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**THE NIGERIAN JOURNAL OF THE SOCIAL SCIENCES,
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**MODERATING ROLE OF EMOTIONAL INTELLIGENCE
ON THE INFLUENCE OF SLEEP DEPRIVATION AND
WORKLOAD ON PERCEIVED JOB PERFORMANCE
(CASE STUDY: FMC STAFF IDO-EKITI)**

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ABSTRACT

This study examined the Moderating role of Emotional intelligence on the influence of sleep deprivation and workload on perceived job performance. A total of 223 participants were selected from Federal medical center Ido Ekiti and data for the study were collected using a well-structured questionnaire. The study employed an expo facto research design, which is a type of survey research.

The hypotheses were tested using independent t-test, Regression analysis and One-way ANOVA. The study showed that there is no significant influence

of Sleep deprivation on job performance $t(221) = 1.01, p > .05$. as participant who experience high sleep deprivation do not differ in Job performance from those with low sleep deprivation. This study also found out that there is a significant difference in Job performance of staffs with low and high workload $t(221) = -1.77, p < .05$. The study also showed that Emotional intelligence played a moderating role in the influence of Sleep deprivation on Job performance $F(2, 220) = 90.57, p < .01$. The study also showed that Emotional intelligence strongly moderates workload on job performance $F(2, 220) = 95.49, p < .01$. it also show found out that there is no significant sex difference in Job performance $t(221) = .36, p > .05$.

Based on the findings obtained, it was recommended that the hospital management should develop strategies to manage workload effectively, incorporate Emotional intelligence training into staff development programs and they should implement initiatives that address sleep hygiene and physical well-being of the staffs.

Keywords: job performance, sleep deprivation, emotional intelligence, and workload

INTRODUCTION

In today's fast-paced work environment, organizations are increasingly concerned with factors that influence job performance. Among these factors, sleep deprivation, emotional intelligence, and workload have emerged as critical elements that significantly impact an employee's perceived job performance.

JOB PERFORMANCE

Job performance refers to the overall quality, effectiveness and value of the work-related activities and behaviours exhibited by an individual within their professional role. It encompasses the measurable actions, contributions and outcomes that an employee delivers in fulfilling their job responsibilities and furthering organisational goals (Campbell & Wiernik, 2015). Job performance is a multifaceted construct that goes beyond mere task completion, incorporating elements such as productivity, work quality, efficiency, innovation, teamwork, and adherence to organisational norms and values (Campbell & Wiernik, 2015).

Job performance is a complex and multifaceted concept that lies at the heart of organisational success and individual career development. It encompasses the totality of an employee's contributions to their organisation, reflecting not just the completion of assigned tasks, but the overall value they bring to their role and the broader work environment, that is, it is the manifestation of an individual's skills, knowledge, abilities and behaviours in the workplace. It's the tangible and intangible ways in which an employee fulfils their job responsibilities and contributes to the organisation's goals. This performance isn't merely about meeting basic job requirements; it's about how effectively, efficiently and creatively an individual carries out their duties (Motowidlo & Kell, 2012).

In the workplace, job performance manifests in various ways. It's visible in the salesperson that consistently exceeds their targets, the teacher who engages students and improves their learning outcomes, the nurse who provides compassionate and effective patient care, or the software developer who creates innovative solutions to complex problems. It's not just about what is achieved, but how it's achieved – encompassing both the tangible results and the processes employed to reach them (Sonntag, S., Volmer, J., & Spsychala, A. 2008).

Human resources management plays an essential role in job performance of employees in workplace or organisation from the recruitment and selection process to the training and development of employees to the performance management through the establishment of clear performance goals, regular feedback, evaluation, and the implementation of appropriate reward systems. HRM motivates employees to achieve higher levels of performance and productivity (Guest, 2011).

The concept of job performance also encapsulates an employee's reliability and consistency. It's about showing up, not just physically, but mentally and emotionally, ready to engage with the tasks at hand. It involves taking initiative, going beyond the call of duty when necessary, and demonstrating a commitment to personal and professional growth that benefits both the individual and the organisation (Borman & Motowidlo, 1997).

In essence, job performance is a holistic representation of an employee's

value to their organisation. It's the sum total of their contributions, both big and small, that drive the organisation forward. It's about effectiveness and efficiency, creativity and consistency, teamwork and individual initiative (Harari M. B., Reaves, A. C., & Viswesvaran, C. 2018).

SLEEP DEPRIVATION

Sleep deprivation is characterized by a lack of sleep, a poor sleeping pattern, insufficient sleep, or a disordered to sleep-wake cycle (Bandyopadhyay and Sigua -2019; Medic et al. -2017). It was defined as not obtaining enough sleep in relation to one's physiological and developmental demands in order to maintain optimal attentiveness during the day (Bandyopadhyay and Sigua -2019). Sleep Deprivation refers to a state of inadequate or insufficient sleep, resulting in impaired physical and mental functioning due to lack of the necessary amount of sleep. It occurs when an individual fails to get the required amount of sleep that their body needs to function optimally, that is, when the body is deprived of the restorative and rejuvenating effects of sleep, which is a vital biological process essential for physical and mental well-being. Sleep deprivation is not merely a lack of sleep but a chronic condition that can have profound impacts on various aspects of an individual's life. It can result from various factors, including lifestyle choices, work demands, medical conditions, or external circumstances that disrupt sleep patterns.

When an individual experiences sleep deprivation, their body and mind are subjected to a range of adverse effects. The lack of adequate sleep can probably lead to physical symptoms such as fatigue, decreased energy levels, and impaired immune function. It can also contribute to cognitive impairments, including difficulties in concentration, memory, decision-making, and reaction times. It also have emotional and psychological consequences, It can exacerbate mood disturbances, increase irritability, and heighten the risk of developing mental health issues like anxiety and depression. Prolonged sleep deprivation can also have detrimental effects on overall well-being, productivity, and quality of life.

It occurs when an individual fails to obtain sufficient sleep to maintain optimal cognitive and physiological functioning (Medic, Wille, & Hemels, 2017) which can be a factor that comes to play in reducing employees' job

performance in an organisation. In the workplace, sleep deprivation can result from various factors, such as long work hours, irregular shift patterns, high-stress responsibilities, or personal circumstances that limit sleep opportunities (Medic, Wille, & Hemels, 2017).

EMOTIONAL INTELLIGENCE

Emotional intelligence refers to the capacity to recognise, comprehend and manage emotions in oneself and others. It involves the ability to perceive emotional cues, utilise emotional information in thinking and problem-solving, understand the complexities of emotional experiences and regulate emotions effectively (Mayer, J. D., Caruso, D. R., & Salovey, P. 2016).

Psychologists (John Mayer and Peter Salovey) introduced the concept of emotional intelligence in the early 1990s. Self-awareness, the ability to recognize and understand one's own emotions, is fundamental in managing stress and maintaining composure in challenging work situations. Self-regulation allows individuals to control their emotional responses, which is especially important when facing the irritability and mood fluctuations often associated with sleep deprivation.

The motivation aspect of emotional intelligence relates to an individual's drive to achieve goals despite obstacles, which could be particularly relevant when examining how people perform under conditions of sleep deprivation and high workload (Killgore, W. D. S. 2010). Empathy, the ability to understand and share the feelings of others, is crucial in maintaining positive workplace relationships and effective teamwork, even when personal resources are strained due to lack of sleep or excessive work demands (Abe, K., Kawachi, I., Kawakami, N., Tsutsumi, A., & Nagata, T. 2018). For instance, an individual with high emotional intelligence might be better equipped to recognise the signs of fatigue in themselves and take proactive steps to mitigate its impact on their work. They might also be more skillful at managing their emotions when dealing with the stress of high workloads, potentially leading to better perceived job performance even under challenging conditions.

Furthermore, the social skills component of emotional intelligence could

play a significant role in how individuals navigate workplace interactions when experiencing sleep deprivation or high workload. Those with strong social skills might be better able to communicate their needs, delegate tasks effectively or seek support from colleagues, potentially buffering the negative impacts of these stressors on their job performance (Pekaar, K. A., van der Linden, D., Bakker, A. B., & Born, M. P. 2018). In professional settings, emotional intelligence plays a crucial role in leadership, teamwork and overall job performance. Individuals with high emotional intelligence often demonstrate better stress management, conflict resolution skills and the ability to inspire and influence others. They tend to be more adaptive to change and resilient in the face of challenges (Miao, C., Humphrey, R. H., & Qian, S. 2018).

WORKLOAD

Workload, defined as the amount and complexity of work assigned to an employee, is a critical factor influencing job performance. Workload refers to the amount of tasks, responsibilities, and overall demands placed on an individual or a team within an organization. It is a crucial factor that can significantly impact employee job performance, productivity, and well-being (Bowling, Nathan A., Alarcon, Gene M., Bragg, Caleb B (2015), Gilboa, Simona, Shirom, Arie, Fried, Yitzhak, (2008), Spector, Paul E., & Jex, Steve M. (2008).

In the context of organisational psychology, workload refers to the demands placed on an individual within their professional role. It encompasses both quantitative and qualitative aspects of work. Quantitative workload relates to the amount of work to be done, such as the number of tasks, clients or cases an employee must handle. Qualitative workload, on the other hand, pertains to the complexity, difficulty and mental or emotional demands of the work (van der Lippe & Lippényi, 2020).

The concept of workload is multifaceted and can be influenced by various factors. These may include job characteristics, organizational structures, technological advancements, and individual differences in skills and capabilities (Bakker & Demerouti, 2018; Spector & Jex, 1998). High workload is often characterized by time pressure, the need for

multitasking, and the requirement to process and respond to large amounts of information rapidly it is important to note that workload is not solely about the volume of work but also about the perceived effort required to meet job demands (Hart & Staveland, 1988).

Workload encompasses various aspects, including the volume of work, the complexity of tasks, the time constraints, and the resources available to complete the required work (Bowling 2015 et al; Spector & Jex, 1998). When the workload is balanced and manageable, employees can effectively allocate their time, energy, and skills to accomplish their goals and contribute to the organization's success (Bakker & Demerouti, 2007).

By actively managing workload and prioritizing the well-being of their employees, organisations can create an environment that enables individuals to thrive, enhances job performance, and ultimately contributes to the overall success and competitiveness of the organisation. Addressing the issue of workload is crucial for organisations to maintain a productive, engaged, and healthy workforce in the long run.

HYPOTHESES

1. There will be a significant influence of sleep deprivation on job performance.
2. There will be a significant difference of workload on job performance.
3. Emotional intelligence will play a moderating role in the influence of sleep deprivation on job performance
4. Emotional intelligence will significantly moderate the influence of workload on job performance
5. There will be a significant difference in job performance between male and female staff.

Method

Participants

Participants for this study included 223 staffs of Federal Medical Center, Ido-Ekiti. The mean age is 45, while the ages range from 18-25, 26-35, 36-45, 46 and above. The participants of the study were drawn from staffs of Federal Medical Center Ido-Ekiti using purposive and convenience sampling technique. This method was used in order to ensure that the

target populations which are the staffs in FMC, Ido-Ekiti were well represented.

Research Design

The design used in this study is expo factor research design. The survey research method was adopted, where copies of the questionnaire were distributed to research participants to measure their responses.

Variables

The variables of this study include one dependent variable, job performance, while the independent variables include sleep deprivation, workload, and emotional intelligence. Other independent variables in this research include age and gender.

Measures

The Job Performance Scale was developed by Çalışkan Abdullah to evaluate employee performance effectively. This 12-item scale includes six items each for task performance and contextual performance, validated through psychometric methods like Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) (Çalışkan, 2015). The scale demonstrates strong internal consistency (Cronbach's alpha > 0.80) and criterion validity, correlating well with related constructs like job satisfaction (Çalışkan, 2015).

Sleep Deprivation Scale

The Pittsburgh Sleep Quality Index (PSQI), developed by Buysse et al. (1989), measures sleep quality and disturbances over a one-month period. It includes 19 items grouped into seven components: subjective sleep quality, sleep latency, sleep duration, habitual sleep efficiency, sleep disturbances, use of sleep medication, and daytime dysfunction. The scale has high internal consistency (Cronbach's alpha ~0.83) and good construct and criterion validity (Buysse *et al.*, 1989).

Workload Scale

The Maslach Burnout Inventory (MBI), developed by Maslach and Jackson (1981), evaluates the three dimensions of burnout: emotional exhaustion, depersonalization, and personal accomplishment. It uses a 22-item scale

with strong psychometric properties, including Cronbach's alpha values > 0.70 for emotional exhaustion and depersonalization (Maslach & Jackson, 1981).

