



RAPID URBANIZATION AND THE NIGERIAN LANDSCAPE: THE GAINS, THE MENACES, AND STRATEGIES FOR FUTURE SUCCESS

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Abstract: The environment is the fiber and bedrock upon which Urbanization thrives. In modifying the environment to accommodate urbanization, care must be taken to avoid any form of exploitation, degradation, abuse, and misuse. But this has not been the case in Nigeria, urbanization has occurred rapidly through unsustainable activities and lifestyles that deplete the environment, and the lives of the very inhabitants it should so dutifully protect. This paper analyzes how Nigeria's rapid urban growth is affecting landscape design and sustainability, and strategies for combating the negative effects of urbanization on the landscape are proposed.

Keywords: Urbanization, Landscape, Rural, Urban, Nigeria.

Introduction

Background

Rural dwellers are constantly on the move to the cities with greater potential. Their reasons include the quest for a better life, the desire to achieve a higher education, job stability, purchasing power, or simply tourism. With this move, cities, which may have begun as small compact units with just enough facilities to accommodate its pioneering dwellers begin to grow. This growth is called Urbanization, and it also occurs naturally through the increased births in the city.

Believed to have begun in 4300-3100BCE in the Uruk period of ancient Mesopotamia when a certain "prosperous and efficient village attracted the attention of other less prosperous tribes who then attached themselves to the successful settlement" (Mark, 2014). Slowly but surely, this urbanization pattern has repeated itself in all nations around the globe further compounding the climate change crisis.

Asia, which has 30% of the global land mass, and is home to nearly half the world's population, has urbanization traced to rural-urban migration inspired by administrative, commercial, and maritime cities which now have gained political significance. When analyzed individually, East and North-East Asia is rapidly urbanizing. South-East Asia features relatively high urbanization rates, South and South-West Asia are one of the least urbanized with high Urbanization rates centered in the oil-rich central Asian countries and very low in the "non-fossil-fuel- producing and less diversified economies, such as Kyrgyzstan and Tajikistan."

China, believed to have half of its population living in cities is hailed for its successful urbanization practice which was achieved by either limiting rural-urban migration or directing this movement away from the big cities towards growing or medium-sized ones, drastically limiting the number of slums.

This urbanization has been experienced in every country, at different rates with an estimate showing that more than 50% of the world's population presently live in urban areas.

Urbanization in Nigeria

The urbanization in Nigeria is both rapid and continuing. 5 out of the 30 largest urbanized cities in Africa are in Nigeria, and her urban population is recorded to be growing at an alarming rate of 4.3 percent per annum, with an estimate that in 2037, her urban population would have doubled (URBANET, 2018).

The main cause of urbanization in Nigeria can be summarized by the rural push and urban pull effect (Jedwab, Christiaensen, and Gindelsky, 2014).

The rural-push effect refers to the unpleasant situations that make living in rural areas undesirable for Nigerians, and these include insecurity, rural poverty, lack of amenities and infrastructure, etc. The

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urban-pull effect refers to the pleasant situations that make urban living attractive and desirable. In Nigeria, these include the presence of job opportunities, availability of social amenities, and public infrastructure (good road networks, schools, hospitals, etc).

Landscape shapes the urban spaces in Nigeria, with each city prioritizing the use of certain elements over the other. Ebonyi state for instance features a vast use of vibrant colors in its urban landscape, while Lagos landscape features a lot of texture, shape, and form. All in all, these landscapes promotes aesthetics, environmental sustainability, and public safety.

Landscape serves as a tool for maintaining law and order in urban areas. When safety and law and order are achieved, it increases the livability rating and ease of doing business within the city thus attracting both foreign and domestic investment.

Also, landscape boosts public perception of urban areas in Nigeria, and since public perception critically influences the growth rate and Economic development of urban areas, attention should be focused on enhancing the landscape of her urban cities.

The menaces

Negative Impact of Urbanization on Landscapes in Nigeria.

