

Impact of Wood Industries on Economic Status of
Resident in Niger State, Nigeria

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Abstract

This study was carried out to find out the impact of wood industries on economic status of resident in Niger State, Nigeria. Survey research design. To achieve this objective, four research questions were formulated to guide the study. A 26- item questionnaire was used to collect data. The instrument was validated by 3 lecturers from the Department of Industrial and Technology Education, Federal University of Technology, Minna. The reliability coefficient of the instrument was found to be 0.81 using Cronbach Alpha formula. Mean was used as statistical tool to analyze the data collected. The study revealed that most wood industries in Niger State possess the potentials, but not the facilities and support required to make tremendous impacts on the economic status of Niger State as the challenges confronting them were beyond ordinary economic challenges. It was therefore, recommended among others that the government of Niger State should create a conducive and growth driven opportunity/environment for investors/industrialist who plan to make impact on the state through the wood industry, as the demand for wood products and wood bye-products are on the increase.

Introduction

Wood is a fibrous rigid material of plant origin. It is broadly classified as hardwood and softwood (Fuwape, 2000). It is a highly synthesized and optimized raw material from nature with load-bearing functions as one of its main functionalities. Wood is one of the most important raw materials, not only because it is used for literally hundreds of products but because it is a renewable natural resource with enormous benefit to the growth and development of any nation.

Looking at wood and its benefits, it is anonymously presented as an unprofitable asset to the progress and development of the state as a whole, which inevitably would be accepted by a novice as an unimportant material required to overcome the challenges of life in various economic sectors and professions. It is obvious that the entire human race depends on all sorts of energy in which water takes about 70% of such dependency and wood provides close to 40% of the items, energy, and facilities that are used to overcome the day to day human, industrial, economic, and environmental challenges (Gadgil, 2006). Wood industry is a multi-million industry which gives livelihood to millions of people around the globe. This is one of the industries which sustain the economy of several nations, especially those with vast forests to speak of. World statistics have shown that the wood industry contributes largely to the national system of production, distribution, and consumption activities of every nation in the world, (Hyde, Newman, & Seldon, 2011). If capitalised efficiently, wood industry will improve nation's wooden resource to the peak of glorious economic condition.

Wood industry is ancillary to many industries. The construction industry, for example is one of the industries which cannot go on without wood industry (Fuwape, 2005). There is no construction site anywhere which is devoid of wooden materials because it is used in all facets

of engineering and technology fields such as in road constructions, building, electrification, transportation, tool making, bridges, rail sleepers and telecommunication poles, all these can boom the economic status of a nation (Kareem, 2015). In another development, a towering and majestic building may be covered with glass, a bridge may be seen as an all concrete structure with metal railings, a castle may look grandiose with concrete and steel combined, but all of them could not have been into what they are without wood, (Kathryn, 2009). Therefore, with the increase in demand and encouragement by the government, many saw mills and other wood-based industries sprang up.

Niger State consists of two forms of wood-based industry: primary processors (forestry, sawmills) and secondary processors (Construction industry) which are formally and informally organized into cooperatives, self-formed associations and individuals. However, no tertiary processing industries (plywood unit mills, particleboards) has been established. In Niger State there are prospects to expand the wood industry sector considering its strategic geographical position, surrounded by richly forest resources as land mass, neighboring states, hence can tap the resources. Most of the wood industries in Niger State import large quantity of hardwood timber species for making high quality products from the south or western part of the country, of which they are neighbors. Most of the industries in Niger State have challenges unique to their particular operations though most secondary processing units share a number of traits and all primary processor units experience many similar constraints that affect the overall industry. Data on market conditions, importation and trend is virtually absent in the sector.

In the world of business, Williams (2012) stressed that wood industry supposed to be one of the many favorites of businessmen, where to

invest their money on. Feasibility studies revealed that wood is indeed a lucrative activity to engage in. The supply is none of a problem and the demands of processed or non-processed wood products are high which means high profits for the investors. In terms of technological advancement in the wood industry, this occurs on a monthly to annual basis, Nigeria and Niger State in particular contribute to the supplies of woods and its products to the international market, but lacks the qualities and standards of major industrial outfits overseas.

Due to these essential reasons, this study was carried out to show the loop-holes that cause the backwardness of wood industries in Niger state, at the same time highlight the possible solutions, add value of wood to the economy of the Niger State and country as a whole; Thereby showing the impact of wood industries" to the enhancement and economic development of the populace of Niger State.

Statement of the Problem

It is an undisputed fact that wood as a product resource and major source of livelihood and revenue generator within the Niger State is seen as irrelevant. According to Haskell (2010), wood to a lay man is not a profitable or an essential product to the challenges of life and the general economy of a community, state, and country at large. It is shocking that Niger state with large land mass (about 10% of Nigerian land mass) and forest resource lacks proper and modern wood industries which could be of immense benefit to the state and the nation at large. Such philosophies are accepted this way because of; lack of basic research on its benefit, poor implementation of development strategies, inappropriate knowledge transfer in various educational/training systems, poor orientation, which leads to its discouragement of present and future benefits to the society.