Emotional Intelligence Scale

The Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) was developed by Mayer et al. (2002) based on their four-branch model of emotional intelligence. It measures perceiving emotions, facilitating thought, understanding emotions, and managing emotions. The MSCEIT demonstrates high reliability (split-half reliabilities for full scale range $r = .93$ to $r = .91$) and construct validity (Mayer et al., 2002).

Procedure

The researcher used a purposive sampling technique, targeting staff at FMC Ido-Ekiti. Copies of the questionnaire were distributed to 250 staff members, of which 223 were retrievable. Respondents were assured of confidentiality, and their consent was obtained before administering the questionnaires.

Method of Statistical Analysis

Data obtained from the field were input into the Statistical Package for the Social Sciences (SPSS) version 20, software designed for analyzing social science research data. Frequencies and percentages were used to present the data in tables and charts, while hypotheses were tested using various statistical analyses. Hypothesis 1 was tested using independent sample t-test to check the influence of sleep deprivation on job performance. Hypothesis 2 was tested using independent sample t-test to check the influence of workload on job performance. Hypothesis 3 was tested using a two stage hierarchical regression to check the moderating role of emotional intelligence on the influence of sleep deprivation on job performance. Hypothesis 4 was tested using a two stage hierarchical regression to check the moderating role of emotional intelligence on the influence of workload and job performance. Hypothesis 5 was tested using independent sample t-test to check the sex difference on job performance.

Results

Hypothesis one stated that there will be a significant influence of sleep deprivation on job performance among staff of the Federal Medical Centre. The hypothesis was tested using independent sample t-test to check the influence of sleep deprivation on job performance. The results are presented in Table 1.

Table 1: Independent Sample t-test showing the influence of sleep deprivation on job performance.

	Sleep deprivation				t ₍₂₂₁₎	P
	High (n = 130)		Low (n = 93)			
	M	SD	M	SD		
Job performance	46.63	5.13	45.81	6.81	1.03	> .05

Independent t-test summary (table 1) showed that there is no significant influence of sleep deprivation on job performance $t(221) = 1.01, p > .05$. This implies that participants who experienced high sleep deprivation do not differ from in job performance from those with low sleep deprivation. Therefore, hypothesis one is not supported.

Hypothesis two stated that Federal Medical Centre staff with a lower workload will report greater job performance than those with a high workload. The hypothesis was tested using independent sample t-test to check the influence of workload on job performance. The results are presented in Table 2.

Table 2: Independent Sample t-test showing the influence of workload on job performance.

	Workload				t ₍₂₂₁₎	P
	High (n = 101)		Low (n = 122)			
	M	SD	M	SD		
Job performance	45.52	4.44	46.92	6.81	-1.77	<.05

Results of the independent t-test in Table 2 showed that there is a significant difference in the job performance of staff with low and high workload $t(221) = -1.77, p < .05$. This means that staff with lower work performed better in their job than those with high workload. Hence, hypothesis two was supported.

Hypothesis three stated that emotional intelligence will play a moderating role in the influence of sleep deprivation on job performance among FMC staff. Hypothesis was tested using a two stage hierarchical regression to check the moderating role of emotional intelligence on the influence of sleep deprivation on job performance. The results are presented in Table 3.

Table 3: Hierarchical regression summary table showing the moderating role of EI in the influence of sleep deprivation on job performance.

Predictors	B	â	t	R ²	ΔR ²	F	p
Model 1							
Sleep deprivation	.07	.14	.47	.001	-	.22	>.05
Model 2							
Sleep deprivation	-.20	.11	-1.86	.452	.451	90.57	<.01
Emotional intelligence	.30	.68	13.44				

A two-stage hierarchical regression approach was adopted in this analysis. At stage one, sleep deprivation did not predict job performance $\beta = .07, t = .14, p > .05, R^2 = .001$. This means that sleep deprivation did not have any considerable effect on job performance as it only accounted for .001% of the variance in job performance.

However, in the second stage, when emotional intelligence is included as a moderator, sleep deprivation remains an insignificant predictor $\beta = -.09$, $t = -1.86$, $p > .05$, while emotional intelligence emerged as a stronger predictor $\beta = 0.68$, $t = 13.44$, $p < .01$. The inclusion of emotional intelligence to the model as a moderator accounted for an additional increase in the R square value to .452 ($\Delta R^2 = .451$). This means that the addition of emotional intelligence significantly improved the predictive power in model 2 such that the model both sleep deprivation accounted for 45.2% variance in job performance and this change in R^2 was significant $F(2, 220) = 90.57$, $p < .01$. The result means that emotional intelligence played a moderating role in the influence of sleep deprivation on job performance. Therefore, hypothesis three was supported.

Hypothesis four stated that emotional intelligence will significantly moderate the influence of workload on job performance among FMC staff. Hypothesis was tested using a two stage hierarchical regression to check the moderating role of emotional intelligence on the influence of workload and job performance. The results are presented in Table 4.

Table 4: Hierarchical regression summary table showing the moderating role of EI in the influence of workload on job performance

Predictors	B	â	t	R ²	ΔR ²	F	p
Model 1							
Workload	-.004	.01	-.18	.000	-	.03	>.05
Model 2							
Workload	-.50	-.15	-2.99**	.465	.465	95.49	<.01
Emotional intelligence	.31	.70	13.82**				

This study used a two-stage hierarchical regression to test whether emotional intelligence will moderate the influence of workload on job performance. At stage one, workload did not predict job performance $\beta = -$

01, $t = -.18$, $p > .05$, $R^2 = .000$. This means that sleep workload did not have any effect on job performance as it does not account for any variance in job performance. However, in the second stage, when emotional intelligence is included as a moderator, workload becomes a significant predictor $\beta = -.15$, $t = -2.99$, $p < .01$, while emotional intelligence also emerged as a stronger predictor $\beta = 0.70$, $t = 13.82$, $p < .01$. The inclusion of emotional intelligence to the model as a moderator yielded R square value of .465 compared to .000 in model 1. This means that the addition of emotional intelligence significantly improved the predictive power in model 2 to significance $F(2, 220) = 95.49$, $p < .01$. The result means that emotional intelligence strongly moderates the influence of workload on job performance. Therefore, hypothesis four was supported.

Hypothesis five stated that there will be a significant difference in job performance between male and female staff. The hypothesis was tested using independent sample t-test to check the sex difference on job performance. The results are presented in Table 5.

Table 5: Independent Sample t-test showing sex difference in job performance

	Sex				$t_{(221)}$	P
	Male (n = 105)		Female (n = 118)			
	M	SD	M	SD		
Job performance	46.44	5.45	46.15	6.27	.36	>.05

Results of the independent t-test in Table 7 showed no significant difference in the job performance of male and female staff $t(221) = .36$, $p > .05$. Therefore, hypothesis five was not supported.

Discussion of Results

Findings obtained in hypothesis one to examine the significant influence of sleep deprivation on job performance among Federal Medical Centre (FMC) staffs revealed that sleep deprivation did not significantly influence job performance among Federal Medical Centre (FMC) staff ($t(221) = 1.03$,

$p > .05$). This suggests that staff experiencing high levels of sleep deprivation performed similarly to those with lower levels of sleep deprivation. While prior research often highlights the detrimental effects of sleep deprivation on cognitive and task performance, these results suggest that other factors, such as personal resilience, organizational support, or adaptive coping mechanisms, may have mitigated the expected negative impact. Additionally, the nature of the healthcare environment, which demands consistent performance under pressure, might have conditioned staff to operate effectively despite reduced sleep.

These findings invite further research into context-specific buffers that shield employees from the adverse effects of sleep deprivation. The finding that sleep deprivation did not significantly influence job performance contradicts a substantial body of existing literature. Previous studies have often established that sleep deprivation negatively impacts cognitive functioning, decision-making, and overall task performance (Alhola & Polo-Kantola, 2007; Pilcher & Huffcutt, 1996). Alhola and Polo-Kantola (2007) reported that even moderate sleep deprivation impairs cognitive tasks, particularly those requiring sustained attention. Pilcher and Huffcutt (1996) emphasized that prolonged periods without sleep significantly reduce performance and alertness, with cumulative effects becoming more pronounced over time. However, some studies suggest that the relationship between sleep deprivation and performance may vary depending on context and coping mechanisms. For instance, Lim and Dinges (2010) found that individual differences, such as resilience, experience, and adaptive strategies, can moderate the adverse effects of sleep deprivation. Similarly, Geiger-Brown et al. (2012) reported that healthcare workers, accustomed to long shifts and irregular hours, often develop compensatory strategies to maintain performance, such as caffeine use, task prioritization, and reliance on procedural memory. Studies show that sleep deprivation significantly impairs cognitive function and performance due to reduced attentional resources and decision-making capacity. For example, research highlights that poor sleep quality reduces work engagement and productivity, primarily through its impact on mental and physical health, as per the Job Demands-Resources (JD-R) model. Sleep's restorative function is critical for replenishing resources, and its deprivation

negatively influences work outcomes (Frontiers, 2020). However, some studies suggest that the effects might vary depending on individual resilience and coping mechanisms.

The results for hypothesis two showed that workload significantly influenced job performance, with staff experiencing lower workloads performing better ($t(221) = -1.77, p < .05$). This aligns with existing literature emphasizing the detrimental effects of excessive workloads, such as increased stress, burnout, and reduced efficiency. High workloads often limit the ability to focus on quality and creativity in task execution, potentially impairing overall performance. The findings underscore the need for effective workload management strategies in the healthcare sector to promote staff well-being and optimize job performance. By redistributing tasks or providing additional support, organizations can foster a more productive workforce. This finding reflects the findings of Bakker *et al.*, (2004) emphasized that high workloads lead to stress and burnout, which in turn impair cognitive functioning and task execution. Similarly, Spector and Jex (1998) noted that workload contributes to emotional exhaustion, reducing employees' ability to focus and perform effectively. However, moderate workloads can enhance performance by fostering engagement and a sense of purpose. According to the Yerkes-Dodson law (1908: Corbett 2015) performance improves with arousal to an optimal point but deteriorates when demands exceed an individual's capacity to cope. This model suggests that while manageable workloads can motivate employees, excessive demands undermine productivity by overwhelming mental and physical resources. Evidence supports the hypothesis that workload significantly influences job performance. A high workload often leads to resource depletion and burnout, reducing efficiency and productivity. The JD-R model suggests that while manageable workloads can promote engagement, excessive demands create stress that impairs performance. Studies from recent years emphasize the importance of resource availability (e.g., support and autonomy) in mitigating workload effects.

The third hypothesis investigated emotional intelligence (EI) as a moderator in the relationship between sleep deprivation and job performance. Results indicated that while sleep deprivation alone did not

predict job performance ($\beta = -.09, t = -1.86, p > .05$), the inclusion of EI as a moderator significantly improved the model's predictive power ($\Delta R^2 = .451, F(2, 220) = 90.57, p < .01$). This highlights the critical role of EI in mitigating the adverse effects of sleep deprivation. Emotional intelligence equips employees with skills such as stress management, self-regulation, and effective decision-making, which enable them to maintain high performance even under physically taxing conditions. These results align with the findings of Schutte *et al.*, (2007) and Sharma *et al.*, (2016), emphasizing the role of EI in sustaining performance under challenging conditions. . Research indicates that EI enhances self-regulation and stress management, buffering the adverse effects of poor sleep on performance outcomes (ResearchGate, 2021). This finding reinforces the value of incorporating EI development programs within organizational training, as such interventions could enhance employees' ability to cope with challenges and sustain productivity.

Similar to hypothesis four, emotional intelligence was found to moderate the relationship between workload on job performance in hypothesis four. While workload alone did not significantly predict job performance ($\beta = -.01, t = -.18, p > .05$), its interaction with EI significantly accounted for variability in job performance ($\Delta R^2 = .465, F(2, 220) = 95.49, p < .01$). These results suggest that emotionally intelligent employees are better equipped to handle the stress associated with high workloads. They likely possess the ability to prioritize tasks effectively, maintain focus, and manage workplace pressures, thereby ensuring continued productivity. This finding underscores the importance of fostering emotional intelligence within the workplace to buffer the negative impacts of excessive demands and support optimal performance. The result of this study negate the finding of Een Yualika E, Ria Meilan, & Novi Fitria (2024) which find out that emotional intelligence variable does not strengthen or weaken the relationship between accounting information system variables and job performance variables.

The findings for hypothesis five indicated no significant difference in job performance between male and female staff ($t(221) = .36, p > .05$). This suggests that gender does not play a significant role in influencing job performance in the healthcare setting examined. The result negate the

result of Igbolie, Chinedu, C.; Obikeze, N.J.; Ifejiofor, Ada and Muokwue Chinyere (2021) which shows that there is a significant influence of gender on job performance. It was indicated that females perform better than males in a research conducted among the non-teaching staff of Odumegwu Ojukwu University. Research shows inconsistent findings regarding gender differences in job performance. Some studies suggest no significant differences, emphasizing that performance is more strongly influenced by individual capabilities and job-related factors than by gender. Others identify context-specific variations, such as differences in coping strategies and task preferences between genders. In contexts like healthcare, where expectations and responsibilities are well-defined, performance appears to be influenced more by individual traits and situational factors than by gender. This finding supports the ongoing advocacy for gender-neutral policies in recruitment, task allocation, and professional development opportunities in the workplace.

