

ASSESSMENT OF CORPORATE SOCIAL RESPONSIBILITIES AND RETURNS TO MARKETING AMONG SAW MILLERS IN ISEYIN LOCAL GOVERNMENT OF OYO STATE, NIGERIA.

Conference Paper

Abdul-azeez A. Muhammed-Lawal

Professor, Department of Agricultural Economics and Farm Management. University of Ilorin, Ilorin, Nigeria.e-mail: lawaz71@yahoo.com

Raimot Adepeju Lawal*

Assistant lecturer, Department of Agricultural and Bio-environmental Engineering. Federal Polytechnic Ilaro, Ogun State, Nigeria.e-mail: raimot.lawal@federalpolyilaro.edu.ng

Taiwo Olusola Ogunseitan

Assistant lecturer, Department of Agricultural and Bio-environmental Engineering. Federal Polytechnic Ilaro, Ogun State, Nigeria.e-mail: ogunseitan.taiwo@federalpolyilaro.edu.ng

*Corresponding author

Abstract

In modern business world, corporate social responsibility has been emphasized by stake holders as a driving tool for success to be accomplished. This study assessed the performance and effects of corporate social responsibilities on returns of saw wood marketing among saw millers in Iseyin town of Oyo State. A well-structured questionnaire was used to collect data for this study from 115 saw millers. Analytical tools for this study were gross margin analysis, correlation and multiple linear regression analyses. The findings revealed that age, sex and years of experience were the main factors that affect saw millers in discharging corporate social responsibility. Also there is a significant difference between the corporate social responsibility and returns to sawn wood marketing ($p < 0.05$) and discharging of economic responsibility to residents in the study area will decreased the revenue generated by the saw millers. Therefore, saw millers needed to be enlightened and encouraged that the success of the business needs to be measure by more than

just profitability. Governments need to encourage them in order to reduce the cost of production to make the products available to the populace at affordable prices, provision of regular supply of electricity, availability of spare parts to replace the worn-out parts.

Keywords: Corporate Social Responsibilities, Saw Millers, Sawn Wood, Marketing, Profitability Analysis

1. Introduction

There are various definitions of corporate social responsibility [CSR]. Most definitions integrate the three dimensions to the concept, that is, economic, environmental and social dimensions. Corporate social responsibility refers to a concept whereby companies integrate social and environmental concern in their business operations and in their interaction with their stakeholders on a voluntary basis (Brussels, 2001).

Corporate social responsibility thus, means the responsibility of enterprises for the effects of their business operations on the environment, their employees and the wider society. Carroll, (1979) views corporate social responsibility in four part definition which encompasses the economic, legal, ethical, and discretionary (philanthropic). He distinguishes between a firm's economic, legal, ethical and philanthropic responsibility. An enterprise acts economically responsible, if it is offering socially desirable goods and services at fair prices. By selling these goods and services, the enterprise secures employment and contributes to the wealth of society. Legal responsibility requires companies to act in compliance with laws. Ethical responsibility includes compliance with rules and values of a society even if they are not legally codified. Philanthropic responsibility stands for philanthropic actions of enterprises, for instance charitable giving or donation of voluntary labour.

Corporate social responsibility in the forest sector has specific characteristics that differentiate it from other sectors of natural resources management. These characteristics link the forest industry to forests, which possess strong environmental and social values. In addition to timber and paper products, forests provide wildlife habitat and recreational opportunities. Forests prevent soil erosion and flooding, help provide clean air and water, and contain tremendous biodiversity.

Forest litters and soil microbes, together, constitute an important resource that makes forests fertile for arable farming in the tropics (Akachukwu, 2006).

Majority of the Nigerian populace depend on the forest industries, thus placing a lot of pressure on the forest resources of the nation. The formal sector is essentially wood based and is fairly well developed and comprise mechanical wood industries, including sawmills, veneer and plywood manufactures, particle board, paper and paper board manufactures.

