



## Boosting intra-African timber trade

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### ABSTRACT

Forest cover in Africa is declining, and new strategies are needed to foster sustainable forest management. At the same time, unstable international trade relationships are challenging Africa's timber trade model. This creates momentum for Africa to boost intra-African timber trade and make use of the novel African Continental Free Trade Area. More continental trade could help reduce Africa's trade deficit in wood and wood products while generating jobs, catalyzing investments and incentivizing sustainable forest management. Six approaches for fostering intra-African timber trade are suggested: increasing timber plantations on degraded land, supporting certification, strengthening small and medium-sized enterprises, building infrastructure for low-emission transportation, combatting and ending corruption, and creating awareness on the untapped economic potential of Africa's timber sector.

### 1. Introduction

African forests are vitally important to global climate regulation and biodiversity conservation while providing a source of income and livelihoods to millions of local communities. At the scale of the African continent, forest cover declined by 2% or 14 million hectares between 2020 and 2025 (FAO 2025), indicating that the drivers of deforestation and forest degradation have yet to be effectively addressed and forest

management in many countries remains unsustainable. While policy instruments such as creation of protected areas and payments for ecosystem services (PES) have received substantial attention (Börner et al., 2020) boosting sustainable timber trade has been widely overlooked as a strategy in the forest conservation toolbox. Currently, Africa largely exports timber as raw material and imports processed wood products (see Table 1). This results in a substantial foreign trade deficit—USD −65.6 billion over the years 1992 to 2020 (African Natural

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Resources Centre 2024). By scaling up intra-African timber trade, more value could be produced and retained on the continent while generating numerous jobs, catalyzing investments, helping reduce poverty, and—not least of all—creating incentives for sustainable forest management.

Today's dominant timber trade model makes African forest management especially susceptible to external circumstances including trade tensions, geopolitical conflicts and either foreign markets' interest in timber sourced from sustainably managed forests or their complacency toward sustainability. Overall, the largest importer of African timber is China (African Natural Resources Centre 2024). In 2019, China amended its forest law to prohibit the purchase, processing, and transport of illegally sourced timber. However, whether the law applies to imported timber is not clearly specified (Samejima 2023). Chinese government authorities and industry organizations regularly advise Chinese firms active in forestry abroad regarding legal compliance and practices of sustainable forest management (Samejima 2023). With the new European Union Deforestation Regulation (EUDR), the European Union is making strides toward avoiding deforestation and forest degradation embodied in its imports of certain agricultural and forest commodities. Compliance with the EUDR is challenging, however, and there are concerns that rather than incentivizing more sustainable forest management, the regulation may result in trade deviation to markets with less stringent sustainability-related requirements (Gilbert 2024). In the United States, the Lacey Act strictly bans the trade of illegally sourced wood products. At the same time, the current US administration's fluctuating import tariffs for African countries are sowing uncertainty and creating an unfavorable business environment for exporters of forest products. Given the developments in these key export markets, there is momentum for Africa to start producing—instead of importing—the finished wood products consumed on the continent, as well as exporting the value-added goods rather than raw timber.

## 2. The African continental free trade area

In 2021, the African Continental Free Trade Area (AfCFTA) came into effect, uniting 54 of the 55 African states behind the goal of greater economic integration (Debrah et al. 2024). Key aims include creation of a single market for goods and services, liberalization of intra-African trade by gradually eliminating tariffs and non-tariff barriers and increasing the movement of natural resources around the continent. The AfCFTA brings together a young and growing population of 1.3 billion people, making it the biggest free trade area worldwide.

While the consequences of Africa's colonial past still loom in many areas of the economy, it is important to note that the AfCFTA—a flagship project of the African Union—is a homegrown African effort to catalyze sustainable, inclusive development. Once the AfCFTA Agreement is fully implemented, wood and paper are among the products expected to profit most in terms of developing regional value chains (Economic Commission for Africa 2025).

## 3. Fostering intra-African timber trade

African forests stand to benefit from enhanced intra-African trade that adds value locally while supporting inclusive and sustainable green

growth across the continent. While there is no silver bullet that will achieve this in all African countries and socioeconomic contexts, below we present a set of six possible approaches that may be flexibly combined. This set of approaches was elaborated by the authors during a moderated two-week online community of practice titled 'AfCFTA's Role in Promoting Sustainable Intra-African Timber Trade for Inclusive Green Growth' in July 2025 (AFF and CDE 2025).

