

Wood Processing Industries in Nigeria: Problems and the Way Forward

Dele M. V. Johnson¹ Olanrewaju R. Bodede^{2*} Fisayo Adesina²

1.Department of Works & Maintenance Services, Rufus Giwa Polytechnic, Owo,Ondo State. Nigeria

2.Department of Mechanical Engineering, Rufus Giwa Polytechnic, Owo,Ondo State, Nigeria

*E-mail: obodede@yahoo.com

Abstract

The wood processing industries in Nigeria are bedeviled with a lot of problems. Some of these problems include deforestation, lack of appropriate machinery for processing, erratic power supply, unfavorable government policies, high taxes and duties as well as inherent problems in wood processing such as defects and bio - deterioration. This paper discusses these problems and proffers appropriate solutions.

Keywords: wood processing, industries, problems, appropriate solutions

1. Introduction

Wood as an indispensable engineering material has served man from time immemorial. It was one of the earliest discovered materials endowed by nature with its source renewable and with lowest tooling cost (Owoyemi, 2006). Early craftsmen relied on it as the material to meet most of their needs. It is used today for various forms of construction work. The rain forest zone of Nigeria as shown in Fig. 1 is blessed with abundant natural forests because the geographical location of the country in the tropical region has naturally favored the growth of trees, which is the source of abundant wood in Nigeria, (Owoyemi, 2006).

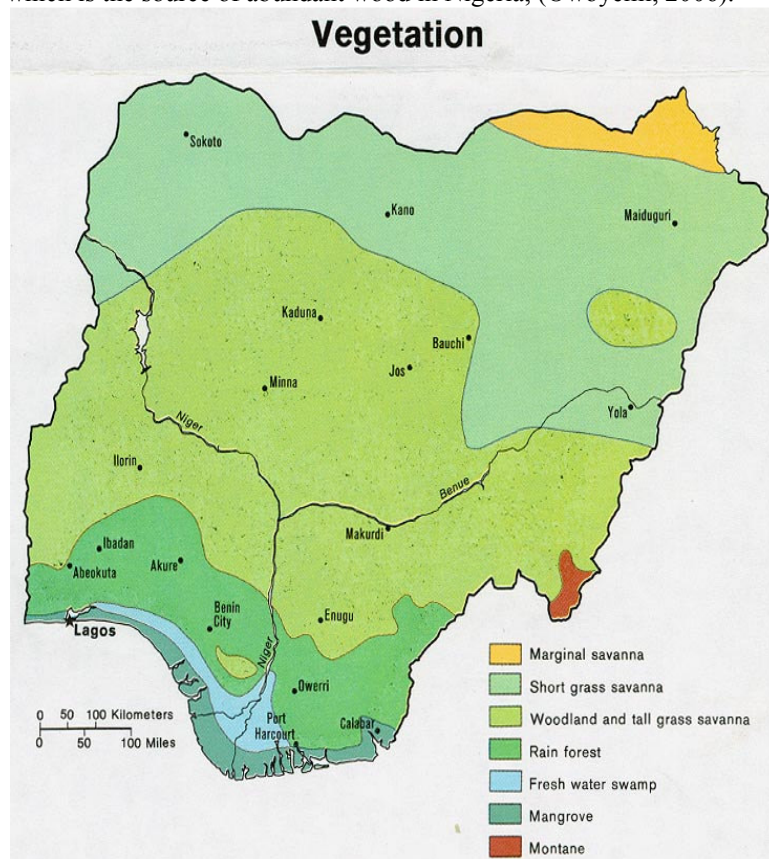


Figure 1. Map of Nigeria showing the rain forest zone (Source: Wikipedia, 2014)

2. Classification of Timber

Wood used for constructional purposes in Nigeria is obtained from two classes of trees, namely:

2.1 Hard Wood

This type of wood is flowering and produces seeds; it grows in cool to tropical climate with broad and evergreen leaves (Sawdust making web link, 2008).

2.2 Soft Wood

This type is cone-bearing with unprotected seeds. They grow mainly in cold to temperate climate with narrow and evergreen leaves (Sawdust making web link, 2008).

2.3 Structure of Timber

The structure of timber which is the source of all wood products is illustrated in figure 2. It has a central core known as pith, from where the growth rings radiate outside toward the bark.

