



UN  
DP



# Stimulating sustainable wood in Green Construction in Kenya for low carbon climate resilient development

With contributions from UNDP, UNHabitat, FAO, Embassy of Sweden



Sweden  
Sverige



Food and Agriculture  
Organization of the  
United Nations

Discussion Paper





# Stimulating sustainable wood in Green Construction in Kenya for low carbon climate resilient development

With contributions from UNDP, UNHabitat, FAO, Embassy of Sweden



Sweden  
Sverige



Food and Agriculture  
Organization of the  
United Nations

**Acknowledgement:** Acknowledgement: UNDP Kenya acknowledges the Government of Kenya, UN Habitat, FAO and the Embassy of Sweden who provided insights and contributed to the authorship of this paper.

**Disclaimer:** This is a working draft subject to inputs from relevant stakeholders

**For enquiries, contact:**

United Nations Development Programme  
Kenya UN Office in Nairobi (UNON) UN Gigiri Complex  
Block N, LEVEL 3  
P.O. Box 30218-00100, Nairobi, Kenya.  
Telephone: +254-20-725357  
Email: registry.ke@undp.org  
www.ke.undp.org  
Twitter: @UNDPKenya  
Facebook: @UNDPinKenya  
Instagram: @undpkenya.

Any use of information, in full or in part, should be accompanied by an acknowledgement of UNDP Kenya as the source.

All rights reserved. © UNDP Kenya 2024.

# Contents

<b>Introduction</b>	<b>7</b>
<b>Situational Analysis</b>	<b>9</b>
<b>Policy Analysis</b>	<b>12</b>
<b>Country Examples</b>	<b>14</b>
<b>Recomendations</b>	<b>16</b>
<b>References</b>	<b>17</b>

## Executive Summary

The forest sector plays a key role in socio-economic development of Kenya and contributes to 3.6 % to the country's GDP<sup>1</sup> excluding environmental services. The sector supports the urban and rural population through the provision of wood fuel and other non-timber forest products and services. Currently the sector provides direct jobs for up to 50,000 and indirect jobs to approximately 600,000. The sector is largely underdeveloped against its potential that can be unlocked through commercial forestry.

At COP28 Kenya joined a coalition of 17 countries that committed to promoting the use of sustainable wood in Green Construction<sup>2</sup>. This commitment is backed by a robust policy and regulatory framework as well as a booming construction industry. In addition, Government has set an ambition to grow 15 billion trees and increase its plantation area to 750,000ha.

Wood has long been integral to traditional building techniques. However, technological progress has spurred the development of engineered wood products capable of substituting fossil-based materials like steel and concrete in large-scale construction, while offering environmentally friendly construction material. Wood-based materials are renewable, recyclable, and if sourced sustainably, have minimal fossil carbon emissions, and reduced environmental footprints.

Globally, numerous governments have implemented policies aimed at enhancing the sustainability of their construction sectors, including sustainably sourced and produced wood materials. At the same time, it requires not only wood-encouraged construction policies but also forest registration and management systems, as well as

timber traceability systems at the national level, to comply with tightening international standards and requirements.

The paper examines the policy environment, supply and processing of timber as well as the uptake of sustainable wood in Kenya's construction industry. The paper recommends interventions required to stimulate the nascent industry in the short, mid and long term. These are summarized in 5Ps. Policy coherence, Production at scale, Processing efficiency, Piloting and Popularizing.

Specifically, there is need for coherence in policy to promote the uptake of wood in construction. For instance, the building code(draft) acknowledges wood as an alternative construction material however there are regulatory nuances that place it as a temporary material thus it is considered a high-risk material by insurance and financing entities.

Currently Kenya has a wood supply deficit of 10.3 million m<sup>3</sup>. Wood for construction requires with specific properties and that are sustainably sourced. The national commercial forestry sector will require support through providing a portfolio of competitive genetic resources which also enable mitigation of risks such as pests and diseases and climate change. Kenya has to make progress in establishment of Standards and Regulations including adopting international standards for timber grading to ensure consistency and reliability in the quality of wood used in construction and other industries. Kenya has to also improve efficiency in processing of wood, current efficiency is 30% coupled with investments in

Finally, the shift in public Awareness and Industry Collaboration: Educating the public and collaborating with the construction industry, architects, and engineers about the benefits of using sustainable wood timber can increase its demand and adoption. At the onset proposals are for piloting by both the public and private- sector .

