

Evaluation of Small and Medium Scale Building Material Industries and Housing Provision in Anambra State (2010-2020)

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ABSTRACT

Housing in Anambra state, just as in many states in Nigeria, has been described as the most unsolvable problems; making itself most conspicuous in slums where the vast majority of urban poor live. Going by the historical antecedents of small and medium scale industry establishment and support, one would expect Nigeria to be among the second world industrialized nations, least to say. The aim of this study is to evaluate the state of small and medium scale building material industries as it affects housing provisions in Anambra state with a view to develop measures that will help enhance better housing provision in the state. The study adopted survey design. The population of the study is 520 being the population of the registered building professionals, management and staff of registered small and medium scale building material industries and other professionals in housing provision in Anambra state. A simple random sampling technique was used to select the respondents as proportionately determined using Bowley's formula. The sample size of 144 was determined using the Taro Yamane's formula. Both primary and secondary sources of data were used to generate the data for this study. Quantitative data collected using a questionnaire was analyzed by the use of descriptive statistics using the Statistical Package for Social Sciences (SPSS) and presented through percentages, means and frequencies. Consequently, in order to test the hypotheses and establish the degree of dependence or independence of the variables under consideration, chi-square statistical tool was used. The study revealed that Lack or limited infrastructure and Poor technological advancement and professionals are

the current state that characterize Small and medium Scale building material industries in Anambra state. The infrastructure identified to be lacking are; power supply, good roads, transportation system and others. The study recommends that, government should make provision of basic infrastructures a priority. Attention must be geared towards solving the problems posed by epileptic power supply, poor road network, etc.

I. INTRODUCTION

Housing in Nigeria, just as in many developing countries, has been described as the most unsolvable problem, making itself most conspicuous in slums, where the vast majority of urban poor live (Jiboye, 2009). Nigeria's housing deficit of an estimated 17 million units is well documented (Nubi, 2008; FMLHUD-2012). This equates to an investment need of nearly \$600 billion when based on an average house price of a modest N5 million (African Development Bank, 2009). Nigeria can boast as Africa's largest housing construction market as well as being the economy's second fastest growing sector— second only to telecoms (National Bureau of Statistics, 2013). The booming housing industry however serves the upper end of the market well while there is very little investment at the bottom end where the need for housing is greatest (Oluwakiyesi, 2011). A report by the United Nations Statistics (2013) estimates that 68% of Nigerians are below the international poverty line of \$1.25 per day, and records that the vast majority is excluded from the formal housing market altogether (UN, 2012).

Going by the historical antecedents of small, medium and large-scale industry establishment and support, one would expect Nigeria to be among the second world industrialized nations, least to say. This venture, laudable as it may be, did not achieve the desired goal. Many of these large-scale firms (e.g the Iron and Steel Industries, the textile industries, the cement industries, the refineries, the transport industries etc.) never took off, while so many failed to sustain themselves and went moribund before long after their establishment. It had been identified that inadequate attention to economic viability and market prospects resulted in substantial excess capacity and this was a major problem. In building material industries in Nigeria for example, so many of the public owned building material enterprises failed to deliver in sustaining themselves let alone establishing subsidiaries or helping the industrialization process; The Ajaokuta Steel Company, the Aladja Steel Rolling Mill etc, which is supposed to be a major manufacturer of building material, has continued to be a conduit for siphoning the country's hard-earned money. Though as they say, learning a new dance is always a difficult task, the country must continue to move on but from a different framework, as the rates at which these large firms go moribund are quite alarming to achieve sustained growth and profits.

Although social housing has been supported through direct government interventions in the form of huge investments and increased funding the housing crisis for the vulnerable poor is still one of rising challenges in Nigeria and in Anambra state in particular. Evidence (Oluwakiyesi, 2011) shows that Nigeria's underdeveloped housing and uncompetitive building material manufacturing sector leaves the door open to imported building materials as 50% of construction materials, which make up some 60% of the cost of construction and roughly 25% of CO₂ emissions, are imported (Jiboye 2009). The recent spate of cost of residential buildings resulting from the use of highly expensive imported building materials and their insidious effects on both the economy, and the environment make the need for low-cost locally made building materials pronounced, due to their inherently lower cost in production, and relatively low through-life maintenance attributes and requirements (Seyfang, 2010). Unfortunately, the influence of small and medium scale building material industry's value and benefits on volume house building to date has been minimal.

Housing in Anambra state, just as in many states in Nigeria, has been described as the most

unsolvable problems; making itself most conspicuous in slums where the vast majority of urban poor live. Anambra state being one of the most industrialized state in Nigeria, have a reasonable number of building material industries operating in the state but there is no empirical evidence on the impact of these building material industries on the housing provision in the state. It was also observed that there are various challenges militating against the effective and efficient operation of these small and medium scale building material industries in Anambra and the state of affairs of these industries are not empirically known.

It is against the above backdrop that this study tends to evaluate the state of affairs of small and medium scale building material industries as it affects housing provisions in Anambra state with a view to enhance housing provision in Anambra state.

Aim/Purpose of the Study

The aim of this study is to evaluate the state of small and medium scale building material industries as it affects housing provisions in Anambra state with a view to develop measures that will help enhance better housing provision in the study area.

