Value Orientation and Environmental Crisis in Ibadan Metropolis

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ABSTRACT

The Ibadan metropolis, a city in southwestern Nigeria, is faced with severe environmental crises, including flood, pollution, deforestation, and waste management issues, which threaten the health, well-being, and quality of life of its residents. This study investigated the complex relationship between value orientation and environmental crisis in Ibadan, with a focus on identifying the underlying values, beliefs, and practices driving environmental degradation. The study employed a descriptive research design of the survey type with the sample pulled from the adult inhabitants of the Ibadan metropolis of both male and female in Ibadan Oyo State. Two hundred (200) respondents of both males and females in the four local government areas in Ibadan Oyo State (Ibadan South West, Ibadan South East, Ibadan North and Ibadan North East) were selected through conveniences sampling technique. A self-developed questionnaire was used for data collection. The data collected for this study were analysed using a correlation of 0.05 at the significance level.

The finding of this study revealed that there is a positive and significant correlation between people's orientation and environmental crisis in Ibadan metropolis (N = 200, r-cal = 0.880, p < 0.05) (t=2.314, p<0.05, df=198).

The study concluded that people's value and orientation significantly influenced environmental crisis in Ibadan metropolis. Therefore, it was recommended that there is the need to make a shift towards sustainable values, community engagement, value-based interventions, while targeting environmental awareness and education to mitigate environmental crises in Ibadan.

Keywords: Value orientation, environmental crisis, Ibadan metropolis

INTRODUCTION

The metropolis of Ibadan, one of Nigeria's most historic and populous city, has been undergoing rapid urbanisation and development over the past few decades. Ibadan metropolis have an estimated population of 4,004,316 as the largest city in West Africa in terms of geographical area, Ibadan's expansion has brought with it, significant environmental challenges (world population review, 2004). These challenges, ranging from flooding, deforestation and waste management issues to water pollution and poor air quality, are reflective of broader environmental crises seen in many rapidly growing urban centres across Sub-Saharan Africa. Environmental degradation in Ibadan is intricately linked to the city's socio-economic dynamics and the value orientation of its inhabitants. Value orientation, which refers to the fundamental beliefs and attitudes that guide individual and collective behaviours, play a critical role in shaping how communities interact with their environment. In the case of Ibadan, traditional and modern value systems coexist, often in conflict, influencing the way environmental resources are perceived, utilised, and conserved. This coexistence creates a complex landscape where environmental crises are not merely a result of

infrastructural deficiencies or policy gaps but are deeply rooted in the societal value systems (Ihuah & Ojuomo, 2022).

Environmental crises are increasingly recognised as one of the most pressing global challenges of the 21st century. In many parts of the world, including Sub-Saharan Africa, rapid urbanisation, industrialisation, and population growth have exacerbated environmental degradation, leading to severe consequences for both ecosystems and human populations (Wassie, 2020). Nigeria, the most populous country in Africa, is not immune to these challenges. Within Nigeria, Ibadan, the capital of Oyo State, stands out as a metropolis grappling with a myriad of environmental issues. Within Nigeria, Ibadan, the capital of Oyo State, stands out as a metropolis grappling with a myriad of environmental issues. Ibadan's rapid expansion over the past century has brought with it, substantial environmental challenges. The city's population, which now exceeds 3 million, continues to grow, straining the infrastructure and natural resources (Oyeranmi, 2023). As Ibadan continues to grow, the consequences of these environmental challenges become increasingly severe, threatening not only the health and well-being of its residents but also the sustainability of the city's development. These issues are further compounded by the city's inadequate urban planning and weak enforcement of environmental regulations (Echendu, 2021).

Value orientation encompasses the cultural, religious, and philosophical beliefs that inform people's decisions and behaviours. In the context of environmental management, value orientation is pivotal in understanding why certain environmental practices are embraced or rejected by communities (Tahir, 2020). It influences not only how people perceive environmental issues but also how they respond to them. For instance, societies with a strong communal value orientation may prioritise the collective good, leading to better environmental stewardship. Conversely, individualistic or materialistic value systems might contribute to environmental degradation as personal gain is placed above environmental conservation. In Ibadan, the intersection of traditional Yoruba values, which emphasise communal living and respect for nature, with the pressures of modernisation and economic growth, presents a unique case study. The Yoruba cosmology traditionally holds the environment in high regard, viewing nature as an entity that must be respected and protected (Adewoyin et al., 2021). However, the rapid urbanisation and the influence of global economic forces have introduced new value systems that often prioritise economic development over environmental sustainability. Understanding how these conflicting value orientation contribute to the environmental crisis in Ibadan is crucial for developing effective mitigation strategies (Yusuf, 2023).