### 3.1. Increase timber production from forest plantations on degraded land

Planted forests make up approximately 2% of the forestland in Africa, with most plantations located in Eastern and Southern Africa (FAO, 2025). A smaller but steadily increasing area may be found in Western and Central Africa. Taken together, these forest plantations can arguably help meet the high demand for African timber for national and regional consumption, thereby alleviating pressure on natural forests while providing economic opportunities for businesses and remunerative jobs for local populations (Pirard et al. 2016). However, to achieve such win-win impacts, a strong and effective governance framework is needed that simultaneously addresses natural forests and plantation forests. To date, plantation forests have often acted as a *driver* of deforestation (Curtis et al. 2018). A valuable step forward would be to ensure that timber plantations are established only as afforestation or reforestation projects on already degraded land while respecting and revisiting the existing multilayered land tenure systems on the continent.

### 3.2. Support certification

Globally, there are a variety of voluntary forest certification schemes. In Africa, the most prominent schemes are the Forest Stewardship Council (FSC) and the Programme for the Endorsement of Forest Certification (PEFC) (Boubacar and Sissoko 2025). These schemes establish standards aimed at promoting sustainable forest management through certification, safeguarding the environmental and social values of forests while allowing for commercial activities such as logging under clearly defined rules. Further, they ensure the traceability of certified forest products from forests to end consumers through chain of custody (CoC) records. Thanks to the corresponding labelling of certified goods, consumers can readily identify sustainable products and make more informed and responsible purchasing decisions.

There is no general “green lane” that would reduce requirements for certified products under the EUDR or Lacey Act. However, certification schemes such as FSC have aligned their requirements with those of the EUDR, using tools that build on block chain-based technologies.

Forest certification holds significant promise to advance sustainable forest management and responsible trade across Africa. To maximize this potential, the African Union, Regional Economic Communities and AfCFTA stakeholders could collaborate with certifiers to integrate forest certification standards into regional forest governance and trade frameworks. Such integration would enhance the competitiveness of African forest products, facilitate intra-African trade in verified sustainable goods, and position Africa as a global leader in responsible forestry. However, the costs of becoming certified are often perceived as prohibitively high (Ham 2000; Cubbage et al. 2009; Wolff and

**Table 1**

Wood in the rough is mostly exported while manufactured wood is mostly imported Data source: (UNCTAD 2026).

| USD millions (at current prices) | Exports of 'Wood in the rough or roughly squared' from African countries... |    |                          |     |       |      | Imports of manufactured wood to African countries... |     |                            |     |       |      |
|----------------------------------|-----------------------------------------------------------------------------|----|--------------------------|-----|-------|------|------------------------------------------------------|-----|----------------------------|-----|-------|------|
|                                  | to African countries                                                        |    | to the rest of the world |     | Total |      | from within Africa                                   |     | from the rest of the world |     | Total |      |
| Year                             |                                                                             |    |                          |     |       |      |                                                      |     |                            |     |       |      |
| 2020                             | 52                                                                          | 6% | 850                      | 94% | 902   | 100% | 73                                                   | 17% | 352                        | 83% | 425   | 100% |
| 2021                             | 59                                                                          | 5% | 1025                     | 95% | 1084  | 100% | 93                                                   | 17% | 452                        | 83% | 545   | 100% |
| 2022                             | 61                                                                          | 6% | 891                      | 94% | 952   | 100% | 89                                                   | 15% | 502                        | 85% | 591   | 100% |
| 2023                             | 60                                                                          | 7% | 784                      | 93% | 844   | 100% | 91                                                   | 15% | 518                        | 85% | 609   | 100% |
| 2024                             | 61                                                                          | 7% | 771                      | 93% | 832   | 100% | 97                                                   | 15% | 542                        | 85% | 639   | 100% |

Schweinle 2022). Governments could subsidize certification and thereby incentivize a broader uptake across Africa.

