

Evaluating Family Survival Strategies amid Environmental Challenges in Lagos: A Sociological Approach

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Abstract

This study investigates the environmental challenges and socio-economic factors influencing family survival strategies in Lagos, aiming to identify key challenges and assess the role of community networks. Four research questions guided the study, focusing on environmental issues, socio-economic influences, community resilience, and the impact of government policies. Employing a survey design, the study targeted families in five Local Government Areas (LGAs) in Lagos: Lagos Island, Surulere, Ikorodu, Alimosho, and Apapa. A total sample size of 350 participants was selected using purposive and stratified random sampling techniques, with 70 families from each LGA. Data were gathered through a structured questionnaire of 28 items, validated by experts and piloted with 50 participants, achieving a reliability coefficient of 0.88. The questionnaire was administered directly to ensure clarity and maximize response rates. Data were analyzed using descriptive statistics and t-tests. The findings revealed that flooding is the most significant environmental challenge, with socio-economic factors such as income level and education critically influencing family survival strategies. Community networks were shown to enhance resilience significantly. The study concludes that targeted interventions are necessary to address flooding and improve socio-economic conditions. Major recommendations include developing comprehensive flood management strategies and fostering community engagement in policy-making to create responsive support systems for families facing environmental challenges.
Keywords: Family Survival Strategies, Environmental Challenges and Socio-Economic Factors

Background of the Study

Lagos, Nigeria's largest city is a rapidly urbanizing metropolis facing numerous environmental challenges that significantly impact family survival strategies. As one of the fastest-growing cities in the world, Lagos has experienced a population explosion, leading to increased strain on its infrastructure and natural resources (Ogunyemi, 2020). This urban expansion has not only brought about economic opportunities but also has heightened the vulnerability of families to

environmental hazards such as flooding, pollution, and the effects of climate change (Adelekan, 2018). The interplay between urbanization and environmental challenges in Lagos is critical to understanding how families adapt and survive. The city is characterized by a dual economy where informal settlements coexist with formal urban areas, creating a unique socio-economic landscape (Obafemi, 2019). Families living in these informal settlements often lack access to basic services and are disproportionately affected by environmental degradation, making it essential to explore their survival strategies (Abidoeye et al., 2020).

Environmental challenges in Lagos, particularly flooding, have been exacerbated by poor urban planning and inadequate drainage systems. According to Adebayo et al. (2021), the city experiences seasonal flooding that displaces thousands of families, leading to significant economic losses and health risks. Such environmental stressors compel families to devise various survival strategies, which often include relocation, diversification of income sources, and community solidarity. Moreover, climate change poses an additional layer of complexity to the survival strategies employed by families in Lagos. Research indicates that rising sea levels and increased rainfall variability threaten livelihoods, especially for those dependent on agriculture and fishing (Odugbesan et al., 2022). Families must therefore navigate these environmental uncertainties while seeking to maintain their economic stability and social cohesion.

Understanding family survival strategies within this context requires a sociological lens that considers both the individual and collective responses to environmental challenges. Sociological theories, such as resilience theory, emphasize the capacity of families and communities to adapt to adverse conditions (Masten, 2018). In Lagos, social networks and community ties play a significant role in enhancing resilience, as families often rely on mutual support during crises. The role of government and policy responses cannot be overlooked in this discourse. The Lagos State Government has implemented various initiatives aimed at improving urban infrastructure and addressing environmental degradation. However, the effectiveness of these initiatives often depends on community engagement and the extent to which families can influence policy decisions (Nwogugu, 2020). This highlights the importance of understanding local contexts and the lived experiences of families when evaluating policy impacts.

Additionally, gender dynamics significantly influence survival strategies in Lagos. Women often bear the brunt of environmental challenges, as they are primarily responsible for household management and caregiving (Ogunyemi et al., 2021). Consequently, examining how gender roles

shape family responses to environmental stressors is crucial for a comprehensive understanding of survival strategies in the city. The intersection of socio-economic status and environmental vulnerability also warrants attention. Families from lower socio-economic backgrounds typically have fewer resources to adapt to environmental changes, making their survival strategies more precarious (Ogunbode, 2022). This socio-economic disparity underscores the need for targeted interventions that address the specific challenges faced by marginalized communities in Lagos. In summary, the study of family survival strategies amid environmental challenges in Lagos offers valuable insights into the resilience and adaptability of urban families. By employing a sociological approach, this research aims to illuminate the complex interactions between environmental factors, socio-economic conditions, and family dynamics. Understanding these interactions is essential for developing effective policies that promote sustainable urban living in Lagos.

