International Journal of Agriculture and Environmental Research

ISSN: 2455-6939

Volume: 11, Issue: 02 "March-April 2025"

EVALUATION OF THE BARRIERS TO THE TRADING OF WOOD PLANKS IN AKURE, ONDO STATE, NIGERIA

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DOI: https://doi.org/10.51193/IJAER.2025.11209

Received: 11 Feb. 2025 / Accepted: 19 Feb. 2025 / Published: 01 Apr. 2025

ABSTRACT

This study investigates the barriers to wood plank trading in Akure, Ondo State, Nigeria, using data collected via semi-structured questionnaires from ten sawmills and eighty wood plank sellers across selected markets in the region. The results identify key challenges such as unfavourable government policies, unreliable power supply, high labour and equipment costs, and limited wood availability, all of which adversely affect profitability, sales volume, and business success. The study employs a Chi-square test to examine associations between education level, years of experience, and the identified barriers. The findings indicate no significant link between educational level and barriers for both saw millers and plank sellers. However, while there is no significant association between years of experience and barriers for saw millers, a significant association exists for plank sellers. This highlights the varying impact of experience on overcoming trade barriers in the wood industry.

Keywords: Wood plank trading, Sawmill industry, Trade barriers, Forestry management, Government policies, Sustainable development, Deforestation impact and Wood supply chain

1. INTRODUCTION

Wood plank trading plays a significant role in Nigeria's economy, particularly in Akure, Ondo State, where it serves as a major livelihood source and supports various industries such as construction and furniture manufacturing (1). The forestry sector is a key driver of economic growth, providing employment opportunities and fostering industrial development (2). However, the sector faces numerous challenges, including government-imposed restrictions, infrastructure deficits, and environmental constraints, all of which threaten its sustainability (Ogunwusi, 2012).

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Forests provide the primary resource for wood plank trading, yet deforestation and poor management have significantly depleted Nigeria's forest reserves (4). Studies indicate that the country's forest area has drastically reduced from covering 10% of the land area to less than 6%, with an annual loss of over 350,000 hectares (5). This decline, coupled with illegal logging and inadequate reforestation efforts, has led to a scarcity of high-quality timber (6). The overexploitation of preferred timber species, such as Milicia excelsa, Swietenia macrophylla, and Triplochiton scleroxylon, has further exacerbated supply chain issues (F. A. Akinsanmi & S. O. Akindele, 2002).

Government policies and regulatory frameworks significantly influence wood plank trading. Although policies are designed to control deforestation and promote sustainable forestry, excessive bureaucratic processes, high taxation, and inconsistent enforcement create barriers for traders (8). The complex legal requirements for logging, including multiple permits, tree inspection certificates, and tariff regulations, impose additional costs on sawmillers and plank sellers (9). International trade policies further complicate the situation, as high tariffs imposed by industrialised countries discourage the local processing of wood, limiting Nigeria's ability to compete in global markets (J. Castano, 2002).

Infrastructure challenges also hinder the efficiency of wood plank trading. Poor road networks make transportation costly and unreliable, increasing the risk of delays in supply (11). Additionally, Nigeria's erratic power supply poses a major obstacle for sawmill operations, as consistent electricity is required to process logs efficiently (12). Due to frequent power outages, sawmillers are often forced to rely on expensive alternative energy sources, which increases production costs (Ekakitie & Enakireru, 2024).

Economic factors, such as high capital investment requirements and fluctuating taxation policies, further complicate the business environment for wood plank traders. Many small-scale traders struggle to access financial resources, limiting their ability to expand operations or invest in modern processing equipment (14). Seasonal fluctuations in wood availability also contribute to price volatility, making it difficult for traders to maintain stable revenue streams (Arowosoge et al., 2010).

Beyond economic and regulatory concerns, environmental sustainability remains a critical issue. The decline in Nigeria's forest cover has led to biodiversity loss, reduced carbon sequestration, and increased soil degradation (16). Unregulated logging, coupled with a lack of reforestation initiatives, threatens the long-term viability of the wood industry (17). Research suggests that promoting sustainable forestry practices, such as afforestation and improved logging techniques, could mitigate these challenges and enhance the sustainability of the trade (18)

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Given these multifaceted challenges, this study aims to evaluate the barriers to wood plank trading in Akure, Ondo State, Nigeria. By assessing the impact of government policies, infrastructure limitations, economic constraints, and environmental factors, the research seeks to provide actionable recommendations for improving trade efficiency and sustainability. The findings will contribute to policy discussions on how best to balance economic growth with environmental conservation, ensuring the long-term viability of Nigeria's forestry sector.

