

## The Effect of IDP Camps on Urban Environmental Degradation: A Study in North Central Nigeria

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### Abstract

This paper looks at the impact of internal displacement people camps on urban degradation and the need to improve the living conditions and environmental gain in transitory housing through site planning, design and waste management systems. A case study analysis of 3 (three) identified displacement camps in north-central Nigeria shows deplorable conditions in terms of materials and methods of construction, layout and the disposal of refuse and sewage along with low levels of awareness by camp residents on issues of environmental degradation. The study also highlighted modern waste management systems and construction techniques for transitory housing used to achieve more sustainable and eco-friendly environments for displacement camps. The study thus recommends: 1) enlightenment and public appeal for specific-need donations towards waste management equipment/infrastructure; 2) increased input from humanitarian and sustainable designers and environmentalists in the establishment of displacement camps and 3) adoption of global standards for transitory housing which are less harmful to the environment.

**Keywords:** *Displacement camps, Transitory housing, Urban degradation, Waste management*

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### **Background to the Study**

Internally Displaced Persons (IDP's) are casualties of trauma or unrest which necessitates their forced departure from their usual place of residence to a transitory (usually temporary) place of refuge within the same territory, region or national borders. Typically, they are not considered to be migrant refugees or asylum seekers since they do not require diplomatic intervention that comes from trans-border migration however they still face the challenges of forced relocation, social integration and cultural acclimation for an unspecified period of time (Deng, 1994; Contat-Hickel, 2001; Ocha, 2003 & Kalin, 2008). Economic, social, political and environmental factors are the main drivers of displacement in Nigeria which are multi-faceted, complex and often overlapping. Violence perpetrated by armed militant groups such as Boko Haram or Niger Delta Avengers and military operations against these groups have caused the bulk of recent internal displacement, but inter-communal clashes arising from ethnic and religious tensions also regularly force people from their homes, as do frequent floods and mass evictions in urban centres (Internal Displacement Monitoring Centre [IDMC], 2012). According to recent findings, about 1,955,000 people had been displaced in Nigeria as a result of such armed conflict, with nearly 1,770,000 as a result of insurgency alone and the remaining 185,000 to ethnic and inter-communal clashes in the middle belt as of 2015. These figures have since increased annually (Alechenu, 2011; IDMC, 2012; DTM, 2016).

The establishment of IDP camps (planned or unplanned) provided respite for many displaced persons however it is widely known that most of the purported IDP camps in Nigeria are mere unoccupied classroom blocks, hostels, large halls or simply tents made of thatch, fabric or lightweight material. These facilities are grossly insufficient and even in deplorable states, further subjecting already pained victims to unhealthy living conditions. Despite being considered transitory or temporary accommodation, inadequate or non-existent site planning and poor waste management give rise to concerns about sustainable temporary shelter alternatives to improve the living standards of post insurgency victims until they are rehabilitated and mentally ready to return to their respective communities (Brookings Institute, 2005; NEMA, 2011).

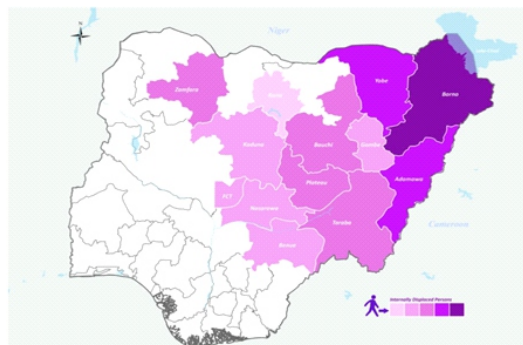
This paper looks at the impact of IDP camps on urban degradation and the importance of site planning, design and waste management systems required to improve the living conditions and environmental gain in transitory housing. The study assesses the living conditions at 3 (three) recognised IDP camps in Kuchingoro and Durumi in Abuja, the Federal Capital and in Bukuru Jos, Plateau state and reviews temporary shelter alternatives from around the world. The study then seeks to offer suggestions for improved IDP camp development based on prescribed site planning, architectural design and waste management systems. The paper aims to highlight the role played by architectural intervention strategies directed at environmental reforms in the provision of transitory accommodation.

