Vol.1, No 3, pp.58-70, September 2013

Published by European Centre for Research Training and Development UK (www.ea-journals.org)

# THE BUILDING INDUSTRY IN THE HOUSING PROGRAMME: TECHNOLOGY, MATERIALS AND LABOUR TOWARDS ADRESSING HOUSING SHORTAGE IN NIGERIA.

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**ABSTRACT:** The building industry is a sector of national economy engaged in preparation of land and construction, alteration, and repair of buildings, structures, and other real property. More agents, institutions and intermediaries have become involved in the various stages of housing construction as a means of producing more housing for human shelter. Building Industry work involves the construction of a new or existing commercial, industrial or domestic buildings or structure. The major form of urban land use is housing construction, and also the pattern of urban land use largely determines the pattern of urban growth and development. (Agbola, 2002). However, this paper examined the essential link between the building industry, technology, materials and labour in relations to housing programme. And its goal is to critically examine the roles of building industry in the housing programme since housing programme as immensely contributed to the development of building construction industry in Nigeria. The paper shows some of the functions of building industry in housing programme, the materials to be use, technology employed and the labour used in the construction process and highlights the need for government to encourage both the private and public building industry to provide quality and affordable housing for human consumption as this will be part of the housing programme organized to alleviate the problem of inadequate housing in most developing countries.

**KEYWORDS:** Building industry, Housing programme, Materials, Technology, labour, Housing Shortage

### **INTRODUCTION**

Housing has been universally accepted as the most important human need after food. Housing in all ramifications is of more important than mere shelter since it embraces all the social services and utilities that go to make a community livable environment. All governments in Nigeria since independence highlighted housing as a major priority. Unfortunately for over 53 years of its independence, Nigeria is yet to develop a vibrant mortgage market and houses continue to be provided through the tortuous traditional method of buying land and building over some years, which could be an individual's entire life time. In many cases such buildings are left uncompleted or individuals have to deplete their entire life savings in order to build a home. The housing situation in Nigeria is characterized by some inadequacies, which are qualitative and quantitative in nature (NHP, 1991; Oladapo, 2006). While the quantitative housing problem

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could be solved by increasing the number of existing stock, the qualitative inadequacies are enormous and complex. Oladapo, (2006) considered the qualitative problem as the major challenge of urban housing in Nigeria. Various studies have also revealed the problems of housing production. (Agbola, 1987; Onibokun , 1985) recognised finance as part of housing problems but ranked land and building materials higher. Their findings influenced government housing policies and subsequent establishment of some relevant programmes and institutions like the Site and Service Programme and the National Institute of Road and Building Research.

Since cost or price is a function of demand and supply. The cost at which the houses reach the market will go a long way to determine affordability. Where per unit cost is abnormally high as we have today, the simple implication is that few people will be able to afford it. The limited finance will not be able to spread around the potential homeowners. Repayment period is also increased making it impossible to revolve the loan around many people with a short period. According to Windapo (2000) and Okupe (2000) the gap between income and shelter cost in Nigeria is very wide. This has eliminated the low-income earners from the housing market. High cost had been attributed to the following: rising cost of building materials, inflation rate in the economy, high space and quality standard adopted by designers, fees of professional involved in housing designs and construction.

Finally, this study will critically examine the essential link between the building industry, Technology, Materials and labour in relations to housing programme and it argues for the creation of an enabling environment, including support of housing initiatives and investments by the building industry as one of the programme for alleviate housing shortage.

### **Nigeria Housing Policy**

To ensure that the new National Housing Policy provides solutions to Nigerians seeking homeownership, estate surveyors have tasked government on the need to fashion out a road map towards its successful implementation. The new National Housing Policy harped on the need to form a comprehensive roadmap that identifies the value chains, linking the sector with growth parameters such as job creation, economic expansion, infrastructural development, and poverty reduction among others.