While some Nigerian cities (e.g. Lagos, in the West) have experienced urbanization at a more rapid rate, the urbanization of others (e.g. Abakaliki, in the east) have been slower. But the constant between both cities is that both are being exposed to the menaces and gains of rapid urbanization: gains because the urban facilities (schools, estates, marketplaces, etc) will finally have patrons; and menaces because, in the desperation to meet the housing needs of the new migrants, best design practices have begun to be eluded; and the activities of these new comers now constitute stress on existing landscape, drastically affecting the lifestyle, climate, & ecosystem, as well as causing extreme change in the environmental landscape.



Figure 1 Street in Bogobiri, Calabar, Cross River State, Nigeria.
Typical example of a defaced landscape in an urban area.



Figure 2 Street in Port Harcourt, Rivers State, Nigeria.
Typical example of a defaced landscape in an urban area



Subsequently, lands reserved for landscape have been replaced with commercial or livable spaces as a quick-fix response to the housing deficit crisis in Nigeria. While other available urban landscapes are constantly being defaced by the emergence of slums and shanties. Bus stops, and street corners, which perform landscape functions are being used for stores or dwellings for the urban poor.

It is not uncommon to find landscape components (like monuments) missing a part in many urban cities in Nigeria. This being the doing of the urban poor. Dumpsters and roll-of bins placed to serve as an organized refuse collection point are carted away by the urban poor to be exchanged for quick gains.

In addition to the aforementioned, more of the rapid urban menaces include:

Environmental impact

Due to increased urbanization activities in Urban Nigeria, permanent land use change has led to these cities exceeding their environmental carrying capacity. This leads to the displacement of the ecosystem, posing a threat or destroying biodiversity and natural habitats. Also, this leads to land, water, and air pollution (Odafiwotu & Abel, 2015).

Landscape degradation

The design of the urban landscape is done to service a particular number of residents and activities (Izakovičová, Petrovič, and Paudišová, 2022). In the event of rapid urbanization, these landscapes are degraded due to overuse. In the city of Lagos, for instance, pedestrian walkways, in addition to the high pedestrian traffic, are being used by motorbikes due to over congestion of the motorways. This degrades the walkways and reduces their service life.

Health and well-being

The impact of rapid urbanization on the health of urban dwellers is a 2 sided coin. On one side, urbanization brings about infrastructure and education that improves the health of urban dwellers; and on the other side of the coin, the consequences of urban activities constitute a source of pollution that depreciates the air quality posing a health hazard to the well-being of urban dwellers (Wang, Liu, Chen, Zhang, Zhang & Bai, 2023).

Disruption

Inability to maintain a balance between urban growth with landscape conservation (Izakovičová et al, 2022). In Nigeria, the quest for quick gains is constantly downplaying the importance of landscape, relegating it to a luxury reserved for the elite, or an obsolete practice indulged by space wasters.

The role of landscaping in urban spaces

How landscape Impacts urban spaces in Nigeria

Sustainability role

Modern urban planning and design in cities like Lagos, Calabar, and Warri have integrated sustainable practices into their urban landscape. This practice mitigates the climate change crisis. An example of this in Nigeria is the incorporation of parks (which create recreational opportunities for urban communities), the adoption of green roofs and vertical walks in some private and public buildings, and the use of landscape to preserve urban forest reserves. These Facilitate social contact and foster togetherness and communal living.

Health role

Landscapes features (like trees and flowers) improves the air quality thus improving the health and well-being of urban dwellers.

Aesthetic role

Landscape elements (form, texture, line, balance, unity, etc.) improve the public appeal of the urban spaces giving it character, style, and identity.

Social role

A well designed landscape is an invisible guide that instructs users on how to behave in public spaces - zebra crossings, street lights, sidewalks and other landscape elements help the authorities maintain law and order in the Nigerian cities.

Agricultural role

Landscape features (like gardens, green roofs, & vertical gardens) bridge the gap between urban dwellers and nature. Providing them with an opportunity to grow their own food, and interact with nature, thus experiencing its healing power (Nikodemus, Bell, Grine, Liepiņš, 2005).

Ecological role

With a major part of the environment in rapidly urbanizing Nigeria reclaimed for urban developments, the Landscape provides a habitat for wildlife to thrive and grow (Alizadeh, 2018).



Economical role

The profession of landscape in itself provides employment opportunity for urban dwellers. Also, the incorporation of recreational parks and gardens in urban landscapes generates employment and revenue. All these constitute economic gains.