### 3.3. Strengthen small and medium-sized enterprises

Small and medium-sized enterprises (SMEs) are the backbone of African timber processing (Dumenu et al. 2023). SMEs also play an integral role in cross-border trade in Africa. To support SMEs in improving their manufacturing quality and efficiency, the African Union together with governments can create special economic zones for timber processing (Tamno and Keneck-Massil 2025). Grouping together in manufacturing hubs will enable African SMEs to invest in specialization and exploit economies of scope. The Gabon Special Economic Zone ‘Wood Cluster’ exemplifies this approach. Of course, this kind of specialization and scaling requires investment. Yet limited access to finance remains a major constraint on SME development in Africa (Hansen-Addy et al. 2025). To get the most out of available and prospective funds, emphasis should be put on secondary wood processing, where the potential for adding value is highest. Commercial banks and development banks could jointly develop blended financing solutions that address funding constraints by de-risking investments and leveraging private capital. In addition, the African Union or the AfCFTA secretariat could bolster regional trade of value-added goods by supporting trade fairs and exhibitions on wood products. Trade shows can gear up business by providing opportunities for SMEs to showcase their products, network with others, and expand their customer base.

However, investments are also required for individual and institutional capacity building at different levels of the value chain, facilitating knowledge and technology transfer to strengthen SMEs and ensure that wood products processed locally meet the quality standard of imported wood-based products while remaining affordable and profitable (Mensah et al. 2025).

### 3.4. Build infrastructure for low-emission transportation

Transportation infrastructure in Africa is fragmented, limiting the trade of timber, wood products, and other goods across the continent. Existing railways mainly connect coastal cities and ports with backlands (Bouraima et al. 2023). There is no trans-African railway network. Trans-African highways exist, but major routes in the forested areas of Central Africa remain unpaved. Meanwhile, the many inland waterways and lakes found in Sub-Saharan Africa offer untapped potential for transportation of bulky goods. However, due to the high density of many tropical timber species, low-tech timber rafting is often difficult.

While railways and waterways provide opportunities for low-emission transportation, efforts to expand the necessary infrastructure must be planned very carefully to minimize tradeoffs and ensure development is truly sustainable. Mega-infrastructure projects often entail “mega problems,” ranging from severe environmental degradation and pollution to population displacement, splintering of customary land, increased foreign debt, and neocolonial dependencies (Biber-Freudenberger et al. 2025; Enns and Bersaglio 2020).

### 3.5. Combat and end corruption

Corruption drains substantial resources from the economy and erodes trust. Beyond its financial impact, corruption severely undermines confidence in institutions, especially the systems and bodies governing trade. For example, to promote the domestic wood processing industry, several African countries have passed legislations with strict limitations or complete bans on log exports while allowing for the export of processed wood (Forest Trends 2022). While, in principle, this can be an effective strategy to increase sectoral employment, the legislations’ impacts are undermined when fraud and corruption are used to bypass the restrictions (Environmental Investigation Agency 2024; Marchand and Zerbo 2025).

For international commerce to function, trust and transparency are essential. For instance, perceptions of corruption can raise concerns about the authenticity and credibility of official documents—particularly in the eyes of international trade authorities. Institutional capacities need to be strengthened to enforce regulations and combat illegal logging and trade as well as corruption (Tonouéwa et al. 2024). Effective strategies to tackle corruption in trade include harmonizing and digitizing customs procedures, implementing and enforcing digital traceability, and leveraging blockchain technology. This means that data is collected at every step of the value chain and stored in a transparent, safe, and tamper-proof way. More broadly, expanding free trade across the African continent can reduce opportunities for illicit payments by minimizing border controls.

### 3.6. Policy engagement for enhanced intra-African timber trade

To gain traction and momentum, the advantages of boosting intra-African timber trade must be elevated on the political agenda. Consistent and strategic high-level communication is essential to draw attention to the topic and keep the issue in focus (African Natural Resources Centre 2021). At the same time, the economic potential of Africa’s timber sector should be more effectively conveyed to prospective investors from the private sector. Current engagement efforts often prioritize government stakeholders, leaving many private investors unaware of the sector’s opportunities. Tailored communication strategies are needed to target private business actors in order to stimulate interest and encourage dialogue about the profitability of the timber sector. These strategies should be built on trust among stakeholders and a spirit of Pan-Africanism that goes beyond national interests.

