

# THE EXTENT OF AND ACTORS INVOLVED IN ILLEGAL LOGGING IN TANZANIA

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## SUBMITTED BY

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Front cover photo:  
Timber logs, possibly *Sterculia appendiculata*, illegally harvested from the Ruhio Forest Reserve seized by forest officers.  
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# 1. EXECUTIVE SUMMARY

## BACKGROUND

**Tanzania boasts significant forest resources, covering 48.1 million ha.** Deforestation, on the other hand, is a serious problem that is threatening forest resources. According to URT (2017), between 2002 and 2013, the country lost 469,420 ha of forest annually. The statistics from GFW show that between 2001 and 2023, the country lost 3,250,000 ha of tree cover, equivalent to a 12% decrease since 2000, and 1.13 Gt of CO<sub>2</sub>e emissions. Agriculture, specifically subsistence farming, is the main driver of deforestation in Tanzania. Other drivers include logging for timber and fuelwood, livestock grazing, and wildfires. Reports suggest that most of the timber extraction is done illegally. Despite the attempts to halt illegal logging and trade, the issue continues to persist because of a combination of many factors, including governance issues, such as inadequate institutional capacity leading to weak law enforcement and corruption, lack of effective forest monitoring systems, and high demand for timber both domestically and internationally.

This study was therefore conducted with the following objectives in mind:



TO ASSESS THE **EXTENT** OF ILLEGAL LOGGING IN TANZANIA MAINLAND,



TO IDENTIFY ILLEGAL LOGGING **HOTSPOTS**,



TO IDENTIFY **KEY ACTORS** INVOLVED IN ILLEGAL LOGGING AND **MARKETS** FOR ILLEGAL TIMBER.

## APPROACH

**A combination of approaches was used to achieve the expected outputs. This included;**

- » A review of references, articles, websites, and reports on illegal logging in Tanzania; its extent, actors, and markets
- » Consultations with key stakeholders including the Tanzania Forest Service Agency (TFS), Traffic International, and individuals
- » Interviews with key informants from Rufiji and Kisarawe districts. The informants included TFS district and zone officials, District Forest Conservators, and District Environmental Officers.
- » Remote Sensing and GIS techniques to identify the extent of deforestation and hotspots
- » Analysis of the GFW data to create the most recent (2023) deforestation statistics and maps at both region and district levels.

## KEY FINDINGS

**i) According to recent statistics (2021 – 2023) from GFW,**

- » a. Between 2021 and 2023, Tanzania lost 549,130 ha of forest cover, equivalent to 183,043 ha annually or a 0.8% annual rate of forest loss.
- » b. Pwani, Ruvuma, Morogoro, and Lindi regions experienced the highest deforestation rates. The findings suggest that these regions are the major hotspots for deforestation in Tanzania.
- » Rufiji is the district with the most forest loss in the country.

**ii) The findings from the literature review and discussions with different stakeholders revealed that timber traders, government officials, and local communities are key actors in illegal logging in Tanzania**

**iii) India, China and, to a lesser extent, Kenya and the United Arab Emirates are the major importers of timber products from Tanzania.**

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## I EXTEND MY GRATITUDE

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## ACRONYMS AND ABBREVIATIONS

<b>DRC</b>	Democratic Republic of the Congo
<b>FAO</b>	United Nations Food and Agriculture Organization
<b>GFW</b>	Global Forest Watch
<b>GIS</b>	Geographic Information System
<b>JET</b>	Journalists Environmental Association of Tanzania
<b>Kha</b>	1,000 ha
<b>Mha</b>	1,000,000 ha
<b>MOU</b>	Memorandum of Understandings
<b>MTNR</b>	Ministry of Tourism and Natural Resources
<b>NAFORMA</b>	National Forest Resources Monitoring and Assessment
<b>NCMC</b>	Tanzania National Carbon Monitoring Centre
<b>NDVI</b>	Vegetation Index
<b>PGIS</b>	Participatory GIS
<b>REDD+</b>	Reducing Emissions from Deforestation and Forest Degradation
<b>SAR</b>	Synthetic Aperture Radar
<b>TFS</b>	Tanzania Forest Service Agency
<b>TZS</b>	Tanzanian Shilling
<b>URT</b>	United Republic of Tanzania
<b>WMA</b>	Wildlife Management Areas

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# 1. INTRODUCTION

## 1.1 BACKGROUND

The total forested land in Mainland Tanzania is 48.1 million ha, equivalent to 54.4% of the total land area of 88.3 million ha (URT, 2017). Deforestation, on the other hand, is a serious problem that is threatening the nation's forest resources. The results from the Forest Reference Emission Level (URT, 2017) showed that, between 2002 and 2013, the country lost 469,420 ha of forest annually. The statistics from GFW show that,

from 2001 to 2023, the country lost 3,250,000 ha of tree cover, equivalent to a 12% decrease since 2000, and 1.13 Gt of CO<sub>2</sub>e emissions. A study on the economic costs and benefits of deforestation in Tanzania estimated that deforestation could cost the national economy some 5.6 trillion Tanzanian shillings (US\$3.5 billion) between 2013 and 2033 (Finnigan Simbeye, 2015; <https://www.scidev.net/sub-saharan-africa/news/redd-alert-deforestation-tanzania-economy/>).

**Agriculture, specifically subsistence farming, is the main driver of deforestation in Tanzania** (Doggart et. al, 2019; Emmanuel F. Nzunda and Amri S. Yusuph, 2019). Other frequently reported drivers include livestock grazing, illegal logging, charcoal production, and wildfires (URT, 2021, FAO, 2020b&a, Mikkolainen, 2019). Most deforestation events involve multiple drivers that frequently co-occur in areas of deforestation (Doggart et. al, 2019).

Various literature indicates that a large portion of timber extraction in the country is illegal. This activity contributes to deforestation and deprives the government of revenue from the legal timber trade. For example, between 2011 and 2012, the country lost an estimated 23 billion Tanzanian shillings (US\$13.5 million) in sales of forest products to illegal logging (<https://www.weforum.org/agenda/2015/01/how-to-stop-illegal-logging-in-tanzania/>).

In an effort to halt the illegal logging and timber trade, especially across its borders, the Government of Tanzania has signed a Memorandum of Understanding (MOU) with neighbouring nations, including Mozambique, Zambia, Kenya, and Uganda. Tanzania also forms part of several declarations and initiatives to reduce the cross-border illegal timber trade. The Zanzibar Declaration on Illegal Trade in Timber and Forest Products (Miza Khamis, 2017), the East Africa Initiative on Illegal Timber Trade, and REDD are all examples of such declarations and initiatives. Despite all these efforts, as highlighted in several studies, the illegal logging and timber trade continues to be a problem because of a combination of factors, including weak enforcement of forest laws, governance issues, lack of effective forest monitoring systems, and high demand for timber both domestically and internationally (Härkönen et.al, 2018 and Kilonzo, 2023).

