THE RELEVANCE OF THE NATIONAL BUILDING CODE TO THE BUILT ENVIRONMENT

A.N Iroegbu; K.C Okolie; Wogu C. L and C. C Iheme

Abstract

The paper takes a critical look at the relevance of the National Building Code (NBC), to the built environment. In doing that, the professional ambiguity in the building construction industry were discuses, via the settlement phase, development stage and the post building life stage, thereby showing the involvement of every professional in the development of a sustainable human settlement. Also discussed were the professional liabilities, and finally recommendations were made which include - the encouragement to work as a learn by all the practitioners. Also, all the professionals were warned not to overlap again - henceforth they should man their beats.

Introduction

The National Building Code (NBC) is a mandatory and recommendatory document adopted by development authorities, to formulating building byelaws. It provides guidelines for regulating building materials, services, systems and processes (Iroegbu, 2007).

The National Building Code lays down the minimum provisions buildings need in order to ensure public safety with regards to structural sufficiency, fire hazard and health aspects. It contains administrative provisions, development control rules and general building requirements. It also serves as a mode code (MC), for adoption by any body involved in construction in the public or private domain (Iroegbu, 2006).

Primarily, when national Building Code is mentioned, the focus is always on urban areas and formally engineered structures. With about 75% of built structure in the country being non-engineered, the National Building Code according to Iroegbu (2006), should include the non-engineered mud, stone and bamboo construction in its purview. For urban areas, it should include also, the provision to deal with slum housing, periodic renewal of certificates for occupied building from a structural, fire and electrical safety point of view and facilities for the physically challenged persons.

Created as a direct response to the scale and magnitude of natural disaster that have struck the country in recent years, its main thrust is on safety. A key element is the inclusion of a complete philosophy and direction for successfully executing building projects through an integrated, multi disciplinary approach from the conceptual stage to planning, designing, construction, operation and maintenance.

In chapter three (3) of the said national Building Code (NBC), the roles of the professionals in built environment are specifically stated without conflicts. Suffice it here to say that building industry is made up of seven (7) professional bodies which include the, Architects, Builders, Engineers, Estate Surveyors/valuers, and Town planners.

Professional Ambiguity in Construction Industry

There had always been ambiguity as to who does what, amongst the professionals, in the building industry. This ambiguity according to Akindoyeni (2007), has now been removed by the code. There are grey areas as in the case of facilities management, in which any of the professions may choose to specialize.

Akindoyeni (2005), in explaining the issue involved stated that, the building industry, a subset of the national construction industry," is responsible for the core development of all sustainable human settlements. It is responsible for the identification of suitable sites for and the physical planning and development of such settlements.

Where this industry has not had a land in the site selection planning and development have

always been chaotic. The process commences with the community expressing the desire for a new settlement and continues as follows:

A. **The Settlement Planning phase**

i. The Land Surveyor:- The land surveyor describes the location in a site map and the physical features in appropriate engineering survey plans, which is legally adopted by the appropriate authority. They provide according to Okoro (2005), all information relating to land. These information are relevant for the carrying out of proper and accurate planning on land for building construction. With information so provided, we are able to determine the appropriate and cost effective usage of land is more readily understood. For building construction activities, the role of a land survey cannot be sidelined or looked down upon. According to Agbatakwe (2005), they are charged with the responsibilities for the measurement, demarcation and identifications of items and features over the surface of the earth, underneath and in space.

ii. **The Town Planner:-** The town planner designs a suitable settlement in accordance with desired nature of the proposed settlement, taking care that all facilities required for sustainable human comfort are provide for adequate sustenance of building construction activities in this relation, the role of town planners must not only be brought to the fore but enforced, it is unacceptable that after the planning done by the colonial masters in establishing towns like Aba, Umuahia, Enugu, Port-Harcourt and all present say cities, 90% of our present day built environment are not related to each other (Okoro, 2005). The town planner is by training, responsible for master planning, layout planning etc.

Resolving the conflicts between competing land uses and seeing that the many and various demands we make upon our small and limited stock of land is met in an orderly fashion is entirely the responsibility of the town planner (Ezute, 2004). He went further, to say it is concerned with controlling the use fit together in the best possible way, to achieve the greatest advantages and the least in convenience, for the individual and society as whole. According to Agbatakwe (2005), they are charged with the responsibilities for orderly, social and economic utilization of land.

iii. The Infrastructure and Service Engineers:- These professionals are responsible for the construction of roads, water, sanitation, electricity, communication etc. They also ensure that the source and trunks for these services are synchronized with the zonal provisions. For a sustainable construction activity, engineers according to Okoro (2005), are as vital as other ancillary services.

iv. The Quantity Surveyor:- The quantity surveyor computes the most probable cost of each phase of the development. According to Okoro (2005), the holy Bible asked a question that underscores the role of quantity surveyors. It asked inter-alia, who ever undertakes the construction of a building without first ascertaining the cost? It is a pertinent question and the quantity surveyor in building project, is readily put into answering this. His role according to Qkoro, starts even before the final drawings are produced.

Bamisile (2004), suggests that he, (the Quantity Surveyor) should prepare first of all: A cost plan as soon as the brief is settled and approximate cost from sketch drawings, elemental cost checks during, so that, should the client's budget be exceeded, the designers (Architect, Mechanical Engineers, Electrical Engineers, etc) can consider each element of the building in reasonable isolation enabling him the, (Quantity Surveyor) to pair costs as necessary, within the total cost limit of the project. He went further, to say that the Quantity Surveyor during actual project execution should have a dual responsibility of ascertaining that, the client obtains value for his money and the contractors an acceptable profit for work done.

v. The Local Planning authority:- This planning authority determines the suitability of the town plan and approves the future settlement plans.