Sawn wood is a natural product from the forests which is sorted into various categories for efficient end uses. It is characterized by various appearances, colors, knots and mineral streaks. The characteristics of sawn wood are consistent with the species of the tree; such as strength, hardness, durability and appearance which vary between different species (Wood products, 2008). In Nigeria, sawn wood is used for various purposes across the country and its prices are fundamental pre-requisite for socio-economic development of the country. Out of the semi processed and processed wood categories, sawn-wood has the highest production and demand and it is the most widely distributed in Nigeria for construction purposes such as building and furniture. (Food and Agriculture Organization, 1999).

Sawn wood is produced by sawmills in Nigeria. The installed capacity of the sawmill industry in Nigeria rose from 8,831,750m³ in 1988 to 15,793,188m³ in 1992. It then decreased to 10,900,000m³ in 1996 and subsequently increased to 14, 684,000m³ in 2002 and 11,734,000 m³ in 2010 (Ogunwusi, 2012).The industry has a few large integrated mills among which are the African Timber and Plywood Ltd. Sapele, Piedmont at Ologbo, Premier Timber Industry Akure, Seromwood Industry Calabar, Iyayi Brothers, Benin City and others. The sawmill industry is characterized by small scale operatives who constitute more than 90% of the entrepreneurs in the sector (GWV Consultants, 1993;Ogunsanwo, 2010;Ogunwusi, 2012, RMRDC2009). The saw mills used outdated technologies while only less than 10% used advance technologies.

The state of corporate social responsibility is largely unexamined in the thousands of small saw milling facilities. Because of the costs, larger companies may engage in corporate social responsibility practices more often than smaller ones, for example give less attention by applying safety measures and complying with existing environmental regulations. Corporate social

responsibility programmes and standards should be defined locally. For examples, law to prevent illegally logged material to enter the country so that customers can now have greater confidence in their suppliers and the material they purchase, law to promote selective harvesting of trees using the techniques established by the Tropical Forest Foundation to protect forest canopy, seed trees and water sources which provides for conservation and utilization of forest resources. Organization of programmes for saw millers on how to export their products, managed forests not destroyed or converted to farms and ranches. Also, orientating saw millers to act on their own to give back to the communities where they work and so on.

Saw millers in the study area embarked on some activities that have effects on their environments such as afforestation practices, solid waste generation, disposal of waste products, and use of sound proof devices for reducing the sound of milling machine. With the aid of corporate social responsibility programmes the effects of these activities on the environments will be minimized in the study area. Therefore, this paper assesses the activities of saw millers that have effects on immediate environment, the effects of corporate social responsibility on returns to sawn wood marketing in the study area and also identify factors affecting the saw millers in discharging corporate social responsibilities to residents

2. Methodology

Description of the study area.

The study was carried out in Iseyin Local Government Area of Oyo state, Nigeria. Iseyin local government area was chosen because of its closeness to old Oyo national park that represents national forest that is predominant in Nigeria. Iseyin is located along Saki road and it is approximately 100 kilometers north of Ibadan and comprises of 11 wards. The study area is bounded by Ibarapa North and Kajola L.G.A to the West, Oyo West L .G.A to the East, Itesiwaju L. G.A to the North and Ibarapa East L. G.A to the South.

Sampling techniques and data collection instruments.

Data for this study were collected from the saw millers using a well-structured questionnaire. Major areas of sawn wood production in Iseyin such as Abaletu, Anaobalowo and Oluwole were

sampled through a purposive sampling technique. A random sampling technique was used to sample 120 saw millers. Responses from only 115 were useful for the analysis of the study.

Analytical techniques

A number of analytical tools were used for the study. They include; descriptive statistics, gross margin analysis, correlation analysis, and regression analysis.

Gross margin analysis: Was used to estimate the returns to sawn wood marketing. The estimation was used to know the profitability of the business, in determining the cost and returns of the business, average total variable cost and average total revenue was used.

Average total variable cost = ATV

Average total revenue = ATR

Gross margin = Average total revenue (ATR) minus Average total variable cost (ATVC)

Total revenue are the returns from sawn wood marketing while average total variable cost includes variable inputs such as cost of round wood per units, total cost of milling wood, tax on wood, transportation cost per cycle, generator cost, blade replacement, labour cost and other variable costs used.