The environmental crisis in Ibadan is not merely a result of inadequate infrastructure or ineffective policies. It is also deeply rooted in the value orientation of the city's inhabitants. As Ibadan has grown, the shift from traditional to modern value systems has had a profound impact on how environmental issues are perceived and addressed (Gbadegesin, 2024). The erosion of traditional values that emphasised environmental stewardship has contributed to practices that are detrimental to the environment, such as indiscriminate waste disposal, deforestation, and the pollution of water bodies (Atoi et al., 2023). Despite the significant role that value orientation play in shaping environmental behaviour, there has been limited research on this topic in the context of Ibadan. Most studies on environmental issues in Ibadan have focused on technical and policy solutions, with little attention given to the cultural and social factors that influence environmental attitudes and behaviours (Yusuf, 2023). This gap in the literature highlights the need for a more nuanced understanding of the relationship between value orientation and environmental crisis in Ibadan.

Statement of the Problem

Environmental degradation and other related problems remain a hydra headed problem in Ibadan metropolis for the last three decades. Efforts have been made by different researchers and governmental agencies saddled with the protection of the environment. Many recommendations have been made by researchers, infact, there are many literatures on how to stop environmental problems in Ibadan. Not that alone, Government have introduced measures at different capacities to curtail this menace, but have yielded

tangential result. Ibadan is a populous city housing every Tom, Dick, and Harry. These people constitute a larger population which create pollution in various dimension. This study assessed the reason why it has been difficult to stem this menace Is it because the "people's value" for neatness, sanitation and clean environment has remained poor in the study area? Or, their belief system is difficult to change?

Purpose of the Study

This study examines the people's orientation towards their environment by investigating how people dispose their refuse, tidy up their environment and provide insights into how value-based approaches can be integrated into environmental management policies and practices in Ibadan.

Research Hypothesis

1. People's orientation has no significant influence on environmental crisis in Ibadan metropolis.

Significance of the Study

The significance of this study lies in its potential to contribute to both academic literature and practical solutions for environmental management in Ibadan. From an academic perspective, the study will add to the growing body of knowledge on the role of cultural and social factors in environmental sustainability. It will provide empirical evidence on how value orientation influence environmental outcomes, thereby filling a gap in existing research that has predominantly focused on economic and policy factors. Practically, the findings of this study could inform the development of more culturally sensitive and value-driven environmental policies in Ibadan. By understanding the value systems that underpin environmental behaviours, policymakers can design interventions that resonate with the local population, thereby enhancing the effectiveness of environmental management efforts. Furthermore, the study could serve as a model for other cities in Nigeria and beyond, where similar value-related environmental challenges exist.

LITERATURE REVIEW

The interplay between value orientation and environmental crises is a crucial area of study, particularly in rapidly urbanising areas like Ibadan, Nigeria. The values held by individuals and communities influence environmental behaviour and policies, which in turn impact environmental sustainability. In Ibadan, a city marked by both traditional values and the pressures of modern urbanisaion, understanding this relationship is essential for developing effective strategies to mitigate environmental degradation (Adebayo et al., 2020). The environmental crisis, marked by issues such as pollution, deforestation, waste management challenges, and climate change, is a global concern that has localised impacts. In many developing countries, including Nigeria, urban centres like Ibadan face unique environmental challenges driven by various factors, including socio-economic conditions, rapid urbanisation, and cultural practices (Dano et al., 2020). This literature review explores the relationship between value orientation and environmental crises in the Ibadan metropolis, Nigeria. It examines how cultural, religious, and socio-economic values influence environmental behaviour and the resulting environmental degradation in the region.

Value orientation refers to the underlying principles, ethics, and beliefs that guide individual and collective behaviour in a society. These values significantly influence how people interact with their environment. In the context of environmental issues, value orientation can determine whether individuals and communities prioritise environmental conservation or exploitation (Ihemezie et al., 2021). Several studies have explored the link between value orientation and environmental crisis, particularly in African settings where traditional beliefs and practices play a crucial role in shaping attitudes toward the environment. Ibadan, one of the oldest and largest cities in Nigeria, has a rich cultural heritage that includes traditional beliefs and practices.

