*. Climate Focus (coordinator and editor). <http://www.forestdeclaration.org>
- Government of Brazil (2025a) An innovative financing mechanism to incentivize long-term forest conservation at scale. Concept Note 3.0. <https://tfff.earth/wp-content/uploads/2025/10/TFFF-Concept-Note-3.1.pdf>
- Government of Brazil (2025b) Tropical Forests Forever Facility (TFFF) proposes innovative financing model for conservation. COP30 website, 23 September. <https://cop30.br/en/news-about-cop30/tropical-forests-forever-facility-tfff-proposes-innovative-financing-model-for-conservation>
- Government of Brazil (2025c) Over USD 5.5 billion announced for Tropical Forest Forever Facility as 53 countries endorse the historic TFFF launch declaration. COP30 website, 6 November. <https://cop30.br/en/news-about-cop30/over-usd-5-5-billion-announced-for-tropical-forest-forever-facility-as-53-countries-endorse-the-historic-tfff-launch-declaration>
- Hansen MC, Roy DP, Lindquist E, Adusei B, Justice CO, and Altstatt A (2008) A method for integrating MODIS and Landsat data for systematic monitoring of forest cover and change in the Congo Basin. *Remote Sensing of Environment* 112 (5): 2495–2513. <https://doi.org/10.1016/j.rse.2007.11.012>
- Harris NL, Gibbs DA, Baccini A, Birdsey RA, de Bruin S, Farina M, et al. (2021) Global maps of twenty-first century forest carbon fluxes. *Nature Climate Change* 11: 234–240. <https://doi.org/10.1038/s41558-020-00976-6>
- Hubau W, Lewis SL, Phillips OL, Affum-Baffoe K, Beeckman H, Cuni-Sanchez A, et al. (2020) Asynchronous carbon sink saturation in African and Amazonian tropical forests. *Nature* 579: 80–87. <https://doi.org/10.1038/s41586-020-2035-0>
- Jiang X, Albright R, Creecy E, Li K-F, Liang M-C, Newman S, et al. (2023) Congo basin rainforest is a net carbon source during the dry season. *Earth and Space Science* 10: e2022EA002644. <https://doi.org/10.1029/2022EA002644>
- Kanté C (2024) Preserving the forest of the Congo basin: a game changer for Africa and the world. *Africa Can End Poverty*, 4 July. World Bank Blogs. <https://blogs.worldbank.org/en/africacan/preserving-the-forest-of-the-congo-basin>
- Karsenty A and Ongolo S (2012) Can ‘fragile states’ decide to reduce their deforestation? The inappropriate use of the theory of incentives with respect to the REDD mechanism. *Forest Policy and Economics* 18: 38–45.
- Ladewig M, Angelsen A, Masolele R and Chervier C (2024) Deforestation triggered by artisanal mining in eastern Democratic Republic of the Congo. *Nature Sustainability* 7: 1452–1460. <https://doi.org/10.1038/s41893-024-01421-8>
- Lescuyer G, Tsanga R, Nziengui S, Forni E and Romero C (2021) Influence of FSC certification on the governance of the logging sector in the Congo basin. *Natural Resources Forum* 45(3): 289–304. <https://doi.org/10.1111/1477-8947.12231>
- Mayaux P and Saracco F (2007) February: Observatoire des Forêts d’Afrique Centrale. In *Présentation à la Conférence Internationale sur la gestion durable des forêts en République Démocratique du Congo*, Bruxelles, Palais d’Egmont (pp. 26–27).
- Mayaux P, Pekel J-F, Desclé B, Donnay F, Lupi A, Achard F, et al. (2013) State and evolution of the African rainforests between 1990 and 2010. *Philosophical Transactions of the Royal Society B* 368: 20120300. <http://doi.org/10.1098/rstb.2012.0300>
- Megevand C (2013) *Deforestation trends in the Congo Basin: reconciling economic growth and forest protection*. Washington, DC: World Bank.
- Mitchell I and Pleeck S (2022) How much should the world pay for Congo Basin forest’s carbon removal? CGD Note, November. Washington DC: Centre for Global Development. <https://www.cgdev.org/sites/default/files/how-much-world-pay-congo-forest-carbon-removal.pdf>
- Nago M and Ongolo S (2021) Inside forest diplomacy: a case study of the Congo Basin under global environmental governance. *Forests* 12(5): 525.

- Ngoma J and Yang L (2024) Does economic performance matter for forest conversion in Congo Basin tropical forests? FMOLS-DOLS approaches. *Forest Policy and Economics* 162: 103199. <https://doi.org/10.1016/j.forpol.2024.103199>
- Piabuo SM, Minang PA, Tieguhong CJ, Foundjem-Tita D and Nghobuoche F (2021) Illegal logging, governance effectiveness and carbon dioxide emission in the timber-producing countries of Congo Basin and Asia. *Environment, Development and Sustainability* 23: 14176–14196. <https://doi.org/10.1007/s10668-021-01257-8>
- Putzel L and Kabuyaya N (2011) *Chinese aid, trade and investment and the forests of the Democratic Republic of Congo*. Working Paper 82. Bogor, Indonesia: CIFOR.