Correlation analysis: This was used to determine the effect of corporate social responsibility on returns to sawn wood marketing.

$$R^2 = \frac{\sum(X_1 - \bar{X})(Y_1 - \bar{Y})}{\sqrt{\sum(X_1 - \bar{X})^2 \sum(Y_1 - \bar{Y})^2}}$$

X = Effect of Corporate Social Responsibility

Y = Returns on Sawn Wood

Corporate social responsibility was measured according to Carroll's (1991) pyramid of CSR. Where CSR was considered to be in four categories of responsibilities, namely economic responsibility, legal responsibility, ethical responsibility and philanthropic responsibility. Therefore this paper assesses the effect of corporate social responsibility on each of the four responsibilities.

Multiple linear regression analysis: This was used to identify the factors affecting the saw millers in discharging corporate social responsibilities to residents.

Regression model

Multiple linear regression model

$$y = \beta_0 + \beta_1 x_1 + \dots + \beta_k x_k + e_i$$

Where

y = Corporate social responsibility which was measured according to Carroll's (1991) pyramid of CSR, namely economic, legal, ethical and philanthropic responsibilities.

β_0 = Constant

$\beta_1 \dots \beta_k$ = Regression coefficients

$x_1 \dots x_k$ = Independent variables Independent variables such as age, sex, years of experience, agreed price, returns to sawn wood, provision of services to organization or individual, compliance with laws, and awareness on corporate social responsibility..

e_i = error term

RESULTS AND DISCUSSION

4.1 Activities of saw millers that have effects on immediate environment

The activities of saw millers that have effects on immediate environment of the respondents includes afforestation practices, waste generated from the saw mills and method of disposal, use of sound proof devices for reducing the sound of milling machine. Details are presented in Table 1. It was found that, 65.2% of the respondents' practices yearly afforestation through their saw mill associations by intervention of governments that provides acres of land and categories of seeds with stipulated specification size of 4 feet and 6 inches to the association and also supervises it and this is not enough in the area. While 34.8% of the respondents did not practices afforestation due to bribery or corruption.

The study revealed that five different types of wood waste are generated during saw milling activities. These are tree barks, cut slabs, strips, plain shavings, and saw dust. These wood waste were disposed using different methods such as burning in an open space, selling, dumping on

vacant plots of land, dumping along streams or river banks, burying of waste to use as drainage during rainfall and also dumping inside designated open space.

58.3% of the respondents dispose their waste accumulated for two weeks through burning, 6.1% sells their waste, 17.4% sell and burn their waste, 5.2% dump their waste on vacant plots, 4.3% dump their waste along river or streams banks, 3.5% bury their waste and use as drainage during rainfall while 5.2% dump their waste inside designated open space. Burning of the waste in an open space, fumes from the generators used during operational procedure of saw milling activities, fumes (Co) from the lorries used when offloading of round woods affects the eyes and lungs of the people around the saw mills leading to air pollution which affect their environments. It was noticed that dumping of the waste along river or streams can cause flooding during heavy rainfall in the study area, burying of waste to use as drainage can cause soil erosion thereby leading to flooding as well. It was also found that, there is loss of biodiversity in the soil within the study area.

Furthermore, 43.5% make use of sound proof devices for reducing the sound of milling machine, thereby control noise pollution in the area. While 56.5% did not make use of sound proof devices, due to high costs, exposure and awareness on its importance. Saw millers report that, people living around the saw mills complained to them on cough, house warming especially during dry seasons and also sound of milling machine which affects their health.

Table 1: Activities of Saw millers that have effects on immediate environment (n=115)

Activities	Frequency	Percentage
a. Afforestation Practices		
Plating of trees		
Yes	75	65.2
No	40	34.8
Total	115	100
b. Disposal of waste		
Burning	67	58.3
Selling	7	6.1
Burning and Selling	20	17.4
Dumping on vacant plots	6	5.2
Dumping along steams/river	5	4.3

Burying of waste to use as drainage during rainfall	4	3.5
Dumping inside designated Open space	6	5.2
Total	115	100
c. Use of sound proof devices		
Yes	50	43.5
No	65	56.5
Total	115	100

Source: Field Survey, 2018

4.2 Effects of Corporate Social Responsibilities on Returns to Sawn Wood Marketing

The costs and returns to determine the gross margins to sawn wood marketing on the basis of which the effect of the corporate social responsibility was determined. The costs and returns to sawn wood marketing per marketer per cycle are as presented in Table 2.