The new National Housing Policy targets development of about one million houses annually, introduction of mass housing to Nigerians irrespective of their financial status as well as social Housing Policy that will make funds available for people in the informal sector as well. Experts had criticised the old housing policy for not addressing the issue of finance and funding of housing production, and for being silent on the government's role in properly contributing to the National Housing Fund. For example one of the major housing policy initiatives was the Policy on Affordable Housing that was initiated in 1979 by the Sheu shagari Administration. The policy though laudable was unable to meet the nation's housing needs because it was based on the unsustainable tenet that houses will be provided by government. The implementation of the 2002 housing policy reforms was a promising beginning, but a lot remains to be done.

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Government (federal and the sub-national governments) should focus on providing a favorable investment climate, infrastructure, and mortgage insurance to first time home buyers and low-to middle income families. It must noted that there are challenges to harnessing the huge potentials inherent in Nigeria's housing sector, and invariably providing affordable housing in Nigeria.

In order to moderate the acute shortage of shelters in the country, the National housing Policy for the period spanning 1994 to 1998 was expected to build 121,000 housing units. In addition, the number of Licensed Primary Mortgage Finance Institutions (LPMFI) rose from 251 in 1993 to 276 in 1994. However, by the end of 1998, it has declined to 115. Similarly, the Federal Government capital expenditure on housing increased by over 500 per cent to N4818.3 million in 1995 from N776.7 million in 1988, but declined slightly by about N722.0 million in 1998 (CBN 1994 and 1998). The Federal and the State Government were expected to spend N2.7 billion on housing provision during the 1996-98 NRP. Over N3.0 billion was expected to be spend by the two levels of governments during the 1999-2001 NRP (NPC, 1998 and 2000)

# **Concept of Housing Affordability**

Housing affordability has been identified as one of the major theoretical issues in the housing context, an argument can be made that affordable housing is a controversial issue which is concept warrants further investigation. The conceptual investigations will attempt to shed more light on the concept of affordable housing. Affordable Housing has been defined by Plymouth City Council as: 'Low cost market and subsidized housing that will be available to people who cannot afford to rent or buy houses generally available on the open market. (http://www.plymouth.gov.uk). Affordable housing is needed and has been viewed in various disciplines such as in the housing context, ethical, economic, sociological and political point of view. It should be noted that affordable housing is a problem which comprises many interrelated and intersecting issues; all of which may be seen as sociological, economic and political. It follows that any credible proposals in relation to lessening the problem of affordable housing must take this into account, and simultaneously addresses economic, political and sociological problems. The essence of this various definition is to help understand affordability in the housing, economic, sociological and political contexts.

Affordability is defined as the ability to back up a desire for housing units with adequate financial resources such that other basic needs like food ,transportation education ,health ,among others ,do not ,as a result suffer (Agbola and kassim, 2007; Agboola,1987and Egunjobi' 1996). (Agbola and Kassim, 2007; Robinson, 1979) defined housing affordability and need as the quality of housing that is required to provide housing of an agreed minimum standard for a population of a given size, household composition and age distribution.

The problem of affordable housing has also defined as 'infrastructure needs'. These needs have been elaborated in the following way: 'The changing face of population has immediate implications for every aspect of education, transport and infrastructure. (Housing Essay, 2003; London Authority, 2006). Affordable housing can therefore also be defined from an ethical point of view, refer to the wider problem of housing shortages being linked to problems such as poverty, crime and low wages for certain sectoral groups. This ethical perspective it somewhat

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suspended from the analysis and the problem becomes one which is defined in terms of how certain factors such as supply, demand, resources and money shape the concept of affordability in terms of the housing sector. (Housing Essay, 2003). Affordability can be defined in economic term as the ability of the consumer to translate his or her housing needs into effective demand. The concept of affordable housing is particularly linked with certain social and economic problems, such as social exclusion, poverty and crime. (Housing Essay, 2003; Pacione, 1997; Rugg, 1999). Economics helps us to understand how prices are determined. They are determined by the forces of supply and demand operating through the mechanism. The notion of "affordability" is one that does not make sense within the discipline of economics. This might be a weakness of economics, but it might also be that the concept itself is meaningless.