### **The Environmental Impact of Transitory Architecture (Local and International)**

Internal displacement of persons until recently bore little significance to national environmental studies largely due to the fact that effective monitoring and tracking systems were non-existent and as such, evidence of the impact of such movement could not be

documented. The 1916 Iseyin-Okeho uprising in south-western Nigeria and the 1929 Aba women's riot in south-eastern Nigeria against policies of the colonial British administration resulted in earliest documented human collateral damage, massive internal displacement and loss of infrastructure (Falola, 2008; Stapleton, 2011; Klieman, 2012; Heerten & Moses, 2014). Another earlier recorded mass internal displacements occurred during the 1967-1970 Nigerian civil war in which 2 (two) million people reportedly died and 10 (ten) million people, largely of south-eastern origin were displaced mostly from northern Nigeria. The turn of the millennium till date witnessed increased numbers of sectional, ethno-religious and communal clashes brought about by disputes over access to land, citizenship and broader questions of ethnic identity in sections of the nation's middle belt which hosts most of the settlers from the different parts of the country (Osaretin, 2013; Adesote & Peters, 2015). The change in political structure from post-independence military rule to fledgling democracy came along with the struggle to tolerate differing views, ideologies, opinions, goals and ambitions through which dissention and violence became the most frequently expressed means of discontent. Resultant internal displacement of people from dissention is one of the greatest human tragedies confronting national development these days. The wanton destruction of property and infrastructure and the loss of lives do more to impede national growth than slow development planning (Matera, Bastian & Kingsley-Kent, 2013).

By August 2016, the number of identified IDPs stood at 2,093,030 (approximately 370,389 households) across Adamawa, Bauchi, Benue, Borno, Gombe, Taraba, Yobe, Nasarawa, Plateau, Kaduna, Kano, Zamfara states and Abuja: 1,878,205 IDPs appear to have been displaced by insurgency. Thus, through displacement monitoring efforts, it has been observed that over 89% of all displacement occurs as a result of insurgency and are seeking protection from violence, less than 9% occurs as a result of communal clashes and just under 2% results from forced relocation due to natural disasters (Je'adayibe, 2008; Okpanachi, 2010; DTM, 2016). Often, the displaced head for villages where they have family or where their ethnic groups are in the majority. Those without family or friends in close enough vicinity are forced to seek refuge in spontaneous camps filled with women, children and the aged or invalid since the younger, healthier males prefer to keep vigil in their abandoned villages over their belongings and ancestral land (Idowu, 1999). Plate I shows the intensity of displacement across the states in the country;



**Plate I:** Map of Nigeria showing intensity of displacement across the states by 2016  
**Source:** DTM, 2016

According to the IDMC (2012) and DTM (2016), approximately 18.7% of all internally displaced persons end up in camps of which the United Nations High Commission for Refugees (UNHCR, 2016) identified 5 (five) types of displacement camps, namely:

1. **Dispersed Settlements:** The displaced individuals settle in houses of families who live in areas unaffected by crisis or on land or properties owned by individuals in rural or urban settlements. This arrangement means sharing existing accommodation (or setup temporary ones nearby), water, sanitary facilities, cooking areas and other services of the pre-existing households.
2. **Mass Shelter in Collective Centres:** The displaced persons find accommodation in school buildings, barracks, community centres, warehouses, uncompleted buildings and a variety of other public buildings. This is particularly the case when there are significant flows of displaced persons into urban centres or towns with no familial connections.
3. **Reception and Transit Camps:** These kinds of camps are quick response accommodation to the shelter needs of displaced persons in an emergency situation. It is usually for a short-term basis pending relocation to more suitable and safer long-term holding camps.
4. **Self-settled Camps:** This is particularly the case when a displaced community settle in camps independent of government or private support. Self-settled camps are often sited on vacant state owned, private or communal property.
5. **Planned Camps:** They provide accommodation on sites specifically set up for displaced persons and they usually possess full infrastructural facilities such as water supply, food and non-food item distribution, education and healthcare.

By 2016, there were 118 known displacement camps identified as collective settlement centres or self-settled camps in Nigeria, 36 of which were recognised as self-made tents, 32 were government buildings and 30 were schools (DTM, 2016).

