

## **Maintenance of Buildings in Nwafor Orizu College of Education, Nsugbe, Anambra State, Nigeria <sup>1</sup>**

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### **ABSTRACT**

The study appraises the maintenance of building of Nwafor Orizu College of Education Nsugbe (NOCEN), Anambra State through the use of questionnaire and interview. A total of one hundred and seventy-one (171) questionnaire were randomly distributed to students and staff of NOCEN and all questionnaire administer were completely filled and returned giving a response rate of 100%. Data collected were analysed and presented using tables, charts and percentages. The study has established buildings are quite inspected regularly and as well as its maintenance in NOCEN but it takes longer period of time to obtain approval for a building inspection or maintenance in college. This basically affect the maintenance of the building within the institution. However, most of the buildings in the collage are properly maintained by the institution through the aid of the maintenance department. The study recommends that the bottleneck in processing maintenance request/approval should be eliminated for effective maintenance work.

### **1. INTRODUCTION**

A building is regarded as an enclosure or “envelope” designed and constructed to provide minimum level of comfort and conveniences for man. Building provides safety, protects human inhabitant, animals, materials and equipment from effect of weather, and gives internal comfort (Ogunoh, 2008). According to Obiegbo, (2003) a building is an essential modifier of micro-climate, a space isolate from climate temperature and humidity, fluctuations, sheltered from prevailing winds and precipitation and with artificial means. Obiegbo (2003) emphasized that buildings are enclosure for space, designed for specific uses, meant to control local climate, distribute services and evacuate waste.

Buildings are designed and constructed to provide healthy and comfortable environment, create good atmosphere for learning (Okolie, 2011). In addition, a healthy building is one that adversely affects neither of its occupants nor the large environment. Furthermore, Okoye and Ogunoh (2008) asserted that buildings are expected to function effectively throughout their expected life span. In

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a nutshell, a building must function to accommodate the activities for which it is built, and provides comfortable indoor and outdoor climates to its occupants (Ogunoh, 2008).

Generally, for buildings to meet these basic needs they require constant and regular maintenance. However, infrastructural maintenance has been a major challenge in many Nigerian public institutions due to poor funding, misuse of facility by occupants, bribery and corruption etc. (Adenuga, 2006). Also, some of these public buildings are allowed to dilapidate to unusable levels before maintenance plans are made to preserve its economic value and durability. Likewise, some of the buildings are left without any form of maintenance for a long time and these leads to total overhaul and reconstruction of the previously constructed project, resulting in a serious economic waste (Cobbinah, 2010). Based on these, Okolie (2011) observed that in Nigeria, stakeholders have continuously expressed concern over level of maintenance suitability of Educational buildings, especially in the universities.

In spite the importance of maintenance to public building especially tertiary Institutions, the Government preferred using funds for new capital projects to the neglect of the existing once (Ezenwa, 1999). Because of this, development of tertiary institutions especially state-owned institutions like Nwafor Orizu College of Education are being forced to identify ways and means to improve on the maintenance of its institution buildings. Unfortunately, lack of maintenance culture of buildings in our institutions has led to unproductive learning environment in the Nigeria tertiary education system. This situation has made students and teachers lack interest and apathy to goals of learning. In view of the above, this research is concern about the ugly situation and therefore seeks to appraise the maintenance of public institution building of Nwafor Orizu College of Education Nsugbe, Anambra State.

## **2.0: LITERATURE REVIEW**

### **2.1 MAINTENANCE AND PUBLIC BUILDING**

Maintenance, according to Olanrewaju (2010) is “the processes and services to preserve, repair, protect and care for a building fabric and engineering services after completion, repair, refurbishment or replacement to current standards to enable it to serve its intended function throughout its entire lifespan without drastically upsetting its basic features and use”. From the definitions, it can be seen that maintenance is a vital component of an organization’s existence in relation to its asset management.

Odediran (2002) also emphasized that the technological development around the world is having aesthetic effect on the construction industry. These innovations of new technologies to buildings are beauty to behold after their completion. He further emphasized that there are lots of technical and administrative actions to ensure the sustainability of the intrinsic and extrinsic values of each of the components of the buildings.