Table 2: Analysis of Cost and Return per Marketer per cycle

Type of wood	Average Cost (₦)	Average Revenue (₦)
IgiAyin	14242.78	63794.78
Mailana	146242.6	44330.43
Oridudu	401.3043	1835.652
Mahogany	11161.74	35537.39
Araba	9323.478	34127.83
Iyya	9193.043	26707.83

Source: Field Survey, 2018

This result shows that an average saw millers is making ₦96,768.9667 on an average production per average cycle which is 7days. Therefore, from the result presented, it may be inferred that sawn wood marketing is a profitable business.

Table 3: Correlation Coefficient Analysis Showing the Effect of Corporate Social Responsibilities on Returns to Sawn Wood Marketing.

Economic Responsibility	Agreed Selling Price	Returns to sawn wood marketing
Agreed to selling price	Pearson correlation	1
	Sig (2- tailed)	-.242***
		.009

		N	115	115
Legal Responsibility			Laws Provided by the Government	Returns to Sawn Wood Marketing
Laws provided by the Government	Pearson correlation Sig (2-tailed)		1	.142 .130
		N	115	115

			Compliance with the Laws from the Government	Returns to Sawn Wood Marketing
Compliance with the the laws from Government	Pearson correlation Sig (2-tailed)		1	-.134 .154
		N	115	115

Ethical Responsibility			Laws Provided by the Host Community	Returns to Sawn Wood Marketing
Laws provided by the Host Community	Pearson correlation Sig (2-tailed)		1	.142 .130
		N	115	115

			Compliance with the Laws from Host Community	Returns to Sawn Wood Marketing
Compliance with the Laws from Host Community	Pearson correlation Sig (2-tailed)		1	-.094 .318
		N	115	115

Philanthropic Responsibility		Donation to Organizations or Individual	Returns to Sawn Wood Marketing
Donation to	Pearson correlation	1	.158
Organizations or	Sig (2-tailed)		.092
Individual	N	115	115

		Provision of Services in areas of Voluntary Labour	Returns to Sawn Wood Marketing
Provision of Services	Pearson correlation	1	.004
In areas of Voluntary	Sig (2-tailed)		.968
Labour.	N	115	115

Source: Field Survey, 2018

The result in Table 3 shows the correlation coefficient between the corporate social responsibilities and returns to sawn wood marketing in the study area. The result indicated that there is a negative correlation between the economic responsibility and sawn wood marketing which were significant correlated at 0.01 levels. This implies that, an agreed price has negative effect on the revenue generated; either minimum or maximum prices given could directly decreased revenue generated by the saw millers. Therefore, discharging of economic responsibility to residents in the study area will decreased the revenue generated by the saw millers. It is seen that there is a positive correlation between legal, ethical, philanthropic responsibilities and returns to sawn wood marketing which were not significantly correlated and this implies that, either the saw millers discharge their legal, ethical and philanthropic responsibilities to their residents or not, it has no effect on the revenue generated by the saw millers in the study area.

4. Factors affecting the Saw millers in Discharging Corporate Social Responsibilities to Residents in the study area.

Factors affecting the various aspects of the corporate social responsibilities such as economic, legal, ethical and philanthropic are as presented in Table 4.