Statement of the Problem

The rapid urbanization of Lagos has led to significant environmental challenges, including flooding and pollution, which severely impact family survival strategies. These challenges disproportionately affect marginalized communities, highlighting the need for a comprehensive understanding of how families adapt and cope in this dynamic urban environment.

Purpose of the Study and Research Objectives

The purpose of this study is to investigate the survival strategies employed by families in Lagos in response to environmental challenges, focusing on the socio-economic, cultural, and policy-related factors that shape these strategies. The objectives are:

1. To identify the key environmental challenges facing families in Lagos.
2. To examine the socio-economic factors influencing family survival strategies.
3. To assess the role of community networks in enhancing resilience among families.
4. To analyze the impact of government policies on family adaptation to environmental challenges.

Research Questions

1. What are the key environmental challenges facing families in Lagos?
2. How do socio-economic factors influence family survival strategies in Lagos?
3. What role do community networks play in enhancing resilience among families in Lagos?
4. How do government policies impact family adaptation to environmental challenges in Lagos?

Hypotheses

H₀₁: There are no significant key environmental challenges facing families in Lagos.

H₀₂: Socio-economic factors do not influence family survival strategies in Lagos.

Research Design

This study utilized a survey design to systematically gather data on family survival strategies amid environmental challenges in Lagos. The survey was structured to include both closed and open-ended questions, allowing for the collection of quantitative data on demographic factors, environmental challenges faced, and adaptive strategies, as well as qualitative insights into personal experiences and community dynamics. This design is appropriate because it enables the researchers to reach a larger, diverse sample across various socio-economic backgrounds, facilitating the identification of patterns and correlations in survival strategies.

Population, Sample Size, and Sampling Technique

The population for this study consists of families residing in Lagos, Nigeria, which is home to approximately 14 million people (National Population Commission, 2021). Given the city's diverse socio-economic landscape, families face varying degrees of environmental challenges. To obtain a representative sample, the study focused on five Local Government Areas (LGAs): Lagos Island, Surulere, Ikorodu, Alimosho, and Apapa. A total sample size of 350 participants was selected, with 70 families chosen from each LGA.

To achieve this, a combination of purposive and stratified random sampling techniques was employed. Purposive sampling was used to select specific neighborhoods within each LGA that are known to experience significant environmental challenges, ensuring that the sample reflects the diverse conditions faced by families. Subsequently, within these neighborhoods, stratified random sampling was applied to ensure that various socio-economic groups are adequately represented.

Instrument for Data Collection

The primary instrument for data collection in this study was a structured questionnaire consisting of 28 items, organized into five sections. The first section had bio-data information items, including demographic details such as age, gender, household size, educational background, occupation, income level, length of residence in Lagos, and Local Government Area. The subsequent four sections of the questionnaire were designed to address each of the research questions. Each of these sections contained five items presented in a four-point Likert scale format,

allowing respondents to express their level of agreement with various statements. The response options include Strongly Agree (SA), Agree (A), Disagree (D), and Strongly Disagree (SD). This format is particularly effective for assessing perceptions and attitudes regarding the environmental challenges faced by families, the socio-economic factors influencing their survival strategies, the role of community networks, and the impact of government policies.

Validity and Reliability of the Instrument

The 28-item structured questionnaire was developed and used for this study. Its content, construct, and face validity were established through a review by three Senior Lecturers at the University of Benin. Their expertise provided critical insights into the relevance and clarity of the items, ensuring that each question accurately reflected the research objectives and addressed the specific environmental challenges and survival strategies pertinent to families in Lagos.

To assess the reliability of the instrument, a pilot test was conducted with 50 participants, comprising 10 individuals selected from each of the five Local Government Areas (LGAs) included in the study. These participants were chosen to ensure a diverse representation while not being part of the main study sample. The data collected from this pilot test were analyzed using Cronbach's Alpha, a widely recognized method for evaluating the internal consistency of survey instruments. The calculated reliability coefficient was found to be 0.88, indicating a high level of reliability. This strong coefficient suggests that the items within the questionnaire consistently measure the same underlying constructs, making the instrument suitable for the main study.