Affordable housing from an economic point of view, affordability is a meaningless concept. (Housing Essay, 2003). It is simply not a social objective for things to be affordable, rather the government should seek to promote competition in the housing market and then leave the market to its own devices. Affordable housing therefore refers to a situation where there are not sufficient numbers of houses being built to satisfy the level of demand of people. However, this definition does not encapsulate how malleable this concept of affordable housing can be when it is viewed from particular standpoints.

### Housing Programme and Building Industry

Housing programme has a statutory duty to improve the supply and quality of housing in a particular area. It creates opportunity for people to live in homes that are affordable, good quality and in sustainable places by working with local authorities to help them achieve the housing ambitions they have for their areas. They are also responsible for delivering existing commitments from the Housing Stimulus Programme, which continue to help deliver new homes across the country. Some work with partners delivering rural housing and support greater innovation through sustainable development, both by funding homes that are well designed and have less impact on the environment and providing expertise on a range of issues that enable our partners to build homes that help communities thrive.

Housing programme suggests and render a means for improvement on the supply and quality of housing in an area. It also makes opportunity for people to live in homes that are affordable. Some of their housing remit includes delivery of existing National Affordable Housing Programme commitments and the new Affordable Homes Programme, which includes the Affordable Rent product, Low Cost Home Ownership including the new First Buy product, Mortgage Rescue, Empty Homes, Homelessness Change, Traveller Pitch Funding and specialist or supported housing. The programme is focused on accelerating the delivery of affordable homes to help improve the condition of existing stock particularly through the Decent Homes programme.

## Housing and Urban Development Public Housing Program

Public housing was established to provide decent and safe rental housing for eligible low-income families, the elderly, and persons with disabilities. Public housing comes in all sizes and types, from scattered single family houses to high-rise apartments for elderly families. There are

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approximately 1.2 million households living in public housing units. The U.S. Department of Housing and Urban Development (HUD) administers Federal aid to local housing agencies (HAs) that manage the housing for low-income residents at rents they can afford. HUD furnishes technical and professional assistance in planning, developing and managing these developments.

## National Affordable Housing Programme

The National Affordable Housing Programme (NAHP) is increasing the supply of affordable homes for the low-income people. In England, during 2008-11, the homes and communities agency invested £8.4bn in affordable housing through the NAHP. The programme's investment partners will deliver 155,000 new homes in each year, a proportion of the homes built will be made available for low cost home ownership and social rent. Before applying for funding, housing providers must first be awarded investment partner status through the pre-qualification process. Housing providers that meet certain requirements are exempted from the pre-qualification process and can instead bid for funding through the Specialist Provision route. Specialist Provision criteria include providing homes in rural communities, black and minority ethnic housing provision, supported housing and environmental innovation. The Affordable Housing Capital Funding Guide contains the rules and procedures for housing associations that have received capital grants/allocations.

# DESCRIPTION OF THE CURRENT NATIONAL HOUSING PROGRAMMES PER INTERVENTION CATEGORIES.

Intervention Category One: Financial Programme: Programmes facilitating immediate access to Housing Goods and Services creating enabling environments and providing implementation support. This includes: Individual Housing Subsidies, Enhanced Extended Discount Benefit Scheme, Social and Economic Facilities, Accreditation of Municipalities, Operational Capital Budget Housing Chapters of IDP's, Rectification of Housing stock (Wikipedia, 2010).

Intervention Category two: Incremental Housing Programmes: This Programmes is facilitating access to housing opportunities through a phased process. This include: Integrated Residential Development Programme: the Phase one include: Land, Services and Township Proclamation and the Phase two includes: Housing Construction and Individual ownership options, People's Housing Process (PHP): (which assists households to access housing subsidies), Informal Settlement Upgrading (Wikipedia, 2010).Consolidation Subsidies, Emergency Housing Assistance :(Provides temporary assistance in the form of secure access to land and/or basic municipal services and/or shelter) (Wikipedia, 2010).

