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Assessment of Accessibility and Disability Planning in Nigerian Construction Industry

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Abstract— Most private and public buildings in Nigeria do not incorporate accessibility design for people with disability (PWD). PWD lack suitable access to school, market, bank and public facilities, access barriers can hinder public mobility, access to services, and social involvement for PWD. This research investigated the level of accessibility planning and design in Nigeria's construction industry and suggest possible remedies to overcome identified accessibility challenges. To achieve this objective, the researcher reviewed literature, relevant laws and policies, formulated and distributed well-structured questionnaires to engineering professionals / firms and PWD, the questionnaires were analyzed using a joint approach which involved the use of both quantitative and qualitative data. The study findings indicates that 80% of construction firms in Nigeria do not include accessibility and disability planning when constructing public buildings, also the National building code (2006) does not contain measurable provisions for PWD.

Keywords— Accessibility Planning, Disability Design, Persons with Disability (PWD), Nigerian Construction Industry, Law / Policy, Public Buildings, National Building Code

I. INTRODUCTION

Contemporary design of built environments in Nigeria indicates evidence of inaccessibility, dependency and deficiency of those with disabilities (1). These challenges affects at least 25 million people or about 15 percent of Nigeria's population (2). Unsurprisingly, the United Nations estimates that about 25 percent of each country's population are special needs persons (3). In 2007. Nigeria ratified the United Nations Convention on the Rights of People with Disabilities (CRPD) and in 2018, Nigeria signed a new law against the discrimination against persons with disabilities (prohibition) act. Notwithstanding, Nigerians living with disabilities continue to face human rights abuses including stigma, discrimination, violence, and poor of access to healthcare, housing, and education (4).

Reports from around the world shows that people living with disabilities experience lower educational achievements, increased cost of living, less legal protection, lower levels of employment, higher poverty rates, poorer health outcomes, poorer health outcomes and less cultural and political participation, etc. compared to non-disabled people. The negative effects of disability is more pronounced in lower income countries, people from the poor homes, women, children and elderly people. Collectively, persons living with disabilities are more likely to experience severe socioeconomic conditions than persons without disabilities (5 - 9).

As the Corona Virus (COVID-19) pandemic continues to disrupt everyday activities, creating a new norm, it is noteworthy to understand how this changes impact the mobility and accessibility of persons with disabilities to public facilities, recreational services, health, education, transport, among other places of interest (8).

Research Problem

The growing demand for large-scale infrastructure, public systems, services, national or regional facilities that are indispensable for economic activity, including roads, telecommunications, power, public transportation, water supplies, and

- [2] 10 facts on disability (2017) WHO. https://www.who.int/features/factfiles/disability/en/
- [3] Statistics on special needs schools in Nigeria (2020) EduCeleb https://educeleb.com/statistics-special-needs-schoolsnigeria/amp/
- [4] Nigeria Passes Disability Right Law, Human Right Watch, New York (2020) https://www.hrw.org/news/2019/01/25/nigeria-passes-disability-rights-law
- [5] Machado L, Oliveira U. (2020) Analysis of failures in the accessibility of university buildings. Journal of Building Engineering 33. https://doi.org/10.1016/j.jobe.2020.101654
- [6] Norhasyikin R., Shuhairimi A. (2017) Challenges faced By People with Disability for Getting Jobs: Entrepreneurship Solution for Unemployment. International Journal of Academic Research in Business and Social Sciences. Vol. 7, No. 3 http://dx.doi.org/10.6007/IJARBSS/v7-i3/2738
- [7] Tennakoon V. et al. (2020) Transport equity in Sri Lanka: Experiences linked to disability and older age. Journal of Transport & Health 18. https://doi.org/10.1016/j.jth.2020.100913
- [8] Robert W. Charlotte P. (2020) Planning For Inclusion? An Assessment of Ontario's Emergency Preparedness Guide for People with Disabilities. International Journal of Disaster Risk Reduction. DOI: https://doi.org/10.1016/j.ijdrr.2020.101888
- [9] Disability (2020) The World Bank Group https://www.worldbank.org/en/topic/disability
- [10] Access To Sports Facilities For People With Disabilities Design & Management Guidelines (2010) Sport Northern Ireland
- [11] Microsoft Encarta (2009) 1993-2008 Microsoft Corporation.
- [12] Emiri D. (2020) Legal Requirements for Infrastructural Development in Nigeria, International Review of Law and Technology (IROT). Volume 1, Issue 1.
- [13] Anjlee A, Andre S., (2016) Disability considerations for Infrastructure Programmes. DOI: http://dx.doi.org/10.12774/eod_hd.march2016.agarwaletal
- [14] NDP implements empowerment programme for persons with disabilities (2020) United Nations Development
- [15] Mace, R. (2008). The Center for Universal Design [accessed 22nd February 2015]. Available at: http://www.ncsu.edu/ncsu/design/cud/about_ud/about_ud.htm"
- [16] Amusat, N. (2009) Disability Care in Nigeria: The need for professional advocacy. AJPARS Vol. 1, No. 1, pp. 30-36
- [17] Hibatullah S. (2018) An Evaluation of the School of Engineering Buildings at the University of Jordan with Regard to Accessibility. Sustainable Cities and Society https://doi.org/10.1016/j.scs.2018.04.025
- [18] Calder A, Sole G, Mulligan H, (2018) The accessibility of fitness centers for people with disabilities: a systematic review, Disability and Health Journal. doi: 10.1016/j.dhjo.2018.04.002.
- [19] Venter, C., Sentinella, J., Rickert, T., Maunder, D. & Venkatesh, A. (2004) Enhancing the mobility of disabled people: Guidelines for practitioners. Berkshire: TRL Limited.
- [20] City Of Toronto Accessibility Design Guidelines (2004) City of Toronto Accessibility Plan
- [21] Disability Desires: People Who are Aroused by the Idea of Becoming Physically Disabled (2017) Justin J. Lehmiller. https://www.lehmiller.com/blog/2017/7/14/disability-desires-people-who-are-aroused-by-the-idea-of-becoming-physically-disabled
- [22] Livable Housing Design Guidelines (2012) Livable Housing Australia, 2nd Edition
- [23] Disability Inclusion Act (2014) No 41. New South Wales. Part 1 The United Nations Convention on the Rights of Persons with Disabilities
- [24] Ozkan T. (2017) Investigating the accessibility factors affecting hotel satisfaction of people with physical disabilities. International Journal of Hospitality Management 65. pp 29–36. http://dx.doi.org/10.1016/j.ijhm.2017.06.002
- [25] Disability Services design guideline (2004) Disability Services Accommodation Standards and Design Guidelines for the Provision of: 1.1 Shared Supported Accommodation (General) Department of Human Services, Victorian Government.
- [26] Nathaly D. (2009) Effects Of Regional Public Transport Strikes On Travel Behavior. Association for European Transport and contributors.
- [27] Discrimination against Persons with Disabilities (Prohibition) Act, (2018). The National Assembly of the federal republic of Nigeria.
- [28] Lagos State Special Peoples Law (2010) The Lagos State House Of Assembly
- [29] Frary, R. (1996) "Hints for Designing Effective Questionnaires," Practical Assessment, Research, and Evaluation: Vol. 5, Article 3.
- [30] From where I stand: "Disability will not stop me from achieving my dreams." (2020) ReliefWeb. https://reliefweb.int/report/nigeria/where-i-stand-disability-will-not-stop-me-achieving-my-dreams