Research Objective

- 1 To assess the current state of Small and medium Scale building material industries in Anambra State.
- 2 To identify the role of the industry in housing provisions in Anambra State.
- 3 To identify the challenges facing Small and medium Scale building material industries in the state.

Research Questions

To carry out this study the following questions were asked to help the researcher achieve the desired objective of the study. The questions are as follows:

1. What is the current state of Small and medium Scale building material industries in Anambra State?
2. What is the role of the industry in enhancing housing provisions in Anambra State?
3. What challenges is facing Small and medium Scale building material industry and housing provisions in Anambra state?

Research Hypotheses

Ho: There is no significant impact of small and medium scale building material industries on housing provision in Anambra state.

Hi: There is a significant impact of small and medium scale building material industries on housing provision in Anambra state.

II. REVIEW OF RELATED LITERATURE

Concept of Housing

Housing is defined as the total residential neighbourhood/environment or micro district including the physical structure, all necessary services, facilities and apparatus for the total health and social well-being of the individual and family (Salau, 2012). It is seen as the physical environment in which the family and society's basic units must develop. Housing structures are enclosures in which people are housed for lodging, living accommodation or even work places.

According to Abram (2014), "housing is not only a shelter but also part of the fabric of the neighbourhood life and of the whole social milieu". It touches upon many facets of economic activity and development. Thus, housing provides social contacts, good image, a sense of belonging and an indicator of social status.

Economically, housing represents a major portion of the family budget or that of an establishment, yet in the realm of private and public investment, the built environment represents a man's most tangible material asset (Kinyungu, 2004).

The 2012 National Housing Policy for Nigeria identified shelter as the most essential human need after food. While adequate housing is crucial for effective performance of man, a

considerable proportion of Nigerians live in sub-standard and poor housing as well as deplorable unsanitary residential environments (Onibokun, 2015).

To this end, one can deduce that housing is the process of providing a large number of residential buildings on a permanent basis with adequate physical infrastructure and social services in planned, decent, safe and sanitary neighbourhoods to meet the basic and social needs of the population and is intended to provide security, comfort and convenience for the users (National Housing Policy, 2004; Osuide, 2004).

2.1.5 Sources and Processing Of Available Resources As Building Materials

There are many locally available resources which can be exploited including small-scale raw material deposits, agricultural products and residues, industrial wastes, low-cost and renewable sources of energy, unskilled and semi-skilled labour, and established technologies which can readily be applied to the local production of low cost materials. Stulz and Mukerji (2018) and Okereke (2003) identified sources of materials on which indigenous building materials rely and categorised them into three broad classes: naturally occurring raw material deposits; agricultural products and residues; and products of manufacturing process. Table 1 show some states in Nigeria where these materials predominate. The properties, applications and deficiencies of these materials are documented in literature (see Spence and Cook, 1983; UNCHS, 1985; Kogbe, 1989; Ike and Martin, 1993; Pemida and Wilson-Iteke, 1993; Bala and Zubairu, 2013 and Stulz and Mukerji, 2018).

Table 1 Availability of Raw Materials in Nigeria

Type of Material	States predominately found
Granite	Pl plateau, Ondo, Ado Ekiti, Bauchi, Abia and Ebonyi
Limestone	Anambra, Cross Rivers, Benue, Imo, and Bendel
Marble	Kwara, Bendel, Benue, Plateau and Kaduna
Laterite	All States
Clay	Cross Rivers, Ondo, Oyo, Sokoto, Gombe, Kano, Niger, Imo
Natural fibre	All States
Bamboo	Eastern Nigeria
Timber	Eastern and Western Nigeria

(Source: Kogbe, 1989; Okereke 2003)

For material production to be commercially viable, the technology involved must be tested, proved and widely known at the local

level. In addition, if these technologies, which have low import input and could be operated and maintained with available skills, are developed,

then the bottlenecks of prohibitive costs and irregular supply can be overcome over time (UNCHS, 1985; UNCHS and CSC, 2010b; Bala and Zubairu, 2013; Stulz and Mukerji, 2018). However, a major limitation of technology is the inability of governments and institutions to translate successful research findings in appropriate technology to commercial scale operation. Turner (2017) observed that government activities in housing hamper the use of local resources where they continue to build and manage houses, which have repeated the same mistakes by setting material standards, and building codes, which are ill suited and far too expensive for the poor majority. For example, in Nigeria, the use of block making machine developed by the Nigerian Building and Road Research Institute is yet to be popularised.

2.1.5.1 Problems & limitations in use of Indigenous Building Material (IBM) Quality of Output

Generally, the quality of output of any productive process is a function of the technology adopted and the availability of national or international accepted standards. Even though standards are identified to be the basic framework for promoting quality production, there are hardly any available for indigenous building materials (UNCHS, 2015). This lack or unavailability of standards means that the output of the productive process will not have a basis for standardisation and acceptance.

Demand for Indigenous Material

Another factor that limits the adoption of indigenous building material is the wide-scale low demand for these products (UNCHS, 2015). The lack of patronage of the indigenous products then implies that the market will not be viable. In 1976, the Federal Government of Nigeria established seven clay brick factories and though these plants were designed with an installed capacity of 1.5 million bricks annually, as at the year 2002, they were on the average running at 15 to 25 percent capacity due to low patronage (Sanusi, 1993; Okereke, 2003). This is largely due to consumer bias and the general feeling that indigenous products are of low quality.

