

State of Physical Facilities of Higher Education Institutions in Nigeria

Abdullahi Isa, Wan Zahari Wan Yusoff Ph.D

Department of Real Estate Management, Faculty of Technology Management, Business and Entrepreneurship
Universiti Tun Hussein Onn, Malaysia (UTHM)

Abstract- Facilities such as consultancy services, technical support, safety and security are considered as an important element in today's institution of higher learning in achieving qualitative education. The purpose of this paper is to explore the state of physical facilities of higher education institutions in Nigeria base on the global best practices. The data was obtained through secondary sources and observation. The Review of related works shown that provision of physical facilities were below average. These facilities facilitate and support Universities, polytechnics, monotechnics and colleges of Education to achieve their international goals and objectives. If higher institution of learning wish to produce graduate who will be able to compete favorably in the international job market, there is need to pay more attention to the state of existing facilities in tertiary institutions.

Index Terms- State, built environment, higher education, physical facilities, inadequacy

achievement in educational system [9]. School facilities consist of all types of buildings for academic and non-academic activities; equipment for academic and non-academic activities, areas for sports and games, landscape, farms and gardens including trees, roads and paths. Others include furniture and toilet facilities, lighting, acoustics, storage facilities, parking lot, security, transportation, ICT, cleaning materials, food services, and special facilities for the physically challenge persons [26]. Researchers have shown that non-availability and inadequacy of such facilities have great influence on the performance of both students and lecturers in higher institution of learning. The facilities can be categorized into physical and non-physical facilities [19].

The paper is structured as follows; Section 2 shows the need for facilities in schools. Next, section 3 shows issues and problems of physical facilities in higher education institution. Section 4 shows the review of related literature. Section 5 shows discussion. Section 6 concluding remarks.

I. INTRODUCTION

Education in general, and higher education in particular, are fundamental to the construction of knowledge, economy and society in all nations [14, 30]. Therefore, tertiary education is considered throughout the world to be the key to both individual and societal aspirations. For individuals; education beyond the secondary level is assumed to be the way societal esteem, better paying jobs and so on, while for societies; it tends to be the key to technological development, productivity and economic growth [2].

The potential of higher education system in developing countries to fulfil this responsibility is frequently thwarted by long-standing problems of finance, efficiency, equity, quality and governance [17]. In Nigeria for example, institutions of higher learning have been facing a lot of problems such as inadequate funding, inadequacy of equipment and facilities, indiscipline among staff and student and so on, which has adversely affected their academic performance. Higher education is the key for the development and achievement of every nation so the need of educational facilities to users cannot be overemphasized [7].

The purpose of teaching and learning process is to bring about desirable change in the learner's behavior through critical thinking. The processes does not take place in a vacuum but rather in an environment structures to facilitate learning. In ideal situation for teaching and learning to take place, there must be adequate infrastructure [6]. Consequently, provision of instructional materials has impact on student learning

II. NEED FOR FACILITIES IN SCHOOLS

Facilities are materials designed to serve specific purposes. In the school system, there are multiplicity of facilities, which facilitate teaching and learning. They are used;

- (1) To illustrate concepts
- (2) Provide opportunity for firsthand experience
- (3) For experimentation and demonstration
- (4) For scientific investigation and discovery
- (5) To provide diversity of thoughts
- (6) For observation and inquiry
- (7) For development of scientific attitudes and skills
- (8) To protect the individual and also provide comfort

Source: [27].

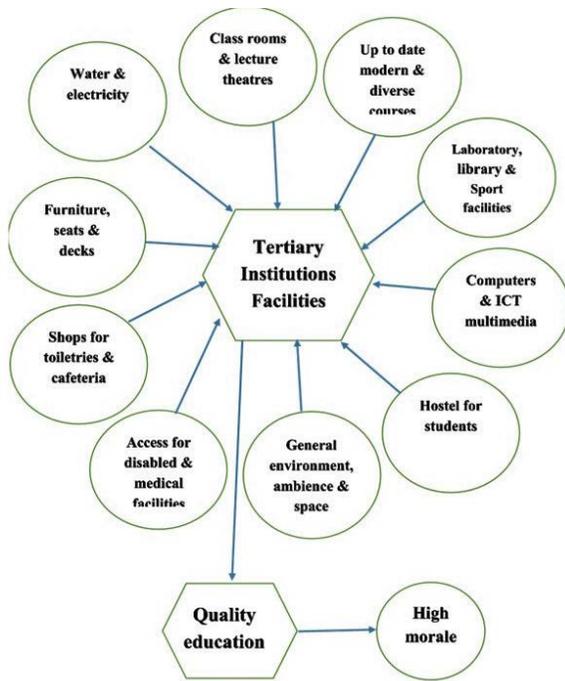


Fig. 1. important facilities in tertiary institutions;
Source: Bakare (2009)