1.1 Statement of problem

Timber has long been a fundamental material in construction, valued for its durability and aesthetic appeal. The timber industry is one of the oldest in the world and continues to play a crucial role in economic development. However, the industry currently faces numerous difficulties that limits its efficiency and sustainability.

The problems encountered in the trading of wood planks are many. They include:

1. Scarcity of wood: wood scarcity is driven by deforestation, climate change, and limited availability of land for sustainable forestry. As global forest cover declines, the reliance on natural forests for timber production is becoming increasingly unsustainable. Climate change further exacerbates this issue, affecting tree growth patterns and reducing the availability of certain wood species.
2. Production cost.
3. Government policies: policies such as mandating payment of taxes and carrying out the legal requirement for felling (collection of receipt for OTV, stamping of log before taking out of the forest, tree inspection certificates, etc).

1.2 Objectives of the study

The primary goal of this research is to examine the obstacles that hinder wood plank trading in Akure, Ondo State, Nigeria, and explore viable strategies to address them. The specific objectives include:

- Examine the barriers to the trading of wood planks in Akure, Ondo State, Nigeria.
- Examine how traders of wood planks can overcome the barriers in Akure, Ondo State, Nigeria.

1.3 Hypothesis to be tested

1) For saw millers:

a. Ho: There is no significant association between the years of work experience of saw millers and the barriers they face in the selling of wood planks in the study area.

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b. Ha: There is a significant association between the years of work experience of saw millers and the barriers they face in the selling of wood planks in the study area.

2) Educational level of saw millers and barriers

a. Ho: There is no significant association between the educational qualification of saw millers and the barriers they face in the selling of wood planks in the study area.
b. Ha: There is a significant association between the educational qualification of sawmillers and the barriers they face in the selling of wood planks in the study area.

Wood plank sellers:

1) Years of experience of wood plank sellers and barriers

a. Ho: There is no significant association between the experience of wood plank sellers and the barriers they face in the selling of wood planks in the study area.
b. Ha: There is a significant association between the experience of wood plank sellers and the barriers they face in the selling of wood planks in the study area.

2) Educational level of wood plank sellers and barriers

a. Ho: There is no significant association between the educational qualification of wood plank sellers and the barriers they face in the selling of wood planks in the study area.
b. Ha: There is a significant association between the educational qualification of wood plank sellers and the barriers they face in the selling of wood planks in the study area.

1.4 Research questions

1. Are their barriers to the trading of wood planks in Akure, Ondo State?
2. What are these barriers?
3. What are the ways of overcoming the barriers both in buying and selling wood planks?
4. What effort has the government made in terms of helping to overcome the barriers?

1.5 Justification of the study

The wood plank trade is a crucial component of Nigeria's forestry sector, significantly contributing to economic growth, employment, and infrastructure development. However, this industry faces persistent difficulties that frustrate its proficiency and sustainability. The **barriers to wood plank trading in Akure, Ondo State**, include government-imposed trade restrictions, high taxation, inadequate infrastructure, and environmental constraints. Understanding these obstacles is crucial for devising strategies that enhance trade efficiency while ensuring sustainable forest management.

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Historically, studies on wood trade and forestry management have emphasized the role of policies, trade regulations, and sustainable practices in promoting efficiency in the timber industry. However, limited research has focused on the specific difficulties faced by local wood plank traders in Nigeria, particularly within Akure. The scarcity of empirical data on how embargoes, tariffs, taxation policies, and conservation laws affect business operations makes it difficult to develop effective interventions for industry growth.

This study is justified because it provides a comprehensive evaluation of the trade barriers affecting sawmill operators and plank sellers in Akure. By pinpointing the major obstacles and examining their effects on the wood supply chain, this research aims to inform policymakers, industry stakeholders, and business owners on practical solutions for improving trade efficiency. The findings will help the sector adapt to evolving regulations, enhance market operations, and foster a more stable trading environment.

Ultimately, the study will serve as a crucial resource for decision-makers seeking to enhance Nigeria's forestry sector, ensuring long-term sustainability while supporting economic growth and industry expansion.

1.6 Scope of study

The research study focuses on the northern and southern parts of Akure City, which is the capital of Ondo State in Nigeria. The evaluation will specifically examine the barriers to the trading of wood planks within this area. Identifying and assessing how policy constraints, manufacturers, government authorities, infrastructure assessment (this may include evaluating transportation networks, storage facilities, marketplaces, and logistical constraints), economic analysis, environmental consideration, and social factors that contribute to the barriers of trading wood planks and recommendations to solve or mitigate the barriers.