By advancing along these six approaches to scale up sustainable intra-African timber trade, the continent could make the best of its forest resources, add value locally and support Pan-African inclusive and sustainable green growth.

### CRediT authorship contribution statement

**Astrid Zabel:** Writing – review & editing, Writing – original draft, Project administration, Methodology, Investigation, Funding acquisition, Conceptualization. **Lydia Afriyie-Kraft:** Writing – review & editing, Investigation, Data curation, Conceptualization. **Annah Agasha:** Writing – review & editing, Writing – original draft. **John Kojo Ahiakpa:** Writing – review & editing. **Scholastica Akalibey:** Writing – review & editing. **Marie-Louise Avana Tientcheu:** Writing – review & editing, Funding acquisition. **Folaranmi D. Babalola:** Writing – review & editing. **Achille Bernard Biwolé:** Writing – review & editing. **Nathalie Guiakora Bouville:** Writing – review & editing. **Thomas Breu:** Writing – review & editing. **Joshua K. Cheboiwo:** Writing – review & editing. **Ruben Doagbodzi:** Writing – review & editing. **Daphine Gitonga:** Writing – review & editing. **Godwin Kowero:** Writing – review & editing. **Admore Mureva:** Writing – review & editing. **Lovemore Musemwa:** Writing – review & editing. **Doris Mutta:** Writing – review & editing. **Reuben Mwamakimballah:** Writing – review & editing. **Labode Popoola:** Writing – review & editing. **Julius Chupezi Tieguhong:** Writing – review & editing.

### Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

### Data availability

Data will be made available on request.