Conclusion

The study concludes that workload, emotional intelligence, and sleep deprivation interact in significant ways to shape job performance among staffs of Federal Medical Center Ido- Ekiti. While workload significantly impacts job performance, the moderating role of emotional intelligence is critical in mitigating the adverse effects of both workload and sleep deprivation. Gender does not play a significant role in job performance, suggesting that individual and situational factors outweigh demographic variables in the context.

REFERENCES

- Abe, K., Kawachi, I., Kawakami, N., Tsutsumi, A., & Nagata, T. (2018). Understanding the role of emotional intelligence in workplace relationships: Perspectives on health and productivity. *Journal of Occupational Health Psychology, 23*(2), 148-156.
- Alhola, P., & Polo-Kantola, P. (2007). Sleep deprivation: Impact on cognitive performance. *Neuropsychiatric Disease and Treatment, 3*(5), 553–567. <https://doi.org/10.2147/ndt.2007.3.5.553>
- Bakker, A. B., & Demerouti, E. (2007). The Job Demands-Resources model: State of the art. *Journal of Managerial Psychology, 22*(3), 309-328. <https://doi.org/10.1108/02683940710733115>

- Bakker, A. B., & Demerouti, E. (2018). Job demands–resources theory: Taking stock and looking forward. *Journal of Occupational Health Psychology, 22*(3), 273–285.
- Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2004). Job demands-resources model of burnout. *Journal of Applied Psychology, 86*(3), 499–512. <https://doi.org/10.1037/0021-9010.86.3.499>
- Bandyopadhyay A, Sigua NL. What is sleep deprivation? *American Journal of Respiratory and Critical Care Medicine, 199*(6), pp. P11–P12 *Am J Respir Crit Care Med. 2019;199*(6):P11–2.
- Borman, W. C., & Motowidlo, S. J. (1997). Task performance and contextual performance: The meaning for personnel selection research. *Human Performance, 10*(2), 99–109. https://doi.org/10.1207/s15327043hup1002_3
- Bowling, N. A., Alarcon, G. M., Bragg, C. B., & Hartman, M. J. (2015). A meta-analytic examination of the potential correlates and consequences of workload. *Work & Stress, 29*(2), 95–113. <https://doi.org/10.xxxx>
- Buysse, D. J., Reynolds, C. F., Monk, T. H., Berman, S. R., & Kupfer, D. J. (1989). The Pittsburgh Sleep Quality Index: A new instrument for psychiatric practice and research. *Psychiatry Research, 28*(2), 193–213. [https://doi.org/10.1016/0165-1781\(89\)90047-4](https://doi.org/10.1016/0165-1781(89)90047-4)
- Çalışkan, A. (2015). The job performance scale: Development, reliability, and validity. *Journal of Management Research, 7*(3), 59–70.
- Campbell, J. P., & Wiernik, B. M. (2015). The modeling and assessment of work performance. *Annual Review of Organizational Psychology and Organizational Behavior, 2*(1), 47–74.
- Colten HR, Altevogt BM. Sleep disorders and sleep deprivation: an unmet public health problem. *Sleep disorders and sleep deprivation: an unmet public health problem. 2006. p. 1–404.*
- Corbett, Martin (2015-08-10). "From law to folklore: work stress and the Yerkes-Dodson Law". *Journal of Managerial Psychology. 30* (6): 741–752. [doi:10.1108/jmp-03-2013-0085](https://doi.org/10.1108/jmp-03-2013-0085). [ISSN 0268-3946](https://www.emerald.com/insight/ISSN0268-3946).
- Een Yualika E, Ria Meilan, & Novi Fitria (2024). Emotional Intelligence As a Moderating Variable in the Application of Accounting Information Systems to MSME Performance Proceedings of the Conference on SDGs Transformation Through the Creative Economy: Encouraging Innovation and Sustainability (TCEEIS 2023)
- Geiger-Brown, J., Rogers, V. E., Trinkoff, A. M., Kane, R. L., Bausell, R. B., &

- Scharf, S. M. (2012). Sleep, sleepiness, fatigue, and performance of 12-hour-shift nurses. *Chronobiology International*, 29(2), 211–219. <https://doi.org/10.3109/07420528.2011.645752>
- Gilboa, S., Shirom, A., Fried, Y., & Cooper, C. (2008). *A meta-analysis of work demand stressors and job performance: Examining main and moderating effects*. *Personnel Psychology*, 61(2), 227–271. <https://doi.org/10.xxxx>
- Guest, D. E. (2011). Human resource management and performance: Still searching for some answers. *Human Resource Management Journal*, 21(1), 3-13. <https://doi.org/10.1111/j.1748-8583.2010.00164.x>
- Hart, S. G., & Staveland, L. E. (1988). *Development of NASA-TLX (Task Load Index): Results of empirical and theoretical research*. *Advances in Psychology*, 52, 139–183. <https://doi.org/10.xxxx>
- Killgore, W. D. S. (2010). Effects of sleep deprivation on cognition and emotional intelligence. *Human Performance*, 23(3), 212-230.
- Killgore, W.D.S. (2010) Effects of Sleep Deprivation on Cognition. *Progress in Brain Research*, 185, 105-129. <https://doi.org/10.1016/b978-0-444-53702-7.00007-5>
- Lim, J., & Dinges, D. F. (2010). A meta-analysis of the impact of short-term sleep deprivation on cognitive variables. *Psychological Bulletin*, 136(3), 375–389. <https://doi.org/10.1037/a0018883>
- Maslach, C., & Jackson, S. E. (1981). The measurement of experienced burnout. *Journal of Occupational Behavior*, 2(2), 99–113. <https://doi.org/10.1002/job.4030020205>
- Mayer, J. D., Caruso, D. R., & Salovey, P. (2016). Emotional intelligence and its implications for workplace success. *Annual Review of Organizational Psychology and Organizational Behavior*, 3(1), 1-25.
- Mayer, J. D., Salovey, P., & Caruso, D. R. (2002). *Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) User's Manual*. Toronto: Multi-Health Systems
- Medic G, Wille M, Hemels MEH. Short- and long-term health consequences of sleep disruption. *Nat Sci Sleep*. 2017;9:151–61. Dove press journal
- Miao, C., Humphrey, R. H., & Qian, S. (2018). A meta-analysis of emotional intelligence and work attitudes. *Journal of Occupational and Organizational Psychology*, 91(4), 772- 798. <https://doi.org/10.1111/joop.12237>

- Motowidlo, S. J., & Kell, H. J. (2012). Job performance. *Handbook of Psychology, Second Edition*, 12, 82-103.
- Motowidlo, S. J., & Kell, H. J. (2012). *Job performance*. In N. Schmitt (Ed.), *The Oxford handbook of personnel assessment and selection* (pp. 82–97). Oxford University Press.
- Obikeze, N.J.; Ifejiolor, Ada and Muokwue Chinyere (2021). Influence of age and gender on job performance among non-teaching staff of chukwuemeka odumegwu ojukwu university, anambra state. *Journal of Educational Research and Development*; Vol.4 No.2 ; pg.192 – 200 ISSN (Print): 2682-5201;
- Pekaar, K. A., van der Linden, D., Bakker, A. B., & Born, M. P. (2018). Self- and other-focused emotional intelligence: Development and validation of the Rotterdam Emotional Intelligence Scale (REIS). *Journal of Research in Personality*, 73, 1-8. <https://doi.org/10.1016/j.jrp.2017.11.004> *Personality and Individual Differences*, 42(6), 921–933. <https://doi.org/10.1016/j.paid.2006.09.003>
- Pilcher, J. J., & Huffcutt, A. I. (1996). Effects of sleep deprivation on performance: A meta- analysis. *Sleep*, 19(4), 318–326. <https://doi.org/10.1093/sleep/19.4.318>
- Schutte, N. S., Malouff, J. M., Thorsteinsson, E. B., Bhullar, N., & Rooke, S. E. (2007). A meta-analytic investigation of the relationship between emotional intelligence and health.
- Sharma, R., Bansal, P., & Garg, S. (2016). Emotional intelligence and organizational performance: A meta-analytical review. *Asian Journal of Management Research*, 6(4), 245–253.
- Sonntag, S., Volmer, J., & Spsychala, A. (2008). Contextual influences on job performance: A review and research agenda. *International Journal of Psychology*, 43(3-4), 159-170.
- Spector, P. E., & Jex, S. M. (1998). Development of four self-report measures of job stressors and strain: Interpersonal conflict at work scale, organizational constraints scale, quantitative workload inventory, and physical symptoms inventory. *Journal of Occupational Health Psychology*, 3(4), 356–367. <https://doi.org/10.1037/1076-8998.3.4.356>
- Van der Lippe, T., & Lippényi, Z. (2020). Co-workers and workload: How team configurations shape perceptions of work. *Social Science Research*, 85, 102371.

Physical and Infrastructural Perception of Residents' Quality of Life in Flood-Prone Area of Ibadan, Region

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Abstract

The study examined physical and infrastructural perception of resident's quality of life in flood-prone area of Ibadan, region with a view to providing information that could guide planning policies and strategies that could enhance the ways residents' perceive their neighbourhood condition to achieve life satisfaction. The policies would also explore the multifaceted nature of sustainability in cities, towards creating resilient, liveable, and future ready urban spaces. The methodology adopted stratified the household member residing within 45m setback to the river (Ogunpa; Orogun, and Kudeti) into three stratum. Thus, buildings below (15m) to the river formed the first stratum; between (15.1-30.0m) to the river is the second stratum, while the third stratum consist of buildings within (30.1-45m) set-back to the river in the area prone-flood. Investigations include site visits, interviews of affected inhabitants, and analyses of flood data collected during the field investigations. These investigations were complemented with review of past records of flooding, especially for inaccessible area. Results obtained from infrastructure across the five local government areas of Ibadan region indicated that 16,638 residential buildings were constructed within the fourth-five meters statutory set back to the rivers and streams while 2,105 of residential buildings were flooded each time its rain. The three major variables influencing resident's perception of

infrastructural quality in the study area were; neighborhood quality, economic opportunities and environmental amenities confine on sustainability. However; environment lack basic facilities and services. It is recommended that urban renewal schemes be adopted to improve the quality of infrastructural facility in the area. The study further recommended the creation of employment opportunities that can be sustained at all levels in sequence to enhance the residents' toward their quality of life in the area prone to flood in Ibadan region.

Key Words: *Environment, Quality of life, Flood-prone, Infrastructure, Residents' Perception*

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1.0 Introduction

The role of infrastructure in the development of a region, in relation to quality of life of an individual cannot be overemphasized. United Nation (2017) remarked that rural infrastructure plays a critical role in poverty reduction, economic growth and employment for the rural poor. The poor in the society have been identified to be the most of the victims of flood, by having no choice, but to end up living in flood-prone area (Lutz, Sanderson and Scherbov 2008). In the view of Stephen (2011), the loss of life due to flood is lower in the developed countries compared to the developing countries. The assertions of Stephen (2011) and Lutz *et al* (2008) appeared to be right because in developing countries, there are absence of effective zoning regulations, flood controls, emergency response to infrastructure and early warning systems. Bangladesh is developing country and one of the most susceptible countries to flood disasters in the world. Up to 30% of the county has been covered with flood water. In 1991, more than 200, 000 lives were lost due to flood in Bangladesh (Stephen, 2011).

The poor in either developed or developing countries usually reside where the value of land is cheap, like river banks which are flood-prone areas, thereby endangering their lives due to flood. Floods all over the

world in the recent time have been related to the occurrence and reoccurrence of prolonged heavy rain (Welch *et al.*, 1977; Christopher, 1997; Action Aid 2006; Adeaga, 2008; Aderogba, 2011; Wright, 2011; Pigrim and Cordery, 1993 and Popoola, 2019). Climate change is an attributed cause of flooding because when the climate is warmer it result to heavy rains, relative sea level will continue to rise around most shoreline, extreme sea levels will be experienced more frequently (Bariweni, Tawari and abowei, 2012) most of the recent deadly floods have happened where the population has increases more. Due to the population increase, there is also an increase in human settlements in floodplains (Hardoy *et al* 2001; Douglas, Alam, Maghenda, McDonnell, McLean, and Campbell, 2008; Popoola., 2024). Human activities such as dam construction, irrigation, bridges and others have negatively impacted on free flow of water in the drainage channels, rivers and streams. Particularly at the urban centres, construction of roads, buildings, factories, manufacturing plants, bridge and curvets, farmlands and others have reduced drainage channels and erosion passages and or diverted natural courses of the flow of water (Aderogba, 2012). For instance, in Lusaka, the capital of Zambia, flood risk has strongly increased because of the fast growth of the city in flood-prone areas (Nchito, 2007). Ibadan in Nigeria also experienced great damaged in 2012, flood. The Senegalese Capital, Dakar and the Burkina Faso's Capital, Ouagadougou, strongly affected by 2009, flooding. Poorest people, in particular, often have a limited choice and end up living in high flood risk zones, such as riverbanks and coastlines, unaware of the risk and unprepared to react to floods (Lutz *et al.*, 2008).