**Intervention Category Three: Social and Rental Housing Programmes:** Programmes facilitating access to Rental Housing opportunities, supporting Urban Restructuring and Integration. This includes: *Institutional Subsidies* :( Providing tenure arrangements alternative to immediate ownership to subsidy beneficiaries), *Social Housing:* (provide a rental or co-operative housing options for low income persons at a level of scale), *Community Residential Units* :( Facilitates the provision of secure, stable rental tenure for the lowest income persons who are not

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able to be accommodated in the formal private rental and social housing market) (Wikipedia, 2010).

**Intervention Category Three: Rural Housing Programme**: This programmes is facilitating access to housing opportunities in Rural areas. The programme includes: *Rural Subsidy, Informal Land Rights:* The rural programme is used to extend the benefits of the Housing Subsidy Scheme to those individuals living in areas referred to as "rural" areas where they enjoy functional security of tenure as opposed to legal security of tenure. Only individuals whose informal land rights are uncontested and who comply with the qualification criteria will be granted such rural subsidies. (Wikipedia, 2010).

# THE BUILDING INDUSTRY

Building industry can be define as a group of different licensed professional (Architects, Builders, surveyors, etc.) in building construction working as one on construction sites to produce the proposed building. It is simply the interaction between professionals like the architects to the builders, surveyors etc. to produce a building. The Building Industry in any nation is a major economic pivot of the country, accounting for significant income and massive employment. Flanagan (2006) defined it as that sector of the economy that is responsible for the design, construction, alteration, repair, maintenance, refurbishment and demolition of buildings, excluding the infrastructure and civil engineering works. In other words, its central concern, as the name implies, is the production and maintenance of buildings. In the fields of architecture and civil engineering, construction is a process that consists of the building or assembling of infrastructure. Far from being a single activity, large scale construction is a feat of human multitasking. Normally, the construction is managed by a project manager, and supervised by a construction manager, design engineer, construction engineer, or project architect. For the successful execution of a project, effective planning is essential.

Building industry, therefore, refers to a primary facilitator and significant index of the socioeconomic development of any nation (Akingboungbe, 2002; Windapo, 2006). It is adjudged to be the second biggest industry in the world (Towry-Coker, 2006). Buildings, which are the primary products of the industry, are outputs of huge financial outlay and added value to the environment worthy of presentation as legacies for succeeding generations (Akingboungbe, 2002; Dada, 2006; Towry-Coker, 2006). The current revolutionary investigations of past projects within the industry by the Federal Government reveals shocking depth of corruption to confirm an early assertion by Akande (1988) and Izam (2006) that construction industry has a long history of accommodating corrupt practices.

Below are some of the various functions of building industries.

- (1) Construction of a building or structure that is or is to be fixed to the ground and wholly or partially fabricated on-site.
- (2) C construction, erection, installation, extension, alteration or dismantling of a transmission or distribution line, or plant, plant facility or equipment used in connection with the supply of electricity; or an air-conditioning, ventilation or refrigeration system.

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- (3) Alteration, maintenance, repair or demolition of any building or structure, excluding electrical or metal trades' maintenance or repair work.
- (4) Construction, erection, installation, extension, alteration, service, repair, replacement of parts or dismantlement of a lift or escalator.
- (5) Installation of electrical or metal work associated with other engineering projects.
- (6) Preliminary site preparation work (including pile driving) for the construction or erection of any such building or structure.
- (7) Lying of pipes and other prefabricated materials in the ground, and any associated excavation work.

## **Housing Types**

For a long period of time, Building industries has involved in the construction of the various types of residential buildings as one of the housing programme designed to alleviate inadequate housing for human consumption. Architects have been able to evolve designs of housing types based on different parameters and functions. Basically, the following are the housing types provided by the building industry. Detached housing, Semi-detached housing, Linked housing, Housing with courtyard gardens, Terraced housing, Town housing. All this types of housing are discussed below.