III. ISSUES AND PROBLEMS OF PHYSICAL FACILITIES

The learning environment in the higher institutions is generally different from the primary or secondary education. Every higher education is built to serve the tertiary education to student based on the various programs offered and therefore, the design and facilities provided in the higher institutions must suit the objectives of the education programs [11]. However, Universities worldwide are facing increasing pressures to produce 'knowledge workers', to respond to perceived competition dynamics, and to maintain and improve quality

standards [17]. In Nigeria, there is a growing concern by the public on the quality of university education and the relevance of the universities curriculum to national development [9]. Part of the problems attributed to these setbacks include: poor funding; lack of infrastructures, lack of frequent curriculum review, inadequate staff training and welfare, students overpopulation, frequent strikes by both the academic and supporting staff and so on [8]. It is very unfortunate that necessary facilities such as sufficient power supply, enough and decent lecture halls, basic chemicals and equipment in laboratories and properly equipped libraries are lacking [29]. Obviously, public universities in Nigeria need to improve a lot in order to parallel the global standard in imparting knowledge, conducting applicable researches, and be responsive to the needs of our socioeconomic development.

Planning and design of educations facilities for schools, polytechnic, colleges and universities, has vital impact on education outcomes [23]. Inadequate structures and facilities, inadequate housing, overcrowded classrooms and inadequate of reading materials. The Nigerian university commission in 2005 recorded over-enrolment out of 25 Federal universities (18) represent 72% were overenrolled. While 13 out of the 19 state universities (representing 68.4%) also overcrowded. Only one of the seven private universities then, (14%) was reported to have overenrolled. Top ten overcrowded universities include five of Federal universities and five universities. With this worst situation no doubt that facilities may be overstretched [9]. School facilities are physical facilities which all individuals have legitimate right to quality educational facilities, physical space that supports multiple and diverse teaching programs and pedagogies; including current technologies one that demonstrates optimal cost-effective [22]. Building performance and operation over time, one that respects and is in harmony with the environment and one that encourages social participation, providing a healthy comfortable, safe secure and stimulating setting for its occupants [5].