2. METHODOLOGY

2.1 Description of the study area

The study was conducted in Nigeria's Akure, Ondo State. The city of Akure is situated in southwest Nigeria, less than 150 kilometres from the coast of the country. The population of the city is approaching five hundred thousand people, and it is a small commercial city. It lies between Latitude 7.290771°E and Longitude 5.21°266' N.

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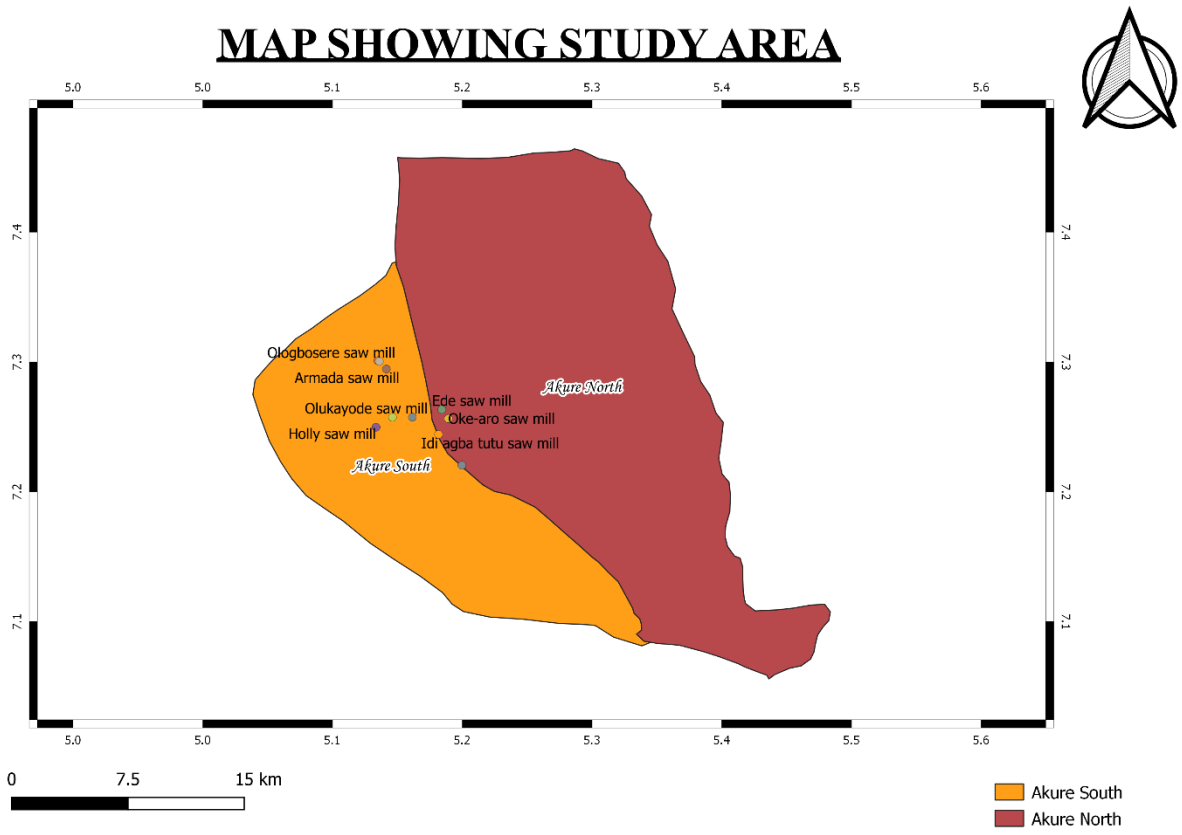

Figure 1: Map showing study areas

2.2 Method of data collection

The data for this study were collected with the aid of a semi-structured questionnaire. The semi-structured questionnaire was used to derive information needed from respondents (wood plank sellers and sawmillers based on the title of the project) in Akure. Eight wood plank markets were purposively selected within Akure, four from the northern part of Akure and four from the southern part of Akure. The purpose is to select the plank markets where there are many sellers. In each of the plank markets, 10 plank sellers were randomly selected and administered with the semi-structured questionnaires to make a total of 80 wood plank sellers for the study. Ten sawmills were selected in Akure as a whole. Six from Akure-south and four from Akure-north. In each of the selected sawmills, the sawmillers were administered the semi-structured questionnaires to make a total of 10 sawmillers for the study.