1 KEFRI (2021) [Kenya Commercial Tree Improvement Strategy IMPROVEMENT STRATEGY \(KCTIS\)](#) (kefri.org)

2 [FCLP-COP28-Release-Buildings-06122023.pdf](#) (forestclimateleaders.org)

## Introduction

The world population is expected to increase by nearly 2 billion persons in the next 30 years, from the current 8 billion to 9.7 billion people in 2050<sup>3</sup>. A growing population requires more food, more industrial products, more energy and more housing. Cities across Africa are growing at an unprecedented rate, the population of Nairobi, for example is growing at a rate of 4.7%, among the highest growth rates in Africa. The result was a growth of the construction sector by 18% annually for the period 2016 – 2020<sup>4</sup>. Despite Africa's rich forest resources, the continent still relies heavily on importing timber products, with annual

expenditures approximating US\$ 4 billion<sup>5</sup>). A primary factor behind this paradox is the continent's underdeveloped wood processing industry.

Wood has long been integral to traditional building techniques. However, technological progress has spurred the development of engineered wood products capable of substituting fossil-based materials like steel and concrete in large-scale construction, while offering environmentally friendly construction material. Wood-based materials are renewable, recyclable, and if sourced sustainably, have minimal fossil carbon emissions and reduced environmental footprints.

<sup>3</sup> United Nations Population Fund – [Global Issues Population](#)

<sup>4</sup> OECD/UN ECA/AfDB (2022), Africa's Urbanisation Dynamics 2022: The Economic Power of Africa's Cities, West African Studies, OECD Publishing, Paris, <https://doi.org/10.1787/3834ed5b-en>.

<sup>5</sup> African Natural Resources Centre (ANRC). 2021. Wood processing and trade of wood products in Africa. African Development Bank, Abidjan, Côte d'Ivoire. [wood\\_processing\\_and\\_trade\\_in\\_wood\\_products\\_in\\_africa\\_may\\_2021.pdf \(afdb.org\)](#)



Source: © Copyright 2024 Fumba Town by CPS Live Ltd. | Web by InStudio

The potential exists for African countries to process raw logs into primary, secondary, and tertiary wood products, both for local use and for export. This shift from exporting unprocessed raw materials to exporting value-added wood products presents a significant opportunity for economic growth. By enhancing the value chain within the wood processing industry, African countries can create jobs and stimulate wealth creation. This approach not only aligns with sustainable resource management but also boosts local economies by retaining more value from their natural resources.

In Kenya, a supportive policy framework could facilitate increased utilization of sustainably sourced wood as a construction material through engineered wood products, particularly in an era increasingly focused on climate consciousness. This transition from fossil-intensive materials to wood could yield direct and indirect benefits for climate change mitigation, adaptation, and sustainable development as envisioned in the African Leaders Nairobi Declaration on Climate Change and Call to Action, as well as to achieve the targets of the Sustainable Development Goals and The Paris Agreement.

It would also facilitate efforts to implement the bioeconomy in a sustainable manner, which aims to promote the production, utilization, conservation and regeneration of biological resources for a sustainable and circular economy. Furthermore, it would support Kenya's ambition to reach 30% by 2032 in its current National Landscape and

Ecosystem Restoration Programme Strategy, enabling the country's climate action commitments including its long-term low emission development strategy.

This Briefing Paper offers an overview of existing policies and legal frameworks aimed at facilitating the use of sustainable wood as a building material in Green Construction in Kenya. Additionally, it highlights both public and private initiatives supporting sustainable construction in Kenya, drawing examples from other countries worldwide regarding the utilization of sustainable wood in construction. Building upon the situation analysis, the paper identifies challenges and gaps in wood supply chains, the adoption of engineered wood products, and the capacities of both the government and construction businesses to transition to the use of sustainable wood products in the construction sector. Finally, the paper provides recommendations to the Government of Kenya on transitioning to sustainable and green construction using sustainable wood products.



## Situational Analysis

The forest sector plays a key role in socio-economic development of Kenya and contributes to 3.6 % to the country's GDP excluding environmental services. It is also an important source of employment and supply household energy needs. Forestry sector contribution to GDP can be enhanced through promotion of commercial forestry and tree improvement programs that increase the tree productivity per unit area of land.