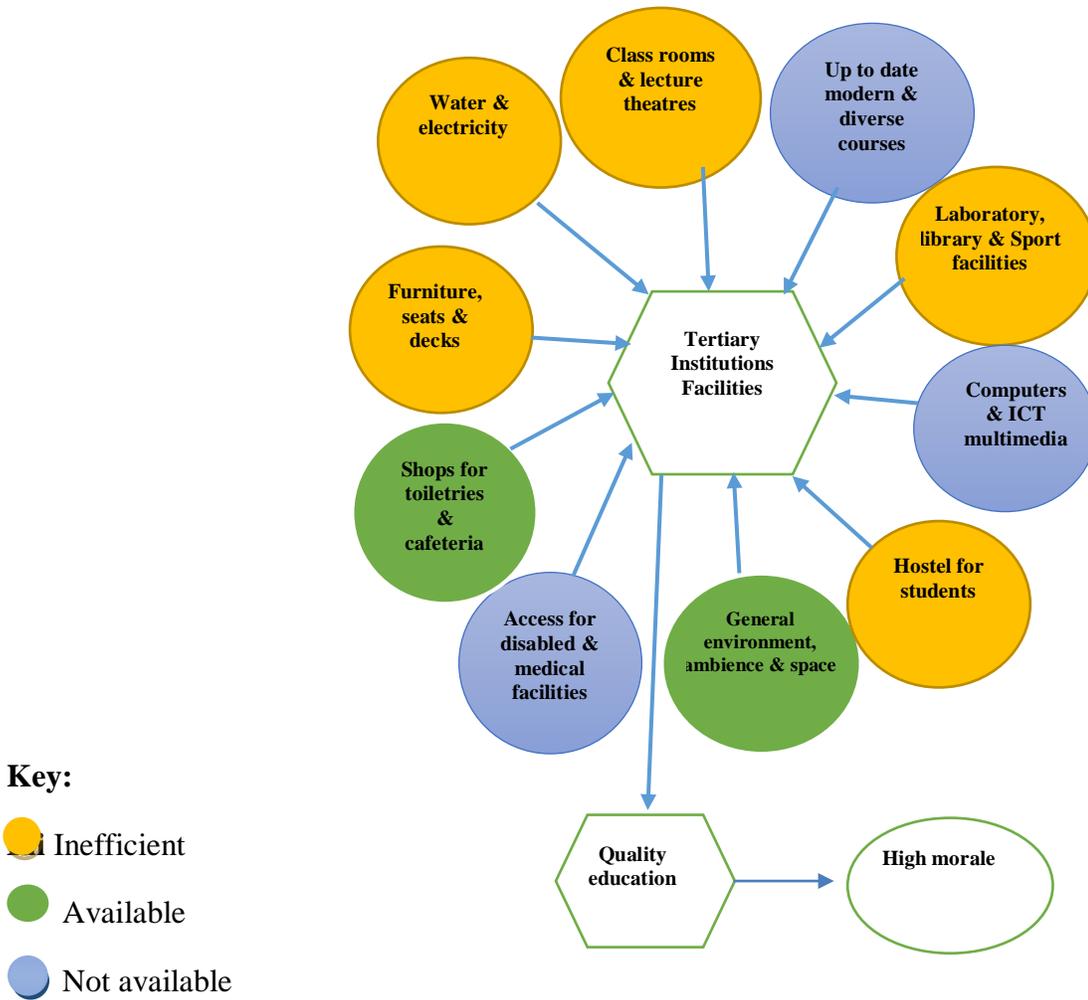


Fig: 2 Inefficiencies of facilities in Nigerian tertiary institutions.

Adapted: Bakare (2009)

Fig. 2 : Above shows the inefficiencies of facilities in Nigerian tertiary institution, classroom and lecture theaters, library, laboratory and sport facilities ,hostel for student, furniture , seat and desks, water and electricity are inefficient , up to date modern and diverse courses, computers, and ICT multimedia, assess for disabled and medical facilities are not available, shops for toiletries and cafeteria are available. These shows clearly the shortage of facilities in Nigerian tertiary institution.

IV. REVIEW OF RELATED WORK

Facilities includes buildings, grounds, utilities, and equipment, and will typically represent the majority of an entity's capital asset. However, facilities are normally designed or selected based on the needs of operation processes of the organization. The features of facilities normally reflect the specific needs of occupying organization and occupants, thus as substantial part of the resources used during the transformation from input to output within office-based organizations, facilities

can have a significant impact on organizational performance [14, 16].

The physical facilities comprises of buildings, land, compound, equipment's, tools, space and so on, while the non-physical facilities include consultancy, catering, security, supply, relocation and event and both are required to be planned, design, documented, resourced, provided or delivered and monitored [10]. Whilst the quality of facility services is important to business in institutions and organizations around the world, where the customer impact is immediate, such as retail sites and hospital. Business sector is a key determining criticality of facility to core operations [22].

Facilities are organizations' resources just like human, technology, finance and time. Facilities play a facilitating role by providing all the necessary support to organization so that it can successfully carry out its business smoothly; properly managed facilities can make certain contribution to organization success [15]. These strategic roles and contributions include improving quality working life. Facilities are instrument of productivity; as

such this closer integration of facilities brings important opportunities to provide a competitive advantage [4].

A study conducted on the impact of overcrowded conditions on student's achievement and teachers' efficiency. According to this report, "teachers say that overcrowded schools are nosier, that they create more non-instructional duties and paperwork, and that, without question, they inhibit teaching and learning [27]. Overcrowding, due to inadequacy of physical resource affected both classroom activities and instructional techniques [25].

The relationship of the physical environment to teachers' professionalism revealed that physical environment or facilities affect teachers which affect teachers' performance. She mentioned further that the most important environmental features which affect teachers' performance are classrooms furniture and class equipment [3]. Comment on simple, dignified, artistic exterior is suggestive of the purpose for which school building exists, make the scholars proud of their school and will have an impressive influence on their performance at school [16].