The scourge of internal displacement of persons is not limited to Nigeria or the African continent (as seen in the case of the Rwanda civil war in the 1990's) as global unrest, insurgency, natural disasters and even alleged genocide in countries like Syria, Myanmar, Pakistan, Vietnam and Peru resulted in widespread internal displacement (Devictor & Do, 2016). Displacement camps of varying types have been utilised to cater for the needs of the affected persons in these troubled areas employing different approaches to the construction of transitory housing. Most of the designs incorporated a combination of timber frames, earth bricks, corrugated metal roofing sheets, plywood cladding or plastic sheeting which could be readily assembled within 24-72 hours and were designed to have a 2-5 year lifespan (AD Editorial Team, 2014). Based upon the volume of displaced persons and the availability of resources, 200-10,000 units of transitory housing units have been known to be provided on camp sites to alleviate the plight of those seeking refuge (Plates 2-4).



**Plates 2-4 (L-R):** Tent-like house made from brick and plastic sheeting in Pakistan (2010); plywood and corrugated roof temporary structure in Vietnam (2004); and timber clad “box” shelter in Peru (2007)

**Source:** AD Editorial Team, 2014

In a bid to promote more environmentally-friendly design, several humanitarian architects have used their knowledge of recycled materials to create transitory relief housing using materials that are readily sourced and could easily be dismantled, disposed of or recycled at the end of its use. Japanese architect Shigeru Ban built recycled paper log houses for 1995 earthquake victims in Kobe, Japan with foundations consisting of donated beer crates loaded with sandbags. The walls were made from 106mm diameter, 4mm thick paper tubes, with tenting material for the roof and 1.8m spaces between houses being used as common areas. For insulation, a waterproof sponge tape backed with adhesive was sandwiched between the paper tubes of the walls. The cost of materials for one 52 square meter unit is below \$2000 (Plates 5-6). The design was later adapted with a tented cover over the paper log frame to meet the local needs of genocide refugees in Rwanda in 1999 (AD Editorial Team, 2014) as seen in Plates 7-8. Additional environmentally friendly consideration and innovation in the design of transitory housing includes the structured layout of camps in the grid or radial site layout for ease in provision of services for electricity, water and possibly heating; solar panel or wind vanes as alternative sources of power, Structural Insulated Panels (SIP's) and portable septic tanks which also serve as biogas digesters to reduce pollution by human waste (Daramola et al, 2012; Umaru, 2017; O'Donoghue-Lindy, 2017).



**Plates 5-8 (Clockwise from top left):** exterior of Shigeru Ban's recycled paper log houses in Kobe, Japan (1995); interior of paper log house; paper log framework assembly in Byumba refugee camp, Rwanda (1999); tent covering of the paper log tents

**Source:** AD Editorial Team, 2014

Urban environmental degradation is a debilitating condition that arises from rapid urban population and industrial growth without the corresponding planning and coordinated inter-play of socio-economic, institutional and technical actions. This has strong links to urban poverty and “green issues” with particular respect to air and water quality, solid waste disposal and other forms of squatter related environmental problems which are undesirable (Johnson et al, 1997; Jamil, 2010; Syrakoy, 2018). The issue of human waste management in IDP camps is a major source of concern to the environment largely due to fears about disease control, poor air quality, mental and physical well-being of the residents and the overall degradation and contamination of the physical environment by man-made substances which constitutes pollution. Spontaneous and indeterminate influx of displaced persons to urban centres incurs the depletion of natural resources and places a strain on infrastructure which hurts the environment in the long term (Etuonovbe, 2009).

Most governments in slowly developing countries such as Nigeria have difficulty generating revenue to cover annual operating costs much less create new investments that will extend services and facilities where it is estimated that some 1,900-3,500 tonnes of refuse is generated daily in most urban centres. Provision for upgrading squatter settlements, crisis-response measures for displaced persons in an emergency and a range of other problems unique to developing nations simply is not available and as such, the vicious cycle of degradation continues to exist (Sham, 1993). Environmental waste and degradation are two sides of the same coin: where less than 10% of most urban areas are served with an organised sewage and refuse collection system, informal squatter settlements and transitory housing generally tends to spring up along the banks of water-ways, roads or railroads where domestic waste can conveniently be dumped.