The forest sector further supports the urban and rural population through the provision of wood fuel and other non-timber forest products and services. The sector has also provided jobs for approximately 18,000 to 50,000 people directly and 300,000 to 600,000 indirectly.

The national per capita wood demand is estimated at 1m<sup>3</sup> per year<sup>6</sup>. With a population estimate of 51million (2019 census), national wood demand was estimated at 51m<sup>3</sup>. Recent study found that Kenya has a wood supply potential of 31.4 million m<sup>3</sup> against a national demand of 51 million m<sup>3</sup> hence a current deficit of 10.3 million m<sup>3</sup>.

As Kenya implements its industrial transformation programs, the forest sector is vital to meet the growing demand for wood, projected to increase from approximately 50 m<sup>3</sup> in 2020 to more about 60 m<sup>3</sup> by 2030. With the current scenario, the deficit of wood is will continue increasing in the country since the forest sector has been constrained by over-reliance on one player (Kenya Forest Service) with conflicting interests as a producer and a regulator as the same time.

<sup>6</sup> [Analysis of Demand and Supply of Wood Products in Kenya | PDF | Reducing Emissions From Deforestation And Forest Degradation | Deforestation \(scribd.com\)](#)

The unexplored potential is however in the private lands and the deficit can be met through commercial forestry.

### Tree Breeding

Tree breeding, a key element of commercial forestry, plays a vital role in providing superior germplasm to enhance tree and forest productivity. This market-driven process is essential to global forest plantation programs. It involves selecting trees with desirable heritable traits, multiplying selected genotypes, inter-mating, and conducting genetic testing. Effective tree breeding requires careful planning, taking into account future demand based on local wood products, market trends, and global developments. The primary aim is to develop high-yielding tree varieties for industrial plantations, stress-resistant types for harsh environments, nitrogen-fixing trees for agroforestry, and varieties suitable for fuelwood or bioenergy.

In Kenya, tree breeding programs have been active since 1936, with varying intensity. These programs have encompassed the introduction of exotic species, domestication of indigenous species, testing of different provenances, and mass selection of superior genotypes. Despite these efforts, the transition to second-generation breeding has been inconsistent, leading to gaps in many programs.

The focus has primarily been on fast-growing exotic timber species like *Cupressus lusitanica*, *Pinus patula*, and *Pinus radiata*, with expansion to lowland pines and other priority species such as *Eucalyptus grandis*, *E. urophylla*, and *Grevillea robusta*. Recent efforts include breeding indigenous species like *Melia volkensii* and *Acacia tortilis* for drought

*With the current scenario, the deficit of wood is will continue increasing in the country since the forest sector has been constrained by over-reliance on one player (Kenya Forest Service) with conflicting interests as a producer and a regulator as the same time*

*Kenya will require high quality germplasm in order to produce the quality of wood that can sustain a mass timber market. There is need to strengthen KEFRI that has the mandate to produce seed and open up opportunities for seed production by private sector. This will stimulate innovation and enhance efficiency in production*

tolerance. However, challenges such as pest and disease issues have led to the discontinuation of certain species, including *P. radiata*.<sup>7</sup>

## Engineered Wood

Engineered Timber Technology entails the process of fixing the strands, particles, fibers or veneers together to form composite wood produces a versatile and durable material used commonly for furniture and in construction for flooring, sheathing, roofing and structural elements. Engineered wood includes plywood, particleboard, fiberboard, Composite Laminated Timber (CLT) among others. Compared to timber, engineered wood is very accurately sized with no warping or twisting; however, when wet the particles can expand. With prefabricated structural elements and panels, quality control and material wastage is in check while delivery of buildings is fast. The properties

of CLT buildings retain many of the advantages of wood (e.g., renewability, biodegradability, and porous structure) while also engendering new properties (e.g., high strength, thermal insulation, optical transparency, and high ionic conductivity) as they do not store heat, have very good insulation properties and the structural integrity is not lost even in situations of fire or great heat

The Engineered Wood Products (EWP) in Kenya are imported as seen in the figure 1 illustrating the International and Regional EWP trade balance in 2018. Before engineered timber can be glued together, it needs to be kiln dried and of the right size and quality. Strengthening is needed for kiln capacity, FSC certification, and forest management methods (and consequently quality and construction compatibility<sup>8</sup>).