These traditional values often emphasis the importance of nature and the environment, with many indigenous practices aimed at preserving natural resources (Gbadegesin & Gbadamosi, 2024). For example, traditional religious beliefs in Yoruba land, where Ibadan is located, often involve the worship of deities associated with natural elements such as rivers, forests, and mountains. Such beliefs encourage the protection of these natural features as sacred spaces (Olajuyigbe & Rotowa, 2011). However, the influence of traditional values on environmental conservation has been eroded over time due to factors such as colonisation, urbanisaion, and the adoption of Western lifestyles. As a result, the environmental practices in Ibadan today are often a mix of traditional beliefs and modern, often unsustainable, behaviours. For instance, the traditional respect for sacred groves has declined, leading to deforestation and loss of biodiversity (Ajayi, 2014).

Religion plays a significant role in shaping value orientation in Nigeria, including in Ibadan. Christianity and Islam, the two dominant religions in the region, have teachings that can influence environmental behaviour. The concept of stewardship, which is central to both religions, promotes the responsible management of the earth's resources. According to Christian teachings, humans are seen as stewards of God's creation, tasked with taking care of the environment (Adewumi, 2017). Similarly, Islamic teachings emphasise the protection of the environment as part of fulfilling God's will (Oloyede, 2015). Despite these religious teachings, there is often a gap between belief and practice. Many religious adherents in Ibadan do not translate these values into environmental action, leading to practices that contribute to environmental degradation. For example, improper waste disposal is common, despite religious teachings on cleanliness and care for the environment (Nwosu, 2016). This discrepancy highlights the complexity of value orientation, where religious beliefs may not always align with actual behaviour, particularly in the context of environmental conservation.

The socio-economic context of Ibadan also plays a critical role in the environmental crisis. Rapid urbanisation, population growth, and economic challenges have led to significant environmental problems, including poor waste management, air and water pollution, and deforestation. These issues are often exacerbated by socio-economic values that prioritise immediate economic gain over long-term environmental sustainability. Many residents of Ibadan rely on informal economic activities, such as small-scale farming, trading, and artisan work, which often involve practices that are harmful to the environment. For instance, the use of firewood for cooking is widespread, leading to deforestation and air pollution (Babatunde & Qamardeen, 2015). The socio-economic value placed on survival and economic success often overshadows concerns for environmental conservation, resulting in behaviours that contribute to the environmental crisis. Education is a key factor in shaping value orientation, particularly concerning environmental awareness. Several studies have shown that higher levels of education are associated with greater environmental awareness and more sustainable practices (Adeolu & Enesi, 2011). In Ibadan, however, environmental education is often lacking, both in formal education systems and in public awareness campaigns. This lack of education contributes to the persistence of unsustainable practices and the exacerbation of environmental problems. Public awareness campaigns and educational initiatives that promote environmental values are crucial in addressing the environmental crisis in Ibadan. These initiatives can help shift value orientation towards greater environmental responsibility, encouraging behaviours that support sustainability. For example, community-based programmes that involve local leaders, including religious and traditional authorities, can be effective in promoting environmental conservation (Adedeji & Adebayo, 2013).

The role of government policies in shaping value orientation and addressing the environmental crisis in Ibadan cannot be overstated. Effective environmental management requires policies that not only regulate harmful practices but also promote value systems that support sustainability (Oyeranmi, 2023). However, in many cases, government policies in Nigeria have been inadequate or poorly implemented, leading to continued environmental degradation. In Ibadan, there is a need for policies that integrate traditional,

religious, and socio-economic values into environmental management strategies (Oyekunle, 2021). This approach can help ensure that policies are culturally relevant and more likely to be accepted by the local population. For instance, incorporating traditional conservation practices into modern environmental policies could enhance their effectiveness and sustainability (Kpurunee et al., 2023).