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Table 1: Geographical Locations of Sampled Sawmills

S/N	LOCATIONS	REGION	LATITUDE	LONGITUDE
1	Idi Aga Tutu saw mill	Akure North	7.238913°N	5.203478°E
2	Adejuyibge saw mill	Akure North	7.218420°N	5.219729°E
3	Ofe-aro saw mill	Akure North	7.250771°N	5.210266°E
4	Ede saw mill	Akure North	7.257133°N	5.205791°E
5	Isaish Babatunde Ibitoye saw mill	Akure South	7.291908°N	5.161397°E
6	Ologbosere saw mill	Akure South	7.290414°N	5.162417°E
7	Olukayode saw mill	Akure South	7.251697°N	5.185367°E
8	Holly saw mill	Akure South	7.244827°N	5.160139°E
9	Armada saw mill	Akure South	7.285138°N	5.167301°E
10	Jede Sawa mill	Akure South	7.251697°N	5.171539°E

2.3 Method of data analysis

This study adopts a descriptive survey research design and follows a quantitative research approach to evaluate the barriers to wood plank trading in Akure, Ondo State. Data were collected using semi-structured questionnaires, which were distributed to 80 wood plank sellers and 10 sawmillers across selected markets.

To analyze the collected data, SPSS Statistical Software was employed. The data were coded to obtain quantitative values suitable for statistical analysis. Descriptive statistics, including frequencies, tables, and percentages, were used to summarize the responses and identify trends in the dataset.

Furthermore, the Chi-square test was used to examine the association between key variables, such as educational level, years of experience, and trade barriers faced by respondents. This statistical test helped to determine whether significant relationships existed between these factors and the challenges encountered in the wood plank trade.

By employing this analytical approach, the study provides empirical insights into the key constraints affecting wood plank trading in Akure, contributing to evidence-based recommendations for policymakers and industry stakeholders.

3. RESULTS AND DISCUSSION

3.1 Results

3.1.1 Result (Saw millers)

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3.1.1.1 Demographic characteristic of Respondents (saw millers)

The educational level of respondents in the study area was studied; 10% out of the total respondents had no formal education, 10% had primary education, 60% had secondary education and 20% of the respondents had tertiary education.

Table 2: Educational Qualification of respondents in the study area (saw millers)

Educational Qualification of respondents in the study area (saw millers)						
	Akure South		Akure North			
	Frequency	Percentage	Frequency	Percentage	Total frequency	Total percentage
No formal education	1	16.67	0	0	1	10
Primary education	1	16.67	0	0	1	10
Secondary education	3	50.00	3	75	6	60
Tertiary Education	1	16.67	1	25	2	20
Total	6	100.00	4	100	10	100

The years of establishment of sawmills in the study area were ranged as follows: <11 years having a total of 10%, 11-20 years having a total of 10%, 21-30 years having a total of 10% and >30 years with a total of 70%. The year of establishment range of >30 years has the highest total frequency in Akure as a whole, with a total percentage of 70%.

Table 3: Year of establishment of sawmills in the study area (saw millers)

Year of establishment of sawmills in the study area (saw millers)						
	Akure South		Akure North			
	Frequency	Percentage	Frequency	Percentage	Total frequency	Total percentage
Less than 10 years	0	0.00	1	25	1	10
10-20 years	1	16.67	0	0	1	10
20-30 years	0	0.00	1	25	1	10
above 30years	5	83.33	2	50	7	70
Total	6	100.00	4	100	10	100

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Table 4: Rate of demand of planks from respondents in the study area (saw millers)

Rate of demand of planks from respondents in the study area (saw millers)						
	Akure South		Akure North			
	Frequency	Percentage	Frequency	Percentage	Total frequency	Total percentage
Every day	Yes	100	Yes	100	10	100
Every week	No	No	No	No	No	No
Twice in a month	No	No	No	No	No	No
Once a month	No	No	No	No	No	No
Once in three months	No	No	No	No	No	No
Total	6	100	4	100	10	100

Table 5: Registration of respondent sawmill with the government in the study area (saw millers)

Registration of respondent sawmill with the government in the study area (saw millers)						
	Akure South		Akure North			
	frequency	Percentage	Frequency	Percentage	Total frequency	Total percentage
Yes	6	100	4	100	10	100
No	0	0	0	0	0	0
Total	6	100	4	100	10	100

Table 6: Respondents' Membership of professional association in the study area (sawmillers)

Respondents' Membership of professional association in the study area (sawmillers)						
	Akure South		Akure North			
	Frequency	Percentage	Frequency	Percentage	Total frequency	Total percentage
Yes	6	100	4	100	10	100
No	0	0	0	0	0	0
Total	6	100	4	100	10	100

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3.1.1.2 Most commonly purchased log species in the saw mills of the Study Area

Table 7: Most commonly purchased log species in the study area (sawmillers)