Inappropriate Use of Indigenous Building Materials in Construction

The use of indigenous building materials in some instances is unpopular due to wrong application in construction. The result is that the material would be abandoned not because it is unfit for use but because there was a lack of skilled workmanship. Sanusi (2013) identified four problems of using indigenous building materials as

follows: that the full range of what constitutes indigenous building material is not known; the lack of basis for cost comparison between IBM and the conventional materials; technical limitation with the use of these materials; and legal problems where these materials are not considered useable by planning authorities and when used are considered as temporary structures. Mahgoub (2017) objects to the return of indigenous building materials in modern buildings for two reasons. First, he opined that these materials cannot satisfy the new needs of building forms and functions and secondly, it is not possible to provide enough materials to satisfy demand. Cather (2001) however observed that better understanding of the failings of these materials and their innate characteristics, overcoming their shortcomings and ways to use them with confidence, can be gained, by applying new knowledge and techniques.

2.1.6 The Prospects of Small and medium Scale Industries

The roles, of small-scale firms in any nation whether developing or developed ones, cannot be overemphasized. Kreitner (2015) reiterates that the earliest business enterprise began on a small scale. This is a far-reaching statement, because it is always better when growth starts from the cradle. This is better understood when one puts into perspective the natural cause of development into consideration. The developmental process of human beings starts from conception gradually grows till birth and another stage of development starts until the child matures into an adult when he or she can weather the turbulence of living the life in this world. It is obviously clearer when one goes down the memory lane, in the world today most multi-nationals started at small scale. Even though their respective growth trend may have varying opportunities ascribed to them. The Ford Motors of America, Suzuki Motors of Japan, Dell Computers and the likes are examples in those highly industrialised nations. Aliyu (2010) on realizing this role says that the investments aimed at stimulating the development of a more diversified and integrated industrial base has shifted to small scale enterprises. This shift is very important as the case with some Asian Tigers like Taiwan and Malaysia. Saro (2001) posits that development is:

1. Increase in the availability of basic goods and services
2. The living standard is raised i.e. higher incomes, provision of more jobs, better education etc.

3. Expanding the range of economic and social choice to individuals
4. The pattern of agricultural and technological productions are advanced

Though to achieve this level in development might not be easy, there are strategies that could make it possible amidst this difficulty. Many countries, in their quest for development have employed different approach to achieving their development. Small scale firms should be seen as one of the tools for achieving this goal conjoined with others to serve the great role of industrialization. However, these roles differ from country to country due largely to factors determined by the country herself. If there is a committed effort from both the small-scale proprietors and the supporting institution, there will be an unprecedented benefit from small-scale sector. Moreover, this stem from laying a very sound foundation at every level in the society. Hence Nnaji (2018) says what any society that must develop into a vibrant, economic middle income or major income society must do is to first bridge the chasm. That bridge is to place services as the bedrock of its society and its goal to be, creation of firms, which power economic growth; in science and economic growth, is technology. This corroborates the vital role industrial establishment can play in any nation's development. In consonance with this Ezeife (2018) says that what makes manufacturing popular in the Asian tiger nations are mostly the one room factories that constantly gives way to one flat factory which are along the path to industrial revolution. It is evident from this that starting small does not mar but makes a nation remain on course towards industrialization. So, small-scale firms are the solid ground on which industrialization thrives because it gets down to the grass root. And more exciting part of it is the propensity of the stage to stage metamorphosis from small scale to large corporation which would be the main base for economic power.

i. Employment

Small-scale industry is regarded as a veritable tool for employment generation. It is clear that employment generation is assured through SSI as that sector cannot fully afford automated machines like the large corporation does. Their activities are mostly based on human labour, hence they are said to be labour intensive. As well this is obtainable with developed economies where relatively the society is richer than the developing countries, their mainstay in production is more of labour intensive than automated. This role of SSI in employment generation is evident in the works of

Daniels & Ngwira, (1993); Gallagher & Robson, (1995). They say, it is estimated that small and medium scale enterprises employs 22% of the adult population in developing countries. If Small and Medium Enterprise, SME's can employ up to this proportion of the population, it shows how enormous the growth and development they could contribute to the economy. The most outstanding role in this employment generating capability is the issue of offering job opportunities to rural dwellers. Because small scale firms are established at every nook and cranny of the country, it makes it possible for rural dwellers to enjoy being employed without drifting to the urban areas for jobs. So the problem associated with rural urban migration is minimized, the living standard of this rural dwellers will improve and most importantly the desired industrialization is brought to the grass root.