Method of Data Collection

After the validation of the questionnaire, it was administered to a total of 350 selected participants, with 70 respondents from each of the five designated Local Government Areas (LGAs) in Lagos. A direct, in-person approach was employed by the researchers to ensure a high response rate and to facilitate immediate clarification of any questions participants might have regarding the questionnaire items. The administration process involved both completion by the researchers and self-completion by the respondents. This hybrid approach allowed for the collection of comprehensive data while also ensuring that participants felt supported throughout the process. The researchers were present to guide respondents, helping to address any uncertainties and ensuring that the questions were understood correctly, thereby enhancing the quality of the responses collected.

Data Analysis

The data collected from the administered questionnaire copies were analyzed using descriptive statistics to summarize and interpret the findings effectively, including frequency (f), percentage (%), mean ($\bar{x}$), and standard deviation (SD). T-test was conducted to test the hypotheses formulated for the study in order to determine whether there were significant differences in family survival strategies across different socio-economic and demographic groups.

Data Presentation

Research Question 1

What are the key environmental challenges facing families in Lagos?

Table 1: Key Environmental Challenges Facing Families in Lagos

S/N	Key Environmental Challenges	N	f	%	$\bar{X}$	SD
1	Flooding is a major challenge for my family.	316	270	85.4	3.7	0.6
2	Pollution affects our daily lives significantly	316	240	75.9	3.5	0.7
3	Waste management issues impact our community.	316	200	63.3	3.2	0.9
4	Inadequate infrastructure contributes to our environmental problems.	316	160	50.6	2.8	1.0
5	Climate change has noticeable effects in our area.	316	120	37.9	2.5	1.1
	Grand Mean	316			3.1	0.7

Table 1 illustrates the key environmental challenges facing families in Lagos, indicating that flooding is perceived as the most significant issue, with 85.4% of respondents (f = 270) identifying it as a major concern. This is corroborated by a high mean score of 3.7, reflecting strong agreement on its impact. Pollution ranks second, affecting 75.9% of families, with a mean score of 3.5, highlighting its substantial influence on daily life. Waste management issues also emerged as a notable concern, with 63.3% acknowledging its impact. Inadequate infrastructure and climate change were perceived as less critical challenges, with mean scores of 2.8 and 2.5, respectively. Overall, the findings underscore the urgent need for targeted interventions to address these pressing environmental challenges impacting family survival in Lagos.

Hypothesis 1

H₀₁: There are no significant key environmental challenges facing families in Lagos.

Table 2: T-test of Significance of the Difference in Environmental Challenges

Major Challenges	N	%	Mean Score	SD	Mean Difference	Df.	t-calc.	t-crit.	Remark
Flooding	158	50	3.80	0.50	0.50	314	4.12	1.96	H ₀₁ :Rejected
Climate Change	158	50	3.30	0.60					
Total/Mean	316	100	3.55	0.55					

Table 2 evaluates the significance of key environmental challenges facing families in Lagos, specifically comparing the perceptions of flooding and climate change. The results indicate that flooding is viewed as a major challenge, with a mean score of 3.80 and a standard deviation of 0.50 among the 158 respondents. In contrast, climate change has a lower mean score of 3.30 with a standard deviation of 0.60. The calculated t-value of 4.12 exceeds the critical t-value of 1.96, leading to the rejection of the null hypothesis (H₀₁). This suggests that there are indeed significant environmental challenges, particularly flooding, which is perceived as a more pressing issue compared to climate change. The findings highlight the urgent need for targeted interventions to address flooding and enhance family resilience in Lagos.

Research Question 2

How do socio-economic factors influence family survival strategies in Lagos?

Table 3: Socio-Economic Factors Influencing Family Survival Strategies

S/N	Socio-Economic Factors Influencing Survival Strategies	N	f	%	$\bar{X}$	SD
1	My family's income level affects our ability to adapt to challenges.	316	290	91.7	3.9	0.5
2	Education level influences our survival strategies.	316	250	79.1	3.6	0.7
3	Employment status impacts the choices we make during crises.	316	230	72.8	3.4	0.8

4	Access to resources is crucial for our family's survival.	316	200	63.3	3.2	0.9
5	Social status affects how we cope with environmental challenges.	316	150	47.5	2.9	1.0
	Grand Mean	316			3.4	0.8

Table 2 examines the influence of socio-economic factors on family survival strategies in Lagos. The findings reveal that 91.7% of respondents ($f = 290$) believe that income level significantly affects their ability to adapt to environmental challenges, evidenced by a high mean score of 3.9. Education level also plays a crucial role, with 79.1% indicating its importance, resulting in a mean score of 3.6. Employment status and access to resources are acknowledged by 72.8% and 63.3% of respondents, respectively, highlighting their influence on decision-making during crises. However, social status appears to have a lesser impact, with only 47.5% of families recognizing its significance. The overall grand mean of 3.4 suggests that socio-economic factors are critical in shaping survival strategies, emphasizing the need for focused support to enhance family resilience in Lagos.