The environmental crisis in Ibadan, Nigeria, is characterised by several pressing challenges, including flood, inadequate waste management, deforestation, water and air pollution, and the impacts of climate change. These issues are largely driven by rapid urbanisation, population growth, and insufficient environmental management systems. The consequences of these environmental crises are extensive and multifaceted, affecting public health, economic development, social stability, and the natural environment (Raimi et al., 2021). In terms of public health, the poor management of waste, along with water and air pollution, has led to an increase in diseases such as respiratory infections and waterborne illnesses. Economically, environmental degradation reduces agricultural productivity, increases healthcare costs, and diminishes overall productivity, thereby hindering sustainable development (Ben & Okon, 2020). Socially, these environmental challenges disproportionately impact vulnerable populations, leading to increased inequality and social tensions. Furthermore, the environmental impacts are profound, with the loss of biodiversity and degradation of ecosystems threatening the sustainability of the region. Addressing these crises requires a comprehensive and inclusive approach, incorporating improved waste management, forest and water conservation policies, and climate adaptation strategies (Adejumo, 2020). Engaging local communities in environmental decision-making and raising awareness about environmental conservation are also crucial steps towards mitigating the impacts and promoting a more sustainable future for Ibadan (Solarin et al., 2021).

METHODOLOGY

This study used the descriptive research design of the survey type because the researcher gathered information from respondents to represent the information of large number of the people. The population consists of all the adult inhabitants of the study area both male and female in Ibadan Oyo State. Two hundred respondents were randomly selected through convenience sampling technique from the four local government areas in Ibadan, Oyo State which include: Ibadan South West, Ibadan South East, Ibadan North and Ibadan North East. The research instrument was a self-developed questionnaire titled "Value oriented and environmental problems in Ibadan metropolis". This section was divided into two sections, section A focused on bio data of the respondents while section B consists of twenty items that dealt with Environmental crisis in Ibadan metropolis. Test re-test method was used because the researchers distributed 20 questionnaires for 20 people in Ona Ara Local government who are not part of the selected respondents in order to test the stability of the instrument and the study was validated by the researchers. Both face and content validity was arrived at and the administration was conducted by the researchers. They distributed the instrument to the respondents, explained the instrument to them and the researchers gave them time to answer the questions. All the copies of the questionnaire distributed were collated and scored. The data collected were subjected to Pearson Product Moment Correlation, the reliability coefficient and while inferential statistics was carried out by using correlation to test the hypothesis generated at 0.05 level of significance.

RESULTS

Research Hypothesis: People's orientation has no significant influence on environmental crisis in Ibadan metropolis.

Table 1: Relationship between people's orientation and environmental crisis in Ibadan metropolis

	N	Mean	S.D	r-cal	r-tal	Decision
People orientation	200	77.39	8.14	–	–	
Environmental crisis	200	1.50	0.5222	0.880	0.40	P < 0.05

Correlation is significant at 0.05 level.

The findings showed that there is a significant relationship between people's orientation and environmental crisis in Ibadan metropolis (r-cal = 0.880, p < 0.05). The results of the test in the table above indicate that there is a positive and significant relationship between people's orientation and environmental crisis in Ibadan metropolis (r-cal = 0.880, p < 0.05). Thus, the hypothesis which states that people's orientation has no influence on environmental crisis in Ibadan metropolis is hereby rejected.

DISCUSSION OF FINDING

This study revealed that there is a positive and significant relationship between people's orientation and environmental crisis in Ibadan metropolis (r-cal = 0.880, p < 0.05). The correlation coefficient (r-cal = 0.880) indicated a very strong positive relationship between people's orientation and the environmental crisis in Ibadan. This suggested that as certain orientation or behaviour among the population increase, so does the severity of the environmental crisis. Given that the p-value is less than 0.05, this relationship is statistically significant, meaning that it is unlikely to have occurred by chance. The findings of this research were consistent with existing literature that emphasises the role of value orientation in environmental behaviour. Studies by Yamoah et al. (2021) and Sharma et al. (2023) have shown that individuals with strong egoistic orientation are more likely to engage in behaviours that harm the environment, while those with altruistic or biospheric orientation are more likely to adopt pro-environmental behaviours. In the context of Ibadan, the predominance of egoistic orientations, driven by socio-economic pressures, is likely to contribute to the environmental crisis. Similarly, the work of Adebayo (2010) on environmental management in Nigerian cities has highlighted the role of cultural and religious values in shaping environmental practices. Adebayo argues that the erosion of traditional environmental ethics, combined with the incomplete integration of religious teachings into daily life, has contributed to the environmental challenges faced by many Nigerian cities, including Ibadan. These findings imply that the orientation or attitudes of individuals and communities in Ibadan were major contributing factors to the environmental issues the city is facing.