The case of urban flooding in Ibadan, a non-coastal city in Nigeria is a typical example of man-made flood disaster. Ibadan has been afflicted by very devastating flood incidents since 1933, when Gege-river drowned houses of those living on its banks. During flooding water is contaminated. Clean drinking water becomes scarce Unhygienic conditions and spread of water-borne diseases result. People, buildings infrastructure, agriculture, open recreational space and the natural word are at risk. In extremely cases flooding may cause a loose of life. Torrential rains pushed rivers over their banks, collapsed mud houses and washed away livestock (Adeleye and Rustum 2017). The economy can also be severely affected by flooding.

Businesses may lose stock and patronage. Destruction of utilities and transport infrastructure can have knock-down effects on a wider area. Tourism, Farming and live stock can equally be affected. Vital infrastructure may be damaged or destroyed. Road links railways, Canals etc. May be blocked causing destruction to the wider quality of life, (Popoola, 2024).

The aim of this study is to assess the physical and infrastructural perception of residents' quality of life in flood-prone Area of Ibadan region, with a view to providing information that could guide planning policies that will explore the multifaceted nature of sustainability in cities, towards creating resilient, liveable, and future ready urban spaces. In order to achieve this aim, the specific objectives of the study is to; determine the variables that are most important to residents in improving their quality of life in flood-prone area of Ibadan region.

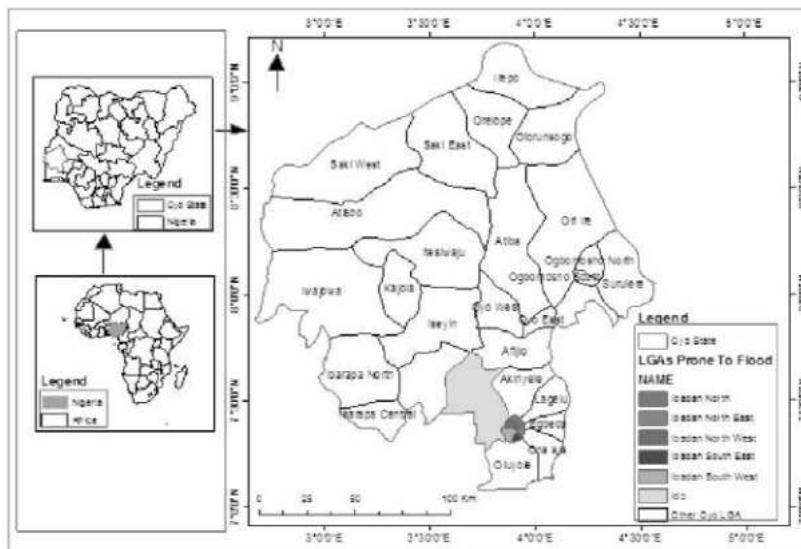


Figure 1.1: Map of Ibadan Showing Local Government Prone to Flood
 Source: Author field Compilation, 2024

From the vulnerability analysis using the weighted overlay function, the result indicates that Ibadan North-East falls completely in areas most

likely to be moderately affected by flood (Moderately Vulnerable Zone), the areas lies within 190 meters and 240 meters elevation above sea level. Within Ibadan North LGA, it shows parts of Bodija, Secretariat, Agodi, and some parts of Bere are prone to High vulnerable flood zones while other areas still within the Local Government are contained within the moderately vulnerable zone. Only around Agodi gate environs did this study identified areas least vulnerable to flood. The polytechnic Ibadan, Sango, parts of Eleyele and Inanlede are zones liable to be impacted and which falls in high vulnerable flood areas within Ibadan North-West Local Government Area. Jericho, Aleshinloye, Alalubosa, parts of Bode and Bere falls within moderate flooding areas. Ibadan South-West takes a greater percentage of places vulnerable to high flooding and this cannot be unconnected to the nature of the terrain (as it lies within the 90-130 meters above sea level) which also houses on two of the major rivers (River Ona and Alaro) within the study area flowing from north of the map southward. Major flooding hotspot falling within the area is Podo, Oluyole, Adegbite, Idi-oro, Yabiye and Fokobode to mention but a few, Iyagonku and environ happened to isolated and which falls in areas of moderate vulnerability. One third of Ibadan South-West areas lies in highly vulnerable zone while two third of the area is likely to be impacted with moderate flooding. However, all this have direct bearing on people vulnerability and the extent of this reflection on their socio-economic and religion activities.

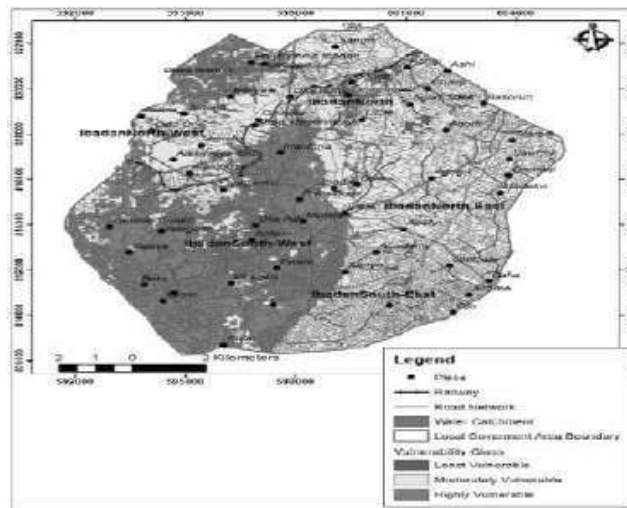


Figure: **1.2:** Vulnerability Map of study area overlay with vector features weighted overlay of Reclassed datasets

Source: *Author field Compilation, 2025*

Physical Setting

Location

Ibadan is located on south-western Nigeria and is the capital of Oyo State. Ibadan is centred about latitude $7^{\circ} 5'$ north and longitude $3^{\circ} 5'$ East (Figure 1) and is located approximately 145 km^2 north of Lagos. It is situated close to the boundary between forest and grassland which makes it a melting point for people and products of both the forest and grassland areas. Ibadan is regarded as the largest indigenous city in tropical Africa. Since its founding in the 1800s, Ibadan has played a prominent role for people living in the south-west of Nigeria. It was the capital of the Old western region when Nigeria had only three regions. The territory of the old western region has since been divided into seven states and a sizable part of the present Lagos state belonged to the western Region. Ibadan hosts the premier university in Nigeria (the University of Ibadan) which established as a college of the University of London in 1984. As a result of these historical antecedents, Ibadan has continuously witness influx of people which has contributed to its rapid growth both in population and physical expansion to cover a very large land mass.

In terms of demographic growth, Ibadan experienced geometrical increase in population between 1851 and 192. By 1856 the population as estimated at 60,000 (Hinderer, 1856) which rose to over 200,000 in 1890 (Milson, 1891), 238,094 in 1921 and 386,359 in 1931 (Mabogunje, 1962), the 1991 census in Nigeria put the population at 1,222,570 (Ayeni, 1994) with a density of 475, 11 persons per square kilometre. Its population is estimated to be about 2,550,593 according to 2006 estimates by the national Population is estimated to projected population by 2010 using 3.2% growth rate is about 2,893,137 (Table 1).

Table 1: The Population Growth of Ibadan 1856-2010

Year	Population
1856	60,000
1890	200,000
1921	238,094
1931	386,359
1991	1,222,570
2006	2,550,593
2010	2,893,137

Source: *Wahab (2011)*

Table 2: Physical Expansion of Ibadan(1830-1988)

Year	Land Size
1830	100 ha
1831	12Km ²
1963	30Km ²
1973	112Km ²
1981	136Km ²
1988	214Km ²

Source: *Wahab (2011)*

In term of physical expansion and land coverage, this pre-colonial urban centre has expanded very fast sprawling daily into the hinterland. Fabiyi (2006) noted that developed land in Ibadan increase from only 100ha in 1830 to 12km² in 1931, 30km² in 1963 112km² in 1973, 136km² in 1981 and 214km² in 1988 (Table 2). An aerial photograph in 1964 showed that the city has spread beyond the drainage basins of Ogunpa and Kudeti and to the catchment area of Ogbere stream in the east (figure 2). Today the city spread has extended to Odo-Onakekere village in the south to Iroko/Motunde villages in the north, Asejire in the east and Bakatari in the west (Central Council of Ibadan indigenes, 2011).

Table 3: Analysis of Buildings within River Set-back in the Eleven LGAs of Ibadan

S/No	Local Government	No of Buildings within statutory setback	No of Buildings flooded August, 26th, 2012	River/stream Length (km)
1	Akinyele	2,527	382	4,355
2	Egbeda	2,703	332	2,293
3	Ibadan Northeast	4,621	228	4,117
4	Ibadan North	3,291	260	3,323
5	*Ibadan North west	4,543	162	6,009
6	*Ibadan South East	2,435	55	4,769
7	*Ibadan South West	3,931	369	7,535
8	*Ido	3,368	788	8,865
9	Lagelu	913	682	2,741
10	Oluyole	366	63	6,630
11	Ona-Ara	850	108	26,553
Ground Total		26,553	2,105	54,841

Source: National Emergence Management Agency/ Town Planning Board, Oyo State, (2018)

Relief and Drainage

Ibadan lies mostly on low land which is punctuated by rocky outcrops and series of hills. These outcrops are mainly granitic. Three major landforms of hill, plains and river valleys dominate the whole landscape of the region. The average elevation is 230m above mean sea level. The metropolis is drained by three important rivers, R. Ogunpa, R.Odo-ona and R.Ogbera (figure 3) and their several tributaries including Omi, Kudeti, Alaro and Alapata.

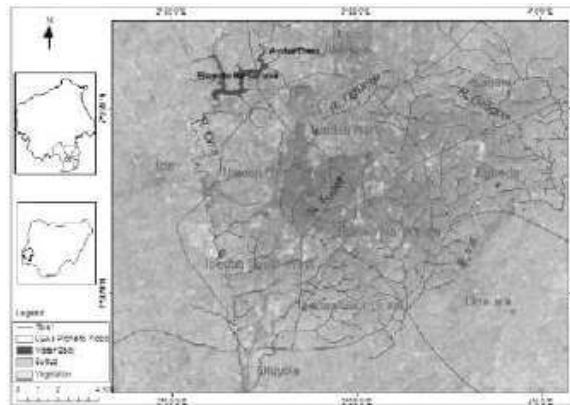


Figure 1.3: *Drainage Map, Land use cover and Local Spatial distribution of Ibadan Source: Author field Compilation, 2025*

This combination of hills and rivers valleys provide a good drainage for the city but it has suffered a lot of abuse due to blockages of the water courses by solid waste coupled with the construction of structure along the river courses and sometimes right within the river course itself. These practices constitute the major reason for the incessant flooding as occasioned by the recent flood disaster on the night of 26th, August, 2011. There are several tributaries of these rivers. The major tributary of R. Ogunpa is the R. Kudeti, both of them drain the eastern part of Ibadan. The Western part of the City which consists of more recent residential and other developments is drained by the R. Odo-Ona and its numerous tributaries, including the Alalubosa, Oshun and Yemoja streams.

Climate and Vegetation

Oyo State exhibits the typical west Africa Monsoon climate marked by distinct seasonal shifts in the patterns. Between March and October, the City is under the influence of moist maritime south-west Monsoon winds which blow inland from the Atlantic Ocean, marking the rainy season. The dry season occurs from November to February when the dry dust-laden winds blow from the Sahara desert. The area experiences high relative humidity and generally two rainfall maximal regimes during the rainfall period of March to October. The means temperature are highest at the end of the Harmattan (averaging 28°C), that is from the middle of January to the onset of the rains in the middle of March. If during the rainfall months, average temperature are relatively high, between 24°C and 25°C, while annual fluctuation of temperature is about 6°C. Most areas of Ibadan are covered by the rain forest and derived savannah. Growth and development have, however, led to significant loss of vegetation. The wetlands are threatened by urban expansion into the wetlands and rural areas. The tick, low-lying forests are prone to flooding as observed in areas like Ajibode, National Institute for Horticultural Research (NIHORT) and Oke-ayo along the course of R, Odo-Ona.

