



# **INVESTIGATING THE COMPLIANCE OF ENVIRONMENTAL AND SOCIAL SAFEGUARDS OF TIMBER HARVESTING BUSINESS IN MANYINGA DISTRICT OF NORTH WESTERN PROVINCE IN ZAMBIA**

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## **Abstract**

This study investigates the levels of compliance with environmental and social safeguards in timber harvesting activities in Manyinga District of Snr Chief Sikufele's chieftdom, Northwestern Province, Zambia. The research aims to assess adherence to established regulations and standards designed to mitigate adverse environmental impacts and protect local communities. The study method adopted was a qualitative one in nature as the problem in the Manyinga district on Timber harvesting was a social phenomenon. The qualitative insights were gathered through Questionnaires, interviews, Focus group discussions, and one-on-one discussions with stakeholders, including government officials, timber companies, and community members.

The quantitative component involves a detailed review of timber harvesting operations, focusing on the implementation of practices such as reforestation, wildlife protection, and soil conservation. Compliance levels are evaluated against the protocols that are laid down by the Forestry Department and the local traditional leadership. Other statutes involved measuring the adherence to the ZEMA guidelines in the concession areas. This analysis highlights gaps in adherence, such as insufficient reforestation efforts and inadequate protection of high conservation value areas.

The qualitative component explores the social dimensions of undertakings of timber harvesting, including the impact on local livelihoods, community engagement, and the effectiveness of complaint mechanisms. The Interviews conducted revealed varying perceptions of the benefits and drawbacks of timber harvesting activities, with some community members reporting improved infrastructure and economic opportunities, while others express concerns about environmental degradation and inadequate enforcement mechanisms in the compliance processes of the timber harvesting business in Manyinga district.

The findings indicate low compliance with environmental safeguards, with notable discrepancies in the enforcement of reforestation and conservation measures. Social safeguards are less consistently implemented, with significant variability in community engagement and benefit-sharing practices amongst stakeholders in the study area. The study underscores the need for enhanced regulatory oversight, better alignment between local

practices and national standards, and more inclusive stakeholder consultation processes that should be talking to each other to better manage the forests in Manyinga. Illegal Timber harvesting is a serious drawback to the forestry sector and measures should be put in place to abate this practice better to manage the forests in a much sustainable way.

In conclusion, the research provides a comprehensive assessment of compliance with environmental and social safeguards in timber harvesting in the Manyinga District. Recommendations for policy improvements, emphasizing the importance of strengthening compliance mechanisms and fostering more equitable and sustainable timber management practices right from the grassroots at the community level through to the policymakers. The study contributes to the broader discourse on sustainable forestry and environmental governance in Zambia and similar contexts which severally will culminate in proper environmental sustenance.

## INTRODUCTION

### Background to the study

Environmental management is crucial in Zambia, particularly in rural provinces where ecosystems are vital for ecological balance. One key component of environmental management is Environmental and Social Safeguards (ESS), which involves policies and procedures designed to mitigate adverse impacts of developmental projects on the environment and society (Karunaratne, 2015). The focus on ESS is essential given the ongoing large-scale timber harvesting in Manyinga District, which has attracted numerous stakeholders and led to concerns about illegal timber trading.

The global issue of illegal logging has significant repercussions, including loss of carbon sequestration capacity and increased deforestation (World Bank, 2017). The World Bank highlights that informal economic activities, including illegal timber trade, often emerge from a mismatch between market demand and the availability of licensed resources (World Bank, 2019). In Manyinga District, the influx of international and local players has exacerbated the problem, particularly with allegations of Chinese companies engaging in illegal timber harvesting practices.

The region's diverse vegetation and forest resources, including Miombo woodlands and various hardwood species, are under threat from unsustainable harvesting practices. The existing forest cover, which represents a significant portion of Zambia's land area, is facing huge degradation due to timber extraction and other anthropogenic activities (Forest Trends, 2021).

### Hypothesis and Methodology

Timber harvesting in the Manyinga district is on the increase by both licensed and unlicensed loggers. This research was premised on investigating whether or not the loggers adhere to the laid down rules and regulations governing the timber sector. Logging in the study area is unsustainably done. Investigating the levels of compliance and understanding of environmental and social safeguard regulations among timber harvesting proponents in Manyinga District.