Most commonly purchased log species in the study area (sawmillers)							
		Akure South		Akure North			
Common name	Scientific name	Freq.	Per. %	Freq.	Per. %	Total freq.	Total %
Afara	*Terminalia superba*	4	13.79	3	16.67	7	14.89
Araba	*Ceiba pentandra*	0	0.00	1	5.56	1	2.13
Aye	*Daubentonia madagascariensis*	1	3.45	0	0.00	1	2.13
Ayere		1	3.45	2	11.11	3	6.38
Danta		1	3.45	1	5.56	2	4.26
Eru	*Gnetum africanum*	1	3.45	0	0.00	1	2.13
Gmelina	*Gmelina arborea*	3	10.34	2	11.11	5	10.64
Iroko	*Milicia excelsa*	0	0.00	2	11.11	2	4.26
Ita		1	3.45	0	0.00	1	2.13
Mahogany	*Swietenia macrophylla*	5	17.24	2	11.11	7	14.89
Obeche	*Triplochiton scleroxcylon*	4	13.79	3	16.67	7	14.89
Omo		1	3.45	0	0.00	1	2.13
Oporoporo	*Solanum avicularia*	3	10.34	0	0.00	3	6.38
Oriro	*Origanum rotundifolium*	1	3.45	0	0.00	1	2.13
Teak	*Tectona grandis*	3	10.34	2	11.11	5	10.64
Total		29	100.00	18	100.00	47	100.0 0

3.1.1.3 Barriers Faced by Respondents Trading in Wood Planks in the Study Area (saw millers).

The barriers the respondents (saw millers) are facing in wood plank trading are as follows: government policy with a total percentage of 13.33%, poor power supply with a total percentage of 53.33%, high labour cost with a total percentage of 13.33%, high cost of equipment with a total percentage of 13.33%, and low availability of wood with a total percentage of 6.66%. Chi-square test ($p > 0.05$) shows that there is no significant association between the years of work experience of sawmillers and the barriers they face in their business (hypothesis 1 and Table 16). Similarly, the chi-square test ($p > 0.05$) shows that there is no significant association between the educational qualification of sawmillers and the barriers they face in their business (hypothesis 2 and Table 16).

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Table 8: Barriers Faced by Respondents selling planks in the Study Area (saw millers)

Barriers Faced by Respondents selling planks in the Study Area (saw millers)						
	Akure South		Akure North			
	Frequency	Percentage	Frequency	Percentage	Total frequency	Total percentage
Government policy	1	9.09	1	20	2	13.33
Poor power supply	4	36.36	4	80	8	53.33
High Cost of Labour	2	18.18	0	0	2	13.33
High cost of equipment	2	18.18	0	0	2	13.33
Low availability of wood	1	9.09	0	0	1	6.67
Total	10	90.91	5	100	15	100.00

Respondents suggested solutions to overcome the barriers they face in the study area (saw millers). The possible solutions suggested by respondents to overcome the barriers they are facing in the study area are as follows: improvement of government policy with a total percent of 42.11%, afforestation with a total percent of 21.05%, improvement of power supply with a total percent of 15.79%, and reduction in tax with the total percent of 21.05% (Table 10).

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Table 9: Respondents Suggested solutions to over-come the barriers they face in Selling Planks in the study area (saw millers)

Respondents Suggested solutions to over-come the barriers they face in Selling Planks in the study area (saw millers)						
	Akure South		Akure North			
	Frequency	Percentage	Frequency	Percentage	Total frequency	Total percentage
Improvement of government policy	5	41.67	3	42.86	8	42.11
Afforestation	3	25.00	1	14.29	4	21.05
Improve power supply	2	16.67	1	14.29	3	15.79
Reduction in tax	2	16.67	2	28.57	4	21.05
Total	12	100.00	7	100.00	19	100.00

3.1.2 RESULTS (PLANK SELLERS)

3.1.2.1 Demographic characteristics of plank sellers

The result of the study showed that 20% of the respondents (wood plank sellers) had no formal education, 10% of them had primary education, 62.5% of them had secondary education and 7.5% of them had tertiary education.

Table 10: Educational level of respondent in the study area (plank sellers)

Educational level of respondent in the study area (plank sellers)						
	Akure South		Akure North			
	frequency	percentage	frequency	Percentage	Total frequency	Total percentage
No formal education	6	15	10	25	16	20
Primary education	3	7.5	5	12.5	8	10
secondary education	28	70	22	55	50	62.5
Tertiary education	3	7.5	3	7.5	6	7.5
Total	40	100	40	100	80	100

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8.75% of the respondents (wood plank sellers) in the study area have less than 5 years of experience in trading in wood plank selling. 17.5% of the respondents have between 5-10 years of wood plank selling experience. 13.75% of the respondents in the study area have 11-15 years of wood plank selling experience. 36.25% of the respondents have between 15-20 years of wood plank selling experience in the study area. 23.75% of the respondents have over 20 years of wood plank selling experience in the study area (Table 11).