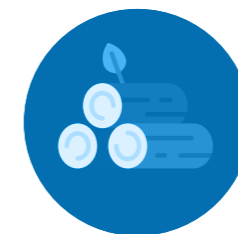
The purpose of this study was to evaluate the extent of illegal logging in Tanzania Mainland, pinpoint hotspots for illegal logging, and identify key players in the industry and markets for illegal timber.

## 1.2 OBJECTIVES

Generally, this study aimed to assess the extent of the problem of illegal logging and the actors involved in illegal logging in Tanzania. Specifically, the study intended to:

- i. Assess the extent of illegal logging
- ii. Identify illegal logging hotspots
- iii. Identify key actors involved in illegal logging and markets for illegal timber

EXTENSION  
of illegal logging



IDENTIFICATION  
of illegal hotspots



IDENTIFICATION  
of key factors



## 2. METHODOLOGY

TO ACHIEVE THE EXPECTED OUTPUTS FOR THE ASSIGNMENT, THE CONSULTANT USED A COMBINATION OF APPROACHES.

### This included:

- » A review of references, articles, websites, and reports on illegal logging in Tanzania regarding the extent of the problem, actors, and markets for illegal forest products
- » Consultations with stakeholders from the TFS, TRAFFIC, and individuals
- » Interviews with key informants from Rufiji and Kisarawe districts. The informants included TFS district and zone officials, District Forest Conservators, and District Environmental Officers
- » Analysis of remotely-sensed images to identify the extent of deforestation at the regional level
- » Analysis of GFW data for recent forest cover loss at the regional level and district level and hotspots in Tanzania Mainland



### 2.1 ASSESSMENT OF THE EXTENT OF ILLEGAL LOGGING AND IDENTIFICATION OF HOTSPOTS

Estimating illegal logging through remote sensing is difficult, and current methods rely mostly on canopy disturbance as an indicator (Ana Gebert, 2019). It is even more difficult to develop a method to distinguish illegal from legal logging. Both legal and illegal logging, are relatively low in volume and take place in the understorey of the forest, resulting in low detection even with high-resolution imagery, as the canopy remains undisturbed.

This study assessed the extent of deforestation in Tanzania Mainland as a proxy for illegal logging activities in the country. This is based on the fact that illegal logging is one of the drivers of deforestation in the country, and thus it is likely that illegal logging activities are taking place in deforestation-affected areas.

The deforestation maps and statistics for the period 2016 to 2020 for the entire Tanzania Mainland were generated using the land cover and land cover change maps developed by Space Intelligence Ltd in collaboration with the Tanzania National Carbon Monitoring Centre (NCCMC). This enabled major hotspots of deforestation in Tanzania to be identified for that period.

In order to produce wall-to-wall high-resolution maps of land cover and change, the consultant used Space Intelligence’s established methodology. The approach combines cloud-free satellite data mosaics using optical data from Landsat-8 (2016, 2018, 2020) and Sentinel-2 (2020), as well as Synthetic Aperture Radar (SAR) data from Sentinel-1 (2020) and data from ALOS-2/PALSAR-2 (2016, 2018, 2020). The Vegetation Index (NDVI) and spectral indices were calculated from Sentinel-2 and Landsat-8 data. Landsat-5 and ALOS-2/PALSAR-2 generated 2010 land cover (Space Intelligence, 2022). The resulting map has a spatial resolution of 25 m.

GFW data was used to create the most recent (2023) deforestation statistics and maps at both region and district levels. The estimate of rate of change was computed using the following formulae:

$$1. \text{ Annual rate of change} = \frac{\text{Area}_{i \text{ year } x} - \text{Area}_{i \text{ year } x+1}}{t_{\text{years}}}$$

$$2. \% \text{ Change}_{\text{year } x} = \frac{\text{Area}_{i \text{ year } x} - \text{Area}_{i \text{ year } x+1}}{\sum_{i=1}^n \text{Area}_{i \text{ year } x}} \times 100$$

$$3. \% \text{ Annual rate of change} = \frac{\text{Area}_{i \text{ year } x} - \text{Area}_{i \text{ year } x+1}}{\sum_{i=1}^n \text{Area}_{i \text{ year } x} \times t_{\text{years}}} \times 100$$

Where:

**Area<sub>i year x</sub>** = area of cover i at the first date

**Area<sub>i year x+1</sub>** = area of cover i at the second

$\sum_{i=1}^n \text{Area}_{i \text{ year } x}$  = the total cover area at the first date and

**t<sub>years</sub>** = period between the first and second acquisition dates.

Based on the statistics of forest loss and the accessibility of key informants, the districts of Rufiji and Kisarawe, both from Pwani region, were selected for further analysis and interviews related to forest loss. Pwani region and Rufiji district have had the highest forest cover loss in recent years.



## 2.2 IDENTIFICATION OF KEY ACTORS IN ILLEGAL LOGGING AND MARKETS FOR ILLEGAL TIMBER

Key actors involved in illegal logging and markets for forest products were identified through a review of different literature and websites, consultations with TFS staff, and the use of secondary data provided by TFS on illegal timber logs confiscated at various checkpoints located throughout the country and Dar Es Salaam Port. In addition, discussions with key informants from Rufiji and Kisarawe districts provided some insight on the people involved in the illegal timber trade.



# 3. RESULTS & MAIN FINDINGS

## 3.1 EXTENT OF ILLEGAL LOGGING AND HOTSPOTS AT REGIONAL LEVEL

The analysis of temporal satellite images between 2016 and 2020 (Figure 1) showed that illegal timber logging in Tanzania is prevalent in several hotspots. These hotspots are characterized by high rates of deforestation and illegal activities that include the felling, transportation, and sale of timber without proper permits.

Tanzania lost 1.51 Mha of forest cover between 2016 and 2020, or 377,000 ha annually. According to Table 3, the top 5 regions accounting for 45% of the total loss of forest cover were Ruvuma, Lindi, Tabora, Singida, and Morogoro (Figure 2 & Table 1).