### Methodology

The methodological framework employed to investigate timber harvesting and compliance levels in Manyinga District was largely qualitative research. By integrating surveys, interviews, and spatial analysis techniques, this study aimed to generate robust empirical evidence, inform evidence-based policies, and contribute to the sustainable management of forest resources in Manyinga and other regions. The methodology chosen best suits the investigative study as the problem is a social phenomenon and the qualitative research method best suited this undertaking. Study questionnaires were distributed across the study area and targeted stakeholders in the local community and those of the Government institutions. Primary and secondary data were collected and analyzed to arrive at conclusions.

## Results and Discussion

From the preliminary analysis of the data collected concerning the investigation of compliance levels in Environmental and Social safeguards in timber harvesting in the Manyinga district, the following tables elucidate the situation in the study area.

### Whether Environmental and Social Safeguards are in place

			Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	3	13.0		13.6	13.6
	No	19	82.6		86.4	100.0
Total		22	95.7		100.0	
Missing System		1	4.3			
<b>Total</b>		23	100.0			

The table presents the distribution of whether environmental and social safeguards are in place with a total of 23 participants giving responses. Here's an analysis and discussion of the results:

#### 1. Environmental and Social Safeguards:

- **Yes:** Three individuals (13.0%) believe that environmental and social safeguards are in place.
- **No:** Nineteen individuals representing (82.6%) believe that environmental and social safeguards are not in place in the timber harvesting business in Manyinga district.

#### 1. Missing Data:

- One participant did not provide information on whether environmental and social safeguards are in place.

#### 1. Discussion:

The data indicates an absence of environmental and social safeguards in the project area. The majority (82.6%) believe that such safeguards are not in place.

The view that environmental and social safeguards are missing raises apprehensions about potential risks to environmental conservation, community well-being, and sustainable development. Inadequate safeguards could lead to negative environmental impacts, social conflicts, and violations of human rights.

The widespread view of inadequate environmental and social safeguards highlights the need for robust statutes to protect natural resources and safeguard the rights and well-being of communities affected by resource extraction.

In conclusion, the table highlights an important view among the respondents that environmental and social safeguards are lacking in the timber harvesting business in the Manyinga district.

**Whether timber harvesting is according to the law**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	2	8.7	9.1	9.1
	No	20	87.0	90.9	100.0
Total		22	95.7	100.0	
Missing System		1	4.3		
<b>Total</b>		23	100.0		

The table above gives an understanding of the distribution of whether timber harvesting is according to the law in Manyinga District, the respondents gave varied responses from a total of 23 participants. The data collected has been analyzed as presented below;

Timber Harvesting Compliance:

**Yes:** Two respondents representing (8.7%) believe that timber harvesting is conducted according to the law.

**No:** Twenty respondents representing (87.0%) believe that timber harvesting is not conducted according to the prescribed statutes.

- **Perception of Compliance:** The data indicates a widespread perception among the sample population that timber harvesting is not conducted according to the law, with the majority (87.0%) expressing this belief.
- **Potential Legal Concerns:** The perception that timber harvesting is not in compliance with the law raises significant concerns about potential illegal logging, unsustainable forestry practices, and violations of forest management regulations. Non-compliant timber harvesting can lead to environmental degradation, loss of biodiversity, and adverse socio-economic impacts.

Some data was missing though representing a percentage of the data collected.

**Implications:** The general view of non-compliance with timber harvesting laws highlights the need for effective enforcement mechanisms, transparent governance frameworks, and stakeholder engagement in forest management processes.

In conclusion, the table highlights a perception among the engaged population in the survey carried out that timber harvesting is not conducted according to the law.

**Whether stakeholders have a say in concessions**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	3	13.0	13.6	13.6
	No	19	82.6	86.4	100.0
Total		22	95.7	100.0	
Missing System		1	4.3		
<b>Total</b>		23	100.0		



The table presents the distribution of whether stakeholders have a say in concessions in the study area. A total of 23 participants responded from a total of 50 questionnaires distributed in this category. The answers have been analyzed and the discussion of the findings is presented below:

### Stakeholder Involvement:

- **Yes:** Three individuals (13.0%) believe that stakeholders have a say in concessions.
- **No:** Nineteen individuals (82.6%) believe that stakeholders do not have a say in concessions.