- Richter J, Goldman E and Davis C (2024) *Indicators of forest designation: production forests*. World Resources Institute. <https://gfr.wri.org/forest-designation-indicators/production-forests>
- Saatchi SS, Harris NL, Brown S, Lefsky M, Mitchard ETA, Salas W, et al. (2011) Benchmark map of forest carbon stocks in tropical regions across three continents. *Proceedings of the National Academy of Sciences of the USA* 108(24): 9899–9904: <https://doi.org/10.1073/pnas.1019576108>
- Shapiro A, Grantham H, Aguilar-Amuchastegui N, Murray N, Gond V, Bonfils D, et al. (2021) Forest condition in the Congo Basin for the assessment of ecosystem conservation status. *Ecological Indicators* 122: 107268. <https://doi.org/10.1016/j.ecolind.2020.107268>
- Shapiro A, d’Annunzio R, Desclée B, Jungers Q, Kondjo HK, Iyanga JM, et al. (2023) Small scale agriculture continues to drive deforestation and degradation in fragmented forests in the Congo Basin (2015–2020). *Land Use Policy* 134: 106922. <https://doi.org/10.1016/j.landusepol.2023.106922>
- Spracklen D, Baker J, Garcia-Carreras L and Marsham J (2018) The effects of tropical vegetation on rainfall. *Annual Review of Environment and Resources* 43(1): 193–218.
- Streck C, Minoli S, Bouchon S, Landholm D, Inclan C and Palmegiani I (2023) Increasing international finance flow to sustain the Congo Basin’s forests. Executive Summary of Discussion Paper. Climate Focus, WWF and COMIFAC. <https://climatefocus.com/publications/congo-basin-forests-finance/>
- Sullivan M, Talbot J, Lewis S, et al. (2017) Diversity and carbon storage across the tropical forest biome. *Scientific Reports* 7: 39102. <https://doi.org/10.1038/srep39102#>
- Tameko AM (2024) The effects of trade openness on deforestation in the Congo Basin countries. *Forest Policy and Economics* 162: 103189. <https://doi.org/10.1016/j.forpol.2024.103189>
- Tchatchou B, Sonwa D, Ifo S and Tiani A (2015) *Deforestation and forest degradation in the Congo Basin: state of knowledge, current causes and perspectives*. Occasional Paper 144. Bogor, Indonesia: CIFOR. [https://www.cifor-icraf.org/publications/pdf\\_files/OccPapers/OP-144.pdf](https://www.cifor-icraf.org/publications/pdf_files/OccPapers/OP-144.pdf)
- Tritsch I, Le Velly G, Mertens B, Meyfroidt P, Sannier C, Makak J-S, et al. (2020) Do forest-management plans and FSC certification help avoid deforestation in the Congo Basin? *Ecological Economics* 175: 106660. <https://doi.org/10.1016/j.ecolecon.2020.106660>
- Tyukavina A, Hansen MC, Potapov P, Parker D, Okpa C, Stehman SV, et al. (2018) Congo Basin forest loss dominated by increasing smallholder clearing. *Science Advances* 4(11): eaat2993.
- Vancutsem C, Achard F, Pekel J-F, Vieilledent G, Carboni S, Simonetti D, et al. (2021) Long-term (1990–2019) monitoring of forest cover changes in the humid tropics. *Science Advances* 7: eabe1603.
- Verhegghen A, Mayaux P, De Wasseige C and Defourny P (2012) Mapping Congo Basin vegetation types from 300 m and 1 km multi-sensor time series for carbon stocks and forest areas estimation. *Biogeosciences* 9: 5061–5079.
- Vizy EK, Manoj H and Cook KH (2023) Is the climate of the Congo Basin becoming less able to support a tropical forest ecosystem? *Journal of Climate* 36: 8171–8193. <https://doi.org/10.1175/JCLI-D-23-0275.1>
- Wang D, Kollenda P, de Smit V, Rigaud K, Gatiso T and Golub A (2025) Protecting forests in the Congo Basin: an empirical basis for performance-linked financing for the Republic of Congo. *Policy Research Working Paper* 11177. World Bank. <http://hdl.handle.net/10986/43476>
- Wilton Park (2025) Report: the Congo Basin forests to Belém and beyond: what follows the Pledge? <https://www.wiltonpark.org.uk/app/uploads/2025/04/WP3580-Report-The-Congo-Basin-Forests-to-Belem-and-beyond-1.pdf>

- Wongchuig S, Papa F, Fleischmann A, Sierra J, Boucharel J, Espinoza J, et al. (2025) Recent significant drying in Central Congo Basin linked to weakened Walker circulation and warmer Atlantic. *npj Climate and Atmospheric Science* 8. <https://doi.org/10.1038/s41612-025-01225-3>
- World Bank Group (2023) September 2023 update to the Poverty and Inequality Platform.
- World Bank Group (2024a) *CEMAC economic barometer: vol. 7*. November. <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/099819012192443798/idu1167fb9e61581814a8a1ad4919cdd49a5661d>
- World Bank Group (2024b) Unlocking forestry sector's potential — Economic Barometer for the Central African Economic and Monetary Community — December 2024 Edition. <https://www.worldbank.org/en/region/afr/publication/unlocking-forestry-sector-potential-economic-barometer-for-the-central-african-economic-and-monetary-community>
- World Bank Group (2025) *Congo Basin forest ecosystem accounts and policy recommendations: a regional synthesis report of ecosystem extent, condition, services, and asset accounts 2000–2020*. Policy Note. Washington, DC: World Bank Group. <https://openknowledge.worldbank.org/entities/publication/7c432652-9ad2-4972-af06-f05428402f8d>
- World Commission on Environment and Development [WCED] (1987) *Our common future*. Report of the World Commission on Environment and Development. <https://digitallibrary.un.org/record/139811?ln=en&v=pdf>
- Zerbo M (2021) The impact of the Log Export Ban reform on deforestation: evidence from Gabon (No. hal-03335911).