Table 11: Years of trading plank by the respondents in the study area (plank sellers)

Years of trading plank by the respondents in the study area (plank sellers)						
	Akure South		Akure North			
	frequency	percentage	frequency	percentage	Total frequency	Total percentage
Less than 5 years	2	5	5	12.5	7	8.75
5-10 years	10	25	4	10	14	17.5
11-15 years	5	12.5	6	15	11	13.75
16-20 years	14	35	15	37.5	29	36.25
more than 20 years	9	22.5	10	25	19	23.75
Total	40	100	40	100	80	100

Table 12 shows that 2.55% of respondents (plank sellers) earn less than ₦100,000 annually, 36.25% of respondents earn between ₦100,000 and ₦200,000 annually and 61.25% of respondents earn over ₦200,000 annually.

Table 12: Estimated annual income of respondents in the study area (plank sellers)

Estimated annual income of respondents in the study area (plank sellers)						
	Akure South		Akure North			
	frequency	percentage	Frequency	Percentage	Total frequency	Total percentage
Less than 100,000	0	0	2	5	2	2.5
100,000-200,000	15	37.5	14	35	29	36.25
more than 200,000	25	62.5	24	60	49	61.25
Total	40	100	40	100	80	100

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3.1.2.2 Commonly purchased plank species from wood plank sellers in the Study Area

Table 13 shows that *Terminalia superba* with 11.53%, *Annona squamosa* with 11.25%, *Swietenia macrophylla* with 7.52%, and *Albizia glaberrima* with 6.52% are the most commonly purchased species.

Table 13: Most commonly purchased plank species from respondent in the study area (plank sellers)

Most commonly purchased plank species from respondent in the study area (plank sellers)							
			Akure South		Akure North		
Common name	Scientific name	Freq.	Perc.%	Freq.	Perc.%	Total Freq	Total%
Aata	*Fagara leprieurii*	3	1.53	4	1.97	7	1.75
Afara	*Terminalia superba*	26	13.27	20	9.85	46	11.53
Araba	*Ceiba pentandra*	12	6.12	13	6.40	25	6.27
Ashiwole		0	0.00	1	0.49	1	0.25
Aya	*Cyperus esculentus*	4	2.04	4	1.97	8	2.01
Aye	*Daubentonia madagascariensis*	10	5.10	7	3.45	17	4.26
Ayere	*Albizia glaberrima*	11	5.61	15	7.39	26	6.52
Ayunre	*Albizia zygia*	4	2.04	8	3.94	12	3.01
Danta		4	2.04	12	5.91	16	4.01
Digbo	*Entandrophragma angolense*	0	0.00	5	2.46	5	1.25
Eku	*Brachystegia eurycoma*	0	0.00	2	0.99	2	0.50
Eru	*Gnetum africanum*	1	0.51	2	0.99	3	0.75
Gmelina	*Gmelina arborea*	8	4.08	8	3.94	16	4.01
Iroko	*Milicia excelsa*	0	0.00	1	0.49	1	0.25
Iron wood	*Olneya tesota*	0	0.00	1	0.49	1	0.25
Ita	*Annona squamosa*	25	12.76	20	9.85	45	11.28
Koleagbe	*Amphimas pterocarpoides*	3	1.53	2	0.99	5	1.25
mahogany	*Swietenia macrophylla*	16	8.16	14	6.90	30	7.52
Mansonia	*Mansonia titillans*	7	3.57	9	4.43	16	4.01
Obeche	*Triplochiton scleroxylon*	15	7.65	15	7.39	30	7.52
Obobo		4	2.04	3	1.48	7	1.75
Okun eran	*Hibiscus vitifolius*	0	0.00	2	0.99	2	0.50

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Omoh	*Pterocarpus erinaceus*	7	3.57	4	1.97	11	2.76
Oporoporo	*Solanum aviculare*	13	6.63	9	4.43	22	5.51
Oriro	*Origanum rotundifolium*	12	6.12	12	5.91	24	6.02
Orumodun		2	1.02	1	0.49	3	0.75
papoo	*Canarium schweinfurthii*	0	0.00	2	0.99	2	0.50
Puu	*Stenogyne kanehoana*	1	0.51	1	0.49	2	0.50
Teak	*Tectona grandis*	7	3.57	6	2.96	13	3.26
White wood	*Liriodendron tulipifera*	1	0.51	0	0.00	1	0.25
Total		196	100.00	203	100.00	399	100.00