### Discussion:

- **Perception of Stakeholder Involvement:** The data indicates a significant perception among the sample population that stakeholders do not have a say in concessions, with the majority (82.6%) expressing this belief.
- **Potential Implications:** The insight that stakeholders lack influence in concessions raises concerns about the transparency, inclusivity, and accountability of decision-making processes related to timber resource management. Limited stakeholder involvement can lead to conflicts, disenfranchisement of local communities, and unsustainable exploitation of resources.

**Implications:** The common understanding of limited stakeholder involvement highlights the need for participatory governance mechanisms, stakeholder engagement processes, and inclusive decision-making frameworks in natural resource management.

### Further Analysis:

- Researchers may want to investigate the reasons behind the perception of limited stakeholder involvement in concessions issuance. Understanding the barriers to effective stakeholder engagement can inform strategies for promoting greater inclusivity, transparency, and accountability in concession processes.
- Assessing existing policies and practices related to stakeholder participation in forest concessions and identifying opportunities for consolidation in participating approaches can help address concerns and enhance the sustainability of timber resource management initiatives.

The table highlights perceptions among the respondents that stakeholders do not have any say in the issuance of forest concessions. Addressing concerns about stakeholder involvement is crucial for promoting equitable decision-making, fostering social cohesion, and achieving sustainable timber harvesting.

**Is whether Forestry department in the district is update with enforcement regulations of the timber resource?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	11	47.8	50.0	50.0
	No	11	47.8	50.0	100.0
Total		22	95.7	100.0	
Missing	System	1	4.3		
<b>Total</b>		23	100.0		

The table presents the distribution of whether the Forestry department in the district is up to date with enforcement regulations of the timber resource among a population or sample of individuals, with a total of 23 participants. Here's an analysis and discussion of the data obtained:

**Enforcement Regulations Compliance:**

- **Yes:** Eleven individuals representing (47.8%) believe that the Forestry department in the district is up to date with enforcement regulations of the timber resource.
- **No:** Eleven individuals also representation (47.8%) believe that the Forestry department is not up to date with enforcement regulations of the timber resource.
- So data was not accounted for because it was missing.

**Discussion:**

- **Perception of Forestry Department Performance:** The data reveals a split perception among the respondents regarding the Forestry Department's compliance with enforcement regulations. Half of the respondents (50.0%) believe that the department is up to date, while the other half (50.0%) believe it is not.
- **Potential Implications:** Divergent perceptions about the Forestry Department's performance in enforcing regulations suggest differing levels of trust, effectiveness, or awareness among respondents. The perception that the department is not up to date with regulations may indicate concerns about regulatory compliance, governance, or capacity.
- The split perception of the Forestry Department's performance highlights the importance of transparency, accountability, and communication in forestry governance. Ensuring that forestry departments have the resources, capacity, and systems in place to effectively enforce regulations is essential for sustainable forest management and conservation.
- Researchers may want to explore the factors influencing perceptions of the Forestry Department's performance, such as past experiences, communication channels, or interactions with department officials. Understanding the underlying reasons for differing perceptions can inform strategies for improving departmental effectiveness and public trust.
- Assessing the actual performance of the Forestry Department in enforcing regulations and identifying areas for improvement can provide valuable insights into opportunities for capacity-building, training, or policy reform initiatives.

The table highlights divergent perceptions from the respondents regarding the Forestry Department's compliance with enforcement regulations. Addressing concerns and improving the effectiveness of regulatory enforcement mechanisms are essential for promoting sustainable forest management and ensuring the equitable and responsible use of forest resources.

**Whether only mature trees are harvested**

			Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	3		13.0	13.6	13.6
	No	19		82.6	86.4	100.0
Total		22		95.7	100.0	
Missing System		1		4.3		
Total		23		100.0		

The table above presents the results of a survey or study questionnaire regarding whether only mature trees are harvested and the results obtained have been discussed below.