Availability in quality and quantity of suitable material, physical resources, in good supply, are crucial for the achievement of curriculum objectives [18]. Proper planning should be done on school facilities. He affirmed that there is a direct bearing between a range of resources (physical and material) and learning outcomes. Adequate and qualitative facilities are required for an effective teaching and learning to take place [1]. School facilities are the operational input, which enable teacher to archive some level of instructional efficiency and effectiveness [12, 13]. Asset that " school facilities can be said to be the physical and spatial enablers of teaching and learning which will increase the production and attainment of desired result [24]. There's significant relationship between adequacy of physical facilities, teachers' effectiveness and students' academic performance [21]. United States District of Education reports that school buildings that can adequately provide a good learning environment are essential for student's success [28].

Institution of higher education have continued to struggle with mounting fiscal problems, problems that are compounded by the present "crisis of public confidence" in higher education skyrocketing costs; declining enrolment; low faculty morale; financial constraint-induced stress among the staff; declining retention; overstretched facilities; old dilapidated buildings which are badly in need of renovation are only a few of the problem that administrators and faculty members face today [20]. "The Nigerian National University Commission (2006) reported that a presidential visitation panel that looked into the operation of all federal universities between 1999 and 2003 revealed that academic and physical facilities at the universities were in deplorable state with insufficient lecture theater/ halls, laboratories and so on [9]. Bello (2007) confirmed the deplorable situation of the physical facilities in our higher institution [8]. Major factors that are responsible for the problems of facilities in Nigerian universities which includes inadequate financial support, inadequate provision of facilities and maintenance culture [9, 12].

V. DISCUSSION

From the review of related work on state of physical facilities of higher education institutions it can be deduced that provision of physical facilities in Nigerian universities are below standard.

Fig.1: Above shown the important of facilities in tertiary institution which include; water & electricity, classroom & lecture theatre, up to date modern & diverse courses, laboratory, library & sport facilities, computers, & ICT multimedia, hostel for student, general environment, ambience & space, access for disabled & medical facilities, shops for toiletries & cafeteria⁷. However, the appraisal of Nigerian institutions indicated the inadequacy of some of these needed facilities classroom and lecture theaters, library, laboratory and sport facilities, hostel for student, furniture, seat and desks, water and electricity are inefficient, up to date modern and diverse courses, computers, and ICT multimedia, assess for disabled and medical facilities are not available, shops for toiletries and cafeteria are available. These shows clearly the shortage of facilities in Nigerian tertiary institution.

VI. CONCLUSION

As this availability, adequacy and quality of school facilities affect the morale of the students and their academic performance it stands to reason that facilities must not be only available but must be adequate and in good condition in order to encourage students achievement in higher education especially in developing country like Nigeria quality manpower supply and well trained graduate who can compete in the international market. If higher institution of learning legitimately wish to produce graduates who will be able to compete favorably in the international job market, there is need to pay more attention to the state of existing facilities in tertiary institution.

REFERENCES

- [1] Adeogun, A. A. (1999). School plant planning and facilities management. Lagos: Frank-Unity (Nigeria) Ltd.
- [2] Adeogun, A. A. (2001). Instructional resources and school effectiveness in private and public secondary schools in Lagos State. Lagos Journal of Educational Administration and Planning 1(i) pp. 74 – 81.
- [3] Agusiobo, B. C. (1994). Including higher level of resource utilization in the integrated science teaching. Unpublished Ph.D. Thesis. University of Lagos.
- [4] Alexander, K. (1996), Facilities management theory and practice, E & FN Spon, Norwich, UK.
- [5] Ali, A.S, Che-Ani, A. I, & Wan Yusoff, W. Z (2010) Uncertainty of building regulation for refurbishment projects Malaysia. Construction, building and real estate research conference of the royal institution of chartered surveyors.
- [6] Anifowose M.O. & Lawal P.O. (2013), "State of facilities in Nigerian tertiary educational institutions" Journal of Technological Research vol. 8 no. 1
- [7] Bakare, T.V. (2009), A consideration of the adequacy of teaching facilities in the universities of south western zone of Nigeria Available in www.ahero.uwc.ac.za/index.php?module=csh&action=downloadfile.
- [8] Bello Muktar, (2007), The state of Nigerian public universities Available in www.gamji.com/article6000/NEWS7632.htm2007
- [9] Babatofe, B.A. (2010), "Problems of facilities in South-West Nigerian universities and the way forward" Journal of Education Administration and policy studies vol. 2(2), pp. 039-043