*Semi-detached housing:* Semi-detached housing is frequently employed by developers and it is based on the use of identical designs. It can be used on single plot as it offers wide planning freedom cum solar orientation. garages, car ports are often located on side boundaries. Semi-detached has wide planning freedom and solar orientation potential.

*Linked Housing:* This type of housing is used by developers undertaking large scale residential projects because it is economical by having space saving advantage as well as adequate solar orientation. Linked housing is synonymous with group of housed built with uniform plan and designs which are capable of being laid out in compact or spacious configuration. Also, linked housing offer high density housing units with good living condition.

*Houses with Courtyard Gardens:* This housing type can be planned as either individual buildings or groups with coordinated design. For large scale development, it is appropriate to use group housing with courtyard and individual garages or communal parking space. Houses with courtyard gardens usually offers high density housing and agreeable living quality combined with large planning freedom.

*Terraced Houses:* Terrace houses provide a share building form which gives rows of identical or slightly varied house. Residents of terraced houses usually park on-street or in communal car parks. Terraced houses have reduced adaptability for solar orientation but it is the most economical residential form. Also, terraced houses have the advantage of high-density developments that offer occupants a good ling standard when uniform plans are used

*Town Houses:* Town houses are another shared building form which comes up in rows of identified houses or a matching variety of designs. Parking of vehicles is on the plot on-street or in a communal car park.

**Building industry and Housing Subsidy:** Houses built by the building industries should be made subsidies for the low-income people so that housing people will not be a difficult task. Housing subsidy is one of the concept that need to be discuss in the study of building industry in

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housing programme. Housing subsidy is the total payment by the government to a corporate body or individual households to cover the differences between the markets determined price and quantity on the one hand those desirable from a national development point of view on the other.(Mandelker and Montgometry, 1973). Housing subsidy is often seen as a potent for achieving a predetermined housing goal. Usually, the nature of housing subsidy is often entrenched in the prevailing housing policy. A policy is a plan of action, a statement of aims or ideas or statement intent made to guide activities in a particular field of Endeavour. According to Onibokun (1990), it is assumed that low-income people tend to spend a larger portion of their income on housing than the high-income people. Since incomes are not evenly distributed in any country, and since the income gap between the affluent few and the poor majority is often wide in developing nations especially in Nigeria, It is rational and logical, to argue that housing imperfection will be prevalent and that national government must intervene to correct these market insufficiencies by way of providing housing subsidies as an instrument of public policy.

### **Types of Subsidy**

There are two main types of subsidy and the two have great implications for housing policy analysis. These are: *The Supply or Cost Related Subsidies:* These are concerned with the subsidy on all components of housing construction or production i.e land purchase and acquisition, provision of services e.g water, electricity, etc, low duties on imported building materials and tax-free holiday for industries producing housing related materials.(Agbola, 1996).*The Demand or Price Related Subsidies:* These are concerned with the subsidies that allow a predetermined level and standard of housing to be consumed by the public. The government attempts to increase housing consumption and improve the standard of housing consumed by provision of housing allowances, below market interest rate loan among others approaches. (Agbola, 1996).

### **Building Industry and the Technology Involved**

Building technology can be easily defined as a technique used by the building industry to be able to perform their duties effectively. It is necessary to study the building industry and construction technology involved in executing their construction process. Technology are involved in the building industry in the following aspect: Technical calculations, Scheduling and resource Planning, Materials control/purchase, Costing / budgeting ,Tendering, Maintenance planning for real estate, Material digitally sends Percentage, Calculations, Orders (purchase orders), Invoices Quality & testing results for Material, Setting out from the architectural, structural, electrical and mechanical drawing, Drafts/Programs., documents Descriptions, Tender enquiries and Method of construction. e.t.c.

The success of the Building construction industry is increasingly predicated on technology. This article sought to identify the technology use at present by building construction companies in the developing countries. For the successful execution of a project, effective planning is essential, involved with the design and execution of the infrastructure in question must consider the environmental impact of the project, the successful scheduling, budgeting, construction site safety, availability of building materials logistics.Building technology can construction, though a relatively small part of the entire construction industry is a very important component. Power

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Transmission and distribution, metallurgical and material handling, medicine, petroleum, chemical, power generation, manufacturing are also technical, all these processes in building industries require highly specialized expertise in planning, cost estimating, design and construction, this type of construction require a team or individuals to ensure a successful project often undertaken by building industry in the world.