Acoustic role

Urban activities constitute a source of noise and public disturbance. Landscape features offer acoustic functions. Trees, for instance, absorb noise, and water from fountains, beyond their aesthetic value, are known to cover noise.

Conservation role

Landscape features (like permeable pavements) provide channels for stormwater management. This can be recycled and reused thus conserving water resources.

Landscape practices

Strategies for ensuring success in the use of landscape as a tool for mitigating the negative effects rapid urbanization in Nigeria.

Efficient use of landscape spaces

Hammadi (2017) listed these urban landscape spaces to include the Public Realm, Street, Buildings, Open Space, Streetscape, Artworks infused with our cultural identity, Pedestrian Environment, and Pavement Width and Surface. Nigerian landscapers should gain mastery of all these, and optimally maximize them in Urban landscapes in Nigeria. These best practices will effectively minimize the menaces of urbanization on both the environment and urban dwellers.

Policy implementation

Nigerian landscapers should collaborate with policymakers to establish sustainable policies that protect the landscape. These will minimize the negative effect of urbanization on Nigerian landscapes.

These policies should be focused on environmental protection, and they should be accompanied by strict punishment and swift prosecution of landscape offenders.

One of such currently in operation is the National Environmental Standards and Regulations Enforcement Agency (NESREA), which was established by law in 2007 as a parastatal of the Federal Ministry of Environment to preside over the affairs of all environmental laws in Nigeria. This arm of the Federal government "protects and promotes the sustainable development of the environment and its natural resources, and environmental technology, as well as ensuring compliance with environmental laws, local and international laws on environmental sanitation, pollution prevention and control.

In addition to this, the different Nigerian Urban cities have specific Environmental Legislations under which implementation is handled by designated agencies (such as the Environmental Sanitation Task Force, Waste Management Boards, State Environmental Protection Agencies, Environmental Sanitation Courts) to apprehend landscape offenders and prosecute them in special Courts.

Maintenance culture

Nigerian landscapers should remain actively involved in the maintenance of public landscapes, as well encourage the participation, maintenance and transparency, among the general public, policy makers, and stakeholders. This guarantees efficient landscape management and maintenance.

Incorporation of sustainable infrastructure

To achieve harmony between urbanization and nature, landscapers should incorporate sustainable infrastructure in their design. These include:

1. vegetation as a bearer of contrast
2. trees
3. shrubs
4. potted plants, and
5. flowers

In the use of these sustainable features, priority should be placed on their quality and environmental impact (Lucie, 2012), and ultimately their ability to cater to the needs of present urban users, as well that of posterity.

Government involvement

The landscape is important in shaping the behavior of citizens. Thus the a need for government involvement in the planning and design of sustainable landscapes in urban areas (Noelle and Anne, 2012). Nigerian landscapers should be at the forefront of demanding active government involvement to improve public spaces that can be decently commercialized thus generating economic gains, social participation, and environmental sustainability.



Mixed-use developments

Nigerian landscapers should promote the design of mixed-use development that fosters community engagement and participation in urban areas. Such developments increase the productivity of urban settlers and boost local tourism. These can be achieved through either remodeling existing urban spaces or creating new facilities altogether. These mixed-use spaces can adopt operational models that generate revenue for their sustenance.

Advocacy

For the preservation of Urban areas, a change is needed. But to give urban dwellers, stakeholders, and the Nigerian government a reason to change (Jim, 2018), Nigerian landscapers should embark on advocacy campaigns to sensitize the public on the need for change in urban landscape designs. Also, the advocacy should demand economic policies that encourage the spread of development to the rural areas in a bid to attract migrants away from overpopulated cities.

This can also be achieved by Nigerian Landscapers extending their design services to rural areas thus bridging the gap between rural and urban areas.

Furthermore, a collaboration between the landscaper and other professionals in the built environment and other sectors can be set up to ensure that complementary infrastructure that drives traffic to urban areas are adequately provided in the rural areas.

When achieved, this will promote rural growth by opening them up to economic development ultimately discouraging rural-urban migration, and reducing the undue pressure on urban infrastructure, landscape, and services.