## References

- AFF; CDE, 2025. AfCFTA's role in promoting sustainable Intra-African timber trade for inclusive green growth. African Forest Forum and Centre for Development and Environment. Available online at <https://afforum.org/events/shaping-timber-trade-africa-join-aff-cde-community-practice>.
- African Natural Resources Centre, 2021. Intra-African Trade in Wood Products: Case studies from Benin, Cameroon, Ghana and the Republic of Congo. African Development Bank, Abidjan, Côte d'Ivoire.
- African Natural Resources Centre, 2024. Regional Timber Trade Flows and Trends in Africa. African Development Bank, Abidjan, Côte d'Ivoire.
- Biber-Freudenberger, Lisa, Bogner, Christina, Bareth, Georg, Bollig, Michael, Dannenberg, Peter, Diez, Javier Revilla, et al., 2025. Impacts of road development in Sub-Saharan Africa: a call for holistic perspectives in research and policy. *IScience* 28 (2), 111913. <https://doi.org/10.1016/j.isci.2025.111913>.
- Börner, Jan, Schulz, Dario, Wunder, Sven, Pfaff, Alexander, 2020. The effectiveness of forest conservation policies and programs. *Annu. Rev. Resour. Econ.* 12 (1), 45–64. <https://doi.org/10.1146/annurev-resource-110119-025703>.
- Boubacar, Inoussa, Sissoko, Yaya, 2025. Sustainable forest management through certification and wood products trade: analyzing the role of the FSC across diverse economic and climatic contexts. *J. Clean Prod.* 518, 145786. <https://doi.org/10.1016/j.jclepro.2025.145786>.
- Bouraima, Mouhamed Bayane, Alimo, Philip Kofi, Agyeman, Stephen, Sumo, Peter Davis, Lartey-Young, George, Ehebrecht, Daniel, Qiu, Yanjun, 2023. Africa's railway renaissance and sustainability: current knowledge, challenges, and prospects. *J. Transp. Geogr.* 106, 103487. <https://doi.org/10.1016/j.jtrangeo.2022.103487>.
- Cubbage, Frederick, Moore, Susan, Henderson, Thresa, Araujo, Michelle M.F.C., 2009. Costs and benefits of forest certification in the Americas. In: Jeanette Pauling, B., Jeanette Pauling, B. (Eds.), *Natural resources: management, Economic Development and Protection*. Nova Science Publishers, Inc, New York, pp. 155–183 editor.
- Curtis, Philip G., Slay, Christy M., Harris, Nancy L., Tyukavina, Alexandra, Hansen, Matthew C., 2018. Classifying drivers of global forest loss. *Science* 361 (6407), 1108–1111. <https://doi.org/10.1126/science.aau3445>.
- Debrah, Yaw A., Olabode, Oluwaseun E., Olan, Femi, Nyuur, Richard B., 2024. The African continental free trade area (AfCFTA): taking stock and looking ahead for international business research. *J. Int. Manage.* 30 (2), 101120. <https://doi.org/10.1016/j.intman.2024.101120>.
- Dumenu, William Kwadwo, Appiah, Louis Gyekye, Paul, Carola, Darr, Dietrich, 2023. Should forest enterprises formalize? Insight from a multi-dimensional characterization of informal baobab enterprises. *Forest Policy Economic.* 150, 102935. <https://doi.org/10.1016/j.forpol.2023.102935>.
- Economic Commission for Africa (2025): Economic report on Africa 2025: united nations.
- Enns, Charis, Bersaglio, Brock, 2020. On the coloniality of “new” mega-infrastructure projects in East Africa. *Antipode* 52 (1), 101–123. <https://doi.org/10.1111/anti.12582>.
- Environmental Investigation Agency, 2024. Until the last log. Available online at <https://eia.org/wp-content/uploads/2024/10/Until-the-Last-Log.pdf>.
- FAO (2025): Global forest resources assessment 2025.
- Forest Trends (2022): Known and reported forest product export restrictions.
- Gilbert Christopher, L., 2024. The EU deforestation regulation. *EuroChoices* 23 (3), 64–70. <https://doi.org/10.1111/1746-692X.12436>.
- Ham, Cori, 2000. Certification: situation analysis of private timber growers in South Africa. *Southern Africa. Forest. J.* 187 (1), 59–64. <https://doi.org/10.1080/10295925.2000.9631257>.
- Hansen-Addy, Andrew E., Parrilli, Mario Davide, Tingbani, Ishmael, 2025. The impact of the regulatory business environment on SMEs' funding choices in developing countries: evidence from Africa. *Int. J. Fin Econ* 30 (1), 941–960. <https://doi.org/10.1002/ijfe.2951>.
- Marchand, Sébastien, Zerbo, Mouhamed, 2025. Enhancing employment through log export ban: insights from wood-processing firms in developing countries. *Forest Policy Econ.* 174, 103491. <https://doi.org/10.1016/j.forpol.2025.103491>.
- Mensah, Prosper, Pimenta, Alexandre Santos, Melo, Rafael Rodolfo de, Amponsah, James, Tuo, Gladys, Chakurah, Issah, et al., 2025. The global supply chain of wood products: a literature review. *Forests* 16 (7), 1036. <https://doi.org/10.3390/f16071036>.
- Pirard, Romain; Dal, Secco, Lise, Warman, Russell, 2016. Do timber plantations contribute to forest conservation? *Environ. Sci. Policy.* 57, 122–130. <https://doi.org/10.1016/j.envsci.2015.12.010>.
- Samejima, Hiromitsu (2023): Legislation and Other Initiatives For Legal Timber Trade in China. Yokohama, Japan.
- Tamno, Jacques Eric Tekam, Keneck-Massil, Joseph, 2025. Africa's participation in global value chains: what contribution can special economic zones make? *Int. Econ.* 184, 100646. <https://doi.org/10.1016/j.inteco.2025.100646>.
- Tonouéwa, Jesugnon Fifamè Murielle Féty, Biaou, Samadori Sorotori Honoré, Assédé, Eméline Sèssi Pélagie, Agossou, Hippolyte, Balagueman, Rodrigue O., 2024. Timber traceability, determining effective methods to combat illegal logging in Africa: a review. *Trees, Forest. People.* 18, 100709. <https://doi.org/10.1016/j.tfp.2024.100709>.
- UNCTAD (2026): UNCTADstat. Available online at <https://unctadstat.unctad.org/>, checked on 4/3/2026.
- Wolff, Sarah, Schweinle, Jörg, 2022. Effectiveness and economic viability of forest certification: a systematic review. *Forests* 13 (5), 798. <https://doi.org/10.3390/f13050798>.