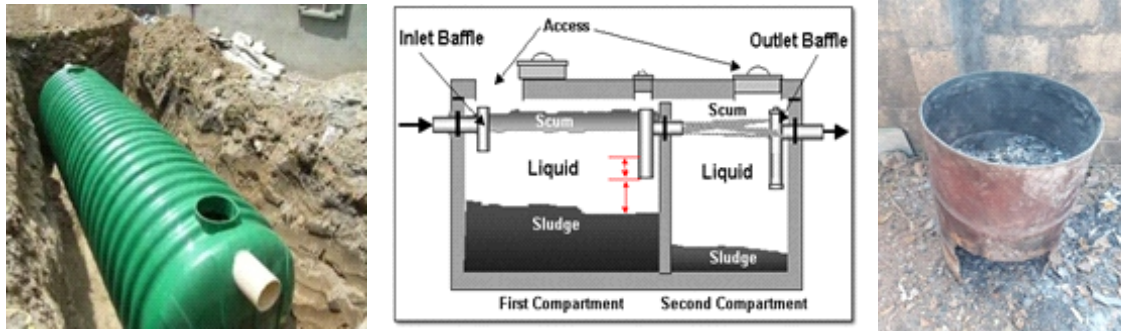
The main components of waste that affect the scope of this paper include drainage, sewage and refuse. Dependent on the layout of the transitory housing scheme, effective drainage may be challenged by cost and installation techniques as well as the availability of a main supply of clean, potable water (Enwerekowe, 2011). Similar concerns arise about the disposal of sewage which is a foul, liquid, organic (biodegradable) waste which comes from indiscriminate discharge and poor drainage characterised by unpleasant odours that contribute to degradation of the quality of the air (Zubairu, 2004). Open dumping is still the most commonly used disposal method of refuse which poses a global challenge to rural and urban rehabilitation. Developing nations are yet to treat waste with the distinctions of organic (biodegradable) and non-organic (non-biodegradable) origin which promotes recycling and waste treatment and prefer to resort to land-filling and uncontrolled incineration causing just as much harm to the environment.

There are several updated techniques of waste management suitable for the needs of transitory housing. These include the use of hand-dug wells fitted with mechanical or manual pumping machines, portable water closet and bucket system toilets and septic tanks fitted with bio-digesters and small-scale incinerators (Plates 9-14). High construction cost of drainage could be offset by using slow-bending channels of uniform gradient along the natural gradient of the topography: the fewer the branches the better which should be oblique and not at right angles where mandatory.



**Plates 9-11(L-R):** Combined portable toilets; bucket system portable toilets; recommended dimensions for construction of bucket system toilets

**Sources:** [www.powellsseptic.com](http://www.powellsseptic.com); [www.allgoods.com.au](http://www.allgoods.com.au); [www.primalsurvivor.net](http://www.primalsurvivor.net)



**Plates 12-14 (L-R):** Modular sewage holding tank; schematic diagram for modular sewage installation; locally fabricated inorganic waste incinerator  
**Sources:** www.Plastic-Mart.com; www.greenkey.com; Authors' file

### Methodology

This study focuses on improving the living conditions of internally displaced persons through the adoption of deliberate strategies of waste management in their camps to alleviate urban degradation. It also addressed the individual and collective role of architects and how architecture as a tool can be used to revamp the current situation through proper design, maintenance and site planning. This section describes the methodology or general research strategy that outlines the way in which the research was undertaken and among other things, identifies the methods to be used in it. The method used for data gathering was case study, selected with a view to examining in great depth the extent of the characteristics being studied: in this case the individuals in IDP camps and their actions in their community which is more qualitative in nature. Data gathering strategies include individual (structured or non-structured) interviews, focus groups, content or documentary analysis, participant observation and archival research. The advantages of this method include data collection and analysis within the context of the phenomenon, integration of qualitative and quantitative data in data analysis and the ability to capture complexities of real-life situations so that the phenomenon can be studied in greater detail (Dudovskiy, 2018).

The camps were selected through purposive sampling which is a non-probability sampling technique based on the characteristics of a population due to the limited number of respondents who could serve as primary data sources within the delimitations and objectives of the study (Crossman, 2017). Through the use of personal interviews, documental research and physical observation, the case study findings are presented and analysed using photographs, narratives and descriptive interpretation.