Geology and Soils

Ibadan is underlain by basement complex rocks which are mainly

metamorphic rocks of Precambrian age with granite, quartzite and migrate as the major rock types. The minor rock types include pegmatite, aplite and diorite. The soils of Ibadan region were formed from the underlying rocks especially granite gneisses, quartz-schist, biotitic gneisses and schist. They were formed under moist semi-deciduous forest cover and belong to the major soil group called ferruginous soils (Hopkins, 1965; D Hoore, 1964). Aweto (1994) identified four main soil associations in Ibadan region on the basis of soil parent materials as the Iwo, Okemesi, Egbeda and Mamu soil associations. The soils of the Iwo association were formed from coarse grained granites and gneisses and those of Okemesi from gneisses, schist and quartzites. Those of Egbeda and Mamu were formed from fine grained biotite and schist and from sericite schist respectively.

2.0 Literature Review for the study

A review of research works showed that arrays of studies have been carried out on environmental problems in terms of its quality and wellbeing of residents (prakash, 2005; Wong and Law, 2009). Majority of these studies focused on the indoor environmental quality and paid less consideration on outdoor environmental quality. For instance, Lai (2009) examined indoor environmental quality acceptance on residential buildings in Hong Kong. The study revealed that certain factors such as operative's temperatures, carbon-dioxide concentration, and noise level illumination level all had important effects on the overall indoor environmental quality acceptance. Apart from the fact that this study did not consider outdoor environmental quality, they were not focussed on the residents' socioeconomic perception of core areas.

Studies of Ozo (1998); Faniran (2012) established that perception are strongly influenced by socioeconomic status of the residents. Ozo (1998a) examined residents' perception of industrial pollution in Benin City. He ascertained that man's perception of environmental phenomena depends on whether it has a very noticeable and serious effect on his economic activity, development and healthy living. In similar vein, Faniran (2012a) examined residents' perception of the monthly environmental sanitation exercise in Ibadan metropolis, Nigeria. The study concluded that the determinants of the perception of the monthly environmental sanitation

exercise were the residents' socioeconomic and demographic varied along the different residential areas of Ibadan metropolis. However, a common issue with all these studies discussed above is that they did not considered residents' socio-economic perception of Environmental Quality in flood prone area of Ibadan. Also resident's perception of their environment is important, as this will enable bottom up approached to decision making. In the past, effort at improving the quality of environment has failed since policy makers determine the view of residents on certain problems and what they feel could ameliorate the problem. This is essence in planning for and with the people. The study will be helpful in understanding factors influence environmental quality from residents' perspective in flood-prone areas of Ibadan region in order to enhance sustainability.

2.1 Concept of Environmental Quality

Environmental quality is a set of properties and characteristics of the environment, either generalized or local, as they impinge on human beings and other organisms (Johnson, 1997). It is a measure of the condition of an environment relative to the requirement of one or more species and or to any human need or purpose. It is an environment of high quality that conveys a sense of wellbeing and satisfaction to its population through characteristic that may be physical, social or symbolic. The immediate meaning of environmental quality is the material aspects of the physical environment like air, water pollution, consequences of overpopulation and noise among others which have certain effects on people (Poport, 2009). Environmental quality is seen as a container concept, different theories relate to different aspects of Environmental quality and multi-dimensional (kamp *et al*, 2003). Concept of environmental quality overlap, and often used as synonyms to concepts of liveability, living quality, living environment, quality of place, residential perception and satisfaction. The evaluation of the residential and living environment, quality of life and sustainability (Kesalkhen,2012). In line with this, RIVM (2012) regarded concept of environment quality as a larger or broader concept of "quality of life" combining of basis qualities as health, safety with aspects of welfare and grace. To achieved genuine sustainability, it is essential to eliminate fragmentation in decision-making. This involves embedding environmental, social and economic

considerations into every stage of planning and policy across all sectors. Only through this integrated approach can we move toward development that is inclusive, balanced, and sustainable over the long term.

2.2 Sustainable Planning Of Housing

Rapid population growth, increase urbanization, poverty, inequality, pollution, and overcrowding have created serious challenges for cities worldwide. In response, UN-Habitat introduced new planning strategies aligned with the New Urban Agenda and Sustainable Development Goal 11 SDG, which focus on making cities inclusive, safe, resilient, and sustainable.

To support these global objectives, UN-Habitat developed five key principles for urban planning (UN-Habitat), which are designed to create more liveable, equitable and efficient urban environments:

- a. **Adequate Space for Streets and Connected street Network:** Cities should dedicate at least 30% of their land to streets and public spaces, ensuring the creation of well-connected networks. This promotes ease of movement, accessibility, and improved urban mobility for both vehicles and pedestrians.
- b. **High Urban Density:** To support sustainable urban systems, such as public transport, infrastructure, and services, urban planning should target a minimum population density of 15,000 people per square kilometer. Higher density helps reduce urban sprawl and makes city services more efficient.
- c. **Mixed Land Use:** In new developments, at least 40% of the floor space should be designated for economic activities such as shops, services or offices. This mix encourages walkable communities, stimulates local economies, and reduces the need for long commutes.
- d. **Social mix in Housing:** Cities should ensure housing diversity by catering to different income groups and household types. Ideally, 20%- 50% of housing should be affordable to low-income residents in flood-prone areas of Ibadan. This approach promotes inclusion and prevents socio-economic segregation among the residents.

- e. **Limiting land Use Specialization:** To avoid monotony and ensure functional diversity, no more than 10% of any neighbourhood should be dedicated to a single land use type (e.g. purely residential or solely commercial). This encourages dynamic, multifunctional urban spaces that better serve the needs of residents.

These five principles are not only practical guidelines, but; also essential tools for shaping cities that can withstand growing urban pressures while supporting social, economic and environmental sustainability.

3.0 Methodology

The researchers has used to the area very well which make familiarization to the study area possible with a view to understanding the physical, and infrastructural perception of residents in the study area. Both the primary and secondary sources of data were adopted for the study which includes – the type of house, nature of house, age of house, type of building materials, housing condition, housing facilities, waste management control mechanism and environmental sanitation among others. The target population is composed of household member residing within 45m setback to the river (Ogunpa; Orogun, and Kudeti). Which was later stratified into three strata, thus, buildings below (15m) to the river formed the first stratum; between (15.1-30.0m) to the river is the second stratum, while the third stratum consist of buildings within (30.1-45m) set-back to the river in the areas. The choice of this stratification is informed by the minimum standard of building setback to a river which is 45m as stipulated in building regulation by-law. Hence, one hundred and three (103) areas prone to flood in Ibadan region were stratified into three residential strata as indicated in the table 3.1 below.

Table 3.1 Identified Areas Prone to Flood in Ibadan Region

LGAs	Areas	Streets
Ibadan northeast	Bodija	Ilupeju, Carpenter,Ogundele, Vulcanizer,Aba-apata, kekere,aloba close.
	Orogun	Celetia, Akande, Oyesola, Salami , GRA, Duroladipo ,Agbowo, Ijokodo, University areas, Apete.
	Adekile	Bokusoro, Oniwata, Adeoye, Adekola, Onibudo, Ile-eja and Obisesan compound
	Ogbeere	Babanla, Ojaogbeeregbangba and Moradeyo
Ibadan southeast	Oje	olodo, Osunline, Alakia-Olosan, Ifelodun, Apata, Olomi, alafara, Ijamun compound,
	Odeaje	Adewonmodo, Lananse, Atipe, aderongba, TemidireOdo
	Kudeti	Okeayo, Ileepo, Adeola, Motulasu, Kole, Araromi Papa -ashafa, Ajegunle and Odo -ogun.
	Labo	Odo-onna, Odo-Onnaelewe, Okeayo, Ileepo, Adeola, Motulasu, Kole, Araromi Papa -ashafa, and Ajegunle.
Ibadan southwest	Foko	Fawole, Oloya, Arolasade compound and Adagbada
	Eleta and Agbongbon	Ajibade, church area, Ilupeju, Oluyole and Alarostram, Kadelu, Ajani, Adabale, Adegbulugbe, Moradeyo,
	Agugu	Apete, Atako, Okeayo, Ileepo, Adeola, Motulasu, Kole, Araromi Papa -ashafa, Ajegunle and OdArolasadeii, Itaegbe, Efungade, Mojekobaje, Moradeyo, kobiowuMoradeyoOloya and TemidireOdo-ona, Apata, Odo-onaeleweApete, Atako Ogbere, Oluyole, Ijokodo, Kudeti, Agbowo, Orogun, Agbokojo, Ilupeju, Moradeyo and Oluyole estate.
Ibadan north	Agbongbon	Adiwonmodo, Celestia 1, celestia 1 2,Araromi, Isolo, Ijomun, Arolasade, Atipe and Aderogba.
Ibadan Northwest		
Total	20	103

Source: Adapted from OYSEMA (2018).

The stratification consists of 7,748 residential buildings in the first strata that is <15m to the river. 3,202 residential buildings are within 15.1-30.0m to the river in the second stratum. Six-hundred and thirty six residential buildings (636) are between 30.0-45m to the river in the third residential stratum. Altogether, consists of eleven thousand five hundred and eighty (11,586) residential buildings. For questionnaire administration, 2.5% of the residential buildings were selected using systematic sampling technique. One out of every forty residential buildings based on the streets numbering system of houses were selected for questionnaire administration. To ensure a random start, the first buildings sampled were chosen randomly out of the first forty residential buildings. Where the sampled building is not residential, the next residential buildings were chosen for questionnaire administration. The targets were respondent adult in selected building. Using this procedure, a total of two hundred and ninety (290) questionnaires were administered and retrieved (286) of questionnaire in the study areas which formed the sample size 96% considered appropriate for the study as contained in the Table 3.2 below.

Table 3.2. Communities and buildings within 45.5m set-back to the River in Ibadan

LGs	Flood prone Areas	>15m	15-30m	30-45m	Total (2.5%)	Question naire
Ibadan Northeast	Alarere, Sawmill, Madeko, Aperin, Saka, Omiyale and Eleta I.	1430	881	111	2422	60
Ibadan North	UI, Oke-itunu, Bodija, Secritariat, UCH, Agugu, Orogun and Foko	2101	622	151	2874	72
Ibadan Northwest	Jericho, Onireke, Eleyele, Sango, Aleshinloye, Alalubosa, Iyangangu and Poly Ibadan.	1282	781	93	2156	54
Ibadan Southeast	Kudeti, Labo, Foko, Oranyan, Eleta, Felele and Molete.	1,134	387	127	1,648	42
Ibadan South-west	Sanyo, Oke -ado, Anfani, Idi -iroko, Yabiye, Orogun, Ilupeju, Moradeyo and Oluyole estate.	1,801	531	154	2,486	62
Total		7,748 (194)	3,202 (81)	636 (16)	11,586	290

Source: *Authors field Survey, 2025*

4.0: Discussion of Findings

The role of infrastructure in the development of a region, in relation to quality of life of an individual cannot be overemphasized. United Nation (2017) remarked that rural infrastructure plays a critical role in poverty reduction, economic growth and employment for the rural poor. It is therefore essential to identify how residents assess the available infrastructure based on the condition and adequacy of the infrastructure in meeting their needs, and its contribution to their quality of life. To determine this, residents were provided with a list of social, economic and environmental infrastructure in the study area. They were to indicate the availability within the flood-prone, outside the flood-prone but within the local Government Area, and outside the local Government but within Ibadan region. These physical attributes were as perceived by residents in the different strata of the study area. All tables and plates in this chapter emanated from the author's fieldwork of 2024.

4.1: Reasons for Living in Flood-Prone Areas of Ibadan Region

It is imperative to ascertain respondent's reasons for living in the flood prone areas of Ibadan region. From the information in table 4.1, the most important reason given is the affordable or cheap house rent. This represented 44.2% of response given in the study area. The next order of importance was closeness to the place of daily activities, and the people being generally friendly, which accounted for 14.6% and 9.1% respectively. However, the disaggregated data established that the three most important reasons given by residents living below 15 meters from the river were *affordable or cheap house rent*, *closeness to the place of daily activities* and being culturally tied to the area representing 48.1%, 14.1% and 6.8% respectively. In the strata lying between 15 and 30 meters to the rivers, the three most important reasons residents gave for living in the area included *affordable or cheap house rent*, *closeness to the place of daily activities* and *low occurrence of crime related activities*. These respectively accounted for 27.7, 21.9 and 12.3% in the study area. Similarly, *affordable or cheap house rent* was the most important reason identified by residents living in the strata lying 30.1-45 metres to the rivers. Next in order of importance were *people are generally very friendly* and there is a *high sense of neighbourliness* and these accounted for 19.0% and 9.0% of the responses respectively.