Hypothesis 2

H₀₂: Socio-economic factors do not influence family survival strategies in Lagos.

Table 4: T-test of Significance of the Difference in Socio-Economic Factors

Major Factor Influencing Survival Strategies	N	%	Mean Score	SD	Mean Difference	Df.	t-calc.	t-crit.	Remark
Income Level	158	50	3.80	0.60	0.40	314	4.00	1.96	H₀₂: Rejected
Social Status	158	50	3.40	0.70					
Total/Mean	316	100	3.60	0.65					

Table 4 examines the influence of socio-economic factors on family survival strategies in Lagos, focusing on income level and social status. The results show that income level is considered a major influencing factor, with a high mean score of 3.80 and a standard deviation of 0.60, reflecting strong agreement among respondents. In contrast, social status has a lower mean score of 3.40 and a standard deviation of 0.70, indicating that it is perceived as less impactful. The t-value calculated at 4.00 surpasses the critical t-value of 1.96, resulting in the rejection of the null hypothesis (H02). This confirms that socio-economic factors, particularly income level, significantly influence family survival strategies in Lagos. The findings emphasize the importance of economic stability and support systems to enhance the adaptive capacities of families facing environmental challenges.

Research Question 3

What role do community networks play in enhancing resilience among families in Lagos?

Table 5: Role of Community Networks in Enhancing Resilience among Families in Lagos

S/N	Role of Community Networks	N	f	%	$\bar{X}$	SD
1	Community support helps my family during environmental challenges.	316	280	88.4	3.8	0.6
2	Strong community ties enhance our resilience.	316	270	85.4	3.7	0.7
3	Local organizations play a vital role in our survival strategies.	316	240	75.9	3.5	0.8
4	Information sharing within the community is beneficial	316	230	72.8	3.4	0.9
5	Collaborating with neighbors improves our coping mechanisms.	316	210	66.3	3.2	1.0
	Grand Mean	316			3.52	0.78

Table 5 explores the role of community networks in enhancing resilience among families in Lagos. The data indicates that 88.4% of respondents ($f = 280$) believe that community support is pivotal during environmental challenges, with a high mean score of 3.8 reflecting strong agreement. Similarly, 85.4% acknowledge that strong community ties significantly enhance resilience, corroborated by a mean score of 3.7. Local organizations are also perceived as vital to survival strategies by 75.9% of participants, indicating their important role in community support systems. Information sharing and collaboration with neighbors are recognized as beneficial but are slightly

less emphasized, with mean scores of 3.4 and 3.2, respectively. The overall grand mean of 3.52 underscores the critical importance of community networks in fostering resilience, suggesting that strengthening these ties could lead to improved adaptive capacities for families facing environmental challenges.

Research Question 4

How do government policies impact family adaptation to environmental challenges in Lagos?

Table 6: Impact of Government Policies on Family Adaptation to Environmental Challenges

S/N	Impact of Government Policies	N	f	%	$\bar{X}$	SD
1	Government policies effectively address environmental challenges.	316	190	60.1	3.0	1.0
2	Community engagement in policy-making is important.	316	250	79.1	3.6	0.8
3	Local government initiatives support our family's survival efforts.	316	220	69.6	3.4	0.9
4	Policies directly influence our coping strategies	316	160	50.6	2.8	1.1
5	There is adequate support from government during crises.	316	140	44.3	2.5	1.2
	Grand Mean	316			3.0	1.0

Table 6 assesses the impact of government policies on family adaptation to environmental challenges in Lagos. The findings reveal that only 60.1% of respondents ($f = 190$) believe that government policies effectively address these challenges, resulting in a mean score of 3.0, which indicates moderate agreement. The importance of community engagement in policy-making is highlighted by 79.1% of participants, with a mean score of 3.6, suggesting that families value their involvement in decision-making processes. Local government initiatives are acknowledged as supportive by 69.6% of respondents, yet the influence of policies on coping strategies is perceived to be less significant, with only 50.6% agreement. Additionally, there is a notable lack of perceived adequate government support during crises, reflected by a low mean score of 2.5 and only 44.3% agreement. The overall grand mean of 3.0 indicates a mixed perception regarding the effectiveness of government policies, underscoring the need for improved policy frameworks that genuinely support families in navigating environmental challenges.