ii. Industrial Initiative and Entrepreneurship

Promoting industrial initiatives and entrepreneurship among the people is a prospect from small-scale firms that is worth mentioning. Small scale firms as a concept encourage especially the dynamic and vibrant youths to go into its establishment as it is relatively cheap. Though, this is only for the ones with requisite skill who can move with tide of constant innovation and entrepreneurship so therein. However, the industrial initiative as well as entrepreneurship is being promoted as business is always changing. It is only with skill that one can succeed and maintain success in his enterprise. Hence, they say change is an inevitable concept. The special edition of Business Week (2012) stresses it the more that change can no longer be an occasional episode in the life of a corporation, companies with rigid structures will be swept away. For one to feel that he is managing a small scale firm without adaptability and flexibility in this regard definitely is at the risk of running his business aground. These dynamics surely is as a result of businesses being very sensitive to change constantly. The goal of any enterprise is to achieve success continually, which is only possible with proper industrial initiative and entrepreneurship ability of the proprietors. There are people who through small scale industry developed their industrial initiative and took it up as an entrepreneur, today that is yielding tremendous profit. Take the instance of most inventors like Thomas Alva Edison the American inventor, Henry Ford the auto maker, Innoson Group the great industrialist, Wilson Nigeria Limited the entrepreneur to mention but a few. All these achieved their success as a result of industrial initiative and entrepreneurship. These

made their dreams come true and not only that, through their initiative and entrepreneurial skill had taken their establishment to the level they are today.

Quality management is an area of management that industrial initiative and entrepreneurship can foster. For instance, the export-oriented model adopted by the Asian Tigers encouraged the manufacturers to dwell so much on quality as their products are targeted onto those highly industrialized nations. Without which it will be difficult to market their products there. When small-scale firms imbibe the culture of quality management the result will always be tremendous if they meet the quality standards of the potential buyers. Of course, there is no doubt that their products would be acceptable by the countries of their destination. McDonalds and the Burger King and here in Nigeria Mr. Biggs, the fast foods franchise, are today the toast of patronage because of the qualitative products and services they provide. Mercedes cars enjoy a wide range of customer demand both from middle and high class due to quality they deliver. And a whole lot enviable firms in the world today. It is so with the entire known world organization today. No wonder Anyaoku (2010) posits that no nation in the world has ever advanced in development without laying its fortresses on quality education. And this industrial initiative and entrepreneurship is sharpened through education.

The constant innovation by manufacturers to avert being edged out of business as a result of competition is another good example of how industrial initiative and entrepreneurship can play a vital role. Saikou and Wen-Chi (2009), opine that entrepreneurship is a source of innovation and change, and as such spurs improvements in productivity and economic competitiveness. And therefore, activities to convert ideas into economic opportunities lie at the very heart of entrepreneurship. This issue of maintaining economic opportunities has gotten to the point that most of industrial goods today are being modified before anybody would have thought it necessary just to keep competition at bay. In the motor industry for instance they churn out motor vehicles of different and wonderful designs almost on yearly basis, and so are with other industrial goods. Nwachukwu, (2018) says that any organization that fails to recognize the inevitability of change is doomed to failure. Change is inevitably too necessary for an organization to keep being on track. Opening up to change brings positive innovation and hence the opportunity of exploring better avenues that firm can leverage on to keep

being at a competitive advantage. And these innovations are borne out of industrial initiative and entrepreneurship

iii. Efficiency

The trend of life is always better if begun from the small way and gradually grows to the top. For expenditure profile, which requires downward adjustment is always too difficult to achieve unlike creating it. The maxim that practice makes perfect is another concept that explains this point in question. The ability to transform from small firm is relatively easier and flexible when compared with starting big and maintaining that level as a result of saving cost through labour. Due to the fact that, the more one does anything, the more perfection expected of him is attainable. If a particular firm goes into production on a small scale, the probability is high that the firm keeps trying all possible channel of achieving his goal (objectives) with a minimal input-cost. With this organizational efficiency which is only attainable through small-scale firm primarily is about achieving optimum goal at the cheapest but standard way. Efficiency begets high profit and this in turn translates to overall growth for the firm. This growth could be multiplied continuously to an extent, that the expansion of the small firm becomes large. That does not mean that small scale firms do not have its challenges and most often some goes out of existence due to these challenges.

2.1.7 Trends in Public Housing Provision in Nigeria

Several researchers (Awotona, 2017; Onibokun, 2010; Arayela, 1996, 2000; Ademiluyi and Solanke, 1997, Olokesusi et al, 2003), carried out a lot of work and documented housing efforts in Nigeria by way of reviewing government housing policies and programmes which affect housing provision. Basset and Short (2010), said that the provision of housing is not only a quantitative problem, but also a qualitative problem in the sense that: housing contributes to the reproduction of different components of labour power with different incomes and housing needs.

Public sector intervention in housing began in the pre-independence era, when in 1928 the Lagos Executive Development Board (LEDB) was established with the primary purpose of clearing areas affected by the bubonic plague that occurred in 1925. The Board was also to provide housing units for metropolitan Lagos (Abiodun, 1999). The early attempts at public housing provision included the building of residential quarters in Government Reservation Areas (GRAs), and provision of staff quarters for

Institutions like Armed Forces, Police, Nigerian Railways etc. Successive Nigerian government's mode of intervention varied in their attempt to redress the housing problems and the bold attempts made then included: direct housing construction, provision of staff quarters, government housing loan, Urban Development and Mortgage Loan Scheme, Site and Services Schemes and Housing Finance System. Agbola (1994) observed that, despite these laudable efforts, there has been continued disappointment, hopelessness, frustration expressed by the general public regarding owning a house or having access to a decent dwelling unit.