3.1.2.3 Barriers Faced by Respondents Trading in Wood Planks in the Study Area (plank sellers).

The barriers respondents (wood planks sellers) in the study area are facing are presented in Table 17. 8.91% of the respondents stated that the barrier they face as wood plank sellers is bad roads. 16.34% of them face the barrier of high capital intensity (16.34%), 27.23% of them face the barrier of disappointment in time of supply, 12.38% face fluctuation in tax. 2.48% face the barrier of high cost of labour. 12.87% of the respondents face the barrier of seasonal scarcity of wood planks and 19.80% of them face the barrier of forest restriction. (Table 16). Chi-square test ($p < 0.05$) shows that there is a significant association between the years of working experience of wood plank sellers and the barriers they face in their business (hypothesis 3 and Table 16). However, the chi-square test ($p > 0.05$) shows there is no significant association between the educational qualification of wood plank sellers and the barriers they face in their business (hypothesis 4 and Table 16).

Table 14: Barriers Faced by respondents Involved in Wood Plank Selling in the study area

Barriers towards plank trading derived from respondent in the study area (plank sellers)						
	Akure South		Akure North			
Barrier and challenges to plank trading	frequency	percentage	frequency	percentage	Total frequency	Total percentage
Bad road for transportation	5	5.26	13	12.15	18	8.91
capital intense	17	17.89	16	14.95	33	16.34
Disappointment in time of supply	30	31.58	25	23.36	55	27.23
Fluctuation in tax	11	11.58	14	13.08	25	12.38
High labour intense	2	2.11	3	2.80	5	2.48

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Seasonal scarcity	11	11.58	15	14.02	26	12.87
forest restriction	19	20.00	21	19.63	40	19.80
Total	95	100.00	107	100.00	202	100.00

3.1.2.4 Respondents Suggested Solutions to Overcome the barriers they Face in their Business in the Study Area (Wood Plank Sellers)

Suggested solutions made by respondents to the barriers faced as wood plank sellers are presented in Table 18. Such as pleading with plank sellers, improving government policies, improving the road system, reporting to government authorities, tax regulations, government grants, buying from various sources and buying excess against scarcity periods.

Table 15: Suggested solutions by Respondents to barriers they face in Selling Wood Planks in the study area

Suggested solutions by Respondents to barriers they face in Selling Wood Planks in the study area (planks sellers)						
	Akure South		Akure North			
Possible solution	frequency	Per. %	Frequency	Per. %	Total frequency	Total percentage
Pleading with plank suppliers	5	7.14	4	7.27	9	7.2
Improving government policies	16	22.86	8	14.55	24	19.2
Improving road system	5	7.14	5	9.09	10	8
Reporting to government authorities	7	10.00	10	18.18	17	13.6
Tax regulation	10	14.29	4	7.27	14	11.2
Government grants	24	34.29	22	40.00	46	36.8
Buying from various sources	1	1.43	2	3.64	3	2.4
Buying excess against scarcity period	2	2.86	0	0.00	2	1.6
Total	70	100.00	55	100.00	125	100

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The table below shows all results of hypothesis tests for the study and their significant level between the variables of each hypothesis.

Table 16: Total hypothesis tested

Variables	DF	P- value	Decision
Years of work experience of Saw Millers v/s barriers faced	12	0.99	Not Significant
Educational qualification of Saw Millers v/s barriers faced	12	0.11	Not Significant
Years of work experience of wood plank seller's v/s barriers faced	12	0.026	Significant
Educational qualification of Wood Plank Sellers v/s barriers faced	12	0.224	Not Significant

P=0.05

3.2 Discussion

3.2.1 Barriers Faced by Saw Millers Trading in Wood Planks in the Study Area

The inadequate power supply is one of the main obstacles sawmillers in the study area face when selling planks. Nigeria's power supply is notoriously inadequate. Electricity is required to run the sawmills that turn logs into planks. However, due to an epileptic power supply, many of the machines could not be powered. As a result, many sawmillers were unable to meet their customers' demand for planks. Therefore, a bad power source hinders their business. Ojukwu (2022) noted that poor supply of electricity has made it extremely difficult to run businesses in Nigeria. He noted further that the World Bank disclosed that businesses in Nigeria suffer an annual loss of $29 billion as a result of an "unreliable" power supply.

Another barrier identified by respondents (saw millers) is the high cost of labour. The cost of labour in Nigeria has increased tremendously in the last few years. The high price of necessities for human survival is the cause of this. Because of this, the average worker will demand a high wage, which sawmillers might find challenging to meet. As such, sawmillers cannot hire the number of labourers they require. As a result, their business is hindered by the high cost of labor.