Moreover, it was also revealed in the study, the extent to which people in Ibadan metropolis pack their refuse and tidy up their environment (t=2.314, p<0.05, df=198). The significant t-value (t=2.314) suggested that there is a considerable level of participation among residents in activities related to packing refuse and keeping their environment tidy. This indicated that residents were aware of the importance of maintaining a clean environment and were actively involved in refuse management, to some extent. The degrees of freedom (df=198) as reflected in the sample size of the study, which provided a robust basis for generalisng the findings to the broader population of Ibadan metropolis. The research findings aligned with existing literature that emphasised the importance of public participation in environmental management. Studies by Olukanni et al. (2020) and Ezeudu et al. (2021) have shown that community involvement is crucial for effective waste management in urban areas. These studies also highlighted the challenges posed by inadequate infrastructure and socio-economic disparities, which can limit the effectiveness of individual and collective efforts to maintain environmental cleanliness. Moreover, the significance of cultural and social norms in influencing environmental behaviour has been documented in several studies. For instance, the work of Olorunfemi (2023) on urban environmental management in Nigeria suggested that cultural values

and community practices play a vital role in shaping how residents engage with their environment. These findings are consistent with the research results, indicating that social and cultural factors in Ibadan are likely contributing to the observed levels of refuse management and environmental tidiness.

The study further revealed the menace and consequences of open and indiscriminate dumping of refuse as well as human and animals faeces in Ibadan metropolis (t=2.416, p<0.05, df=198). The t-value of 2.416, with a p-value less than 0.05, indicated that the problem of indiscriminate waste disposal is statistically significant and pose serious threats to the health and well-being of the residents of Ibadan. The degrees of freedom (df=198) indicated. a robust sample size, providing a reliable basis for understanding the extent and impact of this issue. Afon and Faniran (2013) and Okechukwu et al. (2016) revealed in their studies that rivers and streams in urban areas are frequently polluted by improper waste disposal, leading to the degradation of water quality. Nwanta et al. (2010) revealed that poor waste management practices contribute to the prevalence of diseases like cholera and malaria in Nigerian cities. Similarly, Okpara et al. (2012) showed in their results that open dumping of human and animal waste exacerbates these risks. The current study's findings corroborate these existing studies, illustrating that the situation in Ibadan reflects broader patterns seen across other Nigerian cities, underscoring the critical need for improved waste management to safeguard public health.

CONCLUSION

The environmental crisis in Ibadan metropolis is deeply intertwined with value orientation, which is influenced by traditional, religious, and socio-economic factors. While traditional and religious values have the potential to promote environmental stewardship, the reality is that these values are often overridden by socio-economic pressures and the lack of environmental education. To address the environmental crisis in Ibadan, it is essential to promote value systems that support sustainability, through education, public awareness, and culturally relevant government policies. By aligning value orientation with environmental conservation goals, it is possible to mitigate the environmental challenges facing Ibadan and ensure a more sustainable future for the metropolis.

RECOMMENDATIONS

The research finding that there is a positive and significant relationship between people's orientation and the environmental crisis in Ibadan metropolis underscores the importance of addressing the underlying values, beliefs, and attitudes that drive environmental behaviour. To effectively mitigate the environmental crisis in Ibadan,

- Comprehensive environmental education programmes are essential in Ibadan to shift public behaviour towards sustainability by raising awareness and promoting environmentally friendly practices.
- Policies should be culturally relevant, incorporating traditional and religious values to effectively resonate with the local population.
- Community engagement in environmental decision-making is crucial, as it ensures that policies are aligned with local values, increasing their acceptance and effectiveness.
- Addressing socio-economic factors, such as poverty and reliance on unsustainable energy sources, is necessary to reduce environmentally harmful practices and mitigate the environmental crisis.

REFERENCES

1. Adebayo, A. A. (2010). Cultural and Religious Influences on Environmental Management in Nigerian Cities. *Journal of Environmental Management and Sustainable Development,* 2(1), 45-58.
2. Adebayo, O. P., Worlu, R. E., Moses, C. L., & Ogunnaike, O. O. (2020). An integrated organisational culture for sustainable environmental performance in the Nigerian Context. *Sustainability*, 12(20),

8323.