Parts of the technology include the use of earth construction in building. Earth had been used by our fathers and fore-fathers to erect buildings, sometimes up to 2 storey high without addition of any other reinforcing materials and most of them are still standing till date. The first storey building in Nigeria which is 160 years old was built of earth. Building with earth apart from been economical, has been proved to be strong and durable. Research findings in countries like Australia, South America, Asia, USSR and some parts of Africa, have shown that properly processed soil is as good or can even be made better than most modern materials e.g. sandcrete blocks, by addition of one percent (1%) cement. (Bolyn Construction Company Ltd). The materials that constitute the superstructure of a building are cement based materials (sandcrete block, cement mortar, concrete lintels, cement plaster), which are the major factors that contribute to the high cost of building a house due to the high cost of cement. It is pertinent to note that most Nigerians look down on earth buildings as either not good or a poor man's solution to problem of housing. Little wonder that the Lagos State government had to import building materials from abroad. With the abundance and availability of earth as a building material there is a guarantee that when the appropriate technology is applied, housing delivery will be made more efficient and cheaper.

### **Building Industry and Materials**

Materials for building industry is one of the major issue to be discuss in the study of building industry in housing progamme. One major implication of the building industry is that it has, in turn, resulted in the general shortage of almost all building materials. The shortage in building materials for housing is further exacerbated by the fact that building materials are also required in other construction sectors such as the maintenance of civil engineering works. The demand for building materials for housing therefore competes with the demands made by other construction works, including commercial, industrial, administrative and institutional buildings. This has led to a great deal of building Material rationing.

In the years which followed these major world events, the government, disenchanted with the performance of this industry, decided to adapt cheaper ways which encourage people to build houses, and progressively improve them by using low-cost building materials. To facilitate this new initiative the *Building Research Unit (BRU)* was established in 1972 to research into ways of improving the strength and durability of indigenous building materials. Other small-scale institutions, or building materials production centres (BMPCs), have also been established nation-wide to assist BRU in its endeavours. By establishing these small-scale BMPCs near points of consumption. The government essentially hopes to minimize costs on the use of capital and energy intensive materials. The government has now realized that: low-cost building materials relies on less sophisticated technology that can easily be made on site by the individuals, themselves such

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building materials include cement, and cement related components, and corrugated iron roof. The choice of building materials is limited by a country's state of the building material industry; it is also true that other, very critical, variables such as cultural context, the quality of the built environment, legal and political institutions as well as the level of urbanization, influence the choice of building materials.

High Cost of Building Materials is a key factor that has led to the high construction cost in Nigeria has been the restriction on the importation of cement, which by account constitutes about 40 percent of building materials, if not more. While Nigeria does not produce enough cement domestically to meet demand, imports have been restricted and subject to a process of quota allocation. This has led to sharp increases in the price of cement. However, there are signs of positive change in government policy on cement imports, such as the reopening last September of the Ibeto Cement Factory, an importing entity. In order to bring down materials costs and stimulate construction, as well as make housing more affordable to the Nigerian population, the government should continue its reconsideration of restrictions on the importation of cement and other building materials.