According to Tunji, (2011) one of the Niger state

government vision 3:2020 policy thrust agenda was adding value to manufacturing services and agriculture to facilitate the development of industrial clusters in the form of higher Technology Park and Industrial parks in the State in order to enhance the industrial base of the State. However, till date nothing of such has being in existence. Hence this study becomes necessary to determine the impact of wood industries on the economic status of Niger State residents which can therefore bring about the realization of objectives of vision 2020.

Purpose of Study

The aim of this study was to determine the impact of wood industries on the economic status of Residents in Niger State, Nigeria. Specifically, the study sought to:

1. Determine the extent to which wood is being utilized by wood industries in Niger State.
2. Find out the challenges of wood industries in Niger State.
3. Ascertain the impact of wood industries on the improvement of the Niger State economy.

Research Questions

1. To what extent is wood utilized in Niger State?
2. What challenges do the wood industries in Niger State encounter?
3. What are the impacts of wood industries on the improvement of the Niger State economy?

Methodology

The study adopted a survey research design. A survey research design is considered most appropriate for the study because it is set to collect relevant data from reputable sources and use it to investigate problems in realistic settings. Nworgu (2006) described it as the relevant design where population is large and sampling has to be carried out such that a group or items is studied by collecting and analyzing

data from a few people or items considered to be representatives of the entire group. In this study, questionnaire was the main instrument used to gather information from the respondent on the impact of wood industries on the economy of Niger State.

The area of the study, Niger State occupies which is located at the North Central Zone of Nigeria with a land area of 76,363 square km (29,484 square miles), which is about 10% of the total land area of Nigeria (The 2006 census). The population for this study was 27 management staff and 81 technical staff of all the wood processing industries in Niger state obtained from Ministry of Commerce and Industry.

The instrument was validated by three lecturers in the Department of Industrial and Technology Education, woodwork technology Option, at the Federal University of Technology for their suggestion and observation. The reliability of the instrument was found to be 0.81 using Cronbach Alpha formular. A total of (26) items questionnaire was administered to the management and technical staff of the above

mentioned industries. The questionnaire was administered by the researchers to the respondents through personal contact. All the administered questionnaires were duly completed and returned giving a one hundred percent (100%) return rate. For the analysis of the collected data, the items were rated with four (4) point rating scale of Strongly Agreed, Agreed, Disagreed and Strongly Disagreed. The statistical tools used to analyze the data collected for the research questions was the mean.

Results

To determine the acceptance value, a mean score of 2.5 is computed in line with the 4-point rating scale, any item that attracts 2.5 and above is considered Agreed and any item that attracts below 2.5 is considered Disagreed. The response mode were Strongly Agree (SA, 4), Agree (A, 3), Disagree (D, 2), Strongly Disagree (SD, 1).

Research Question 1

To what extent is wood utilized in Niger State?

Table 1: Mean score of management and technical staff on the extent of wood utilization in Niger State N₁=27 N₂=81

S/N	ITEM	\bar{x}_1	\bar{x}_2	\bar{x}_t	REMARKS
1.	Seasoning of converted timber	3.56	3.00	3.28	Agreed
2.	Upholstery designing and construction	3.22	3.22	3.22	Agreed
3.	Furniture construction	3.00	3.22	3.11	Agreed
4.	Bamboo and Rattan based production.	3.33	2.56	2.95	Agreed
5.	Finishing Operations on finished wood articles	3.00	3.22	3.11	Agreed
6.	Various Sawing Operations	3.00	3.11	3.06	Agreed
7.	Sales of planks of various marketable sizes	3.44	3.00	3.22	Agreed
8.	Timber preservation is always adequate	2.67	2.27	2.47	Disagreed
9.	Adequate and proper utilization of wood (chips, sawdust etc.) by products	2.54	2.44	2.49	Disagreed
Key					
\bar{x}_1	=	Mean score of management staff			
\bar{x}_2	=	Mean score of technical staff			
\bar{x}_t	=	average mean score of management staff and Technical staff			

Table 1 shows that both groups of respondent agreed with all except item 8 and 9 with the average mean rating of 2.47 and 2.49 respectively. Mean score ranging from 2.47 – 3.28.

Research Question 2:

What challenges do the wood industries in Niger State encounter?

Table 2: Mean score of Management and Technical Staff on the challenges the wood industries in Niger State encounter

$N_1=27$ $N_2=81$

S/N	ITEM	\bar{x}_1	\bar{x}_2	\bar{x}_t	REMARKS
10.	Poor power supply	3.00	3.39	3.20	Agreed
11.	Inadequate skilled personnel	2.89	3.39	3.14	Agreed
12.	Low patronage by environments and construction workers of local products	2.78	3.06	2.92	Agreed
13.	High tax rates	3.11	3.17	3.14	Agreed
14.	Insufficient wood raw materials	3.56	3.00	3.28	Agreed
15.	Value depreciation of final products and furniture used	3.00	3.22	3.11	Agreed
16.	Lack of commercial labour	3.00	2.72	2.86	Agreed
17.	Health hazards and complications	3.22	2.89	3.06	Agreed
18.	Weather conditions which affect market value of wood products	3.22	2.89	3.06	Agreed
19.	Lack of available and proper transporting facilities (trucks, vehicles e.t.c.)	3.33	3.00	3.17	Agreed

Key

- \bar{x}_1 = Mean score of management staff
- \bar{x}_2 = Mean score of technical staff
- \bar{x}_t = average mean score of management staff and Technical staff

agreed with all items with the mean score ranging from 2.86 – 3.28.