Table 4: **Determinants of Corporate Social Responsibilities.**

Determinants of Economic Responsibility				
Variables	Factors	B	t-value	Significant
A	Constant		3.792	0.000***
X ₁	Awareness on corporate social Responsibility	0.140	1.565	0.121
X ₂	Sex	-0.293	-3.429	0.001**
X ₃	Age	0.236	2.548	0.012**
X ₄	Marital status	-0.090	-1.068	0.288
X ₅	Level of education	0.112	1.222	0.224
X ₆	Agreed price	-0.297	-3.296	0.001**
X ₇	Returns to saw wood marketing	0.052	0.583	0.561
R ²	R-square	0.264		
Determinants of Legal Responsibility				
A	Constant		3.085	0.003***
X ₁	Awareness on corporate social Responsibility	0.147	1.599	0.113
X ₂	Sex	0.293	-3.325	0.001**
X ₃	Age	0.269	2.816	0.006*
X ₄	Marital status	0.047	1.0505	0.615
X ₅	Level of education	0.080	1.082	0.397
X ₆	Returns to saw wood marketing	0.100	1.082	0.282

X ₇	Compliance to the laws	0.172	-1.860	0.066*
X ₈	Laws provided to improved business enterprise	-0.113	-1.289	0.200
R ²	R-square	0.221		

Determinants of Ethical Responsibility

A	Constant		5.088	0.000***
X ₁	Returns to saw wood marketing	0.001	0.013	0.990
X ₂	Sex	-0.198	-2.021	0.046*
X ₃	Age	0.501	5.068	0.000***
X ₄	Martial status	-0.071	-0.926	0.357
X ₅	Level of experience	-0.027	-0.316	0.753
X ₆	Years of experience	-0.491	-5.394	0.000***
X ₇	Compliance to the laws	-0.212	-2.377	0.019**
X ₈	Laws provided to improved business enterprise	-0.125	-1.327	0.187
R ²	R-square	0.378		

Determinants of Philanthropic Responsibility

A	Constant		3.220	0.002
X ₁	Returns to saw wood marketing	0.009	0.102	0.919
X ₂	Sex	-0.190	-2.068	0.042**
X ₃	Age	0.496	3.732	0.000***
X ₄	Martial status	-0.138	-1.626	0.108
X ₅	Level of experience	-0.106	-1.127	0.263
X ₆	Years of experience	-0.551	5.679	0.000***
X ₇	Donation to organization or individual	-0.35	0.323	0.748
X ₈	Provision of service in areas of voluntary labour	0.073	0.775	0.440

X ₉	Provision of services to organization or individual	0.244	1.762	0.082*
R ²	R-square	0.445		

Source: Field Survey, 2018.

***, **, * Significant at 1%, 5% and 10% respectively

The result of regression model showed that three explanatory variables were significant in determinants of economic responsibility while the other four were insignificant. The significant variables are sex, age and agreed price which were found to significantly determining the factors affecting the saw millers in discharging economic responsibility to residents in the study area at (p< 0.05) (p< 0.05) (p< 0.05) respectively. The implication of this finding is that, as saw millers discharge economic responsibility to their residents, it will decrease their revenue generated in the study area. The coefficients of determination with value 0.264 shows that the explanatory variables explain about 26.4% of the variations in the factors affecting economic responsibility leaving about 73.6% unexplained.

Regression model revealed that three explanatory variables were significant in determinants of legal responsibility while the other five were insignificant. The significant variables are sex, age and compliance to the laws by government to improved saw millers enterprise which were found to significantly determining the factors affecting the saw millers in discharging legal responsibility to residents in the study area at (p< 0.05) (p< 0.10) (p< 0.10) respectively. The implication of this finding is that, either the saw millers discharge legal responsibility to their residents or not, it has no effect on their revenue generated in the study area. The coefficients of determination with value 0.221 shows that the explanatory variables explain about 22.1% of the variations in the factors affecting legal responsibility leaving about 77.9% unexplained. It was also found that four explanatory variables were significant in determinants of ethical responsibility while the other four were insignificant. The significant variables are sex, age, years of experience and compliance to the laws by host community to improve the well-being of the people in the community which were found to significantly determining the factors affecting the saw millers in discharging ethical responsibility to residents in the study area at (p< 0.10) (p< 0.01) (p< 0.01) (p< 0.05) respectively. The implication of this finding is that, either the saw millers discharge ethical responsibility to their residents or not, it has no effect on their revenue

generated in the study area. The coefficients of determination with value 0.378 shows that the explanatory variables explain about 37.8% of the variations in the factors affecting ethical responsibility leaving about 62.2% unexplained.