Yusuf (1989) appraised corporate property maintenance practice in Nigeria and established that maintenance has become a big issue in the world of property and building. According to him, here in Nigeria, the Federal Government in its 1987 budget allocated 590 million naira for the maintenance of public buildings but this amount when considered against the fact that it represents just a small fraction of the total needed for public buildings alone, excluding the needs of the private sector, is a pointer to the enormity of the property maintenance needs of Nigeria as a whole in economic terms. The situation has not gone better with present challenges confronting the country in terms of infrastructural development.

Maintenance is defined as “a combination of any actions carried out to retain an item in, or restore it to an acceptable condition” (1984). However, In the study of Edmond, et al (2010), they affirm that maintenance of existing building assets has been considered a top priority in most client organizations in their project planning. Most organizations have realized the efficacy of maintenance functions in their day-to-day activities and in the continuity of their production line to avoid a shutdown. This maintenance functions, whether services, repair, replacement, or cleaning, is a project to an organization. The characteristic of the maintenance project depends greatly on the nature of the work to be executed. This also determines the mode of execution of the project, whether through in-house or outsourced contracting.

Straub (2011) considered maintenance contractors as service innovators; the study looks at certain attributes that determines the success of a maintenance project in relation to the personality of the contractor. He states that maintenance contractors must acquire more knowledge to ascertain the rate or level of deterioration of components and be able to give maintenance advice and cost implications. In addition, for a successful maintenance project, the ability to design, plan, and calculate maintenance scenarios, and performance measurement plans are vital. Integrity, honesty, and coordination skills are also identified as necessary attributes.

Abusiga (2017) concluded that the management aspects are vital to the successful completion of a maintenance project. The early involvement of all stakeholders is paramount in this regard. They suggested that the critical factors identified from the results of the study should be effectively monitored by the project team and the maintenance contractor project manager. The maintenance contractor team should liaise with the client and the consultant organization. This team integration and collaboration acts as a partnership in executing maintenance project and will facilitate a successful completion of such project. However, the results of the study may not be generalized to all project team and the maintenance contractor project manager.

Also, in the study of Mukelasi *et al* (2012), the critical success factors (CSFs) for building maintenance management of local authority in Malaysia were identified as leadership, culture, structure, roles and responsibilities, system infrastructure, and measurement. Their study revealed that, leadership relates to human capital, resources and relations which must consist of commitment, identification with the organisation, mutual trust, cooperation and future optimism.

They further termed culture as the nature of the maintenance work which entails the organizational practices, climate and norms, internal competence and integration, history and tools, conception and work demand. The organisational cultural elements culminate to organisation performance. Also, the organisational structure is the division of responsibilities within the system as in top management and operational functions and physical inspection.

According to Mukelasi *et al.* (2012), work policy will enhance a successful maintenance work system. Maintenance organisations must also utilize their system infrastructure which comprises resources, technology, management control, procedures and strategy to their advantage to achieve a positive project outcome. In addition, project outcome needs to be measured whether it meets users' expectations in terms of quality, speed, reliability, safety, function and comfort.

### **3.0: METHODOLOGY**

This study was a survey research and was conducted in Nwafor Orizu College of Education Nsugbe, Anambra State, Nigeria. The population of this study constitutes the Students and Staff who assumed that have good knowledge of maintenance management and conditions of buildings in the college and these were obtained from the records available at various department in the institution. Questionnaire containing information on current conditions and types of educational buildings and framework for effective and efficient maintenance of buildings in the study area were constructed, instructed and administered to staff and students in the college. Table 1 showed the composition of the respondents with their respective population sizes and sample sizes. A total of 171 questionnaires were administered to the respondents and fully completed, returned and used for analysis. This correspond to a response rate of 100%. Being a descriptive research, tables and charts were used in presenting the data presentation, while mean and percentages for data analysis

**Table 1**      **Distribution of Questionnaire**

Group	Number of Respondents	Percentage of Respondents (%)
Students	115	68
Works and Services Dept	21	12
Registry Dept	14	8
Bursary Dept	14	8
Academic Staff	7	4
Sub Total	171	100

Source: Researcher's field study (2018)