## FOREST LOSS & EXTENT MAP

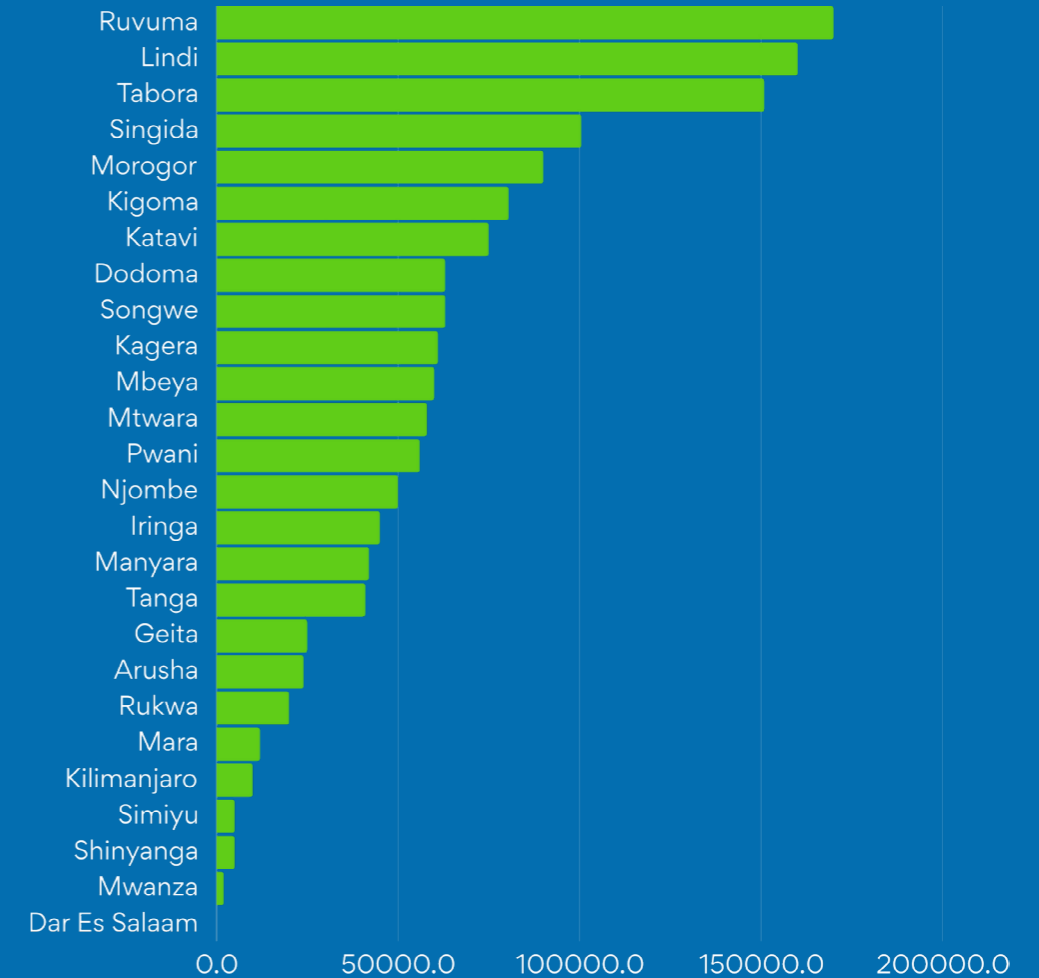


**FIGURE 1**  
Forest loss and extent map for Tanzania Mainland between 2016 and 2020

- STABLE FOREST
- DEFORESTATION
- REGROWTH
- STABLE NON-FOREST



## DEFORESTATION BETWEEN 2016 - 2020 (HA)



**FIGURE 2**  
Forest loss in different regions of Tanzania Mainland between 2016 and 2020

RANK	REGION	FOREST LOSS (HA)
1	RUVUMA	172,924
2	PWANI	161,115
3	LINDI	157,305
4	MOROGORO	102,744
5	KATAVI	92,511
<b>TOTAL</b>		<b>686,599</b>

**TABLE 1**  
The top five regions accounting for 45% of forest loss between 2016 and 2020

On the other hand, the analysis of GFW data from 2021 to 2023 showed that Tanzania lost 549,130 ha of forest cover, equivalent to 183,043 ha loss annually or a 0.8% annual rate of change. In addition, the analysis showed that Pwani, Ruvuma, Morogoro, Lindi, and Mbeya regions experienced the highest deforestation rates over these years (Figure 3).



# TC LOSS (HA)



**FIGURE 3**  
Forest loss in different regions of Tanzania Mainland from 2021 to 2023  
(Source: GFW)

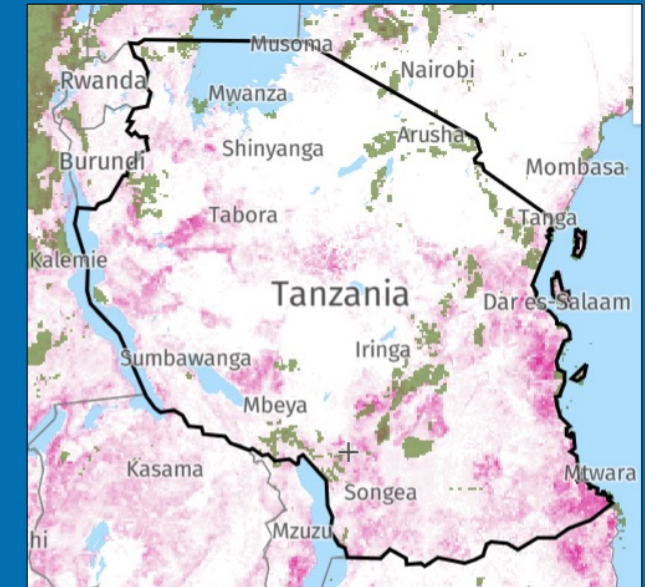
In 2023, Tanzania lost 229,000 ha of natural forest, equivalent to 89.9 Mt of CO<sub>2</sub> emissions (Figure 4). (GFW, <https://www.globalforestwatch.org/dashboards/country/TZA/>).

In 2023, the top 5 regions accounting for 53% of the total loss of forest cover were Ruvuma, Pwani, Lindi, Morogoro, and Katavi (Table 2).