**Frequency and Percentages:** The table provides frequencies and percentages for respondents who answered "Yes" or "No" to the question of whether only mature trees are harvested.

**Valid Percent:** The valid percent column represents the percentage of respondents out of the total valid responses for each category. For example, 13.0% of respondents answered "Yes," indicating that they believe only mature trees are harvested.

**Cumulative Percent:** The cumulative percent column shows the running total of valid percentages. It helps in understanding the overall distribution of responses as each category accumulates.

Out of the 22 respondents who provided valid responses, only 3 (13.6%) answered "Yes," indicating that they believe only mature trees are harvested.

Conversely, 19 respondents (86.4%) answered "No," suggesting that they do not believe only mature trees are harvested.

This indicates a significant discrepancy in perceptions regarding the harvesting practices among the surveyed population indicating no compliance to the regulation.

### **Discussion:**

- The results suggest a prevalent belief among respondents that not only mature trees are harvested, indicating concerns about unsustainable logging practices.
- Harvesting immature or juvenile trees can have detrimental effects on forest ecosystems, including reduced biodiversity, soil erosion, and loss of habitat for wildlife.
- Possible reasons for the perceived harvesting of immature trees could include economic motivations, inadequate regulations or enforcement, or a lack of awareness of sustainable forestry practices among logging companies.
- Addressing concerns raised by respondents who believe that only mature trees are harvested is crucial for promoting sustainability and conservation in logging operations.
- This may involve implementing stricter regulations on logging practices, promoting sustainable forestry certifications, and raising awareness of the importance of preserving mature trees for future generations.

In summary, the results highlight the need for further investigation and potential improvements in logging practices to ensure sustainability and conservation of forest ecosystems.

### **Conclusion**

It is very clear from the analysis of the responses obtained from the stakeholders that the Environmental and Social Safeguards compliance levels in Timber Harvesting in are low. Based on the data provided and the discussions for each question regarding environmental and social safeguards, as well as compliance with timber harvesting laws, several conclusions have been drawn:

1. **Low Implementation of Safeguards:** The findings reveal a significant gap between the presence and absence of environmental and social safeguards. Only a minority of respondents reported their presence, indicating that a substantial portion of activities or practices may lack necessary protections for the environment and communities.
2. **Risk and Responsibility:** The absence of safeguards adherence suggests potential risks to environmental sustainability and social welfare. This includes risks such as environmental degradation.
3. **Policy and Compliance Importance:** The data highlights the critical role of regulatory frameworks and compliance mechanisms. Strong policies and enforcement are essential to ensure that businesses and activities adhere to legal standards and promote responsible practices.

4. Need for Awareness and Capacity Building: There is a clear need for educational efforts and capacity-building initiatives. These would promote understanding and adoption of environmental and social safeguards among stakeholders, fostering a culture of sustainability and responsibility.
5. Call for Action and Collaboration: Addressing the findings requires collaborative efforts among governments, businesses, civil society organizations, and communities. This collaboration is necessary to enhance awareness, improve compliance with laws, and ultimately mitigate environmental and social risks.
6. Sustainable Development Goals: The findings highlight the alignment with sustainable development goals (SDGs). Integration of safeguards not only ensures legal compliance but also contributes to broader sustainability objectives, such as biodiversity conservation and inclusive growth.

The data underscores the urgency of integrating environmental and social safeguards into organizational practices and regulatory frameworks. Addressing the gaps identified requires concerted efforts from multiple stakeholders to enhance awareness, compliance, and accountability in safeguarding environmental and social interests

Based on the data provided regarding whether the Forestry Department enforces timber regulations and whether reforestation is conducted by concession holders, several conclusions can be drawn:

### **Suggestions for further studies research**

I suggest that a study premised on a Comparative Analysis of Compliance levels and Environmental and Social safeguards in in timber harvesting Across Different districts can be done where the study should Compare compliance levels, challenges, and strategies between Manyinga District and another district with similar regulatory environments to identify best practices and areas for improvement. This work could therefore be a good platform for further studies and research.

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