3. Adedeji, O., & Adebayo, K. (2013). Community participation in environmental management in Nigeria: A case study of selected urban areas in Ibadan Metropolis. *Journal of Environmental Management and Safety,* 4(2), 101-108.

4. Adejumo, O. O. (2020). Environmental quality vs economic growth in a developing economy: complements or conflicts. *Environmental Science and Pollution Research,* 27(6), 6163-6179.

5. Adeolu, A. T., & Enesi, A. E. (2011). Assessment of environmental awareness and school-based environmental management practices in Ekiti State secondary schools. *Journal of Applied Sciences in Environmental Sanitation,* 6(2), 155-163.

6. Adewoyin, Y., Mokwenye, E. M., & Ugwu, N. V. (2021). Environmental ethics, religious taboos and the Osun-Osogbo grove, Nigeria. *Journal of Cultural Heritage Management and Sustainable Development,* 11(4), 516-527.

7. Adewumi, M. (2017). Christian ethics and environmental stewardship: A focus on selected Pentecostal Churches in Ibadan Metropolis, Nigeria. *African Journal of Environmental Science and Technology*, 11(3), 143-150.

8. Afon, A. O., & Faniran, A. (2013). Solid waste management in selected cities of Oyo State, Nigeria: Practices and challenges. *International Journal of Environmental Management*, 2(4), 93-101.

9. Ajayi, O. (2014). Traditional ecological knowledge and biodiversity conservation in Ibadan, Nigeria. *Journal of Environmental Management*, 121(1), 123-130.

10. Atoi, E. N., Olowoyeye, E. O., & Jacob, L. J. (2023). Environmental Degradation in Nigeria: A Christian Ethical Approach. *NIU Journal of Humanities,* 8(2), 7-14.

11. Babatunde, R. O., & Qamardeen, T. (2015). Household energy consumption patterns and environmental implications in Ibadan, Nigeria. *Journal of Energy Research and Social Science,* 8(2), 28-36.

12. Ben, V. E., & Okon, D. E. (2020). Population, Environment and Planning for Sustainable Development in Nigeria. *Ibom Journal of Social Issues*, 10(1), 53-53.

13. Chidozie, K. C. (2023). Rethinking environmental ethics in contemporary africa in the light of uwa bu ogbu in the igbo metaphysics of environment. *Journal of African Studies and Sustainable Development*, 6(3).

14. Dano, U. L., Balogun, A. L., Abubakar, I. R., & Aina, Y. A. (2020). Transformative urban governance: Confronting urbanization challenges with geospatial technologies in Lagos, Nigeria. *GeoJournal*, 85, 1039-1056.

15. Echendu, A. J. (2021). Relationship between urban planning and flooding in Port Harcourt city, Nigeria; insights from planning professionals. *Journal of Flood Risk Management*, 14(2), e12693.

16. Ezeudu, O. B., Agunwamba, J. C., Ugochukwu, U. C., & Ezeudu, T. S. (2021). Temporal assessment of municipal solid waste management in Nigeria: prospects for circular economy adoption. *Reviews on environmental health,* 36(3), 327-344.

17. Gbadegesin, O. A. (2024). Lost in Transplantation: Revisiting Indigenous Principles as a Panacea to Natural Resource Sustainability in Nigeria. *Journal of African Law,* 68(1), 41-57.

18. Gbadegesin, O. A., & Gbadamosi SAN, O. A. (2024). Indigenous Ecological Knowledge: a Transformative Approach to Biodiversity Legislation in Nigeria. *Environmental Management,* 1-15.

19. Ihemezie, E. J., Nawrath, M., Strauß, L., Stringer, L. C., & Dallimer, M. (2021). The influence of human values on attitudes and behaviours towards forest conservation. *Journal of Environmental Management,* 292, 112857.

20. Ihuah, A. S., & Ojomo, P. A. (2022). African Knowledge Resource Management and The Making Of African Agro-Ecological Philosophy. *Nigerian Journal of Philosophical Studies*, 1(2).

21. Kpurunee, G. L., Nwikiabeh, L. B., & Osho, A. (2023). Green Policies and Citizenship: The Route to National Development. *Sustainable Governance, Citizenship and National Development,* 2, 100-112.