Research Question 3:

What are the impacts of wood industries on the improvement of the Niger State economy?

Table 2 reveals that both groups of respondent

Table 3 Mean score of management and technical staff on the future benefits of wood industry on the Niger State economy.

SN	ITEM	N ₁ = 27 N ₂ = 81			REMARKS
		\bar{x}_1	\bar{x}_2	\bar{x}_t	
20.	The use of high tech machines for human ease human fatigue and increase the speed of productivity	3.11	3.00	3.06	Agreed
21.	Realization of high income by wood industries due to enhanced wood industrial performance	3.67	3.39	3.53	Agreed
22.	There will be greater use of wood and other materials to meet the durability and other performance requirements of products.	2.43	2.45	2.44	Disagreed
23.	Provision of social amenities for residents by the industry	3.33	2.94	3.14	Agreed
24.	Residents have access to wood industrial products	3.67	2.83	3.25	Agreed
25.	Increase in revenue generation and economic status by government	3.67	3.00	3.34	Agreed
26.	Employment opportunity to the residents	3.22	2.83	3.03	Agreed

Key

- \bar{x}_1 = Mean score of management staff
- \bar{x}_2 = Mean score of technical staff
- \bar{x}_t = average mean score of management staff and Technical staff

Table 3 reveals that both groups of respondent agreed with all items with the mean score ranging from 3.03 - 3.53.

Discussion of Findings

In order to propel the economic state of any community or nation a proper analysis of the activities carried out within the various industries or sector of the said city must be carried out. It was discovered that the activities being carried out in the wood industries in Niger State did not totally include the production of bamboo and Rattan. This simply implies that some beneficial potential of wood production and processing are yet to be tapped in Niger State (Fuwape, 2000).

The finding shows that the challenges facing the wood industry in Niger State were not only the immediate challenges such as Poor power supply, lack of commercial labour, lack of wood and raw materials, but those that affect most economies such as land use policies, poor security within the capital city, poor investment

climate which contributes majorly to the growth and development of any state's economy which is in line with (Bello, 2010) who stated that in the aspect of the national incomes, the government can generate more incomes from the forest if its properly maintained. This income can be use in promoting the levels and standard of economy of the state.

Table 3 shows that all the items agreed with finding on the impacts of wood industries on the improvement of the Niger State economy except item 13 with mean rating of 2.44 which is below the agreed level of 2.50. This is insignificant and it shows that if wood industries where properly mobilized, it would create significant impact on the Niger State government economy, which is in line with Hyde, Newnan, & Seldon., (2011) who highlighted in their study titled the Economic Benefits of Forestry Research that the World statistics had shown that if wood industries are capitalized efficiently, the industry would contribute largely to the national system of production, distribution, and consumption activities of every nation.

Conclusion

Based on the findings and review on the impact of wood industries on the economic status of Niger State, it is obvious that the wood

industries have made and will continue to make significant contributions to civilization, industrial development, education, communication, poverty alleviation, labour demand and economic development of Niger State. According to the findings which are in agreement with Fuwape (2005) who stated that the high demand for wood products due to the increase in population has induced high pressure on forest resources and shall increase as the years come by, strongly explains the fact that the market for the wood industries would continue to grow irrespective of its shortcomings. Thus it is obvious that the economic impact of wood industries to Niger State cannot be over emphasized as the resources are available only if they are being efficiently utilized and interested individuals and industrialist are being supported with all the resources they desire to make an impact with the wood industry in Niger State, thereby creating employment, export products and better production status of the wood industry in Niger State. All these goals cannot be achieved without the support of the Government, professionals in the wood technology area and people of Niger State.

Recommendations

Based on the findings, the following recommendations were made:

1. Niger State wood industries should encourage the production and usage of bamboo and rattan products so as to create an extra revenue generator for the state and source of employment for the unemployed.
2. Workshop training as a strategy for acquiring modern woodwork technology skills, should be inculcated in the curricular of technical/vocational institutions so as to transfer the necessary knowledge and skills to the future industrialist and wood technologists. And also, professionals in the wood work field and the government should organize Exhibitions so that companies can come

and show case the latest machineries used in the wood industries so as to enlighten staff of the wood industries with their operational status and usage. Thereby creating an Avenue for proper interaction between professional colleagues in the woodwork world.

3. There should be comprehensive impact assessment of the activities of forest industries vis-à-vis, logging harvesting, transportation and wood conversion. Forest concession traders should be involved in forest regeneration. There should be equivalent replacement for every tree removed from the forest.

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