It is therefore necessary to identify why these past housing policies and programmes failed to achieve their set goals. Some studies revealed that public intervention in housing in Nigeria did not achieve much success in the past because of many reasons. These included: inappropriate and poor execution of housing policies and programmes; the inability to understanding the housing needs of the low-income earners (which made up majority of urban dwellers), thereby resulting in the provision of inadequate and inappropriate kind of housing for them; politicizing government housing programmes; houses built by government are expensive for the low-income earners to buy and are always few in number; housing proposals do not usually take into consideration different Nigerian climatic, cultural and socio-economic environments, (Jagun, 2017; FGN, 2010; Atolagbe, 1997) thus, constituting major reasons why dwellers embarked on physical transformation as soon as they acquire their buildings. (Awotona, 1994; Tipple 1994).

Despite the public-sector participation in housing as direct house construction of low-income buildings, Olotuah (2003) was of the opinion that housing conditions of the low-income earners had not shown any significant improvement over the years. The most challenging problem before the public sector is its failure to define a proper role to play in housing provision. It has been involved in direct house construction and of ensuring enabling environment for housing development. He stressed further that though public sector intervention in housing development has been unsuccessful it has a major role to play in ensuring optimum performance of the private sector, which has been the greater supplier of housing in the country.

Architects are the first to feel the impact of economy and politics, consequently they should always make sure that public housing designs maintain a National identity i.e. a regional trend. Very functional layout of residence which is most capable of reflecting Nigerian way of life and

generally important here is the closeness to nature through outdoor areas (Ogunsote, 2002).

III. EMPIRICAL LITERATURE

The country like Nigeria is trying to grapple with the realities of getting on to the league of industrialized. Steel (2012) in his work posits that Ghana on this realization of the importance of industrialization, the country introduced Economic Recovery Program (ERP) way back in the year 1983 to redress some of the causes of its long economic decline. Steel went further to state that the key elements of the program supported by adjustment lending, import liberalization increased access to previously restricted inputs especially for small firms, and broadened competition from imported products. With the massive realignment of the highly overvalued exchange rate which created new export opportunities and import substitution.

Okoh and Ping(2000) in their work say that those import dependent firms were affected though, due to price raise of imported inputs and the cost of financing them, it is for the overall interest of the development process for the country. In the light of this problem, the alternative was to look inward to small-scale enterprises development. These small-scale enterprises employ technology transfer as well as the development of their indigenous technology where necessary. This means that the nation is using a combinational strategy to pursue her industrialisation process.

Hence, Liedholm (2010); Schmitz (1982) says, that the fundamental issue is how to create a policy business environment that enables Small Scale Enterprises (SSE) to contribute productively to industrial development, not whether SSE's have a role.

Parker et al (1994), says that in Ghana the small and medium enterprises SME contributed to the economic growth immensely. The sector had absorbed the labour force by 15.5% when compared to large scale firms that had employed only 5% of the labour force. As well in that sectors output it was recorded to be 6% of the gross domestic products (GDP). This is not to say that the contribution is fantastic, but a consistent effort without bias or corruption will definitely see this country grow from there.

Some scholars gave their respective reasons for the support of the development of small and medium building material industries in Nigeria which will be embodied in the industrialisation framework of this country. Osoba (2017) cites that due to low level of capital requirement for the establishment of small scale industry, it will help in

industrialisation process of this country. In his own work Adejugbe (2017) is of the view that due to large number of establishment and their labour intensive nature of their operation will guarantee employment for large members of the society, while inventions, adaptation and general technological development will also be there as it is common within the enterprise of SME. A more equitable distribution of income are usually achieved in this sector considering the fact that the small firms are large in number and employs large altogether, Oshagbemi and Saanai (2017).

Also Holz-Eakin and Rosen (2005) as cited in Schafer and Talavera (2006) ..., corroborates this fact after conducting their research, when they say that small scale enterprise is one of the most important contributors to the growth of developing countries such as Taiwan and Malaysia. In complementing the large scale firms,

Healy and Lutken (1989) say that enhancement of the tempo of industrial development are generally visible among small and medium scale enterprises to become feeders of the large scale firms. This will help the forward and backward linkages needed in industrial growth. Where large scale is established, definitely there will spring up other small scale firms that will complement the large ones. Hence we advocate the adoption of Import Substitution Industrialization model, co-joined with Export Oriented Model of which the position of Small Scale Firms is evidently clear.

The roles, of small-scale firms in any nation whether developing or developed ones, cannot be overemphasized. Kreitner (1995) reiterates that the earliest business enterprise began on a small scale. This is a far reaching statement, because it is always better when growth starts from the cradle. This is better understood when one puts into perspective the natural cause of development into consideration.

Saro (2001) posits that development is:

1. Increase in the availability of basic goods and services
2. The living standard is raised i.e. higher incomes, provision of more jobs, better housing provision, better education etc.
3. Expanding the range of economic and social choice to individuals
4. The pattern of agricultural and technological productions are advanced

Though to achieve this level in development might not be easy, there are strategies that could make it possible amidst this difficulty.

Hence Nnaji (2018) says what any society that must develop into a vibrant, economic middle income or major income society must do is to first bridge the chasm. That bridge is to place services as the bedrock of its society and its goal to be, creation of firms, which power economic growth; in science and economic growth, is technology. This corroborates the vital role industrial establishment can play in any nation's development. In consonance with this Ezeife (2018) says that what makes manufacturing popular in the Asian tiger nations are mostly the one room factories that constantly gives way to one flat factories which are along the path to industrial revolution. It is evident from this that starting small does not mar but makes a nation remain on course towards industrialization. So, small-scale firms are the solid ground on which industrialization thrives because it gets down to the grass root.