### Data Presentation and Discussion of Findings

This section of the study presents the field study report from the listed IDP camps visited and examined detailed on Table 1 below. The main parameters under review include the available facilities and layout as well as the availability and condition of waste (drainage, sewage and refuse) management systems. The study takes into cognisance the prescribed standard requirements, practices and ethics for the establishment of relief transitory housing for



displaced persons as specified by international bodies such as the United Nations High Commission for Refugees (UNHCR) and the International Organisation on Migration (IOM) for cost effective approaches to accommodate families over an unspecified period of time.

**Table 1:** Details of study area locations and population




	<b>Durumi</b>	<b>Kuchingoro</b>	<b>Bukuru</b>
Date established	2014	2014	2013
Location	Area 1, Federal Capital territory (FCT), Abuja	Lugbe District, federal capital Territory (FCT), Abuja	Zang Commercial High School, Bukuru, Jos-south, Plateau state
Sponsor	Nigerian Federal Government	Nigerian Federal Government	Stefanos Foundation ( <i>non-govt. org.</i> )
Population ( <i>as at time the time of the report</i> )	2226	1550	150
Views			

The study also takes into special consideration the peculiar cultural, social and psychological needs of the displaced population. It is the usual practice to provide spaces and infrastructure that take care of the general needs of all displaced persons irrespective of the area or nature of displacement specific to the location of the displacement camp in terms of climate and readily available materials of construction. This discourages the use of “prototype” displacement camp schemes such as the types used by international organisations in relief camps around the world. The design and setup of temporary dwellings for post-disaster victims should be one that is environmentally sensitive and one that enables the psychological recovery of the forced resettlement individuals involved.

The study findings show consistency with existing data that the government, humanitarian organisations and private individuals are responsible for setting up IDP camps. However, in the cases of Durumi and Kuchingoro, the residents live in self-help makeshift structures, which appear unplanned and are setup in spontaneously sought locations without consideration for their suitability, which more often than not exposes the displaced persons to further danger or very quickly become over crowded. The materials used for setting up these structures such as canvas fabrics, polythene sheets, jute bags, thatch, sticks to mention a few which are poorly made, poorly insulated or flimsy, quickly become uncomfortable, unsafe, leaky and unhygienic. The end result is a housing situation lacking several qualities of homes that are significant at this stage for victims' recovery such as ventilation, lighting, warmth, colour, space and security. Other problems as identified by the displaced individuals

themselves are: lack of privacy, lack of sufficient space to carry out daily activities, all family members forced to sleep in the same space, inadequate or poor sanitary facilities, absence of water and electricity.

**Table 2:** Condition of facilities and infrastructure






	Durumi	Kuchingoro	Bukuru
Facilities	Cluster layout light-weight residential tents made from tree branch supports and covered in jute-bags and/or plastic sheets.	Rectangular-based residential and “school” tent structures made from wooden pole supports and covered in corrugated roofing sheets, plastic sheeting of jute bags.	Single-story vacant classroom block made of sandcrete-blocks and corrugated roofing sheets for sleeping and school activities. Additional spaces created with wooden frames and corrugated metal sheets.
Infrastructure	Absence of potable water supply (residents purchase water from vendors), absence of centralised cooking areas, shared bathroom and toilet facilities made of wood and corrugated metal sheets paid for on usage (resulting in widespread open defecation in nearby bushes)	Motorised borehole (water provided at a fee) for those with the means to pay, fetid stream for washing, absence of cooking area, shared bathing and toilet spaces made of wooden poles and plastic sheeting	Shared bathroom and toilet facilities made of wood and corrugated roofing sheets, hand-dug wells, central cooking area and washing area
Views			