The role of government is also to meet the welfare needs of the citizenry. One of the major welfare needs of the citizenry is availability of adequate housing. The lack of adequate capital base and lopsided policies on the part of government has almost rendered government agencies and bodies responsible for housing provision incapable and incapacitated in performing their mandated duties. The problem is widespread and the same at all tiers of government both Federal and State. Government has made considerable effort in housing delivery for the masses, but all attempts seem to be like a drop of water in an ocean due to the enormousity of the problem. Aina (2004) in a report in The Punch Newspaper titled Lagos Spends #10bn on Housing wrote: The Commissioner for Housing, Mr. Wahab Owokoniran, stated that the state government had spent #10billion on different housing schemes in the state. According to him, people criticize the cost of delivering houses in the state as expensive, but this is not true considering the fact that building materials used for the housing schemes are imported. The effort of the Lagos State government in housing delivery is commendable but the question is who are the expected beneficiaries of the housing schemes built with imported materials considering the fact that 70% of Nigerians live in abject poverty (less than 1 dollar per day)? The strong opinion being canvassed in this paper is that earth building technology should be embraced and developed to provide low-cost housing that are indeed affordable by the low-income earners and the urban poor.

# **Building Industry and labour**

There are many routes to the different careers within the building construction industry which vary by country also, each building projects constitute a separate event that brings the major participants together for the first time. They include the owner, architects, quantity surveyor, engineers (structural and services), Builders/ contractors and subordinators (Parsons, 1979). This presents a system of temporary relationships of the key actors in contrast to other major industries that operate on continuing relationships. Each of the actors has its own set of objectives, expectations and most probably represents a separate firm. The reason the wide

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variety in the skills needed on a project according to Murdoch and Hughes (1996) arises out of the sheer technical complexity of the problems associated with building procurement. The quantity and quality of the labour produced by the building industries has to be vibrant to enable the quick discharge of quality and more housing for human habitant. However, there are three main tiers of careers based on educational background which are common: The Unskilled and Semi-Skilled: General site labour with little or no construction qualifications such as Bricklayer, Carpenter, Carpet layer, Concrete finisher, Heavy equipment operator, Heating and cooling, Electrician, Fencer, Iron worker; The Skilled On-site managers whom possess extensive knowledge and experience in their craft or profession. e.g., Landscaper, Painter and decorator, Plasterer, Plumber, Pipefitter, Roofer, Steel fixer, Tiler, Welder, a tradesman who specializes in welding and The Technical and Management Personnel with the greatest educational qualifications, usually graduate degrees, trained to design, manage and supervise the construction process. Technical and specialized occupations require more training as a greater technical knowledge is required. These professions also hold more legal responsibility such as The Architect, Civil Engineer, Building Services Engineer Project Manager Quantity Surveyor, Structural Engineer. This entire professional must hold Bachelor degrees of their prospective discipline and must also be chartered with their prospective professional bodies. Government should encourage the engagement of the all this discipline in the government based building industries in Nigeria.

#### CONCLUSION

This paper has examined the essential relationship between the building industry and the housing programme. The study indicated that the goal of providing affordable housing can be achieved by encouraging the building industry in the production of good and quality housing for masses in a subsidizing manner as this will help in ameliorating the problem of housing scarcity, housing infrastructure and services.

Building industry at a time of revolutionary national reforms like this ours building industry experience requires concerted efforts to address the problems of the sectors by the provision of construction material in a subsidizing way, labour and the professionals involved in the building industry must be competent. Buildings are central to national development and with the current housing situation in the country; the industry cannot afford to allow the problems confronting the industry to persist. The professionals hold the key to the resolution of the problems in the sector. Nigeria must keep working at improving the housing programme, and this can be achieved by just studying what other countries have done. It is important that Government provides mortgage insurance to first time home buyers who do not have credit history and to low-to middle income families in order to achieve our aim of providing affordable housing. Government should take on the responsibility of building houses because experience has shown that it is unsustainable in the long-run. The Nigerian Federal Housing Authority (FHA) could be restructured to become the government sponsored entity that will be responsible for providing mortgage insurance while the Federal Mortgage Bank of Nigeria (FMBN) can pool the insured mortgages and sell them in the capital market to provide liquidity.

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In conclusion, reconsideration of the restriction on the importation on building materials should continue, and we must conduct more research on how we can use local building materials. I also recommend that government should encourage the developer's responsibility about providing affordable housing. The present method of funding infrastructure projects through the annual budgets only results in having uncompleted projects when revenues fall short of expectation has been the experience in nation's history.

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