2.4 Summary of Literature

The Federal government on their bid to develop small and medium scale enterprises of which small and medium scale building material industry is a part had formulated and supported all these programmes and policy initiatives. It is primarily to transform the country from an under developed state to a developed one. It can be seen that the serious-minded government's effort is there to help in the industrialization attempt in the time past. Unfortunately, it has not giving the desired result. The question then is, has all these efforts geared towards housing provision and industrialization through small scale building material firm's development achieved its purpose by SSF small scale firms, playing its intended roles? However, these roles of small scale building material industry in housing provision and industrialization of any nation are clear, even though it has not been fully exploited in the industrialisation of Anambra State. This work seeks to know why in the face of important role played by small scale building material manufacturing industries in housing provision of other nations, Anambra State housing provision and industrialization process has not fully exploited that sector.

IV. RESEARCH METHODOLOGY

The research methods that was used in this work is "survey design" because the phenomenon under research investigation is of the present and this method ultimately deals with the situation under investigation.

This survey was carried out through administration of structured closed and open-ended

questionnaire(s) and use of interviews on respondents that are involved in housing construction, housing provision and small and medium scale building material manufacturing industries in Anambra state. Since this research is concerned with small and medium scale building material industries.

The population of the study is five hundred and twenty (520) being the population of the registered building professionals, management and staff of registered small and medium scale building material industries and other professionals in housing provision in Anambra state. The sample size of 144 was determined using the Taro Yamane's formula.

Quantitative data collected using a questionnaire was analyzed by the use of descriptive statistics using the Statistical Package for Social Sciences (SPSS) and presented through percentages, means and frequencies.

Consequently, in order to test the hypotheses and establish the degree of dependence

or independence of the variables under consideration, chi-square statistical tool was used.

The chi-square formula used on these data was

$$X^2 = \frac{(O - E)^2}{E}$$

Where: **O** is the Observed Frequency in each category

E is the Expected Frequency in the corresponding category

X² is Chi Square

However, in order to compute the value so as to obtain the appropriate number of degree of freedom, the formula to be used is $v=(c - 1) (r - 1)$

Where:

c = Number of columns r = Number of rows

V. DATA PRESENTATION AND ANALYSIS OF RESEARCH OBJECTIVES

Research Objectives One: To assess the current state of Small and medium Scale building material industries in Anambra State.

Table 1 The current state of Small and medium Scale building material industries in Anambra State.

S/N	Factors	(5)	(4)	(3)	(2)	(1)	Mean score	Rank
1	Limited availability of funding from financial institutional and the government.	45	60	15	-	20	4.00	3
2	High Cost of Credit facilities inclusive of interest rates and maintenance costs and the demand for duly registered collateral obligations.	45	60	15	-	20	4.00	3
3	Inconsistency in Government policies and bureaucratic bottlenecks experienced in the administration of incentives and support facilities from all levels of government.	50	60	20	-	-	4.00	3
4	Multiple taxes as a result of levies and other tax expectations from both the State and Local Government Areas.	50	40	-	20	30	3.60	5
5	Import Liberalization.	50	40	-	20	30	3.60	5
6	Unavailability of local raw material.	50	65	20	-	5	4.30	2

7	High cost of procuring machinery.	45	60	15	-	20	4.00	3
8	Lack or have a limited infrastructure like power supply, good roads, transportation system.	65	55	20	-	-	4.4	1
9	Export constraints	70	30	20	20	-	4.30	2
10	Contributes to the economy in terms of output of goods and services	50	30	20	-	40	3.40	8
11	Provide opportunities for developing and adapting appropriate technological approaches.	60	20	20	-	40	3.50	6
12	High rate of labour turnover	55	30	20	-	35	3.60	5

Table 1 Cont.

S/N	Factors	(5)	(4)	(3)	(2)	(1)	Mean score	Rank
13	Poor managerial and management system	60	20	20	-	40	3.50	6
14	Lack of Computerization of Maintenance Management System	50	20	20	-	50	3.10	9
15	Poor technological advancement and professionals.	70	50	20	-	-	4.40	1
16	Poor quality control system	-	70	40	15	15	3.45	7
17	Lack unhealthy competition with foreign products.	35	65	-	15	25	3.70	4

Source: Field survey 2021

From the table, all the items listed in the table describe the current state of Small and medium Scale building material industries in Anambra state.

Lack or limited infrastructure and Poor technological advancement and professionals, ranked first in the table with a mean score of 4.4. followed by Unavailability of local raw material and Export constraints with mean scores of 4.30. Limited availability of funding from financial institutional and the government; High Cost of Credit facilities inclusive of interest rates and maintenance costs and the demand for duly registered collateral obligations; Inconsistency in Government policies and bureaucratic bottlenecks experienced in the administration of incentives and support facilities from all levels of government, all ranked 3rd, with mean scores of 4.00. Lack

unhealthy competition with foreign products, ranks 4th on the list with mean score of 3.70. Import Liberalization; and High rate of labour turnover ranked 5th with mean score of 3.60%, followed by Provide opportunities for developing and adapting appropriate technological approaches; Poor managerial and management system. They ranked 6th in the list with mean scores of 3.50. Poor quality control system ranked 7th with mean score of 3.45. Contributes to the economy in terms of output of goods and services ranks 8th with a mean score of 3.40. Lack of Computerization of Maintenance Management System ranked the least with a mean score of 3.10.