**TABLE 2**  
The top five regions accounting for 53% of the total forest loss in 2023

RANK	REGION	FOREST LOSS (HA)
1	RUVUMA	31,032
2	PWANI	30,409
3	LINDI	22,373
4	MOROGORO	20,774
5	KATAVI	17,035

**FIGURE 4**  
2023 forest loss map for Tanzania Mainland (Source: GFW)



**TOTAL 121,623**

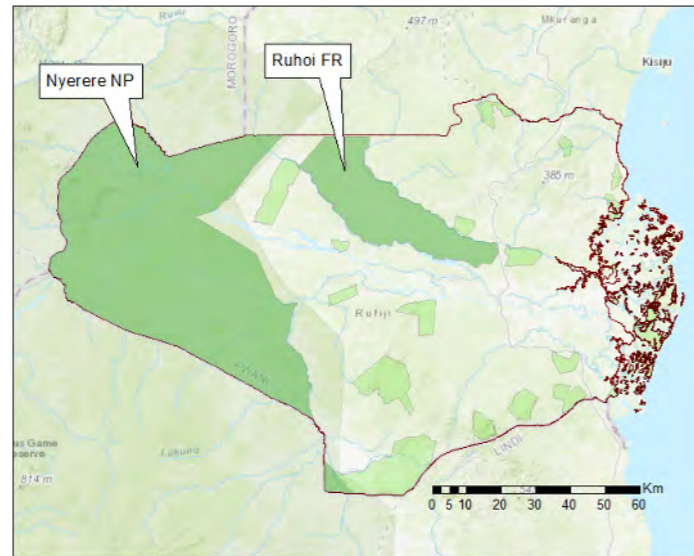
The results from the analysis of the rate of forest loss over the two time periods, i.e. 2016–2020 and 2021–2023, revealed a **declining trend, falling from 377,000 ha to 183,043 ha**. This may be explained by a reduction in the amount of forest cover over the years, which would leave fewer trees available for harvest. Moreover, the disparities in the mapping methodologies and scale by GFW and Space Intelligence may account for the observations.

GFW products are created at a global scale, mostly utilizing optical data (Landsat images), while the Space Intelligence product was produced at a national scale, using a combination of optical and radar data. Nevertheless, the 2016 – 2020 forest loss was still higher than that for 2021 – 2023 when computed using GFW data i.e. 188,670 ha (half of the Space Intelligence figure) compared to 183,043 ha, confirming the decline in forest loss between the two time-frames.

# 3. RESULTS & MAIN FINDINGS

## 3.2 EXTENT OF ILLEGAL LOGGING AND HOTSPOTS AT DISTRICT LEVEL

The GFW portal offers long-term statistics (2001-2023) on the extent of forest loss in every district of Tanzania. The districts of Rufiji and Kisarawe were chosen for additional forest loss analysis and interviews based on the forest loss statistics and accessibility of key informants. While it was easier to obtain key informants in Kisarawe district, Rufiji district has had the highest forest cover loss in recent years (Figure 6).



**FIGURE 5**  
Location of Nyerere NP and Ruhoi FR in Kisarawe district

**FIGURE 7**  
Agricultural encroachment in Ruhoi Forest Reserve



**FIGURE 6**  
Illegal forest harvesting in Ruhoi Forest Reserve

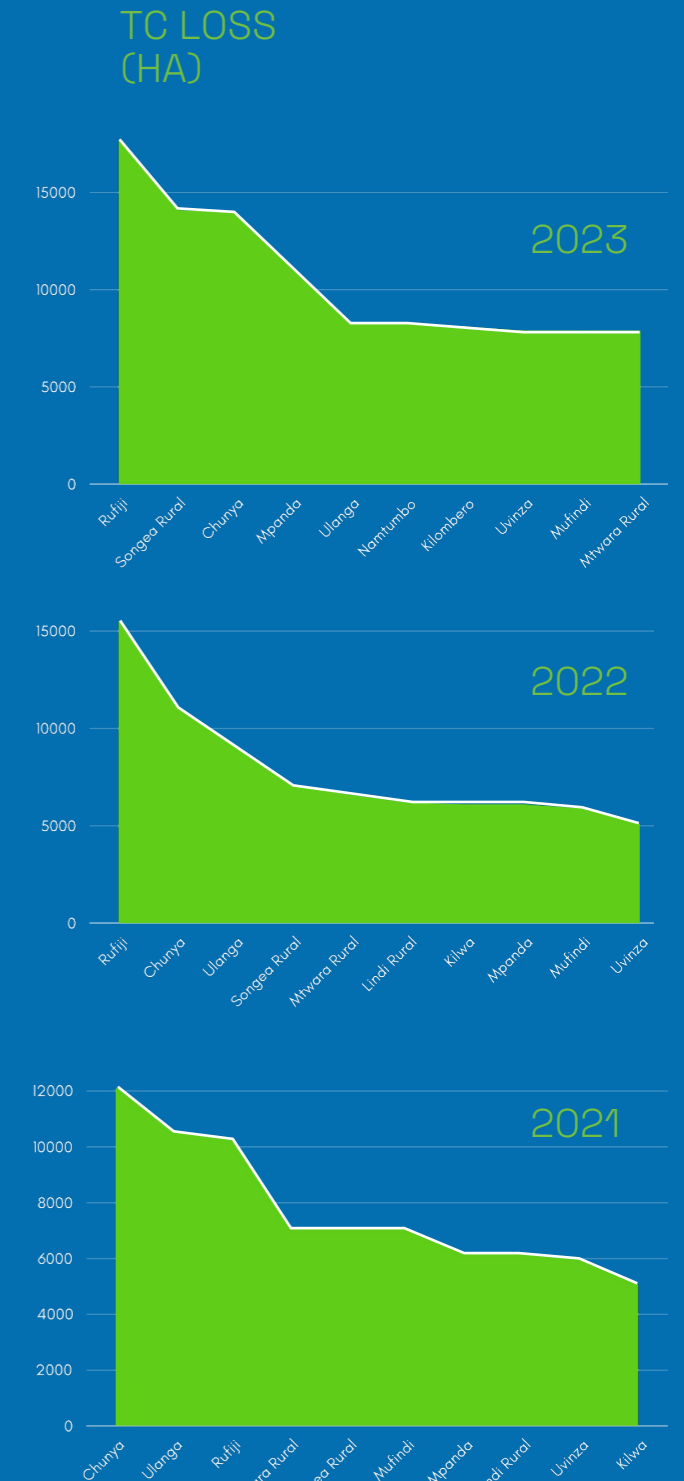


## RUFIJI DISTRICT

Rufiji is one of the six districts of the Pwani region of Tanzania. The forests in Rufiji district, which comprise woodland, coastal forest, and mangroves in the tidal forest in the Delta, are home to a vast range of flora and fauna. In addition to serving the local communities by providing a range of forest products such as fruits, medicine, logs, fuelwood, honey and beeswax, they also serve an environmental role by mitigating climate change, particularly by acting as a carbon sink and conserving soil and water. It should also be noted that the forests contribute to the district's annual budget. The district is covered by some 6,258 km<sup>2</sup> of the Nyerere National Park/Selous Game Reserve (Figure 5), 19 forest reserves, and Wildlife Management Areas (WMA), namely Ngarambe/Tapika. Over the last decade, the forests in Rufiji district have come under increasing pressure from unsustainable human activities, including illegal timber harvesting, shifting cultivation (slash and burn) farming systems, pole cutting, and forest fires.