Another obstacle mentioned by study participants is the high expense of equipment. The bad economy of the country has made equipment that is imported very expensive. It therefore becomes a problem for sawmillers to replace their old equipment due to the unbearably high cost. This is therefore a barrier to their business.

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Low availability of wood supply is another barrier identified by sawmillers in the study area. The supply of logs to sawmills in the study area is becoming increasingly scarce due to daily reductions in the size of the forest estate of the state. Increasing illegal felling of trees and encroachment into the forest reserves of the state have drastically reduced the supply of logs to sawmills in the study area. Low availability of wood supply has therefore become a barrier to the business of wood plank selling in the study area.

Chi-square test ($p > 0.05$) shows that there is no significant association between the years of working experience of sawmillers and the barriers they face in their business. This means that irrespective of the years of working experience of sawmillers in the study area, they are all faced with the same barriers. This is because barriers such as poor power supply, high cost of labour and high cost of equipment have nothing to do with years of working experience. It is a common barrier to them.

3.2.2 Barriers Faced by Plank Sellers in the Study Area

Plank sellers identified bad roads as one of the barriers they face in carrying out their business. It is pertinent to note that bad roads are a barrier because planks are heavy materials. To transport them is very difficult. Bad roads have made their transportation a heinous task both for the plank sellers as well as for their customers that want to buy planks. Plank sellers therefore see bad roads as a barrier.

Another barrier identified by plank sellers is the high capital intensity of the business. Plank selling is a small-scale business venture. The majority of those that are involved in the business have limited capital. They therefore see the capital that is needed to operate a plank-selling business as a barrier.

Many of the plank sellers also see disappointment in time of supply as a barrier to their business. This is because more often than not their source of supply does disappoint them. The reason for this is because the sawmillers, who are their major source of supply, are often faced with some problems that make them disappointed. These include power failure, decreasing availability of raw materials (logs), high cost of machine spare parts, and bad roads.

Plank sellers also identified high cost of labour as a barrier to their business. Plank sellers need labour to offload planks from the truck that has brought the planks. When customers also want to buy planks, they need labour to load the planks inside. The cost of this labour is high to most of the plank sellers. As such, they see the cost of labour as a barrier to their business.

The chi-square test ($p < 0.05$) shows that there is a significant association between the years of working experience of wood plank sellers and the barriers they face in their business. This shows that experience in selling planks is very important and can make wood plank sellers overcome

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some barriers. Barriers like high capital intensity can be overcome by years of working experience. This is because wood plank sellers with many years of working experience would have made more money to overcome the barrier of high capital intensity. To buy planks in bulk will not be a barrier.

However, the chi-square test ($p > 0.05$) shows there is no significant association between the educational qualification of wood plank sellers and the barriers they face in their business. This shows that education does not play a major role in helping wood plank sellers to avoid or overcome the barriers they face in their business. Education is known to improve information available to people in various fields of businesses. This means there is no special information in wood plank business that is available to the educated ones among them. The trading information is available to most of them.

4. CONCLUSION AND RECOMMENDATION

4.1 Conclusion

The study assessed the impact of barriers that are faced in trading planks. In the course of the study, plank traders were categorised into two groups (the sawmillers and the plank sellers). The study points out various problems or barriers, suggestions, and approaches they made in solving the problems for easier and more efficient plank trading. More study was made to evaluate the relationship between the level of education, the years of experience, and the barriers faced. The association between the level of education of both sawmillers and plank sellers has no relationship with the barriers they face, while the year of experience and barrier faced has no relationship for sawmillers but does for plank sellers.

4.2 Recommendation

In view of the findings of this research, the following recommendations are hereby made:

1. The government should regulate tax and give out grants to plank traders.
2. Power supply should be improved for better functioning of log-converting infrastructures (sawmill).
3. Bad roads should be repaired to aid transportation of wood planks.

ACKNOWLEDGEMENT

My first gratitude goes to God Almighty, who is my source and sustainer, my provider, the rock on which I stand, who has given me good health and rewarded me with his favour.

My heartfelt gratitude goes to our parents, who tirelessly set the groundwork for our education, giving it their all, as well as the support given to us since birth, their love and encouragement at all times. We also appreciate our siblings for being there always.

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I also appreciate our supervisor, Professor A.G Adedayo, for his fatherly advice, care, counsel, support and prayers, our profound gratitude to him for his unrelenting effort and sacrifice in going through our work despite his busy schedule so as to make the study successful, may God bless you richly.

Also special thanks to the entire staff of the Forestry and Wood Technology Department for their parental guidance, tolerance, supervision, and overall commitment to our career's success. Their moral support and orientation are quite valuable. We say, May God bless them all.

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