<sup>7</sup> [KEFRI GATSBY SUMMARY BREEDING REPORT JM.pdf](#)

<sup>8</sup> East Africa sustainable timber construction Supply and demand study - Arup

### Net trade (Exp - Imp) '000 m<sup>3</sup>, 2018

	Logs	Timber	Plywood	Particleboard	MDF
Tanzania	-36	42	-0.3	-1	-1
China	-60,040	-37,593	7,421	240	-1,131
India	-4,472	-853	-517	-26	-144
UAE	-99	-930	-375	-40	-47
Ethiopia	-2	-129	-7	-4	-2
Kenya	-0.2	-2	-52	-8	-23
Zambia	96	4	-4	-0.5	-9
Rwanda	-0.3	-0.11	-3	-0.3	-0.2
Uganda	11	-11	17	-0.03	7
Malawi	0.2	3	5	3	-2
South Africa	588	13	-50	-6	95

■ Net importer

Source: FAO UNComtrade

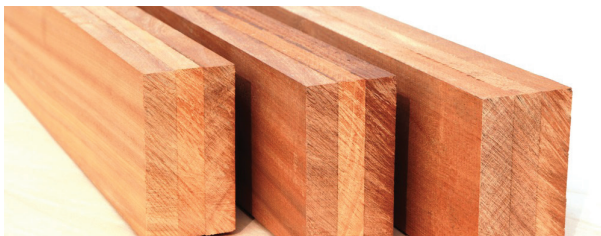
## Sustainable Sourcing of Wood Products

To fill the existing supply-demand gap, businesses source wood locally in Kenya and import from neighboring countries such as Uganda and the Democratic Republic of Congo. However, most of the wood obtained locally is from unsustainable/illegal sources and most times of poor quality. Illegal wood is causing massive destruction of Kenya's forests, has accelerated the effects of climate change and continues to impose stiff competition to businesses that obtain their wood products from legal sources.

Private commercial forestry can play a key role in closing the wood supply gap by offering fast-growing and renewable alternatives to felling natural forests. It can create opportunities for growers of all sizes to generate wealth and secure supply of inputs to secondary industries (such as manufacturing and construction) with high employment, foreign exchange and inclusive economic growth impacts .

To create an enabling business environment for commercial forestry, a range of interventions along the forest value chain need to be instituted including:

- Establishing certified source for quality planting material (germplasm)
- Enhancing extension service for silviculture
- Providing economic incentives for tree growers and wood processors including tax waivers
- Investment in research and innovation for commercial forestry



## Forest certification

There is a growing demand by consumers worldwide to ensure that they are consuming products from certified sources that are not contributing to environmental degradation, climate change or human rights abuse. Forest certification provides assurance and confirms that forests are being managed in a way that preserves biological diversity and benefits the lives of local people and workers, while ensuring they sustain economic viability.

In partnership with Forest Steward Council (FSC), Kenya developed its own Interim National Forest Standards as basis for promoting responsible forest management using the FSC certification system. The standard is applicable to all forest management operations in Kenya seeking certification. This certification will promote commercial forestry by easing regulatory barriers that have constrained the forest sector.

Meet the requirements of investors: Certification confirms that forests are being managed in a way that preserves biological diversity and benefits the lives of local people and workers, while ensuring they sustain economic viability. FSC certification confirms that forests are being managed in a way that preserves biological diversity and benefits the lives of local people and workers, while ensuring they sustain economic viability.

## Timber Grading

Timber grading plays a crucial role in the construction industry in Kenya, serving as a key quality control measure to ensure the structural integrity and safety of wood-based construction projects. This process involves evaluating and categorizing timber based on various characteristics like strength, density, and appearance, which are critical determinants of its suitability for different construction purposes. Adoption of timber grading will be critical since it helps in standardizing the

quality, ensuring that only appropriately graded timber is used for specific construction needs. It enhances consumer confidence in wood products, supports compliance with national building codes, and contributes to the overall reliability and durability of wooden structures. Furthermore, graded timber often fetches a higher market value, incentivizing sustainable forestry practices and supporting the growth of the local timber industry. By ensuring that only high-quality, graded timber is used in construction, Kenya can maintain high safety standards in its buildings and infrastructure, while also promoting the sustainable use of this valuable natural resource.