As earlier mentioned, the camps are meant to be transitory in nature and it is best to not have camps that are too large to as to make it easier to control and distribute services. A non-existent overall site plan or map should detail the configuration of a proposed population settlement, its surroundings and characteristics, and location, and should set out principles of modular planning. The planning of these settlement camps should be carried out after proper consultations have be made with protection and supply agencies, architects, surveyors,

planners, engineers, environmental specialist to mention a few. This is to ensure that the overall layout design meets the comfort and safety requirement of camp residents. It is also important to note that developing an inappropriate site or failing to develop the site to the acceptable standards would expose the already displaced persons to further risk, unnecessary losses, distress and even further displacement. Failure to provide safe, healthy and secure camps leads to societal ills which include (but are not limited to): 1) stress and tensions and which leads to social conflict and friction between families, clans or ethnic groups; 2) discrimination against marginalised individuals or groups; 3) significant environmental contamination and health risks for the residents and those living in close proximity to the camps; 4) influx of criminals hiding among the displaced who benefit from the assistance; 5) an increase in critical protection threats, including sexual and gender based violence (SGBV), abuse of children and human trafficking and 6) loss of independence and self-reliance by the residents which prolongs their willingness to return to their original location. It usually takes 2 (two) to 15 (fifteen) years to resolve land rights in order to reconstruct homes damaged by conflict or disaster.

In addition to providing security, host governments are ultimately responsible for allocating land for camp and settlements regardless of the eventual sponsor of the camp. It is important then that attention is given to the design of temporary shelters, as it usually is the first dwelling place provided after displacement. This was clearly not the case in the study areas. As evident in the case studies, these shelters are usually crowded, with very scarce resources, unhygienic to live in and a breeding ground for virulent diseases. The element of planning was generally noticed to have been neglected in all of the camps studied including in the Zang-Bukuru camp which occupied a repurposed school facility. This made the efficient and equitable distribution of goods and services as well as proper waste management virtually impossible as detailed in the findings on Table 3.

**Table 3: Waste management systems**

	Durumi	Kuchingoro	Bukuru
Waste management systems	Indiscriminate waste disposal by open dumping and incineration within close proximity to bathing and toilet spaces, absence of septic tanks and cesspools. Drainage follows natural topography of the site towards surrounding water bodies.	Open dumping of refuse and sewage into surface draining channels around the site, absence of septic tanks. Refuse intermittently transported off-site by vendors for a fee to land-fills and neighbouring dump sites.	Run-down drainage channels transport sewage and roof run-off into nearby roadside storm drains as existing septic tanks have caved in due to age and poor maintenance. Refuse dumped and burned in hand dug pits.
Views		 	 

Establishment of a settlement camp begins with a detailed analysis of the host community which must be carried out to avoid putting these communities under intense infrastructural strain or make it difficult to manage urban sprawl or degradation. Preparedness measures in this phase should address shelter solutions and settlements, carefully taking into account of the specific context of the affected area, the host population, and adverse effects and dynamics generated by a developing crisis. Though transitory in nature, the camps studied have been in existence for several years and do not have any immediate plans for shutting down any time soon since the crisis situations that led to their establishment have lingered over successive administrations. In the 3 camps observed, as is the case with most camps, service provision over time has largely remained the responsibility of humanitarian organisations which are yet to utilise any of the updated waste management techniques for disposal of sewage and refuse outlined in the preceding section of the study.

Drainage provision was limited in some cases and totally absent in the cases at Durumi and Kuchingoro. The methods outlined earlier which include the use of portable or bucket system toilets, locally fabricated incinerators and modular sewage tanks/cesspits fitted with biodigesters are practical, economical, sustainable and environmentally friendly. They are people-centred, promote self-reliance and enable the residents of the camps develop sustainable solutions for themselves within the cultural characteristics and habits of the camp location. The recommended waste management methods apply a systematic age, gender and diversity (AGD) approach to ensure that all residents have equal access to their rightful services and resources which is consistent with global practices. Properly designed

settlements which incorporate temporal yet effective waste management systems are adaptable and capable of responding to changes in any given crisis situation and they foresee an exit strategy when the displaced individuals find more permanent housing solutions. Such strategies are significantly less degrading to the host communities and thus a response to the key issues in this study.

