

ABSTRACT

With the demand for housing in Nigeria growing at a geometric rate while housing provision is at an arithmetic rate, there is an obvious need to evolve a more practical method of achieving mass housing development in the country. Dry construction presents an excellent opportunity to government at all levels and the primary mortgage institutions to guarantee speedy provision of mass and affordable housing in Nigeria. This technology will provide for building professionals and contractors a viable alternative to the traditional wet construction method with blocks and bricks and concrete. However, this study will examine the role of dry construction in ensuring affordable housing in Nigeria.

The study was conducted in Akwalbom State, Nigeria and was carried out at Champion Breweries plc Uyo Akwalbom State. 50 persons were selected using the simple random sampling (srs) technique. Questionnaire was also a major instrument used for the study and was structured in a five-like scale measuring attitude of Strongly Agreed, Agreed, Undecided, Disagree and Strongly Disagreed. The researcher personally collected data from the respondents through the help of the human resource manager.

In analyzing the data collected for the purpose of carrying out this research, the statistical tool known as the chi-square test was used. The use of sample percentage was also employed. Tables were used in presenting the data for the purpose of the simplicity and clarity. This study will examine the role of dry construction in ensuring affordable houses in Nigeria.

The findings from this study revealed that there are challenges to dry construction system in Nigeria. Dry construction system can help solve Nigeria's housing challenges. Dry construction system is more expensive than other means of construction. Dry construction system can be used as a means for the provision of affordable houses for Nigerians.

CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND TO THE STUDY

With Nigeria's capital expenditure profile put at 24 per cent of recurrent expenditure in 2014, falling price of crude oil and a high cost of funds for execution of capital projects, the construction industry in Nigeria is obviously under pressure to evolve more time and cost

efficient system of construction to ensure affordable housing in Nigeria.

The importance of housing in human history cannot be overemphasized. Housing is seen as one of the best indicators of a person's standard of living and of his or her place in society (UNCHS, 1993). Housing and building conditions also reflect the living standards of a society (Venkatarama, 2004). Thus, the importance of access to adequate and affordable housing took the front burner in the mid 20th century. Most Nigerians don't have access to decent housing units due to the cost occasioned by the cost of building materials. This has led to various researches into development of the new and innovative dry construction techniques to enhance access to housing for all.

The new construction technology which is based on dry construction system which are manufactured from cement, quartz sand, cellulose, natural calcium and water, are processed by autoclave (drying process under high pressure and temperature) for durability and dimensional stability. They are manufactured into boards. The boards which come in various sizes and thicknesses between 6mm and 20mm, are manufactured under strict quality control and international standards.

Describing the dry construction system as a modern building system which tends to translate the building process into an industrial process, Le (2014) said the system is more versatile and faster construction method that allows up to 70 per cent construction time saving possible when compared with the traditional wet construction using bricks and blocks. He added that whatever the design idea the Architect can conceive, the dry construction system can achieve, pointing out that various reference building projects using the boards now abound in Nigeria.

This system, unlike the traditional brick and block method requires minimum use of water. The system generates minimum construction waste and dry construction buildings have much better preserve room temperature and they are energy efficient. The use of timber associated with the traditional construction is avoided with dry construction, and the system impacts positively on reducing deforestation.

Lower dry construction load impacts on minimum excavation, less soil disturbance. The system compliments better the green building idea for modern construction world over. In addition, the system is a lightweight construction. It is about 10 times less in weight

compared to equivalent blocks and mortar construction, resulting to savings in foundation and structural costs.

Dry construction foreave solution has also proved to be a much viable solution with lower self-weight, faster and better technical finishes. Dry construction building boards have a high fire resistance rating and good acoustic and thermal properties. It is also a moisture and pest resistance solution. Explaining that skill-gap is a major challenge for dry construction, Le (2014) noted that some companies in Nigeria who are in partnership with other stakeholders with skills in dry construction technology to put in motion machinery for skill acquisition with regular trainings to ensure the technology is domicile with the Nigerian populace, adding that customers' perception is another challenge to address, while efforts are in top gear towards continuous education about the modern system of building.