- [10] Carpenter, C. and Oluafa, A. (1995). Post-Occupancy Evaluation of Buildings and Development of Facility performance criteria" *Journal of Architectural Engineering* Vol. 1 No. 2, Pp. 77-81.
- [11] Dilanthi, A. and David B. (2000). *Facilities Management performance in Higher Education Properties/Facilities*, Vol. 18, No. 7/8, Pp. 293-301.
- [12] Ehiemetalor, E. T. (2001). School facilities management practice in Nigeria. In N. A. Nwagwi, E. T. Ehiemetalor, M. A. Ogunu & M. Nwadiani (Eds). *Current issues in educational management in Nigeria*. Benin City: NAEAP.
- [13] Emetarom, U. G. (2003). Provision and management of facilities in primary schools in Nigeria: Implications for policy formulation. Paper presented at the annual National Conference of NAEAP, University of Ibadan, and October 28th – 31st.
- [14] Hasbullah, A, Isma'il, M & Wan Yusoff, W.Z (2010). School committee performance using community based facility management (cbFM) in the education system of Batabura district in Indonesia. 2nd International congress on engineering education; transforming engineering education to produce quality engineers.
- [15] IFMA (2001) Operation and maintenance benchmarks" Research Report 21 International Facility Management Association – IFMA (2006). What is FMI Available at www.ifma.org/whatisfmi/index.cfm.
- [16] Kasim, R. Abubakar, M. A & Ishiyaku, B. (2013) Assessment of service user's experience on the facilities provision at UTHM students' residential colleges" presented at 3rd international conference on Technology Management and Business Entrepreneurship (ICTMBE2014), on 23 to 24 at Mahkota Hotel, Maiacca, Malaysia. Pp 265-275
- [17] Khalil, N. Husin, H.N. & Nawawi, (2012) A. Evaluation and concept of building performance towards sustainability in Malaysian higher institution. *Journal of environment behavior studies*, vol. 3, no.8
- [18] Kenneth T. and Jeffery A.C. (2006). *Educational Facilities Planning* (Ed), Managing school facilities (pp. 185-204).
- [19] Knirk, F.G. (1992). "Facility Requirements for Integrated learning system". *Educational Technology*, Vol. 32 No. 9, Pp. 26-32.
- [20] Levine, A. (2001). *Privatization in Higher Education*" National Centre for the study of Privatization in Education, New York, NY, Available at: www.nga.org/cda/files/HIGHEREDPRIVATIZATION.
- [21] Ndirangu, M. & Udoto, M. O. (2011) Quality of learning facilities and learning environment" *journal of quality assurance in education*, Vol. 19 No. 3.Pp. 208-223.
- [22] NHS Estates (1996). "Re-engineering the Facilities Management Service" *Health Facilities Note* 16.
- [23] Ogundele, M. O. & Moronfoye, S. A (2013). Infrastructural facilities and academic goals achievement of Kwara state tertiary institutions, Nigeria. *Journal of vocational education & technology*, Vol.10, Nos. 1&2
- [24] Osifila, G. I. (2004). Provision and management of physical plants as correlates of academic performance in Lagos State public secondary schools. Unpublished M.Ed Dissertation, University of Lagos.
- [25] Rivera-Batiz, F. L. & Marti, L. (1995). A school system at risk: A study of the consequences of overcrowding in New York city public schools. New York: Institute.
- [26] Subedi, B. R. (2003). Factors influencing high school students' achievement in Nepal. *International Educational Journal* 4(2).
- [27] Uko, E.S. (2015), Principalship and effective management of facilities in secondary school in Cross River state Nigeria" *International journal for academic research and reflection*, vol. 3 no. 1. Available at www.idpublication.org
- [28] United States Department of Education (2002). The class size reduction program: Boosting students' achievement in schools across the nation. Washington DC: www.ed.gov/press release/05-1998.
- [29] <http://www.vanguardngr.com/2013/12/education-ector-stinks-infrastructure-bad-now-worse/#sthash.1q4lcJH3.dpuf>
- [30] World Bank (1979). *World development report: Knowledge for development*.

AUTHORS

First Author – Abdullahi Isa, Ph D. candidate,
email:isazazzau@gmail.com

Second Author Wan Zahari Wan Yusoff Ph.D., Associate
Professor, email: zahari@uthm.edu.my

Correspondence Author – Abdullahi Isa, Ph D. candidate,
email:isazazzau@gmail.com, +60149546726