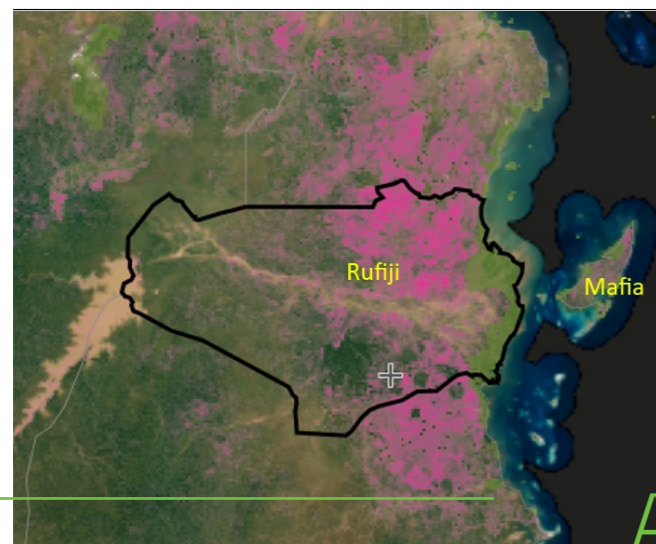
The commercial demand for timber and charcoal is the main factor explaining the situation because of its relative proximity to Dar Es Salaam. Due to insufficient financial and human resources, illegal forest harvesting has spread to the village and TFS forest reserves. Mangrove Forest Reserve and Ruhoi Forest Reserve were the forest reserves with severe encroachment. (<https://pwani.go.tz/economic-activity/utalii>) (Figures 6 and 7)..

According to GFW, Rufiji district has been one of the country's top three most deforested districts over the past three years (Figure 8).



**FIGURE 8**  
The top ten districts with the highest forest loss in 2021, 2022, and 2023 (Source: GFW)

FIGURE 9  
2010-2023 forest loss and extent map for Rufiji district (Source: GFW)



In 2010, over 51% (695,000 ha) of Rufiji district was covered by forest. It lost 17,700 ha of tree cover in 2023, which is equivalent to 6.47 Mt of CO<sub>2</sub> emissions (GFW, <https://www.globalforestwatch.org/dashboards/country/TZA/>).

- PRIMARY FORESTS
- TREE COVER LOSS

ACCORDING TO DISTRICT ENVIRONMENTAL OFFICERS AND TFS OFFICIALS, THE TREE SPECIES THAT ARE MOSTLY ILLEGALLY HARVESTED INCLUDE:

- » *Azelia quanzensis* (for timber)
- » *Diospyros consularia* (Mkuruti) (for medicines and fuelwood)
- » *Dalbergia melanoxylon* (Mpingo) (for carvings, fuelwood and timber)
- » *Milicia excels* (Mvule) (for timber)
- » *Pterocarpus angolensis* (Mninga) (for timber)
- » *Ochna densicoma* (Msekeseke) (for medicines and fuelwood)
- » *Brachystegia spiciformis* (Mtondoro) (for timber)
- » *Mimusops schliebenii* (Mgama) (for medicines and, fuelwood)

## KISARAWA DISTRICT

Kisarawe district is one of the districts in the Pwani region. It is located 25 km from the outskirts of Dar Es Salaam City, towards the north-east. The district is rich in diverse and abundant natural resources such as miombo and savannah. Of particular significance is the Pugu/Kazimzumbwi Nature Forest Reserve (NR), with a total area of 8,965 ha, and part of the Selous Game Reserve (Figure 8). The Pugu/Kazimzumbwi Nature Forest Reserve comprises part of what is regarded to be one of the oldest forests in the world. It is one of the 34 worldwide ecological hotspots, home to a wide variety of endemic species of flora and fauna. The reserve enjoys more protection from unsustainable human activities and provides opportunities for exploring nature-based solutions encompassing the tourism potential of the area.

Masanganya, Chakenge, and Kisanga forest reserves are among the other forest reserves in the district.

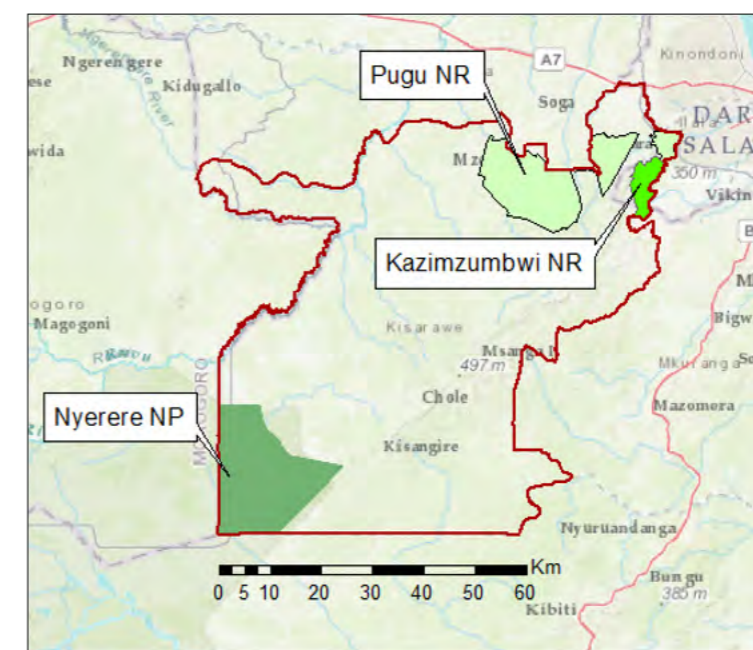


FIGURE 10  
Location of Nyerere NP, Pugu NR, and Kazimzumbwi NR in Kisarawe district

Despite their high biodiversity with unique flora and fauna and the fact that they provide a significant portion of the district's resources, these forests have suffered from illegal harvesting of trees for wood, driven by market availability in Dar Es Salaam and encroachment due to land demand for agricultural activities. Kisanga, and Pugu/Kazimzumbwi Forest Reserves have suffered severe encroachment (<https://pwani.go.tz/economic-activity/utalii>).