1.2 STATEMENT OF THE PROBLEM

Various researchers are of the opinion that with the demand for housing in Nigeria growing at a geometric rate while housing provision is at arithmetic rate, there is obvious need to evolve a more practical method of achieving mass housing development in the country. Dry construction presents an excellent opportunity to government at all levels and the primary mortgage institutions to guarantee speedy provision of mass and affordable housing in Nigeria. The researcher is of the view that dry construction technology will provide for building professionals and contractors a viable alternative to the traditional wet construction method with blocks and bricks and concrete. However, this study will examine the role of dry construction in ensuring affordable housing in Nigeria.

1.3 OBJECTIVES OF THE STUDY

The following are the objectives of this study:

1. To examine the role of dry construction in ensuring affordable houses in Nigeria.
2. To examine the process involved in dry construction system.
3. To determine the factor limiting the use of dry construction system for building development in Nigeria.

1.4 RESEARCH QUESTIONS

1. What is the role of dry construction in ensuring affordable houses in Nigeria?
2. What is the process involved in dry construction system?

3. What are the factors limiting the use of dry construction system for building development in Nigeria?

1.5 HYPOTHESIS

H_0 : Dry construction system cannot be used as a means for the provision of affordable houses for Nigerians.

H_A : Dry construction system can be used as a means for the provision of affordable houses for Nigerians.

1.6 SIGNIFICANCE OF THE STUDY

The following are the significance of this study:

1. The outcome of this study will educate professionals in building technology and other stakeholders in the building industry on the need for active innovative development with the use of dry construction system with the view of ensuring the provision of affordable houses for Nigerians.

2. This research will also serve as a resource base to other scholars and researchers interested in carrying out further research in this field subsequently, if applied will go to an extent to provide new explanation to the topic

1.7 SCOPE/LIMITATIONS OF THE STUDY

This study on the role of dry construction in ensuring affordable houses in Nigeria will cover all the process involved in the use of dry construction system with a view of determining approaches that can be adopted in the delivery of sustainable mass housing for Nigerians.

LIMITATION OF STUDY

Financial constraint- Insufficient fund tends to impede the efficiency of the researcher in sourcing for the relevant materials, literature or information and in the process of data collection (internet, questionnaire and interview).

Time constraint- The researcher will simultaneously engage in this study with other academic work. This consequently will cut down on the time devoted for the research work.

REFERENCES

UNCHS (1993). National Trends in Housing Production Practices Volume 4: Nigeria. Nairobi, Kenya.

Venkatarama Reddy, B.V. (2004). Sustainable building Technologies. Current Science. Vol.87/7

Le, A. (2014) Understanding Stabilized dry Construction. Virginia: VITA Publication Technical Paper No 2. Retrieved on July 7, 2014 from <http://sleekfreak.ath.cx:81/3wdev/VITAHTML/SUBLEV/EN1/STABERTH.HTM>

THE ROLE OF DRY CONSTRUCTION IN ENSURING AFFORDABLE HOUSES IN NIGERIA

The complete project material is available and ready for download. All what you need to do is to order for the complete material. The price for the material is NGN 3,000.00.

Make payment via bank transfer to Bank: Guaranteed Trust Bank, Account name: Emi-Aware technology, Account Number: 0424875728

Bank: Zenith Bank, Account name: Emi-Aware technology, Account Number: 1222004869

or visit the website and pay online. For more info: Visit <https://researchcub.info/payment-instruct.html>

After payment send your depositor's name, amount paid, project topic, email address or your phone number (in which instructions will sent to you to download the material) to +234 70 6329 8784 via text message/ whatsapp or Email address: info@allprojectmaterials.com.

Once payment is confirmed, the material will be sent to you immediately.

It takes 5min to 30min to confirm and send the material to you.

For more project topics and materials visit: <https://researchcub.info/> or For enquiries: info@allprojectmaterials.com or call/whatsapp: +234 70 6329 8784

Regards!!!