Summary of Findings

1. **Key Environmental Challenges:** The study identified flooding as the most significant environmental challenge facing families in Lagos, with 85.4% of respondents acknowledging its impact. Pollution, waste management issues, inadequate infrastructure, and climate change were also recognized, but to a lesser extent.
2. **Socio-Economic Factors Influence:** Income level emerged as the most critical socio-economic factor influencing family survival strategies, with 91.7% of respondents indicating its importance. Education level and employment status also played significant roles, while social status was perceived as less influential.
3. **Community Networks as Resilience Enhancers:** Strong community ties and support systems were found to be essential in helping families navigate environmental challenges. A majority of respondents emphasized the benefits of collaboration and information sharing within their communities.
4. **Impact of Government Policies:** The study revealed mixed perceptions regarding government policies. While community engagement in policy-making was viewed as important, many respondents felt that existing policies inadequately address environmental challenges and provide insufficient support during crises.
5. **Statistical Significance of Findings:** The t-test results indicated significant differences in perceptions regarding both environmental challenges (H01 rejected) and socio-economic factors (H02 rejected). This suggests a strong relationship between environmental issues and socio-economic conditions in shaping family survival strategies.
6. **Need for Targeted Interventions:** The findings underscore the urgent need for targeted interventions from both the government and community organizations to address flooding and improve socio-economic conditions, ultimately enhancing family resilience in Lagos.
7. **Recommendations for Future Policy:** The study highlights the necessity for policies that prioritize economic stability, educational opportunities, and infrastructure improvements to effectively support families facing environmental challenges.

Discussion of the Findings

The findings of this study underscore the critical environmental challenges faced by families in Lagos, particularly the prominence of flooding as a significant issue. This aligns with recent research that highlights urban flooding as a persistent problem in many developing cities,

exacerbated by inadequate infrastructure and climate change (Adelekan et al., 2019). The high percentage of respondents acknowledging flooding reinforces the urgency for effective flood management strategies, as pointed out by Omoigui and Bassey (2021), who emphasize that proactive measures can mitigate the impact on vulnerable populations.

Socio-economic factors, especially income level, were found to be pivotal in influencing family survival strategies. This supports existing literature that demonstrates how economic stability directly correlates with adaptive capacity in the face of environmental stressors (Mastrorillo et al., 2016). Furthermore, the role of education and employment status in shaping resilience is consistent with studies that establish a link between socio-economic status and vulnerability to environmental risks (Adger, 2016). However, the lesser influence of social status found in this study challenges some perspectives that consider social hierarchies as critical determinants in coping mechanisms (Patterson et al., 2020).

Community networks emerged as vital for resilience, corroborating findings by Dhanani et al. (2019), who argue that social capital enhances collective action and resource sharing during crises. These networks serve as crucial support systems, enabling families to navigate challenges more effectively. The mixed perceptions regarding government policies highlight the need for improved community engagement in policy-making, reflecting the views of Hossain et al. (2021), who advocate for policies that are responsive to local needs and conditions.

Conclusion

This study highlights the pressing environmental challenges faced by families in Lagos, with flooding emerging as the most significant issue impacting daily life. The results indicate a strong consensus among respondents regarding the urgency of addressing this problem, underscoring the need for effective flood management strategies and infrastructure improvements. By recognizing flooding as a critical concern, stakeholders can prioritize interventions that enhance community resilience.

Furthermore, socio-economic factors play a pivotal role in shaping family survival strategies. The findings reveal that income level, education, and employment status significantly influence families' abilities to adapt to environmental challenges. This highlights the importance of fostering economic stability and educational opportunities as essential components of resilience-building

efforts. Policymakers should focus on creating pathways for economic empowerment to better equip families in navigating crises.

The study also emphasizes the vital role of community networks in enhancing resilience among families. Strong social ties and collaborative efforts within communities provide essential support systems that enable families to cope with environmental challenges more effectively. Promoting community engagement and resource sharing can enhance these networks, ultimately strengthening collective adaptive capacity.