From the forgoing, one can deduce that the major reasons for residents to live in flood- prone areas are affordable or cheap house rent, closeness to the place of daily activities and access to residential building in the flood-prone areas; which was mostly by footpaths. The reasons for this is not far-fetched as people living in major cities of Nigeria always cry to avoid areas prone to traffic congestion and at the same time look for apartment that suit their level of income.

Table 4.1: Reason for Living in Flood-Prone Areas of Ibadan Region

Strata Reason residents are living in the Flood - prone area	below 15m		between 15-30m		30.1-45m		Ibadan region	
	Frequency	(%)	Frequency	(%)	Frequency	(%)	Frequency	(%)
Social amenities	17	4.9	1	0.0	4	4.0	22	3.7
People generally friendly	20	5.8	16	10.3	19	19.0	55	9.1
Heterogeneous population	23	6.6	14	9.0	2	2.0	39	6.5
Cheap home rent	167	48.1	43	27.0	56	56.0	266	44.0
Inherited property	2	0.6	10	6.0	-	-	12	2.0
Safe place to raise children	11	3.2	5	3.2	3	3.0	19	3.2
Low occurrence of crime	11	3.2	19	12.3	-	-	30	5.0
High sense of Neighbourliness	23	6.6	13	8.4	9	9.0	45	7.5
Culturally tied to this area	24	6.9	-	-	3	2.0	26	4.3
Closeness to place of daily activities	49	14.1	34	21.9	5	5.0	88	14.6
Total	347	100	155	100.0	100	100.0	602	100.0

- Note:**
- i. Infrastructure available within 45 metres setback to the river
 - ii. Available Infrastructure outside the flood-prone area but within the local government
 - iii. Infrastructure outside their local government
 - iv. Infrastructure residents accessed in the flood-prone area of Ibadan region

Source: Author field compilation, 2025

4.2 Physical Characteristics of Flood-prone Areas in Ibadan Region

To determine the attributes of the flood-prone area, respondents were provided with fifteen (15) variables that described the areas' Physical conditions. Respondents were to indicate their level of agreement with each of the variable describing the area. Each description was rated using one of five point Likert scales of *strongly, agree, just agree, disagree, and strongly disagree*. These rating were assigned weighted values of 5, 4, 3, 2 and 1 respectively. For ease of analysis and discussion, the data obtained using this procedure subsequently evolved into an index termed Physical Characteristic Index (PCI).

In the flood-prone area of Ibadan region, the level of agreement of respondents with the fifteen identified physical attributes was also examined. For the region, PCI mean was 2.05. There were seven of the fifteen identified physical attributes with negative deviations about the PCI mean.

Details of the deviation for each of the attributes are presented in Table 4.1: Reason for Living in Flood-Prone Areas of Ibadan Region 4.2. The physical attribute with the highest PCI was road condition is bad and dilapidated. The PCI of this element was 2.98. There were seven other attributes with PCI above the mean average. Among area is congested with many building these were building are deteriorated and generally old (2.75), deficient in infrastructural facilities (2.44) the area is not properly laid out (2.40), the area is congested with many building (2.38) and most building have no direct accessible to the road (2.38). That these PCIs are closer to 3 is an indication that respondents just agreed with the statements as a true reflection of the region.

Table 4.2: Residents' level of agreement with descriptions of strata in Ibadan Region

Physical Attributes	below 15m		between 15-30m		30.1-45m		Ibadan region	
	PCI	MD	PCI	MD	PCI	MD	PCI	MD
Deficient in infrastructural facilities	2.51	0.22	1.93	0.07	2.87	0.87	2.44	0.39
Road condition is bad and dilapidated	1.09	0.80	3.04	1.18	2.81	0.81	2.98	0.93
Building are deteriorated and generally bad	3.37	1.08	2.28	0.42	2.61	0.61	2.75	0.70
Sanitary condition is poor The area is improperly laid out	2.37	0.08	2.13	0.27	2.31	0.31	2.27	0.22
Congested area with many building The env. is generally squalid	2.25	-0.04	2.70	0.84	2.24	0.24	2.40	0.35
Building were not accessible to road	3.12	0.83	1.04	0.08	2.09	0.09	2.38	0.33
River banks full of waste	2.22	-0.07	1.35	-0.51	2.07	0.07	1.88	-0.17
Drainage condition are good	2.30	0.01	2.86	1.00	1.97	-0.03	2.38	0.33
Area is accessible to transport	2.71	0.42	1.73	-0.13	1.87	-0.13	2.10	0.05
Adequate supply of Electricit	1.48	-0.81	0.98	-0.88	1.77	-0.23	1.41	0.64
Adequate water supply facilitate	2.05	-0.24	1.78	-0.08	1.68	-0.32	1.84	-0.21
Mean aggregate	1.42	-0.87	1.30	-0.56	1.58	-0.42	1.43	-0.62
	1.94	-0.35	1.60	-0.26	1.51	-0.49	1.68	-0.37
	1.70	0.59	1.29	-0.57	1.36	-0.64	1.45	-0.60
	1.81	-0.48	1.01	-0.85	1.30	-0.7	1.37	-0.68
Mean aggregate	2.29		1.86		2.00		2.05	

- Note:**
- i. Infrastructure available within 45 metres setback to the river
 - ii. Available Infrastructure outside the flood-prone area but within the local government
 - iii. Infrastructure outside their local government
 - iv. Infrastructure residents accessed in the flood-prone area of Ibadan region

Source: *Author field compilation, 2025*

A critical observation of information provided in Table 4.2 show that in the stratum lying below 15 meters from the rivers, the top three attributes with the highest PCI were that the buildings are deteriorated and generally old (3.337), the area is congested with many buildings (3.12) and road condition is bad and dilapidated (3.09). Four other attributes with PCI depicting the attributes of their area include, river banks is usually filled with domestic waste, deficient in infrastructural facilities, sanitary condition is nothing to write home about and most buildings have no direct access to the road except footpath with PCIs of 2.71, 2.51, 2.37 and 2.30 respectively. Findings also show that attributes with PCI higher than the PCI of areas situated 15-30 metres from the river include; road condition is bad and dilapidated, most buildings have no direct access to the road, the area is not properly laid out, building are deteriorated and generally old. Others are sanitary condition is nothing to write home about, the area is congested with many buildings, and deficient in infrastructural facilities with PCIs of 3.04, 2.86, 2.70, 2.28, 2.13, 1.94 and 1.93 respectively.

The PCI of the area situated between 30-45 metres of the flood prone area was 2. Most of the attributes with positive deviation about the mean value ranged between 2.87 and 2.07. these attributes are deficiency in infrastructural facilities, bad and dilapidated roads, deteriorated and generally old buildings, bad sanitary condition, improper lay out of the area, congestion of the area with many buildings and the environment being generally squalid. These are an indication that respondents just agreed with the statement as a true reflection of their area. From the forgoing, it can be inferred that the physical attributes of the region is not that good. On the other hand, that the magnitude of respondents' agreement was higher in the stratum located below 15 metres to the rivers when compared with the other two strata, implies that residents' level of agreement on this attribute is differed.

4.3 Available Infrastructure in the Flood-Prone Areas of Ibadan Region

A number of facilities that could enhance environmental quality were identified through literature search. Residents' were asked to indicate whether such facilities were available or otherwise in the three strata of

flood-prone areas. Findings are presented in Table 4.3 above. The most available facility in the study area is private primary school, as shown in Table 4.3. The study established that 92.3% of respondents living in areas below 15 metres from the rivers were aware of the facilities available. In areas lying 15-30 metres and 30-45 meters. All respondents (100%) claimed that this was available. It is evident that 97.4% of the respondents were aware of the private primary school availability in the three strata. From the above, one can conclude that private primary schools are common in the study area. It may also connote the fact that many of the respondents send their wards to these schools. When compared to the availability of public primary school, the situation indicates that private primary schools were more available.

Next in importance is availability of market, in the study area, 96.7% of respondents were aware of the availability of markets, in the three strata: 96.6% in the area lying below 15 meters were aware of the availability of market, while 93.6% and 100% in area lying 15-30 meters and 30-45 metre respectively were aware of the market in their area (see Table 4.3). in the study area there are daily markets that respondents patronize for their daily needs, some of which are Oje, Oja-Oba, and Bodija among others.

The facility ranked the third most available in the study area is private secondary school. From Table 4.3, it is seen that 94.4% of the respondents took cognizance of its availability. This facility ranked first in the area lying 30-45 metres of the rivers, and 100% of respondents claimed awareness of its availability. While in areas lying 15-30 meters, 90.6% of respondents were aware of the availability of this facility. It can therefore be deduced that respondents in the study area send their children to such schools.

Availability of transport facilities that is buses, cars, motorcycles among others was the next most available facility in the study area, ranking fourth. In areas lying below 15 meters from the rivers, 74.4% of its respondents were aware of its respondents. Its level of availability is higher in both areas lying 15-30 meters and 30-45 meters from the rivers with 90.2% and 100% (See Table 4.3) response to its availability respectively.

The facility ranked fifth most available in the study area is private hospitals. When compared to the availability of general hospital and primary health care centres. The respondents were more aware of the availability of private hospital for their health needs. In areas lying below 15 meters from rivers, it ranked seventh, with 88% of its respondents affirming the availability of this facility. The situation is not so different in area lying 15-30 meters and 30-45 meters, with 89.6% and 80.4% (see Table 4.3) of its respondents respectively confirming the availability of private hospital in the areas. From the above, it can be concluded that residents of the flood-prone area of Ibadan region understudied go mainly to private hospitals for their medical needs.

Table 4.3: The level of Infrastructural facility in the study area

Infrastructures	below 15m			between 15-30m			30.1-45m			Ibadan region		
	Freq	%	Rank	Freq	%	Rank	Freq	%	Rank	Freq	%	Rank
Private primary school	108	9.11	4	173	10.24	1	107	10.58	1	107	10.58	1
Market	113	9.54	2	162	9.59	6	107	10.58	1	107	10.58	1
Private secondary school	106	8.95	6	173	10.24	1	99	9.79	5	107	10.58	1
Transport Facilities	87	7.34	10	156	9.24	7	107	10.58	1	107	10.58	1
Private hospital	103	8.69	7	155	9.18	8	86	8.51	6	107	10.58	1
Public primary school	109	9.20	3	173	10.24	1	60	5.93	9	107	10.58	1
Well water	92	7.76	8	164	9.71	5	60	5.93	9	107	10.58	1
Public secondary school	117	9.87	1	173	10.24	1	00	0.00	14	107	10.58	1
Primary health care	108	9.11	4	137	8.11	9	40	3.96	13	107	10.58	1
Borehole water	90	7.59	9	102	5.45	10	82	8.11	7	107	10.58	1
Waste disposal	51	4.30	12	92	0.30	11	62	6.13	8	107	10.58	1
Electricity	57	4.81	11	05	1.18	13	107	10.58	1	107	10.58	1
Drainage system	34	2.87	13	20	0.24	12	53	5.24	11	107	10.58	1
Recreational Space	10	0.84	14	04	0.00	14	41	4.06	12	107	10.58	1
Pipe borne water	0	0.00	15	0	0.00	15	0	0.00	14	107	10.58	1
General hospital	0	0.00	15	0	0.00	15	0	0.00	14	107	10.58	1

- Note:**
- i. Infrastructure available within 45 metres setback to the river
 - ii. Available Infrastructure outside the flood-prone area but within the local government
 - iii. Infrastructure outside their local government
 - iv. Infrastructure residents accessed in the flood-prone area of Ibadan region

Source: Author field compilation, 2025

The public primary school ranked the sixth most available facility in the study area. The study established that 923.2% of respondents in the area lying below 15 meters of the rivers were aware of facility's availability. In area lying 15-30 metres, 100% of its respondents were aware of its availability. The situation was a bit different in the third stratum (30-45) meters with a little above average of its respondents (56.1%) being aware

of the availability of this facility in their area. From the above, it was concluded that respondents in area lying below 15 meters from the rivers and 15-30 meters, send their wards to public schools. While the remaining 43.9% from the area lying 30-45 meters from the rivers use other alternatives for their wards.

Water is supply through pipe borne, borehole, well, rivers among others. In the Ibadan region under study, Well water is the most available source of water supply in the area (see Plate 1). Well water supply ranked the seventh most available facility. In areas lying below 15 meters and 15-39 meters, well water supply was ranked the eighth most available facility, with 78.6% and 56.1% of its respondents respectively affirming its availability. In the area lying 15-30 meters from the river, 94.8% of respondents claimed that well water was available and ranked it fifth.