## Policy Analysis

Kenya has a robust policy and regulatory framework that can be leveraged to stimulate the use of wood for construction see table xx. There are however instances observed where the policies are incoherent and unpredictable serving as a deterrent to investments in the sector. For instance, buildings constructed from wood are considered non-permanent. This has multiple implications in other areas including public perception but also financing opportunities and high-risk classification by insurance companies. Policy coherence is fundamental to enable the uptake of sustainable wood for construction.

There is need for a TIVET and Education policy to support skills development from timber saw milling for saw milling operators, to timber design and wood work technologies and skills would need to be supported<sup>9</sup>.

Throughout the engineered wood value chain, it has been observed that there exist some skills deficiencies. Consequently, these skills deficiencies have led to inefficiencies of up to 70% through wood wastage. Upskilling from

the current production base of furniture, doors, windows to structural timber projects would be essential to meet the needs of a growing green construction industry, which requires specialists skills and tools. This would require additional training institutions to build capacity beyond the 15,000 registered carpenters<sup>10</sup>.

Currently the Kenya Forestry Institute (KEFRI) has the sole mandate on the production of quality seed and germplasm. This constrains the timely supply for sustainable forestry seed. A delegation of this function through certification of private sector owned laboratories to produce seeds alongside KEFRI would go a long way in meeting the demand for germplasm seedlings to meet the demands of the green construction industry.

Resolution of challenges around access to climate and green finance to enable the financing of the green construction sector given the climate core benefits that can be accrued from the use of timber. While Kenya has a vibrant ecosystem to facilitate private climate finance, challenges remain. Some of the options and areas identified by partners to catalyze climate finance include: building capacity to implement climate programs at the local level, expanding and exploring the usage of green bonds, risk mitigation instruments such as guarantees and equity fund investments.

Given the current deficit position that Kenya is currently going through in terms of engineered wood, there would be need for allowance of imports to meet the expanded need for this product. As Kenya grows the trees to support green construction industry reliance on imports within the auspices of the African Continental Free Trade Agreement and other regional trade arrangements would be critical. A flexible arrangement would have to be entered into to support the short and medium-term interventions, including importation of wood in the interim.

<sup>9</sup> Cheboiwo, J. K. (2016). Private forestry sector in Kenya: status and potential. AFF Report. African Forest Forum, Nairobi.

<sup>10</sup> East Africa sustainable timber construction Supply and demand study - Arup





*Sweden derived much of its industrialization and economic growth from forests and forest products, while at the same time doubling its forest cover to 70 percent of the country's surface.*



## COUNTRY EXAMPLES

Internationally, numerous governments have implemented policies aimed at enhancing the sustainability of their construction sectors, including sustainably sourced and produced wood materials. At the same time, it requires not only wood-encouraged construction policies but also forest registration and management systems, as well as timber traceability systems at the national level, to comply with tightening international standards and requirements.

This section showcases three (3) examples of initiatives that have shifted the momentum towards the adoption of sustainably sourced wood products in the construction sector. These examples offer valuable insights that can be adapted and applied in Kenya's context.

### Sweden

Sweden's experience demonstrates that commercial forestry and the expansion of forest cover can go hand in hand. During the 20th century, Sweden derived much of its industrialization and economic growth from forests and forest products, while at the same time doubling its forest cover to 70 percent of the country's surface. The demand for forest products, efficiency measures and value-addition technologies, together with policies for replanting, have made this possible. In the 21st century the introduction of mass timber technologies has catalyzed the transition to renewable construction materials.



In 2021, Sweden unveiled a 20-storey cultural center, music hall and hotel, all made in mass timber, with the carbon emissions generated from construction totaling to less than the amount stored in its structure. Sweden also developing the world's<sup>11</sup> largest woodcity in Sickla. The 60-acre Wood City project, will accommodate 2,000 residents and providing 7,000 office spaces, is set to be located This area, historically an industrial zone, has undergone significant transformation into an office and commercial district.

### Zanzibar – The world's largest timber building

CPS Zanzibar, a property development company, is one of the first to realise the potential of this opportunity in Africa, developing Fumba Town and The Burj Zanzibar. The first is a mixed-price 5,000-unit housing development, while The Burj is set to be the world's tallest timber building. Together, they make up an innovative eco-town, providing a mix of affordable and luxury housing, and demonstrating the speed and quality of timber construction. However, the project has had no access to locally produced timber. **All the timber used to build Fumba Town was imported from South Africa and Europe, adding roughly 25 percent to the building cost.** In fact, the investment was only enabled by a combination of public-private partnership (PPP) lease agreements and a Special Economic Zone, allowing the development to still run at a competitive price. While the impact of strong PPPs is transformative, for mass timber to reach its full potential for the region, the development of domestic timber production is vital.