**FIGURE 11**  
Illegal forest harvesting in Kisanga Forest Reserve

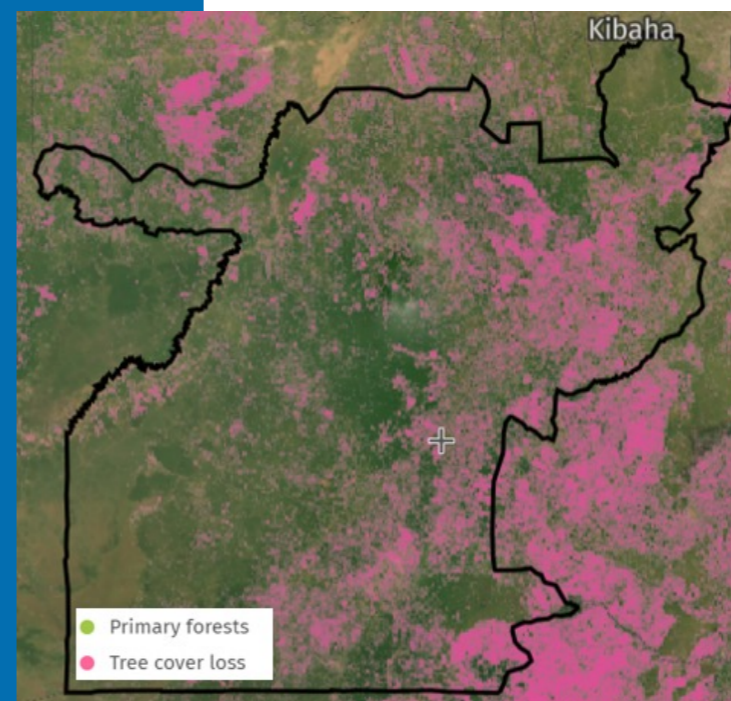
According to the District Forest Conservator, of the three forms of forest management, namely, village land forest reserves, forests on general land, and forests managed by TFS,

## TFS FORESTS ARE MOST AFFECTED BY ILLEGAL LOGGING DUE TO THE FOLLOWING:

- » They are located far from village centres
- » TFS officials are located far from the forests
- » Invaders come from areas outside the nearby villages

## THE TREE SPECIES THAT ARE MOST ILLEGALLY HARVESTED INCLUDE:

- » *Barphia kirkii* (Mkuruti) – for logging
- » *Brachystegia sp* – for charcoal
- » *Dalbergia melanoxylon* (Mpingo) – for carvings
- » *Spirostachys africana* (Mcharaka), *Combretum schumannii* (Mpera mwitu), and *Faurea saligna* (Msizize) – for fuelwood
- » *Lovoa brownii* (Mukongoro) – for poles



**FIGURE 12**  
2010-2023 forest loss and extent map for Kisarawe district (Source: GFW)

■ PRIMARY FORESTS  
■ TREE COVER LOSS

In 2010, Kisarawe had 318,000 ha of tree cover, extending over 63% of its land area. It lost 6,390 hectares of tree cover in 2023, equal to 2.07 million tons of CO2 emissions (GFW, <https://www.globalforestwatch.org/dashboards/country/TZA/20/4/?map=eyJjYW5Cb3VuZCI6dHJ1ZX0%3D>).

## 3. RESULTS & MAIN FINDINGS

### 3.3 KEY ACTORS IN ILLEGAL LOGGING AND MARKETS FOR ILLEGAL TIMBER

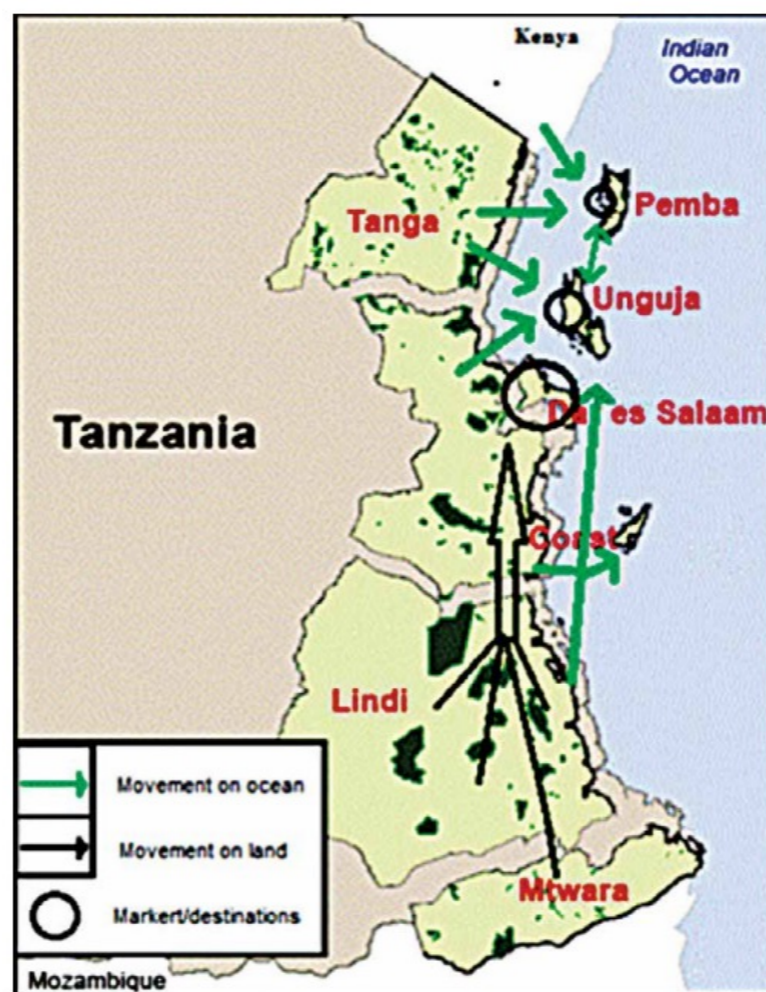
There is no universal definition of illegal logging. Nevertheless, “violation of relevant national legislations” is a fundamental aspect shared by all definitions. According to Brack and Hayman (2001), illegal logging occurs when timber is harvested, transported, bought or sold in violation of national laws.

A review of references, articles, and reports on key actors involved in illegal logging in Tanzania revealed that **timber traders are smuggling hundreds of tonnes of trees to feed lucrative construction markets and furniture industries both within the country and abroad.** An assessment conducted by the Journalists Environmental Association of Tanzania (JET) in 2015 showed that illegal logging in the Rufiji forests is fuelled by a growing demand for wood products and charcoal making.

Loggers, who often invade forests at night, target indigenous tree species, notably *Pterocarpus angolensis* (Mninga), and *Commiphora africana* (mpodo), due to the high demand for their wood. Despite frequent government directives to stop deforestation, , illegal logging has been ongoing, with most trees cut in the middle of the forest to avoid the authorities.



According to Chenga and Mgaza (2016), to avoid authorities, **timber dealers use dhows to transport timber products from illegal ports located along almost the entire eastern shoreline from Mtwara to Tanga to avoid authorities** (Figure 13). Most of these boats were reported to be heading to Zanzibar. The Port of Zanzibar has been a major trading post for centuries and is an important channel between Africa and Asia (<https://news.mongabay.com/2016/10/despite-conservation-efforts-tanzanias-forests-still-under-pressure/>).