The five least available facilities in the study area are; electricity, drainage system, recreational space, pipe borne water and water and general hospital. Some of the methods of supplying electricity is through the national grid, public power, generating set, solar system, inverter among other. In areas lying below 15 meters, 48.7% of the respondents confirmed to have had access to electricity through public power. While in areas lying 15-30 meters, 100% of the respondents claimed they rarely have public power supply, they relied mainly on generating sets and inverters. In the area lying 30-45 meters, 100% of the respondents confirmed the availability of power supply. In the study area in general, electricity was one of the least available facilities. This situation reflects the epidemic power situation in Nigeria.

Also among the least available infrastructure in the study area is drainage facility. Drainage is very important in road designs. Where it is not available, flooding becomes a likely challenge. In the area lying below 15 meters to the rivers, 29.1% responded that the area had challenge. In the area lying 15-30 meters the situation was critical as only 11.6% perceived that there was drainage, while in the area lying 30-45 meters, 49.55 of respondents claimed that there was no drainage (See plate 1). It is therefore evident that area lying below 15 meters from the rivers and 15-30 meters might be experiencing incessant flooding incidence during raining season due to inadequate drainage system.

Drainage Channel in the third strata

Recreational facilities include the formal: football pitch, basketball court, golf course etc and informal such as relaxation centres, gyms etc. The availability of recreational facility in areas lying below 15 meters and 15-30 meters is low, as only 8.5% and 2.3% respectively were aware of its existence, while 38.2% claimed knowledge of its availability in area lying 30-45 metres from the rivers. Similarity, availability of pipe borne water in the study area is poor. Finding showed that none of the respondents was aware of its availability. This implies that respondents relied on other sources of water supply such as well water, and borehole among others. However, it is likely that available facilities highlighted may not be adequate in meeting the need of the residents of the flood-prone area of Ibadan. This uncertainty would be the focus in the next sub-heading.

4.4 Infrastructural Adequacy in Flood-Prone area in Ibadan Region

Many times facilities may be available but inadequate. It is not the availability of facilities that enhance the quality of environment, but the residents' perception of their adequacy. In order to determine the level of adequacy attached to the facilities in the study area, respondents were asked to rate each facility identified in the questionnaire using 5 Likert Scale of very Adequate (VA), Adequate (A), just Adequate (JA) Not Adequate (NA), Not adequate at all (NAA). For ease of analysis, an index known As Facility Adequacy Index (FAI) was arrived at (the same process for HCI). The findings are as presented in Table 4.4.

From Table 4.4 the facilities with FAI above the mean for the study area (FAI=2.81) include; public primary school, private primary school, private secondary school, private hospital, market. Others area transport facilities, water supply through well, primary health care, public secondary school, and water supply through borehole. The facilities with FAI lower than the mean for the study area are, waste disposal, electricity supply, drainage system, general hospital, recreational space, water supply through public tap. As shown in Table 4.3, apart from the public primary school, the other most adequate facilities were facilities provided by private individuals not the government. These facilities are; private primary school, private secondary school and private hospitals. The public facilities that were supposed to add quality to the environment had negative deviation; they were the inadequate ones.

Public primary school turned out as the most adequate facility in the study area with an FAI of 3.53, higher than the mean FAI^s of 2.81. in area lying below 15 meters to the rivers, it was the most adequate facility and it also ranked 1st in availability. The same situation obtained for the areas lying 15-30 meters. However, in the areas lying 30-45 meters, public primary school turned out to be one of the least adequate facilities, with FAI of 1.87 lower than the mean FAI^s and low availability as well. Private primary schools were the next most adequate facility in the study area with an FAI of 3.49: higher than the average FAI for the study areas. The adequacy of private primary school was ranked the fourth most adequate facility in area lying below 15 metres: its FAI was 3.52, which is higher than the average FAI of 2.99 for areas lying below 15 meters from the rivers. It was ranked the fourth most adequate facility in areas lying 15-30 meters as well, with FAI of 3.64 that is higher than the average FAI of 2.88 for area lying 15-45 meters from the rivers. In areas lying 30-45 meters, it ranked the fifth most adequate facility with FAI of 3.20 also higher than the average FAI of 2.66 for areas lying between 30-45 meters.

Table 4.5: Infrastructural Adequacy in the study Area

Infrastructure	below 15m		between 15-30m		30.1-45m		Ibadan region	
	FAI	MD	FAI	MD	FAI	MD	FAI	MD
Public primary school	3.88	0.89	4.3	1.42	1.87	0.73	3.53	0.72
Private primary school	3.52	0.53	3.64	0.76	3.2	0.6	3.49	0.68
Private secondary school	3.66	0.67	3.55	0.67	3.07	0.47	3.45	0.64
Sanitary condition is poor	3.5	0.51	3.95	1.07	3.14	0.54	3.44	0.63
Private hospital	3.33	0.34	3.29	0.41	3.87	1.27	3.42	0.61
Market	3.36	0.37	3.51	0.63	3.31	0.71	3.41	0.6
Transport facilities	3.13	-0.04	3.65	0.77	2.41	-0.19	3.16	0.35
Water supply through well	3.76	0.72	3.29	0.41	2.13	-0.47	3.12	0.31
Primary health care	3.46	0.47	3.17	0.29	1.33	-1.27	3.1	0.29
Public secondary school	3.09	0.1	2.42	-0.46	3.45	0.85	2.84	0.01
Water supply borehole	1.85	-1.14	2.83	-0.05	2.95	0.35	2.58	0.00
Waste disposal	2.36	-0.63	2.00	-0.88	4.43	1.83	2.57	0.23
Supply of Electricity	2.41	0.58	2.06	-0.82	2.16	-0.44	2.11	0.07
Drainage system	2.91	0.08	2.06	-0.82	1.28	-1.32	1.93	0.88
General hospital	2.16	-0.81	0.98	-0.88	1.77	-0.23	1.41	0.64
Recreational Space	1.46	-0.24	1.78	-0.08	1.68	-0.32	1.84	-0.21
Water supply through Tap	2.05	-0.87	1.30	-0.56	1.58	-0.42	1.43	-0.62
		-0.35	1.60	-0.26	1.51	-0.49	1.68	-0.37
		0.59	1.29	-0.57	1.36	-0.64	1.45	-0.60
		-0.48	1.01	-0.85	1.30	-0.7	1.37	-0.68
Mean aggregate	2.99		2.88		2.60		2.81	

Note: i. Infrastructure available within 45 metres setback to the river
 ii. Available Infrastructure outside the flood-prone area but within the local government
 iii. Infrastructure outside their local government
 iv. Infrastructure residents accessed in the flood-prone area of Ibadan region

Source: Author field compilation, 2025

The third most adequate facility in the study area is private secondary school. The FAI for this facility is 3.45 in areas lying below 15 meters from rivers. It had an FAI of 3.66 and was the third most adequate facilities, but ranked sixth in availability. In areas lying 15-30 meters, it had FAI of 3.5 and ranked the fifth in adequacy, but ranked first in availability. For areas lying between 30-45 meters, the FAI for private secondary was 3.07, it ranked the seventh most adequate facility and respondents ranked it the fifth available facility.

Private hospital is the fourth most adequate facility in the study area. It was ranked by respondents as the fifth most available facility in the study area and had a FAI of 3.44. In areas lying below 15 meters from rivers, the FAI for this facility was 3.50; respondents ranked it the fifth most adequate facility and seventh most available facility. In the areas lying 15-30 meters, it was ranked the second most adequate facility with FAI of 3.95, but its availability was low; as the eighth most available facility. In areas lying between 30-45 meters, this facility ranked the sixth most adequate facility with FAI of 3.14 and was also ranked the sixth most available facility by respondents.

The least adequate facilities in the study area include all public facilities; that is facilities that should be provided by the government. They are; waste disposal, electricity supply, drainage system, general hospital, recreational space and pipe borne water. All these had negative deviation about the mean. Their FAI in the study area were 2.58, 2.57, 2.11, 1.93, 1.64 and 1.14 respectively, their values were lower than the average FAI of the study area of 2.81. as shown in Table 4.5 all these facilities had negative deviation about the mean in the three strata too. It is clear that residents of the study area had to improvise to make a living in the area, as private individuals and not the government, mostly provided the adequate facilities. The average facility adequacy index (FAI) for Ibadan region is 2.81. While the FAI for the area situated 15 meters, 15-30 meters and 30-45 meters from the rivers are 2.99, 2.88 and 2.60 respectively (that is FAI=2.99, FAI=2.88 and FAI=2.60). The adequacy of the available facilities in the selected strata varies from one area to another. The result of the One Way Analysis of Variance suggest that this variation is not statistically significant ($F=0.5777$ and $P=0.466$).

5.1 Conclusion and Recommendation

The study has examined infrastructural perception of residents' quality of life in flood-prone area of Ibadan region. The study revealed that facilities such as water supply, restaurant, dispensary, drainage, electricity supply, waste disposal, and fire station, among others, were insufficiently available in the study area. The study concluded that infrastructure facilities in flood-prone area of Ibadan region are inadequate. Based on the findings of this study, it is significant to provide basic and adequate infrastructural facilities that are *sustainable* at all levels in sequence to enhance the residents' toward their quality of life in the study.

The need for quality housing is highly imperative and should be the concern of all. Low quality housing in flood prone community has negative implications and that should be avoided. It has shown that houses in the flood prone areas of Ibadan region can be categorized into different strata. However, buildings below (15m) to the river formed the first stratum; between (15.1-30.0m) to the river is the second stratum, while the third stratum consist of buildings within (30.1-45m) set-back to the river in the areas. Many houses in the first strata to the river are old and in bad shapes and people reside in these low quality houses which are quite injurious to human habitation.

The complex nature of physical, social and economic activities usually put much pressure on the infrastructural facilities and services which leads to the degradation of a housing environment. Low quality houses are synonymous with low income earners and poor people of the flood prone area. The poor cannot afford good quality houses hence they made do with what is available. Housing as a unit of environment has profound influence on the health, efficiency, social behavior, economic productivity and general wellbeing of the individual and the community. If the problem of infrastructures in the flood prone areas is adequately addressed, associated problems such as poverty, poor environmental quality, outbreak of diseases, and unemployment among others will be drastically reduced.

5.2 Recommendations

Based on findings of this study, a full scale urban renewal scheme is

recommended especially in the first strata to ensure high quality housing environment. This can be achieved through a comprehensive land use study to ascertain the factors responsible for the degradation of the housing environment in the area under study. The public and organized private sectors should establish small scale industries and institutions to create employment opportunities and quality education for residents of the study area to improve their financial status and social wellbeing. Water supply schemes should be embarked upon to help in reducing the menace of water borne diseases and to improve sanitation. There is also the need for improvement in power supply, rehabilitation and provision of access roads, open space and recreation, health care services among others.

Government should strive to increase production of local building materials and provide facilities for acquisition of small loans from community banks and local finance enterprises at low interest rates which will lead to the provision of quality housing in the study area. The private sector which is the largest producer of shelter should imbibe good maintenance culture for their property in order to increase property value and improve the aesthetic quality of the housing environment and general sanitation.

References

- Action Aid (2006): Climate Change, Urban flooding and the right soft of urban poor in African Cities: A report by action aid Nigeria, Retrieved October, 2006
- Adeaga, O. (2008): Flood hazard Mapping and the Risk Management in Parts of Lagos, M.Sc dissertation, Department of Geography, Faculty of Environmental Sciences, University of Lagos, Akoka, Lagos, Nigeria
- Adelye, A., and Rustum, R. (2017): Flooding and Influence of Urban Planning in Lagos Nigeria. J. Urban Design and Planning (ICE), Pp: 164.
- Aderogba, K.A (2011): Substantive causes and effects of floods in South Western Nigeria and Sustainable development of the Cities and Towns. Journal of Emerging Trend
- Ayeni, M.O.A. (1994): The metropolitan area of Ibadan: its growth and structure. In Filani, M.O et al. (eds) Ibadan Region Chapter7 Page 72-84. Rex Charles Publishers, Nigeria.