<sup>11</sup> Stockholm Wood City to be the largest wooden city in the world | World Economic Forum ([weforum.org](https://www.weforum.org))



*“Burj Zanzibar” will be the world’s tallest timber building. Set to rise 96 meters tall to accommodate 266 residences and recreational and conferencing facilities. The 28-story tower will be located in Fumba Town, a region of Zanzibar 20 km away from the UNESCO-protected historic Stone Town, a hist*

### **Guatemala – establishing a timber traceability system for sustainable wood tracing.**

The importance of sustainable forest management and trade by assessing accurate estimates of log volumes in transportation was recognized by Guatemala’s National Forest Institute (Instituto Nacional de Bosques – INAB). INAB is working to improve policy frameworks, statistics, and timber-tracking systems to encourage legal and sustainable forest value chains and advance sustainable forest management. As part of this effort, there is a priority need for the development of faster and more accurate methods for assessing the volume of logs and other wood products in transit.

In a response the Electronic Information System for Forest Enterprises (*Sistema Electrónico de Información de Empresas Forestales* [SEINEF]) was launched in 2014. SEINEF is a semi-electronic timber sector monitoring system, with volume-tracking and transaction-verification functionalities. This helps the private sector operate more effectively by having increased access to market information, while also helping guide verification activities or road checks.<sup>12</sup>

The SEINEF developed based on the Guatemalan Forest Information System (*Sistema de Información Forestal de Guatemala*), and both were supported by the International Tropical Timber Organization (ITTO) and the United States Agency for International Development (USAID). Currently the maintenance of the SEINEF is partly funded through issuing wood transport permits. Since most traceability systems are established to support the collection of fees and royalties, financing directly from these inputs contributes to their validation and acceptance, as observed in Guatemala.

Additionally, INAB developed smartphone software, called CUBIFOR (*Cubicación de Productos Forestales* or “Scaling of Forest Products”), under an ITTO funded project. CUBIFOR simplifies this process of conventional log volume measurement requiring only a photograph of the log stack and estimates of its average width and length. The app automatically recognizes each log face, calculates the average diameter and stacking factor, and generates a detailed report of scaled volumes, downloadable in Excel and PDF formats. It allows for the scaling of logs into various products such as sawnwood, rectangular boards, round billets, sawdust, chips, fuelwood, wood pieces, and charcoal.<sup>13</sup>

<sup>12</sup> FAO and WRI. 2022. Timber traceability – A management tool for governments. Case studies from Latin America. Rome.

<sup>13</sup> [https://www.itto.int/news/2023/06/09/itto\\_project\\_releases\\_app\\_for\\_calculating\\_timber\\_volumes\\_in\\_products\\_using\\_smartphones/?from=sdg](https://www.itto.int/news/2023/06/09/itto_project_releases_app_for_calculating_timber_volumes_in_products_using_smartphones/?from=sdg)

# Recommendations

## 1. Enforce Forest Regulations:

- Establish and enforce robust forestry regulations to ensure sustainable management and harvesting of wood resources. This should include strict guidelines on logging practices, reforestation, and the protection of biodiversity.
- Develop a certification system for sustainably sourced wood, ensuring that products used in construction come from responsibly managed forests. This will not only protect the environment but also create market incentives for sustainable practices.

## 2. Investment in Local Communities:

- Promote initiatives that invest directly in local communities for sustainable forestry management. This can include funding for community-led forest management programs, which empower local populations to manage their natural resources sustainably.
- Implement training and education programs focused on sustainable forestry and green construction practices. These programs should be designed to enhance local skill sets and create job opportunities within the community, thereby contributing to economic development.

## 3. Fostering Public-Private Partnerships:

- Encourage collaborations between Kenyan authorities, international organizations, and private sector stakeholders to drive innovation and investment in sustainable wood production and green construction technologies.
- These partnerships could involve knowledge exchange programs, joint research and development initiatives, and financial incentives for companies that adopt sustainable practices.