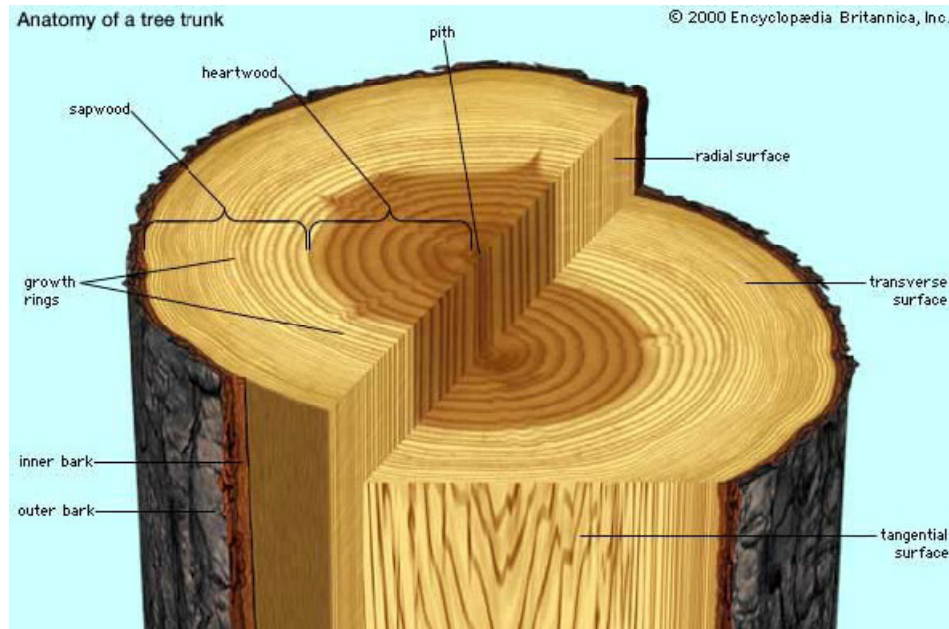


Figure 2. The structure of wood showing the growth rings (Source: Encyclopædia Britannica, 2000)

3. Uses of Wood

Wood is a versatile material useful for construction. It is used for the following purposes:

Housing: for doors, windows and roofing

Joinery: staircase construction and form work for concrete work

Packaging and handling: for crates, pallets etc

Furniture: chairs, beds, tables etc

Transportation: for railway wagons, coaches, vehicle bodies

Bridges and Poles: Most rural bridges and electric poles are made of wood.

Pulp and Paper: Exercise books, textbooks, newspapers and magazines are made from pulp and paper derived from wood.

4. Problems of Wood Industries

The problems faced by wood industries in Nigeria are many and multidimensional, these include

4.1 Effect of Climate Change/Deforestation

The potential loss of productive species due to the problem of global warming which is on the increase may lead to strong economic losses that can affect forest owners as well as the whole timber industry (Hanewinkel et al. 2013), this is also true of Nigeria. Furthermore, we generally lack the culture of replacing felled trees with new ones (afforestation). This gradually leads to the problem of deforestation thereby promoting low capacity utilization in the wood processing industries.

4.2 Lack of Machinery

Some of the machinery used in wood processing are sophisticated and are practically not available. This leads to drudgery and low productivity level which invariably lowers profitability (Charles - Owaba, 2005).

4.3 Unenforced government policies have greatly hampered the sale of wood products. For example, government placed a ban on imported furniture, yet people still import foreign furniture such as bullet proof doors thereby hampering the business of local wood processors, their financial base and purchasing power.

4.4 Lack of Finance

Wood industries in Nigeria lack the financial capacity to procure sophisticated machinery that would have enabled modern - day wood processing. Loans from banks are difficult to come by because of the stringent conditions attached to such loans and the high interest rate of 12 percent (Trading Economics, 2014) does not

encourage the development of the wood industries.

4.5 High Taxes and Duties

The wood industries are groping under the yoke of high taxes and rates. They are made to pay multiple taxes such as withholding tax, education tax, income tax etc; all these contribute to the financial burden on them which obviously slows down their progress

4.6 High Operational Costs

The high operational cost prevalent in the Nigerian economy is another serious problem encountered by wood industries. Some of the causes of these high costs are erratic power supply which necessitates the use of power generators to run production. Other problem in this category includes inflationary tendencies inherent in the Nigerian economy (Charles - Owaba, 2005).

5. Wood Defects

Wood defects are some of the problems inherent in wood processing. They impair upon the quality of wood (USDA, 1999). The occurrence of defects could be classified into two:

Defects in timber during growth: These include heart shake, cup shake and ring shake.

Defects in timber after conversion: These include cupping, bowing, twisting etc (Everything 2 web link, 2008).

6. Effects of these Problems

The effects of these problems on the masses include high cost of furniture products and loss of jobs in most cases. Poor growth in the economy and low technological development are other effects of these problems.

7. Solutions to the Problems

The solution to the problem of depletion of forest resources is aggressive afforestation i.e. planting of new trees to replace the felled ones. The lack of sophisticated machinery for wood processing could be tackled by massive importation of appropriate machinery through provision of bank loans. Development of indigenous technology for the manufacture of these spare parts will also solve the problem and more importantly the establishment of cottage or jobbing foundries by every wood processing industry in Nigeria to produce most of their spare parts since they are mostly cast products.

Government policies that encourage importation of furniture and wood products to the detriment of local wood processors should be abolished. Another role that government could play to lessen the problems encountered by wood processing industries is to reduce taxes, customs and duties paid by wood processors on equipment and timbers.

High operational costs occasioned by the use of generating sets could be solved by government ensuring cheap and regular power supply while the problem of biodeterioration and defects in wood could be solved through proper wood treatment and seasoning.

8. Conclusions and Recommendations

To ensure optimization of wood processing industries in Nigeria, in order to ensure improve productivity and profitability, all the problems highlighted should be solved or reduced to the barest minimum.

It is recommended that government should as a matter of urgency solve the energy problem prevalent in Nigeria since independence, because without stable and cheap electricity, there could not be meaningful technological or economic growth.

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