Furthermore, four explanatory variables were significant in determinants of philanthropic responsibility while the other five were insignificant. The significant variables are sex, age, years of experience and provision of services to organizations or individuals which were found to significantly determining the factors affecting the saw millers in discharging philanthropic responsibility to residents in the study area at ($p < 0.05$) ($p < 0.01$) ($p < 0.01$) ($p < 0.10$) respectively. The implication of this finding is that, either the saw millers discharge philanthropic responsibility to their residents or not, it has no effect on their revenue generated in the study area. The coefficients of determination with value 0.44 shows that the explanatory variables explain about 44.5% of the variations in the factors affecting philanthropic responsibility leaving about 55.5% unexplained.

5.0 CONCLUSION

Saw mills industries in Nigeria is still underdeveloped and an avenue for increasing the nation's revenue and also provides employment for thousands of people. This sector has not implemented corporate social responsibility willingly in their business without strict supervision from the authority. The empirical result shows that either the saw millers in the study area discharge their corporate social responsibilities or not, it has no effect on the revenue generated by the saw millers. Therefore, saw millers needed to be enlightened and encouraged that the success of the business needs to be measure by more than just profitability. Saw millers need to be encouraged by governments to reduce the cost of production to make the products available to the populace at affordable prices, by providing regular supply of electricity, available/ availability and supply of spare parts to replace the worn-out parts to reduce fatigue and the high energy required. Saw millers need to give back to the community in which they operates, clean up all forms of pollution they have caused in their course of production and also provide infrastructural facilities to the community as a way of giving back and developing the community.

REFERENCE

- Akachukwu, A.E. (2005). Disappearing Forests, the Consequences and Challenges of Sustainable Development in Nigeria. Proceedings of the 31st Annual Conference of the Forestry Association of Nigeria held at University of Agriculture Makurdi. November 20-25, 2005, 49-57.
- Bauer, P.T. & Yameh, B.S. (1993). Economics of Marketing Reform. In: Abbot, J.C. Agric and Food Marketing in Developing Countries, Selected Reading, *CTA/CABI Publication Series*, 108 - 132pp.
- Brussels,(2001). Green paper: promoting a European framework for corporate social responsibility presented by the commission of the European communities.
- Carroll, A.B. (1979). A three-dimensional conceptual model of corporate social performance. *Academy of Management Review*, 4: 497-505.
- Carroll, A. B. (1998): The Four Faces of Corporate Citizenship. In: *Business & Society Review*, Vol. 100, No. 1: 1-4.
- Federal Department of Forestry.(1988).Present status of the forestry sector of Nigeria, Forest Resource Study.
- Fisman, R., Heal, G., & Nair, V. (2006).A model of corporate philanthropy. (Working paper) University.
- Food and Agriculture Organization. (1999). Global Forest Products Consumption, Production, Trade and Prices: Global Forest Products model projections to 2010. *FAO Forest Paper* No. 81:33pp.
- Heal, G., (2005). Corporate social responsibility: an economic and financial framework.
- Larinde, S.L. (2010). Secondary processing and the Nigerian saw mill industry: Issues, challenges and opportunities. In S.KoladeAdeyoju and S.O Bada (eds) Readings in sustainable tropical forest Management. Pp. 277-291.
- Ogunsanwo, O.Y. (2010). Challenges of wood utilization in Nigeria. In S.KoladeAdeyoju and S.O Bada (eds) Readings in sustainable tropical forest Management. Pp 293-303.

Ogunwusi, A.A. (2012). Characterization of wood cellular structures of five lesser used wood species growing in Nigeria. *Journal of Natural Sciences Research* 2(7);128-134.

Olorunnisola, A.O. (2000). Workshop Structure in the small Scale Furniture Industry in Ibadan metropolis. *Journal of Tropical Forest Resources* 16(1):46-57.

Wood products, (2008). Wood product industries: Production of sawn wood. USSR. 3pp.

Poster Presentation at 6th African Association of Agricultural Economists, Abuja. 23rd – 26th September, 2019.