This implies that the items listed in the table describe the current state of Small and medium Scale building material industries in Anambra state.

Research Objectives Two: To identify the role of the industry in better housing provision in Anambra State.

Table 2 The role of small and medium scale building material industry in better housing provision in Anambra State.

S/N	Buildings	(5)	(4)	(3)	(2)	(1)	Mean Score	Rank
1	Import substitution to building materials	-	20	100	20	-	3.00	3
2	Reduces the scarcity of building material which in return enhances housing provision	15	15	45	65	-	2.60	7
3	Production of more reliable and durable building material than imported once.	20	30	70	20	-	2.80	6
4	Create employment which enhances the financial strength of the citizen to afford a house.	20	70	30	20	-	3.70	1
5	Reduces the continuous importation of building material.	20	30	70	20	-	2.80	6
6	Reduces the cost of construction of houses in the state.	20	20	50	50	-	2.90	5
7	It enhances the sustainability of government housing policy	20	30	70	20	-	3.30	2
8	It encourages investment in housing which is potentially the most fundamental pillar for extended social and economic expansion	-	20	95	25	-	2.95	4
9	Enhancing housing microfinancing for the low-income population.	20	20	50	50	-	2.90	5
10	Availability of building material for building construction.	-	20	95	25	-	2.95	4
11	Source of internal revenue for the state government which enhances the housing policy of the government	20	30	70	20	-	3.30	2
12	given rise to a dynamic locally based supply chain	20	20	50	50	-	2.90	5

Source: Field survey 2021

From the table, all the items listed in the table describe the role of small and medium scale building material industry in better housing provision in Anambra State.

Creation of employment which enhances the financial strength of the citizen to afford a house ranked highest with mean score of 3.70, followed by enhancement of the sustainability of government housing policy; and Source of internal revenue for the state government which enhances the housing policy of the government with mean scores of 3.30. Import substitution to building materials; Availability of building material for building construction; It encourages investment in housing which is potentially the most fundamental pillar for extended social and economic expansion ranked 3rd and 4th with mean scores of 3.00 and 2.95 respectively. Reduces the cost of construction

of houses in the state; Enhancing housing microfinancing for the low-income population and given rise to a dynamic locally based supply chain ranked 5th with mean score of 2.90. Production of more reliable and durable building material than imported once; Reduces the continuous importation of building material ranked 6th with mean score of 2.80. Reduces the scarcity of building material which in return enhances housing provision ranked the least with a mean score of 2.60.

This implies that the items listed describes the role of small and medium scale building material industry in better housing provision in Anambra State.

Research Objective Four: To identify the challenges facing Small and medium Scale building material industries in the state.

Table 3 Responses on the challenges facing Small and medium Scale building material industries in the state.

S/N	Factors	(5)	(4)	(3)	(2)	(1)	Mean Score	Rank	Remark
1	Poor Basic Infrastructures	45	40	20	13	22	3.38	4	Agree
2	Lack of Funding	80	40	10	10	-	4.27	1	Agree
3	Lack of Marketing Ethics	65	25	10	10	30	3.58	2	Agree
4	Low quality production	25	10	5	25	75	2.72	5	Disagree
5	Poor Managerial Skill	10	10	15	15	90	2.05	6	Disagree
6	Obsolete Technology	75	35	15	15	-	4.27	1	Agree
7	Poor internal quality control practices.	105	15	15	5	-	4.27	1	Agree
8	High tax rate and multi-taxing system	55	65	35	24	24	3.55	3	Agree
9	Political instability and insecurity	105	15	15	5	-	4.27	1	Agree
10	Customers preference to foreign products.	-	5	15	15	105	1.69	7	Disagree

Source: Field survey 2021

From the table, all the items listed in the table evaluate challenges facing Small and medium Scale building material industries in the state.

The results show that, Lack of Funding; Obsolete Technology; Poor internal quality control practices; Political instability and insecurity; ranked highest with mean scores of 4.27 as challenges facing Small and medium Scale building material industries in the state. Lack of

Marketing Ethics with mean score of 3.58 followed by High tax rate and multi-taxing system with mean score of, 3.55. Respondents strongly agreed that Poor Basic Infrastructures is another factor with mean score of 3.38. However, some of the respondents disagreed that Low quality production; Poor Managerial Skill; and Customers preference to foreign products with mean scores of 2.72, 2.05 and 1.69 respectively, are 'factors.

Table 4 Ranking of Statements on the measures that will enhance effective housing provision in Anambra State.

S/N	Statements	(5)	(4)	(3)	(2)	(1)	Mean Score	Rank
1	Mortgage institutions should charge minimal Interest on loans	100	40	-	-	-	4.83	1
2	Direct construction by the homeowner with loan from the Government.	89	51	-	-	-	4.77	2
3	Authenticated academic/professional Certificates should be accepted as collaterals.	68	52	10	10	-	4.44	3
4	Increase in the salaries Anambra state workers to enable them build their own houses.	62	58	10	10	-	4.44	3
5	Promotion of local production of building materials in the state through tax relief on SMS industries.	40	40	40	20	-	4.11	4
6	Maintenance of basic infrastructure, policy and government support.	40	20	40	30	10	4.09	5

Source: Field survey 2021

From the table, all the items listed are measures that will enhance effective housing provision in Anambra State.