#### 4.0: RESULTS AND DISCUSSION

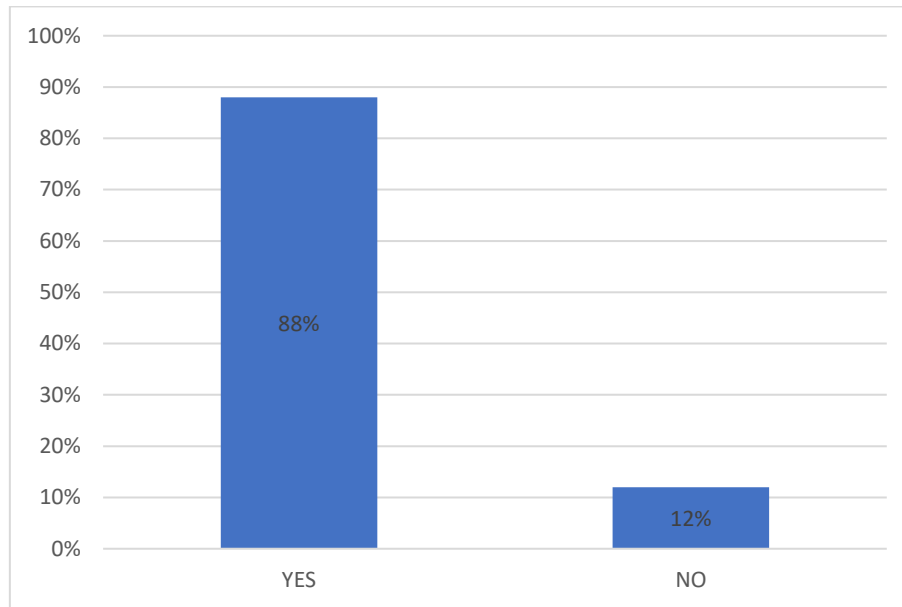


Figure 1: Extent of inspection of the building in the study area

The results in Fig. 1 shows the extent which inspection of building are undertake in the study area. The result in Fig 1 shows that 88% of the respondents agreed that the institution undertake regular inspection of the building facilities whereas 12% disagree. Based on this, buildings in the study area are regularly inspected.

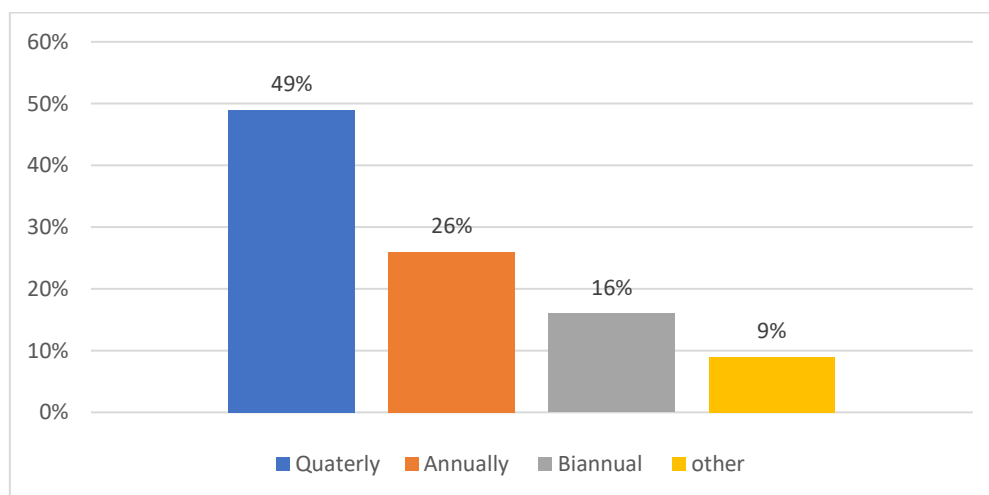


Figure 2: The extent maintenance is done in the study area

The response in figure 2 indicate that 49%, 26%, 16% and 9% of the respondents agrees that maintenance works are done in the institution on quarterly, annually, biannual and others respectively. The ratio between maintenance issues effected on annually basis to biannual are 75% to 25%. Therefore, buildings and its facilities are maintained either on quarterly basis or annual in the study area.