Corporate Social Responsibility(CSR)

CSR refers to business efforts geared toward achieving sustainable development (Julian & Natalia, 2020). Beyond providing landscape design services, Nigerian landscapers should carry out community development so as to empower rural settlers with the basic education, skill set, work ethic, and business acumen needed to thrive and improve their rural communities. This can be adopted as a Corporate Social Responsibility effort by the Society of Landscape Architects of Nigeria (SLAN), and in collaboration with other civil societies and non-governmental organizations, to help bridge the gap between the rural and urban areas.

CONCLUSION

Urban landscapes encompass every element within the cone of vision of the observer in an urban area. The landscaper is the artist of the environment, and they are saddled with the task of piecing color, line, texture, form, scale, space, materials, & structures together to curate how a city is perceived and experienced. Rapid Urbanization without adequate planning, drastically alters the landscape. Thus, there is a need for well structured landscapes in urban cities. Followed diligently, the proposed strategies in this paper will allow Urban landscapers to design in line with the allowable bearing capacity of Nigerian cities, while making adequate preparations for possible expansions.

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Conflict of interests

The authors declare no conflict of interest.

Reference

- 1.Aarts, Noelle & Lokhorst, Anne. (2012). The Role of Government in Environmental Land Use Planning: Towards an Integral Perspective. 10.5772/50684.
2. Behdad A. and James H. (2018). A review of urban landscape adaptation to the challenge of climate change. *International Journal of Climate Change Strategies and Management*. ISSN: 1756-8692
3. Feng Wang, Siyu Liu, Tian Chen, Hao Zhang, Yifan Zhang & Xiaoxuan Bai How urbanization affects residents' health risks: evidence from China. *Environ Sci Pollut Res* 30, 35554–35571 (2023). <https://doi.org/10.1007/s11356-022-24767-y>
4. Joshua J. Mark. published on 07 April 2014.
5. Mendeliana Brunensis. 60. 281-298. 10.11118/actaun201260080281.
6. Ohwo, Odafivwotu & Abotutu, Abel. (2015). Environmental Impact of Urbanization in Nigeria. *British Journal of Applied*



- Science & Technology. 9. 212-221. 10.9734/BJAST/2015/18148.
7. Ojijerts N, Simon B, Ineta G, Ingus L. (2005). The impact of economic, social and political factors on the landscape structure of the Vidzeme Uplands in Latvia, *Landscape and Urban Planning*, Volume 70, Issues 1–2, Pages 57-67, ISSN 0169-2046, <https://doi.org/10.1016/j.landurbplan.2003.10.005>. (<https://www.sciencedirect.com/science/article/pii/S016920460300210X>)
 8. Rain, Julian & Yakovleva, Natalia. (2020). Corporate Social Responsibility. 10.1007/978-3-319-95726-5_26.
 9. Rural Push, Urban Pull, and... Urban Push? New Historical Evidence from Developing Countries. Remi Jedwab† and Luc Christiaensen‡ and Marina Gindelsky§ January 2014
 10. Simpson, Jim. (2018). Advocacy for a Change - Research Paper.
 11. Talal H. (2017) THE ROLE OF URBAN LANDSCAPE DESIGN IN ENHANCING PEOPLE'S OUTDOOR PLACES AND SPACES. Faculty of Islamic Architecture, College of Engineering and Islamic Architecture, Umm Al Qura University, Makkah Al Mukarramah, Saudi Arabia.
 12. URBANET. Infographics: Urbanisation and Urban Development in Nigeria |October 23rd, 2018.
 13. Urbanizing Asia Mark henley/Panos Pictures <https://www.rrojasdatabank.info/citiesasian1011-02.pdf>
 14. Urbanization. Retrieved on Feb. 16th, 2024 from <https://www.worldhistory.org/urbanization/#:~:text=Urbanization%20began%20in%20ancient%20Mesopotamia,themselves%20to%20the%20successful%20settlement.>
 15. Zita I, František P, and Eva P, (2022). The Impacts of Urbanisation on Landscape and Environment: The Case of Slovakia *Journals Sustainability* Volume 14 Issue 1 10.3390/su14010060 14(1), 60; <https://doi.org/10.3390/su14010060>