On the measures that will enhance effective housing provision in Anambra State, the respondent indicates that Mortgage institutions should charge minimum interest on loans. This is ranked 1st in the table with a mean score of 4.83. Direct construction by the homeowner with loan from the Government ranked 2nd with a mean score of 4.77. Authenticated academic/professional Certificates should be accepted as collaterals; and Increase in the salaries Anambra state workers to enable them build their own houses ranked 3rd with

mean score of 4.44. Promotion of local production of building materials in the state through tax relief on SMS industries ranked 4th with mean score 4.11. Maintenance of basic infrastructure, policy and government support ranked 5th with means score of 4.09.

Test of Hypotheses

Ho: There is no significant impact of small and medium scale building material industries on housing provision in Anambra state.

Hi: There is a significant impact of small and medium scale building material industries on housing provision in Anambra state.

Table 5 Chi-Square Test

	Value	df	Asymp. (2sided)	Sig.
Pearson Chi-Square	18.649	9	.029	
Likelihood Ratio	12.271	9	.019	
Linear-by-Linear Association	.629	1	.038	
N of Valid Cases	140			

Source: Field survey 2021

Table 6 Chi-Square Test Symmetric Measures

	Value	Asymp. Std. Error	Approx. T	Approx. Sig.
Nominal by Nominal	Phi	.022		.030
	Cramer's V	.013		.030
	Contingency Coefficient	.021		.030 .043 .024
Interval by Interval Ordinal by Ordinal	Pearson's R	.511	.057	.171
	Spearman Correlation	.619	.064	.932
N of Valid Cases	228			

Source: Field survey 2021

From the table, the value of Pearson chi-square is computed as 10.70 with a degree of freedom. However, comparing them with critical value of chi-square at 9 degree of freedom and 5% level of significance, it is clear that the computed value of 18.65 is greater than the critical value at 9 degree of freedom with 5% level of significance. Hence, the null hypothesis is hereby rejected. The implication of this, there is a significant impact of small and medium scale building material industries on housing provision in Anambra state. Furthermore, this finding is corroborated by table 9.3 above where the symmetric measures were also computed to support the analysis.

From the table, it can be seen that the crammer's value is significant at 0.03 which is less than 5% level of significance. Similarly, the contingency coefficient is also significant at 0.03 just like the Cramer's V. Both Pearson's R and Spearman's are significant at 5% with the values of 0.043 and 0.024 respectively.

VI. SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

Summary of Findings

The study revealed that Lack or limited infrastructure and Poor technological advancement and professionals are the current state that

characterize Small and medium Scale building material industries in Anambra state. The infrastructure identified to be lacking are; power supply, good roads, transportation system etc. (See Table 1).

The study revealed that Creation of employment which enhances the financial strength of the citizen to afford a house; enhancement of the sustainability of government housing policy; and Source of internal revenue for the state government which enhances the housing policy of the government are the major role of small and medium scale building material industry in better housing provision in Anambra State (See Table 2).

The study revealed that, Lack of Funding; Obsolete Technology; Poor internal quality control practices; Political instability and insecurity are major challenges facing Small and medium Scale building material industries in the state. (See Table 3)

The study revealed that Increase in the salaries of Anambra state workers will enable them build their own houses. And also, Direct construction by the homeowner with loan from the Government will enhance housing provision in the state (See Table 4).

Conclusion

The test of hypothesis revealed that there is a significant impact of small and medium scale building material industries on housing provision in Anambra state. In conclusion, it has been identified that the small and medium scale building material manufacturing industries could be used as a tool that can help in advancing the pace of housing provision and industrialization in Anambra State. Though this role is bedeviled with the problem in Nigeria and the way Nigerians go about their business. Let these identified roles be fully exploited in the face of this problem of housing development and industrialization.

The following recommendations are made based on the research findings:

Provisions of basic infrastructures are among the most difficult challenges that respondents are pointing at. On the course of this research it was revealed that infrastructural decay especially the issues of power supply is affecting the development and growth of small medium scale building material industries in Anambra State as well as the country in general. In this regard it is very important that government should make provision of basic infrastructures a priority. Attention must be geared towards solving the problems posed by epileptic power supply, poor road network, etc.

The problem of obsolete technology which requires acquisition of requisite equipment to meet up with the new technologies. The study recommends that government should provide advancing soft loan to prospective as well as existing industrialist in building material manufacturing. Another approach is acquisition of loan from development financial institution like Bank of Industry, or commercial banks through the intervention of the government so that the cost for capital will not be too heavy on the proprietors.

Finally, Mortgage institutions, Primary Mortgage Institutions (PMIs) and Secondary Mortgage Institutions (SMIs) should charge minimal interests on loans. The federal and state government should pursue a dynamic mortgage finance/credit facilities policy so that such finances would be within reach of the low-income people, at very moderate lending terms including below market interest rates as they obtain their funds from FMBN at ridiculously low rate from NHTF.

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