B. The Development Stage

i. The land Surveyors:- The Land Surveyor lay out the plots and set the beacons for each allotment

ii The Infrastructure and services Engineers:- The engineering contractors construct the road, water mains, the electrical and telecommunication mains, the sewer mains,

lii The Estate Surveyor and Land Administrators:- the Estate Surveyors and Land Administrators supervise the allocation of land to members of the community.

iv The Architects:- The architects design buildings according to the town planners functions land use design, supervise the construction for assurance that is in accordance with his design and specifications,

v The Structural Engineers:-The Structural engineers design and supervise the structural components of the building,

vi. The Building services Engineers:- The building services engineers (electrical, mechanical, telecommunications), design, and supervise the service engineering input into the building,

vii. The Quantity Surveyor:- The quality surveyor prepares the cost plan, bills of quantities and estimates of the building, the interim valuation for progress certification and final
certification at thecompletion of the building

Ix The consultant Builders:- The consultant builder:

a. Carries out the build ability and maintainability of the design.

b. Prepare the construction methodology

c. Prepares the construction health and safety plan.

d. Prepares the quality management plan, and where required by the client.

e. Prepares the construction programme.

ix. The Building Construction contactor:- The Building construction contractor carries out the construction of the building according to the contract document appropriately managed by a registered builder,

x. The estate Surveyor again:- Where the building is an investment project, the estate surveyor and value is responsible for either letting to tenants or selling to purchase sometimes, he is required to manage the properly in use.

xi. The Builder again:- During the utility life of the building there is the need to keep its vale at the level it yields equitable returns. This process is called maintenance and the builder is the one who carries it out.

C.

Post Building Life Stage

At the end of the utility life of the building, when redevelopment is considered the obvious economic use strategy, the existing would be required to be de-constructed. This is quite different to the popular approach of brutal demolition which is rampant in the country. The specialist in de-construction is obviously the one who was specialist at construction — the builder. The afore-stated describe the involvement of every professional in the development of a sustainable human settlement. When this is carried out correctly, the buildings are comfortable, maintainable, long lasting and desirable to the users the community. Above all, there is more than sufficient work for every professional in the system-(Akindioyeni, 2007).

Professional Liabilities

The code is one that allows the affected professionals to sanction building plans for smaller plots and less complicated structures. It also made it mandatory for the professionals to take responsibility for the safety of any structure in case of a natural disaster (Iroegbu, 2007).

Again, with the scope of these responsibilities for and expertise in practice, come the concomitant liabilities. Each participating professional is now required to be accountable for the integrity and quality of his contribution to the developed product.

The need for indemnity in professional practice is well prescribed by law. Every practicing registered builder or consultancy outfit according to Akindoyeni (2007), should take advantage of the products of insurance companies in this regard.

The Relevant of National Building Code (NBC) to the Built Environment

The national Building Code (NBC), does stipulate who does what, what tests of engineering, functional and other integrity of component, material an workmanship are required in the process of the project. It makes it easier to allocate and attribute liabilities in event of product failure.

The code provides among others a convenient vehicle for the education of the uninitiated client. It also educates the developer and even the entire public.

The code apart from laconic attribution of responsibilities spelt out for each specialist professional, it will now be easier to identify incompetent practitioners, charlatans and quarks and to deal with them under the law.

Recommendations

In view of the great relevance of the National Building Code (NBC), to the built environment, the following recommendations becomes tenable

1. Every professional is involved on most phases of development. For the accreditation of the industry, practitioners must now learn to work as a team, each striving for the perfection of the product. When this is achieved, professional bickering will now be a thing of the past
2. Again, the related professional bodies in the industry should hence forth ' man their beats' and only over lap, without usurping the functions or de-meaning the relevance of the other which attitude contributes immensely to the incessant cases of building collapse in Nigeria

Conclusion

The contemporary and nagging issue is also in view of the cases and cause of building collapses that have been ravaging our country- Nigeria. My thesis therefore, is that the professionals in the built environment should no longer overlap.

Hence forth, they should know which round pegs to put in round holes. A stitch in time saves nine.

References

Agbataekwe, G.O (2005), construction industry: A catalyst for sustainable national development. In G.O. Adindu (eed). ABSU journal of construction management and building (ABUS JCMB) 1 (l)PP.19-22.

Akindoyeni, A. (2005). Policy issues in the building industry. Matter arising. Unpublished lecture material. Nigeria Institute of Building (NIOB).

Akindoyeni, A. (2007, Feb). The national building code (NBC) and its relevance to the built environment. A paper presented at the 2007 Annual general meeting/ conference organized by the Nigerian Institute of Building (NIOB) Abia state chapter-on the theme, the Builder and the National Building Code, held at Hotel Royal Demigrate, Umuahia. 15th -16th

Bamisile, A. (2007). Building production management. Lagos: Foresight press

Ezute, L. (2004 May). Planning /Urban laws and their implementation: A case study of Abia State. A paper presented at the Annual Seminar of the Nigeria Institute of Building (NIOB), Abia State Chapter on the theme, Minimizing Building Dilapidation and Collapse in Nigeria, held at Estern

comfort Hotel, Umuahia. I9lh

Iroegbu, A.N. (2006, Sept. 30). The national building code: The need for immediate implementation Abia State. The tusk Newspaper 2(56), P.8

Iroegbu, A.N. (2007, Feb). The national building code (NBC). The need for immediate implement in Abia State. A paper presented at the 2nd Annual General Meeting/ Conference of the Nigeria Institute of Building, Abia State Chapter on the theme, the Builder and the national Building Codes, held at Hotel Royal Damgrete, Umuahia, 15th I6lh

Okoro, W-.A. (2005). Construction activities for sustainable national development. ABSU Journal of Construction Management and Building (ABSUJCMB) 1 (l).40-48.