### **Conclusion and Recommendations**

Displacement of persons is a societal ill that requires a multifaceted approach for resolution. Emergency response and strategic planning to deal with the accommodation needs of those in need of transitory housing should not come at the expense of harming the host environments whether ecologically, financially, socially or physically. Planning for settlement camps involves the input of a team of professionals and stakeholders where architects as custodians of space creation and managers of the physical environment should play a dominant role. It is important for architects to tap into their problem solving ability and experience in both design and planning, to come up with sustainable solutions to the seemingly complex nature of transitory shelter which will be serviced by effective waste management systems. The health and well-being of the residents of these displacement camps will constantly be under the very real threat of fire outbreaks, spread of communicable illness, inclement weather and further violence so long as the physical environments in which they exist suffer appreciable degradation. The very nature of internal displacement and the problems it creates for urban infrastructure suggests the need for deliberate action from designers, planners, social psychologists and environmentalists in order to prevent exacerbating the conditions of the community and the camp residents.

The findings show that the nature of accommodation provided for the internally displaced persons in Nigeria are in deplorable physical states, with their housing being grossly insufficient and incapable of providing the necessary amount of comfort required to enable these post-disaster populations recover from the physical and psychological loss they have experienced. Consequently, significant findings made from the study of the selected IDP camps in Nigeria also reveal the inadequate waste management systems employed and suggest the acceleration of urban degradation if the situation remains unchecked and not remedied. The study recommends public awareness and support from well-meaning citizens who may be less knowledgeable about the onset of urban degradation caused by displacement camps aimed at receiving donations for specific needs such as waste management. The study also suggests increased participation by humanitarian/sustainable designers and environmentalists to develop climate-responsive and eco-friendly schemes for transitory housing that reflects the cultural leanings of displaced persons. The study also proposes the incorporation of age, gender and diversity approaches by organisations such as NEMA for equal access to waste management facilities/services by all residents of displacement camps as prescribed minimum global benchmark standards.

## References

- AD Editorial Team. (2014, March 24). The humanitarian works of Shigeru Ban. *Arch Daily*. Retrieved from <https://www.archdaily.com/489255/the-humanitarian-works-of-shigeru-ban>.
- Adesote, S. A. & Peters, A. O. (2015). An historical analysis of violence and internal population displacement in Nigeria's fourth republic (1999-2011). *International Journal of Peace and Conflict Studies*, 2(3), 13-22.
- Alechenu, J. (2011). Terrorism, insecurity and the Nigerian state. *The Punch*, p. 3.
- Brookings Institution (2005). *Addressing internal displacement: A framework for national responsibility*. A report from the University of Bern Project on Internal Displacement. Bern, Switzerland: Author.
- Contat-Hickel, M. (2008). Protection of internally displaced persons affected by armed conflict: Concepts and challenges. *International Review of the Red Cross*, 83 (843), 701-708.
- Crossman, A. (2017). *Understanding your purposive sampling: An overview of the method and its application*. Retrieved from <https://www.thoughtco.com/purposive-sampling-3026727>.
- Daramola, S. A., Adebayo, T., & Alabi, D. (2012). Green architecture and sustainable development in Nigeria. *Journal of Sustainable Development and Environmental Protection*, 2(2), 95-101.
- Deng, F. M. (1994). *Internally displaced persons*. An interim report of the UN Secretary General on Protection and Assistance and UN Department for Humanitarian Affairs, New York and Washington, D.C., U.S.A: Authors.
- Devictor, X. & Do, Q. (2016). *How many years have refugees been in exile?* Policy research working paper 7810 for the World Bank Group Development Research on fragility, conflict and violence cross-cutting solution areas. Retrieved from <http://econ.worldbank.org>.
- Displacement Tracking Matrix (2016). *Nigeria, displacement*. Retrieved from [www.displacement.iom.int/nigeria](http://www.displacement.iom.int/nigeria)
- Dudovskiy, J. (2018). *The ultimate guide to writing a dissertation in business studies: A step-by-step assistance*. Retrieved from <https://research-methodolgy.net>.
- Enwerekowe, E. O. (2011). An appraisal of waste management systems for informal settlements within Jos urban areas in Nigeria. *Journal of Science and Multidisciplinary Research*, 3, 43-30.