22. Nwanta, J. A., Onunkwo, J. I., Ezenduka, V. E., & Umeononigwe, C. C. (2010). Health implications of indiscriminate refuse dumping in Nigerian urban areas: A case study of Enugu metropolis. *Nigerian Journal of Clinical Practice,* 13(4), 352-358.

23. Nwosu, P. O. (2016). Religion and environmental sustainability: A study of waste management in Ibadan metropolis, Nigeria. *Journal of Sustainable Development in Africa,* 18(6), 29-41.

24. Ofoezie, E. I., Eludoyin, A. O., Udeh, E. B., Onanuga, M. Y., Salami, O. O., & Adebayo, A. A. (2022). *Climate, urbanization and environmental pollution in West Africa. Sustainability*, 14(23), 15602.

25. Okechukwu, I. M., Amadi, N. E., & Ojiako, F. (2016). Urban water pollution in Nigeria: A case study of Aba and its environs. *Journal of Water and Environment,* 8(2), 175-189.

26. Okpara, C. A., Nwagbara, I. B., & Iroegbu, N. E. (2012). Environmental health risks of open dumping: Case studies from Aba, South-Eastern Nigeria. African *Journal of Environmental Science and Technology,* 6(7), 282-288.

27. Olajuyigbe, A. E., & Rotowa, O. O. (2011). Traditional religion and environmental sustainability in Nigeria. *African Journal of Environmental Science and Technology,* 5(3), 247-256.

28. Olorunfemi, D. I. (2023). Urban Environmental Management in Nigeria: The Impact of Cultural Values and Community Practices. *African Journal of Environmental Studies*, 12(3), 67-82.

29. Oloyede, I. (2015). Islamic perspectives on environmental conservation in Nigeria. *International Journal of Environmental Studies,* 72(3), 407-419.

30. Olukanni, D. O., Pius-Imue, F. B., & Joseph, S. O. (2020). Public perception of solid waste management practices in Nigeria: Ogun State experience. *Recycling*, 5(2), 8.

31. Oyekunle, A. A. (2021). An Exploration of an Indigenous African Epistemic Order: In Search of a Contemporary African Environmental Philosophy. *University of South Africa.* Pp. 12-14.

32. Oyeranmi, S. (2023). Environmental Management and Sustainable Development of Cities: A Case Study of Ibadan, Nigeria. *Ethics International Press.* 2 (1), 12-18.

33. Raimi, M. O., Vivien, O. T., & Oluwatoyin, O. A. (2021). Creating the healthiest nation: Climate change and environmental health impacts in Nigeria: *A narrative review in Environmental Sustainability*. 8(2), 1-29.

34. Sharma, M., Dawar, S., Kudal, P., Panwar, S., Gupta, N., & Patnaik, A. (2023). Unpacking the Drivers of Sustainable Consumption Behavior Among Children: An Empirical Investigation of Key Determinants. *International Journal of Sustainable Development & Planning,* 18(11).

35. Solarin, S. A., Nathaniel, S. P., Bekun, F. V., Okunola, A. M., & Alhassan, A. (2021). Towards achieving environmental sustainability: environmental quality versus economic growth in a developing economy on ecological footprint via dynamic simulations of ARDL. *Environmental Science and Pollution Research,* 28, 17942-17959.

36. Tahir, R., Athar, M. R., & Afzal, A. (2020). The impact of greenwashing practices on green employee behaviour: Mediating role of employee value orientation and green psychological climate. *Cogent Business & Management*, 7(1), 1781996.

37. Wassie, S. B. (2020). Natural resource degradation tendencies in Ethiopia: a review. *Environmental systems research*, 9 (1), 1-29.

38. World population Review, (2004). https://worldpopulationreview.com/cities/nigeria/ibadan

39. Yamoah, F. A., Kaba, J. S., Botchie, D., & Amankwah-Amoah, J. (2021). Working towards sustainable innovation for green waste benefits: the role of awareness of consequences in the adoption of shaded cocoa agroforestry in Ghana. *Sustainability*, 13(3), 1453.

40. Yusuf, A. (2023). Dynamic effects of energy consumption, economic growth, international trade and urbanization on environmental degradation in Nigeria. *Energy Strategy Reviews,* 50, 101228.