**FIGURE 13**  
Movement of forest products along the Indian Ocean coast (Source: Chenga, J. and Mgaza, A. (2016))

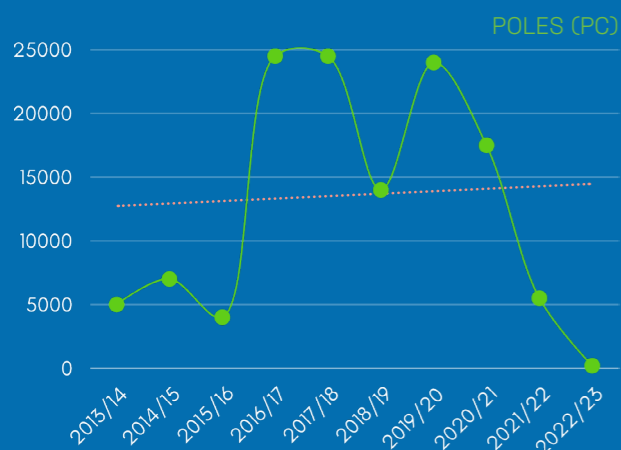
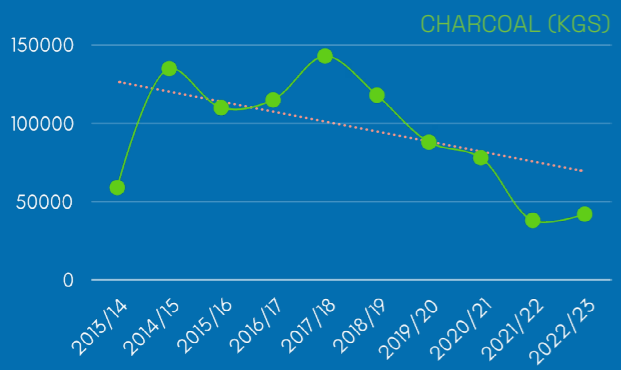
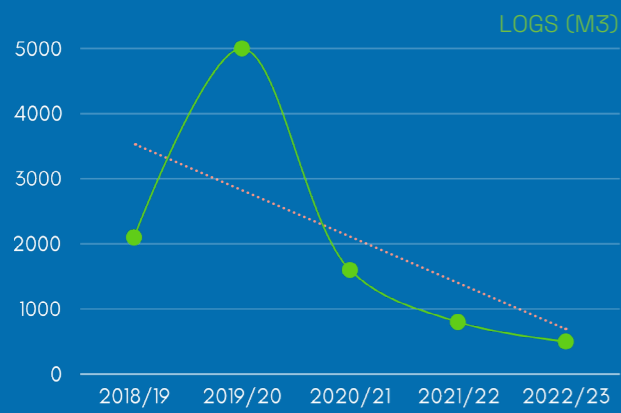
Government officials can enable illegal logging to thrive.

**SOME OFFICIALS MAY TURN A BLIND EYE TO ILLEGAL ACTIVITIES OR EVEN COLLUDE WITH LOGGERS FOR PERSONAL GAIN.**

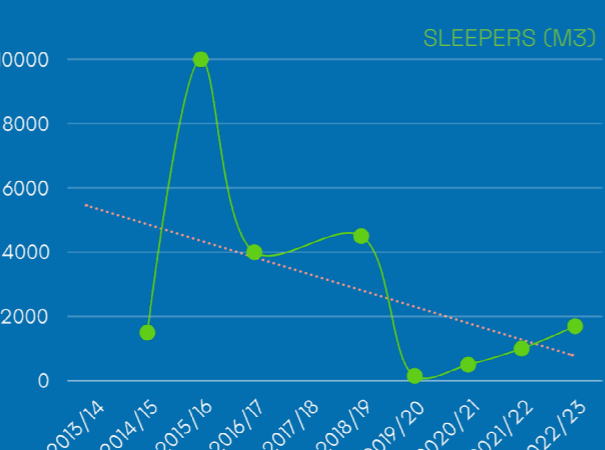
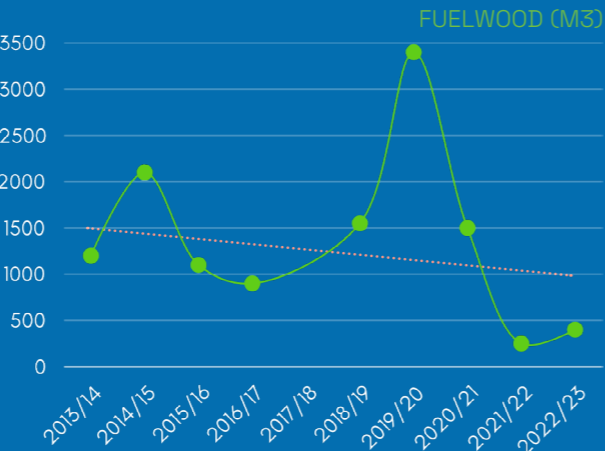
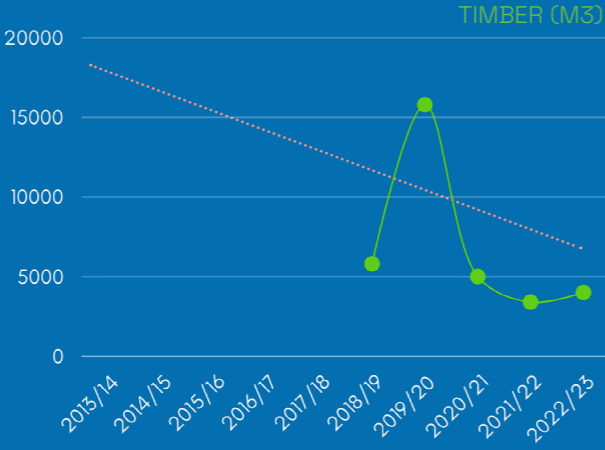
Residents from Rufiji accused some district forest officials of colluding with illegal loggers. They said officials sometimes secretly give permits or offer safe passage to illegal timber consignments. While government regulations require tree harvesting in forests surrounding the districts to be closely monitored and the wood stamped after being verified as legally cut, residents said such measures are not always followed.

Local communities sometimes engage in illegal logging activities as a means of generating income or meeting their basic needs. **Poverty, a lack of alternative livelihood options, and limited enforcement of forestry regulations can drive communities to participate in illegal logging.**

The government has taken measures to combat the problem of illegal logging by increasing the number of forest guards and improving the efficiency of timber checkpoints and transport monitoring systems. Figure 14 shows the trend of forest products seized at different checkpoints within the country over the period 2013/2014 -2022/2023.