- Etuonovbe, A. K. (2009). *The devastating effects of environmental degradation: A case study of the Niger Delta region of Nigeria*. Paper presented at FIG Working Week: Surveyors Key Role in Accelerated Development in Eilat, Israel, 3-8 May.
- Heerten, L. & Moses, A. D. (2014). The Nigerian-Biafran war: Postcolonial conflict and the question of genocide. *Journal of Genocide Research*, 16 (2-3), 169-203. Retrieved from <https://doi-org/10.1080/14623528.2014.936700>.
- Internal Displacement Monitoring Centre (2012). *Global overview: People internally displaced by hazard-induced factors*. Geneva, Switzerland: Author.
- Idowu, W. (1999). *Citizenship, alienation and conflict in Nigeria*. Retrieved from <http://ajol.info/index.php/ad/article/view/22166/19381>
- Jamil, Y. (2010, October, 24). Urban poverty and environmental degradation: A vicious cycle. *The Daily Star*. Retrieved from <http://www.google.com/amp/s/www.thedailystar.ref/news-detail-135602%3famp>.
- Je'adayibe, G.D. (2008). Religions, conflicts and internally displaced persons in Nigeria. In T. Falola and O.Ochayi Okpeh, Jr. (Eds.), *Population Movements, Conflicts, and Displacement in Nigeria*, (p. 156). Trenton, New Jersey: African World Press Inc.
- Johnson, D. L., Ambrose, S. H., Basset, T. J., Bowen, M. L., Crummey, D. E., Isaacson, J. S., (...) Winter-Nelson, A. E. (1997). Meanings of environmental terms. *Journal of Environmental Quality*, 26, 581-589.
- Kalin, W. (2008). *Guiding principles on internal displacement – annotations*. A report for the American Society of International Law, Washington, USA: Author.
- Klieman, K. A. (2012). US oil companies, the Nigerian civil war and the origins of opacity in the Nigerian oil industry. *The Journal of American History*, 99 (1), 155-165. Retrieved from <https://doi.org/10.1093/jahist/jas072>.
- Matera, M.; Bastian, L & Kingsley-Kent, S. (2013). *The women of war 1929: Gender and violence in Nigeria*. New York, USA: Palgrave Macmillan.
- National Emergency Management Agency (2011). *Disasters: new camps for internally displaced persons*. Retrieved from [www.nema.gov.ng](http://www.nema.gov.ng).
- Ocha, T. (2003). *Guiding Principles on internal displacement*. New York, USA: UN Press
- O'Donoghue-Lindy, L. (2017). Chinwe Ohajuruka: Architect of Nigeria's eco-housing future. *SheInspires Her*. Retrieved from <http://sheinspiresher.com/chinwe-ohajuruka-architect-of-nigerias-eco-housing-future/>

- Okpanachi, E. (2010). *Ethno-religious identity and conflict in Nigeria: Understanding the dynamics of Sharia in Kaduna and Kebbi States*. Retrieved from: <http://www.ifra-nigeria.org/spip.php?article=107>.
- Osaretin, I. (2013). Ethno-religious conflict and peace building in Nigeria: The case of Jos, Plateau state. *Academic Journal of Interdisciplinary Studies*, 2 (1), 349-360. doi:10.5901/ajis/2013.V2n1 p. 349.
- Sham, S. (1993). *Urban environmental issues in south-east Asian cities: An overview*. Retrieved from <http://www.nzdl.org/gsdmod?e=d-00000-00>.
- Stapleton, T. J. (2011). *Nigerian Civil War (1967-1970)*. [Wiley Online Library]. Retrieved from <https://doi.org/10.1002/9781444338232.wbeow446>.
- Syrakoy, A. C. (2018). Urban environmental degradation: Realities and historical illusions. *European Journal of Environmental Sciences*, 8 (1), 38-43. doi: <https://doi.org/10.14712/23361964.2018.6>.
- Umaru, A. N. (2017). *Integrated waste disposal-cum-biogas production for domestic cooking*. (Unpublished doctoral thesis), Abubakar Tafawa Balewa University, Bauchi, Nigeria.
- United Nations Commission on Human Rights (2016). *Profiles in displacement: Georgia*. A report on internally displaced persons by the representative of the UN Secretary-General. UN report no. E/CN.4/2001/4/Add.4
- Zubairu, M. (2004). Assessing the sustainability of the two-way relationship between development and the environment. *AARCHES Journal*, 3(2), 38-46.