## 4. Incentives for Using Sustainable Wood in Construction:

- Introduce tax incentives or subsidies for construction projects that use sustainable wood, making it a more attractive option for developers and builders.
- Encourage the adoption of green building standards that prioritize the use of sustainable materials, including wood, in construction projects.

## 5. Enhancing Market Access and Consumer Awareness:

- Develop marketing campaigns and educational initiatives to raise awareness among consumers and industry stakeholders about the benefits of using sustainable wood in construction.
- Facilitate access to international markets for sustainably sourced wood products from Kenya, helping to expand the market for these products and incentivize sustainable practices.

## 6. Monitoring and Evaluation Mechanisms:

- Establish robust monitoring and evaluation mechanisms to track the effectiveness of sustainable forestry practices and the impact of policies on forest conservation and community development.
- Regularly review and update policies and practices based on these evaluations to ensure continuous improvement and adaptation to changing environmental and economic conditions.



## References

1. **Kenya Forestry Research Institute (KEFRI). (2021).** Kenya Commercial Tree Improvement Strategy (KCTIS). <https://www.kefri.org/>
2. **Forest Climate Leaders Partnership (FCLP). (2024, December 6).** FCLP-COP28-Release-Buildings-06122023.pdf <https://forestclimateleaders.org/>
3. **United Nations Population Fund (UNFPA).** Global Issues: Population. <https://www.unfpa.org/node/9115>
4. **Organisation for Economic Co-operation and Development (OECD), United Nations Economic Commission for Africa (UN ECA), & African Development Bank (AfDB). (2022).** Africa's Urbanisation Dynamics 2022: The Economic Power of Africa's Cities. [https://www.oecd-ilibrary.org/development/africa-s-urbanisation-dynamics-2022\\_3834ed5b-en](https://www.oecd-ilibrary.org/development/africa-s-urbanisation-dynamics-2022_3834ed5b-en)
5. **African Natural Resources Centre (ANRC). (2021).** Wood processing and trade of wood products in Africa. African Development Bank. [https://www.afdb.org/sites/default/files/documents/publications/wood\\_processing\\_and\\_trade\\_in\\_wood\\_products\\_in\\_africa\\_may\\_2021.pdf](https://www.afdb.org/sites/default/files/documents/publications/wood_processing_and_trade_in_wood_products_in_africa_may_2021.pdf)
6. **Government of Kenya (2013).** Analysis of Demand and Supply of Wood Products in Kenya. <https://www.scribd.com/document/120410991/Case-study-using-demand-and-supply>
7. **Kenya Forestry Research Institute (2021).** KEFRI GATSBY SUMMARY BREEDING REPORT JM.pdf
8. **Cheboiwo, J. K. (2016).** Private forestry sector in Kenya: status and potential. AFF Report. African Forest Forum, Nairobi.
9. **Arup. (n.d.).** East Africa Sustainable Timber Construction: Supply and Demand Study. (report)

# About UNDP Discussion Papers

Discussion Paper 1. [Addressing Inequality: Universal Access to Digital Financial Services for Equitable Growth | United Nations Development Programme \(undp.org\)](#)

Kenya has made significant progress towards the realization of human development. Poverty rates at the national poverty line have declined from above 50 percent in the 1990s to below 40 percent in the 2020s, with significant improvement in welfare observed in both urban and rural areas. Innovative digital financial services have played an important role in improving welfare since their introduction in the mid-2000s. In particular, financial services offered through mobile money have had a transformative impact in increasing access to finance to previously excluded or underserved individuals, enabling immediate transfers and payments of money over long distances, increasing access to credit, and providing a secure savings instrument. This success has inspired the uptake of mobile money in many countries across the world. Today, there are over 1.6 billion registered mobile money accounts globally, carrying out over US\$ 1.26 trillion in transactions annually.



**For enquiries, contact:**

United Nations Development Programme  
Kenya UN Office in Nairobi (UNON) UN Gigiri Complex  
Block N, LEVEL 3  
P.O. Box 30218-00100, Nairobi, Kenya.  
Telephone: +254-20-725357  
Email: [registry.ke@undp.org](mailto:registry.ke@undp.org)  
[www.ke.undp.org](http://www.ke.undp.org)  
Twitter: @UNDPKenya  
Facebook: @UNDPinKenya  
Instagram: @undpkenya.