Lastly, the mixed perceptions regarding government policies indicate a need for more responsive and inclusive policy frameworks. Engaging communities in the policy-making process is crucial to ensure that interventions address local needs and conditions. By aligning policies with the realities faced by families in Lagos, the government can foster greater resilience and adaptability in the face of ongoing environmental challenges.

Recommendations

1. **Enhanced Flood Management Strategies:** Policymakers should prioritize the development and implementation of comprehensive flood management plans that include improved drainage systems, early warning systems, and community education on flood preparedness. Investments in infrastructure that mitigate flooding risks are essential for protecting vulnerable communities.
2. **Economic Empowerment Initiatives:** To strengthen family resilience, there should be a focus on economic empowerment programs that enhance income levels and job opportunities. This can include vocational training, microfinance initiatives, and support for local businesses, particularly in underserved areas, to help families adapt to environmental challenges.
3. **Community Engagement and Capacity Building:** Local governments and organizations should foster community networks by promoting collaborative initiatives that encourage resource sharing and mutual support. Workshops and training sessions can enhance community members' skills in disaster response and resilience planning, empowering them to take active roles in their own safety and well-being.
4. **Inclusive Policy Development:** It is crucial to involve community members in the policy-making process to ensure that government interventions are responsive to their needs. Establishing platforms for community engagement can facilitate dialogue between residents and policymakers, leading to more effective policies that address the specific environmental and socio-economic challenges faced by families in Lagos.

References

- Abidoye, R., Adebayo, O., & Balogun, A. (2020). Urbanization and family survival strategies in Lagos. *Journal of Urban Studies*, 45(3), 123-140.
- Adebayo, O., Ogunyemi, O., & Odugbesan, J. (2021). Flooding in Lagos: Impacts and coping strategies. *International Journal of Disaster Risk Reduction*, 56, 102-115.
- Adelekan, I. (2018). Climate change and urban flooding in Lagos: An assessment of vulnerability and adaptive capacity. *Environmental Science & Policy*, 88, 123-134.
- Adelekan, I. O., Tunde, A., & Ajibade, I. (2019). Urban flooding in Lagos: An analysis of the challenges and solutions. *International Journal of Water Resources Development*, 35(5), 877-895.
- Adger, W. N. (2016). Vulnerability to climate change: Are there limits to adaptation? *Global Environmental Change*, 20(2), 144-158.
- Dhanani, A., Miller, J. R., & Stokes, J. (2019). The role of social capital in building resilience in urban communities. *Sustainability*, 11(1), 145.
- Hossain, M. S., Hossain, S., & Islam, R. (2021). Community engagement in environmental policy-making: Lessons from disaster-prone areas. *Journal of Environmental Management*, 281, 111763.
- Masten, A. S. (2018). Resilience theory and research: Past, present, and future. *Journal of the American Academy of Child and Adolescent Psychiatry*, 57(9), 672-677.
- Mastrorillo, M., et al. (2016). The role of economic resources in adaptive capacity to climate change: A review. *Climate and Development*, 8(2), 122-132.
- National Population Commission. (2021). *Nigeria's Population and Housing Census*. Retrieved from NPC Website on 16/8/24
- Nwogugu, E. (2020). Policy responses to urban environmental challenges in Lagos: A sociological perspective. *Nigerian Journal of Sociology*, 18(1), 45-60.
- Obafemi, A. (2019). The socio-economic dynamics of urbanization in Lagos. *African Urban Studies Journal*, 12(2), 78-90.
- Odugbesan, J., Adebayo, O., & Ogunyemi, O. (2022). Climate change impacts on livelihoods in Lagos: A gender perspective. *Journal of Climate Change and Society*, 10(1), 56-70.

- Ogunbode, E. (2022). Socio-economic factors influencing family adaptation to environmental challenges in Lagos. *Journal of Environmental Management*, 305, 114-125.
- Ogunyemi, O. (2020). Urbanization and environmental sustainability in Lagos. *Sustainable Cities and Society*, 55, 102-114.
- Ogunyemi, O., Adebayo, O., & Onafeko, A. (2021). Gender roles in family survival strategies amid environmental changes in Lagos. *Gender, Place & Culture*, 28(1), 34-50.
- Omoigui, L. O., & Bassey, E. (2021). Flood management in Lagos: Strategies for reducing urban flooding impacts. *Water Policy*, 23(2), 275-290.
- Patterson, J. J., et al. (2020). Social hierarchies and vulnerability: Examining the effects of status on coping mechanisms. *Environmental Science & Policy*, 114, 91-98.