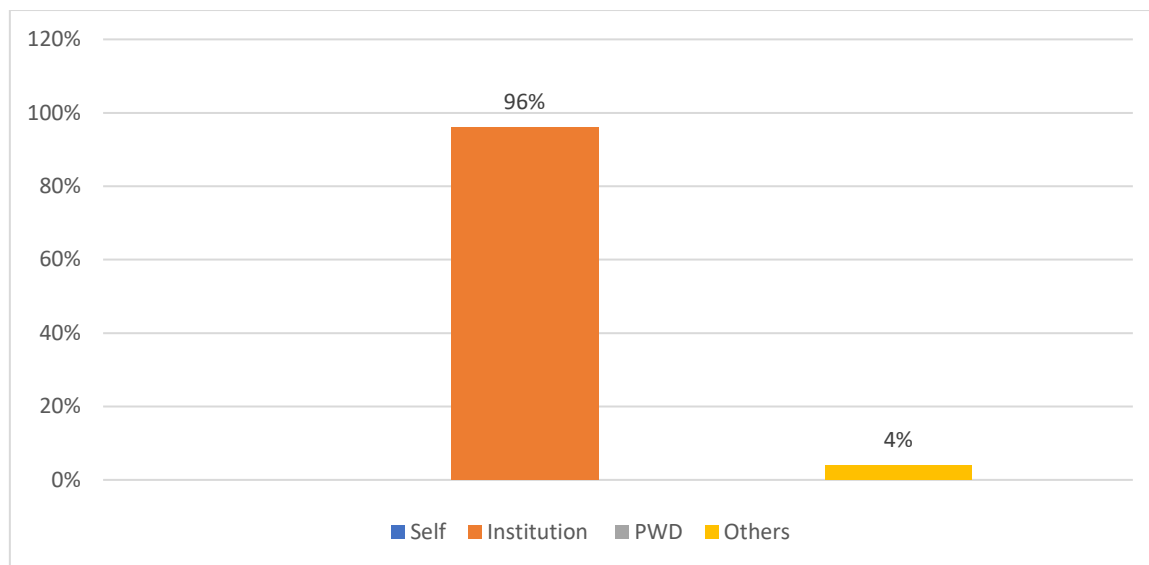


Figure 3: Who is responsible for the maintenance of the building?

The results in Figure 3 shows more than 96% of the maintenance work are done by the institution where others are responsible for the rest 4% of the work. Also, the findings in Fig 3 indicate that none of the respondents’ tick self and PWD. Therefore, body responsible for maintenance work within the collage is the institution itself.

**Table 2: Condition of Maintenance of Buildings in the study area**

Questions	Variables	No of Respondents	Percentage of Respondents (%)
Does the maintenance department come in to do maintenance work on the building without request?	(a) Yes	98	57%
	(b) No	73	43%
How long does it take for maintenance request to be attended to	(a) Less than a week	10	6%
	(b) 1-2 weeks	83	49%
	(c) 1-2 months	61	36%
	(d) More than 2 months	17	10%
In your opinion is the building well maintained	(a) Yes	123	72%
	(b) No	48	28%

**Source:** Researchers field study 2018

The results in table 2 indicate that 57% and 43% of the respondents agrees that maintenance works are done with by the maintenance department with official request and without official request respectively. Also, it takes about 2 months for the requests to be attended to. Due to this, some urgent maintenance may begin while its request is still been process. Furthermore, the results in table 2 indicate 72% and 28% respondents are satisfied with the condition maintenance of buildings in the college and not satisfied respectively.

## **5.0: CONCLUSION AND RECOMMENDATIONS**

Based on the research findings the following conclusion were drawn:

- i. Inspection of building facilities are done regular basis in the college;
- ii. Buildings and its facilities are maintained either on quarterly basis or annually in the study area as the needs arise;
- iii. The institution or the college through the aid of the work and maintenance unit of the collage is responsible for maintenance work;
- iv. Maintenance work within the collage is constrained by a lot of issues. However, issues bordering on time spent to obtaine an approval to carry out inspection or maintance work within the collage are most critical. Therefore, the study recommends that the issues should be properly addressed by the management of the institution for effective maintenance work to be achieved within the collage.

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