**FIGURE 14**  
Forest products seized in different places around the country over the period 2013/2014 -2022/2023  
Source: TFS



**THE FIGURE INDICATES A DECREASING TREND IN THE NUMBER OF FOREST PRODUCTS,**

seized that were intended to be illegally traded. The positive trend could be attributed to the efforts made by the TFS, the Government of Tanzania at large, and civil society to combat the illegal logging and timber trade in the country.

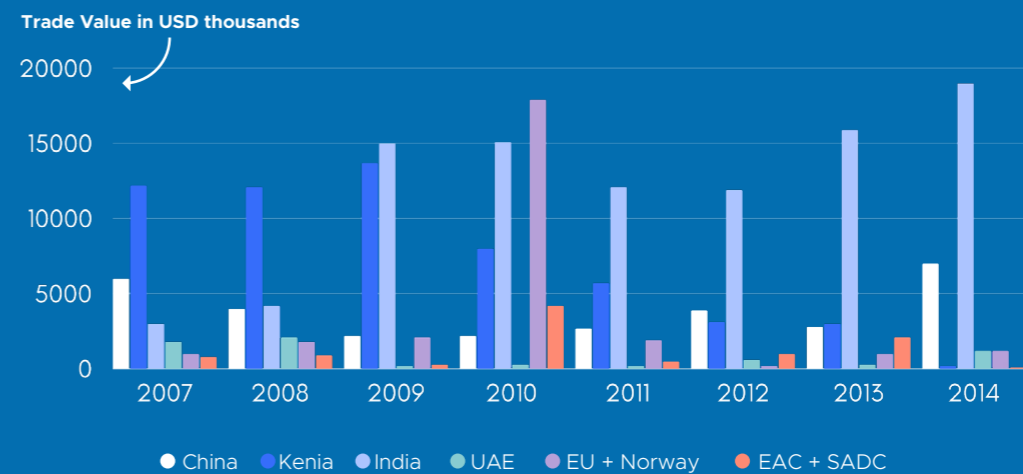
On the other hand, the declining trend could be compounded by other factors such as the use of unguarded routes by illegal traffickers.

Obtaining information on illegally traded forest products crossing the border is challenging. This may be due to the fact that many government officials consider this information sensitive.

The consultant only managed to obtain 2022 data from TFS, which indicates that 8,950 pieces of *Pterocarpus tinctorius* logs, locally known as Mkurungu, totalling 656.219 m3, valued at TZS 795,301,274.90 (US\$311,882.85), were seized at Dar Es Salaam harbour before being exported abroad. The logs were considered illegal because they lacked the necessary paperwork. A review of various reports shows that illegal timber trading occurs across Tanzania's borders with Mozambique, Kenya, and Zambia. The findings from a rapid assessment of illegal timber trade across the Ruvuma River on the Tanzania and Mozambique borders showed that Tanzania was losing an estimated TZS 6.8 billion (US\$4.2 million) every year from illegal practices in the forestry sector from the three southern districts of Masasi, Tunduru and Nanyumbu alone (E. Sulle 2013). In recognition of this problem, a Memorandum of Understanding between the forest agencies of the two countries was signed, outlining cooperative measures to help improve the management of critical natural resources in the two countries. According to a 2011 study conducted by the East Africa Wildlife Society in collaboration with the Tanzania Natural Resources Forum, Tanzania may have lost US\$8.33 million in revenue yearly due to undervaluing timber and poles, under-recording timber volumes, operating an illegal charcoal business, and illegally harvesting and selling logs.

Apart from addressing the challenges of illegal logging within their borders, the countries must also confront the issue of being used as transit hubs for illegally harvested timber coming from other nations, such as the Democratic Republic of the Congo (DRC). Studies indicate that the intra-regional and inter-regional illegal trade of timber and other forest products is growing, flowing through Tanzania, Kenya, Uganda, Madagascar, Zambia, Mozambique, DRC, Malawi, and Western and Central Africa.

For instance, in 2015, 47 containers loaded with logs from the DRC and 56 containers from Zambia were seized at the Dar Es Salaam Port ([http://www.china.org.cn/world/Off\\_the\\_Wire/2016-06/11/content\\_38640682.htm](http://www.china.org.cn/world/Off_the_Wire/2016-06/11/content_38640682.htm)). Using TFS export data for reported forestry goods from 2007 to 2014, Lukumbuzya and Sianga (2017) found that China, India, and, to a lesser extent, Kenya and the United Arab Emirates import the most timber products from Tanzania (Figure 15).



**FIGURE 15**  
Destination and trade value of Tanzanian forestry product exports over the period 2007-2014  
Source Lukumbuzya, K. and Sianga, C. (2017)  
Note: : More recent timber export statistics were not available when the team was compiling this report

## 4. CONCLUSIONS & RECOMMENDATIONS

### 4.1 CONCLUSIONS

FROM THIS STUDY,  
WE CAN DRAW  
THE FOLLOWING  
CONCLUSIONS  
AND  
RECOMMENDATIONS:

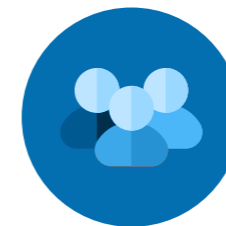
- » According to recent statistics (2021 – 2023) from GFW,
  - a. Between 2021 and 2023, **Tanzania lost 549,130 ha of forest cover**, equivalent to 183,043 ha annually or a 0.8% annual rate of forest loss.
  - b. Pwani, Ruvuma, Morogoro, and Lindi regions experienced the **highest deforestation rates**. The findings suggest that these regions are the major hotspots for deforestation in Tanzania.
  - c. Rufiji is the district with the **most forest loss** in the country.
- » The findings from the literature review and discussions with different stakeholders revealed that timber traders, government officials, and local communities are **key actors in illegal logging in Tanzania**
- » India, China, and to a lesser extent, Kenya and the United Arab Emirates are **the major importers of timber products from Tanzania**.

### 4.2 RECOMMENDATIONS

Based on the study's findings,

THE FOLLOWING  
ACTIONS ARE  
RECOMMENDED

to improve an assessment of the extent of illegal logging and to control the illegal timber trade both domestically and internationally:



» Given the difficulties of estimating illegal logging through remote sensing, a more effective monitoring system would be to **integrate remote sensing with real-time reporting by individuals on the ground**, for example using a Participatory GIS (PGIS) system. PGIS enables real-time users such as foresters or even villagers to mark locations where they observe illegal logging,



» Despite the TFS and the Government of Tanzania at large making positive strides in combating the illegal logging and timber trade in the country, the problems persist. Several texts, including Sulle (2014), K. Lukumbuzya and S. Anstey (2016), have offered recommendations for addressing the problems. They include, but are not limited to, **improving law enforcement, improving transparency, assessing forest governance indicators, supporting private sector initiatives, and monitoring forest trade**.

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