- Bariweni, P.A, Tawari, C.C and abowei, J.F.N. (2012): Some Environmental effects of flooding in the Niger Delta Region of Nigeria, *International Journal*
- Christopher, R. (1997): *Geosystems: An Introduction to Physical Geography*. London: Prentice – Hall. (Third Edition). Pp. 423
- Douglas, I., Alam, K., Maghenda, M., McDonnell, McLean, and Campbell (2008): Unjust waters: Climate Change, Flooding and the Urban Poor in Africa, *Environ. Urban*, 20 (1), 187
- Faniran, G. B. (2012): Residents' perception of the monthly environmental sanitation exercise in Ibadan metropolis, Nigeria. M.Sc Dissertation, submitted to the Department of Urban and Regional Planning, Obafemi Awolowo University, Ile-Ife. Nigeria.
- Kamp, R. And Rabier J.R(2003): Aspiration adapt to situations but why are the Belgians so much Happier than the French? Survey Research Centre, University of Michigan, ann Arbor, Pp 13-31
- Kasalkhen, M. and May, J. (2012): *A study on Poverty, Vulnerability and the Impact of Management: A guide for South Asia: Sri Lanka*.
- Lai, H. (2009): *Design for Social Sustainability Community well-being* <http://www.Futurecommunities.net/SocialDesign>
- Lutz, W., Sanderson, W, and Scherbov, S. (2008): The Coming Acceleration of Global Population Ageing, *Nature*. 451, 716–719, doi: 10.1038/nature06516.
- Mabogunje, A.L (1962): *Yoruba Towns*, University of Ibadan press, Ibadan, Nigeria.
- Micheal, A. And Oyewale, O.(2013): Evaluation of the causes and effects of flood in Apete, Ido local Government Area, Oyo, State, Nigeria. *Journal of Civil and Environmental Research* Vol.3 No 7, 2013
- National Emergency Management Agency, NEMA (2012): *Annual report on Flood*, Official gazette, Abuja
- Nchito, W. (2007): Flood Risk in Unplanned Settlements in Lusaka, *Environ. Urban*.,19 (2), 539
- Nigeria Metrological Agency Niment (2011): *Official gazette o Rainfall data of Onitsha Station. Anambra State*
- Ozo, M. (1998): Environmental Planning and management of Urban flood Interface: Perspective on an Emerging Field, *Environment and Urbanization* (15) Pp 135-148.
- Pilgrim, D.H and Cordery, F.S (1993): *Flood Runoff in D.R madmen handbook of hydrology first Edition* New York: McGrow-Hill Int. Page 91-94.

- Popoola A.S (2019): Residents' Quality of Life in Flood-Prone Area of Ibadan Nigeria, Ph.D Published thesis Submitted to Urban and Regional Planning Department, Hezekiah Oluwasanmi Library, Obafemi Awolowo University, Ile-Ife, Nigeria.
- Popoola A.S. and Solomon D.Z (2023): Perception of Residents' Socio-Economic on Quality of Housing Environment in Flood-Prone Area of Ibadan, Nigeria, *Journal of Nigeria Institute of Town Planning Vol. 2 No 2 2024*
- Prakash, G. (2005): Rapid Changing Dynamics of Urbanization in China: Escalating Regional inequalities and Urban Management problems, *Journal of Sustainable Development*, Vol. 3(2).
- Stephen A.G.(2009):The Relationship between Environmental Quality Level and Housing sale prices in Istanbul Metropolitan area. *ITU A-Z 6(11): 60-70*
- Stephen, A. (2011): *River Systems and Causes of Flooding: Tulane University, EENS 2040.*
- Taiwo (2008): *Flood Sacks 500 in Babura. Published by Thisday Nigeria, Vol.13 No.4867 pp.18*
- United Nation Habitat,(2017): *State of the world cities 2016/2017, Earth scan international Review of social Science and Humanities, Vol. 2 No 1 (20015) Pp 176- 185*
- Wahab, B. (2011): *Ibadan: A rapidly growing city in need of a master plan. Paper read at the Architects Congress/Annual general Meeting organized by the Nigerian Institute of Architects, Oyo State Chapter, held at Penrose Event Centre, Obafemi Awolowo Avenue, Old Bodija Estate, and Ibadan July 7th*
- Wahab, B. (2016): *Town planning and entrepreneurship nexus, Paper Presented at the 2nd Leg of Mandatory Continuing Professional Planning Education Programme held at City Global Hotels, Oweri by 28th and 29th September, 2016, PP 23-42*
- Welch, H., Symons, P. and Narver, D. (1977): *Some Effects of Potato Farming and Forest Clear Cutting on New Brunswick Streams, Fisheries and Marine Service. Environ. Can. Technical Report No. 745, St. Andrew's New Brunswick*
- Wright, T. (2011): *Waterlogged: Pakistani Children push a motorbike through flooded streets after rain in Lahorerin. The Wall Street Journal, London*

Illiberal Democracy and Coups in West Africa: An Examination of Niger Republic

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Abstract

Recently, there has been a surge of military coups in West Africa. This trend indicates a region increasingly marked by insecurity and undemocratic practices. The pattern points to alarming political instability and the decline of democratic governance in the sub-region. The resurgence of military rule may be linked to a failure of leadership in West Africa to meet the people's aspirations and deliver the benefits of democracy, such as good governance. Focusing specifically on the coups in Niger Republic, this study examines how illiberal democracy has contributed to the resurgence of military coups in West Africa. It utilises qualitative desk research, collecting and analysing existing data from published papers, newspaper articles, and online sources. The framework for this study is based on Political Development Theory. Findings reveal that the rise of an illiberal democratic culture and practices in West Africa, particularly in Niger Republic, is connected to military involvement in politics. The study concludes that addressing the political crisis requires cooperation between the country, regional bodies, and civil society organisations, with a commitment to promoting democratic principles and values.

Keywords: Coup D'etat, Illiberal Democracy, Political Development, Niger, Regional Stability

1. Introduction

The resurgence of military coup d'état in Africa, particularly in West Africa, has attained an alarming level, evidenced by the increasing number of military takeovers across the sub-region. This trend underscores a troubling pattern of instability and democratic regression in many West African countries and challenges the sustainability of liberal democracy in the sub-region. "Chilaka & Peter (2022) linked the resurgence of coups in the region to the stagnation and inability of democracy to take root and flourish in West Africa. This is evident, according to them, in the numerous instances of poor governance indices across the region, ranging from corruption and the absence of genuinely free, fair, and credible elections to the exacerbation of security crises, among other challenges. This resurgence, according to Azubuike et al. (2024), raises concerns due to the potential for a contagion effect that aids spreading rapidly like wildfire. Omotola (2011) argued that unconstitutional changes of government pose a significant threat to democratic stability and consolidation in Africa, drawing on empirical data from across the continent. It suggests that the failure to consolidate democracy can lead to such unconstitutional changes. Omotola (2011) further stressed that the primary element of liberal democracy is ensuring the constitutional rise to power through regular, participatory, competitive, and legitimate elections. Azubuike et al. (2024) added that the constitutional and political crises in several African states have been triggered by factors such as poor governance, mismanagement, socio-economic and political instability, and corruption. These crises have provided opportunities for military interventions, marking a notable trend across the continent and most especially the West Africa sub-region.

Recently, some countries in Africa, particularly in the West African sub-region, have experienced military coups. This resurgence of coup d'état in West Africa jeopardises the efforts and progress towards the consolidation of democracy in the region. Nearly all countries in West Africa were taken over by the military shortly after the countries in the region gained independence from colonial rule (Ajayi & Olu-Adeyemi, 2015a). During this period, military rule became popular in the region due to its contagion effect. This trend according to Ajayi & Olu-Adeyemi (2015) persisted until the 1990s when the global wave of democratization

encouraged a transition to democratic governance in most West African countries and triggered the returned of the uniformed men to the barracks. This situation prevailed until recently when the status quo was challenged once again by resurgence of military interruption of democratic governance. The military leaving the barracks to interrupt democratic governance brings to memory the region's experiences of military rule in the 1960s before the 2000s. In West Africa, Chad, Mali, Guinea, Burkina Faso, Niger, and Gabon have all experienced military coups and are under the control of military government "" (Adeyeye & Adeyeye, 2024). The recurrence of military interventions in these nations underscores the challenges they face in achieving and maintaining stable democratic governance.

The military's intervention in Niger's political affairs has led to periods of authoritarian rule, suspension of democratic processes, and instability. The Head of the Presidential Guard, General Abdourahamane Tchiani, on the 26th of July 2023, seized power from the democratically elected president, Mohamed Bazoum, and suspended the constitution. President Bazoum, along with his family, was placed under house arrest and reportedly lived under harsh conditions (Buchan & Tsagourias, 2023). Explanations for the coup varied among scholars and political observers of Niger politics. Meanwhile, military coups in Niger have been a recurring phenomenon in the country's political history. These coups have often been triggered by various factors such as dissatisfaction with the ruling government, allegations of corruption, economic instability, and perceived threats to national security. Buchan, & Tsagourias, (2023) observed that some suggested that the military was disgruntled after being side-lined by the president. Others suggested that it was because of growing concerns over poverty and security in Niger. """"Durotoye (2016) observed that the resurgence of military coups in West Africa has been fuelled by the emergence and growth of hybrid authoritarian regimes and the prevalence of sham elections.

Like Niger, the leader of the Guinea military junta, Colonel Mamady Doumbouya, justified the coup by claiming that poverty, insecurity and widespread corruption compelled his special forces to interrupt the democratic governance, thereby, rescuing the countries from ruins

(Buchan & Tsagourias, 2023). Against this background, this paper examines illiberal democracy and the resurgence of military coup in West Africa, particularly Niger Republic.

2. Conceptual Clarifications

Democracy is often subjected to varying interpretations, leading to definitional pluralism. While it is easy to identify democratic practices, defining democracy itself poses challenges (Enemu, 1999). Scholars like Huntington (1991) emphasise the electoral process, describing democracy as a system where the majority votes in competitive elections to elect leaders. However, democracy extends beyond elections to include broader governance principles such as citizen participation in public decision-making, as well as political equality and the rule of law (Aituaje, 2010). Furthermore, Ochefu (2007) emphasises that the effectiveness of democracy relies on free and fair political competition, adherence to the rule of law, and the protection of public freedoms. These elements, combined with good governance and institutional transparency, ensure the sustainability of democratic systems.

On the other hand, illiberal democracy refers to regimes that conduct elections but lack the fundamental tenets of liberal democracy, such as individual rights and the rule of law. Despite appearing democratic on the surface, these regimes manipulate democratic processes for political gain. Scholars like Zakaria (1997), Davenport (1996), and Gratton and Lee (2024) describe illiberal democracies as systems where elections are held but are neither free nor fair. Power often remains concentrated in the hands of elites or a single leader, undermining genuine democratic values (Plecka, 2022). Zakaria's concept of illiberal democracy highlights the distinction between political liberties and civil liberties, stressing that many countries holding elections lack constitutional liberalism, thereby eroding democratic institutions (Moller, 2008). This creates a system where democratic procedures coexist with authoritarian practices, posing a threat to the foundations of democracy.

On the hand, a coup d'état is the sudden and often violent overthrow of a government, traditionally seen as a severe threat to democracy. Marsteintredet & Malamud (2020) describe military coups as attempts to

remove heads of state, usually resulting in military rule. Coups differ from revolutions in that they aim to replace top leadership without altering the broader social and political order. These takeovers often exploit existing political instability, and, unlike revolutions, they do not seek to change societal structures but rather to seize control of state institutions (Basin, 1987). Britannica (2024) notes that while revolutions bring about significant changes, coups typically replace leaders while leaving core political systems intact, thus posing a direct challenge to democratic governance without offering long-term solutions to systemic issues.

Even though democracy, at least in theory, spreads the concepts of popular sovereignty, political equality, and individual rights and freedoms, illiberal democracy is a challenge to these principles. Elections are held, but they are being manipulated. The essence of the matter is that the weakening of democratic institutions initially undermines the form of government in which the concepts of popular sovereignty, political equality, and individual rights and liberties are laid in the political culture. As a result, illiberal democratic culture may lead to and legitimise coups d'état. The weakening of the established democratic norms and institutions contributes to the strengthening of grounds for the occurrence of coup d'état as it becomes easier for displeased factions to take advantage of social instability, and overthrowing the government is easier under the guise of protecting democracy or restoring order. Coup d'états are considered a direct threat to democracy and illiberal democracy at the same time. Although coups are portrayed as "redeeming actions" by the perpetrators — an essential means of restoring order or preserving democratic values — they generally further weaken democratic processes and empower military rulers or authoritarian governments. In addition, coups may aggravate the root causes contributing to the rise of illiberal democracy — corruption, social disparities, and political invasiveness — creating a destructive, self-sustained circle of instability and autocracy. As a result, this relationship between democracy, illiberal democracy, and a coup indicates the fragile nature of democratic governments and the need for policies to protect democratic values and institutions to avoid the recurrence of despotic autocracies.

3. Theoretical Framework

The Political Development Theory was employed to provide credence to the study. The theory can be traced to the writings of Samuel Huntington (1965), Lucian Pye (1966), and Almond and Powell (1966) (Madubuegwu et al., 2021). The theory of political development elucidates the factors influencing military interventions in global politics and subsequent military rule. It encompasses strong civilian governance, democratic values, and robust political institutions, akin to those in advanced societies like the United States and the United Kingdom. The major assumption of this theory is that where political development indicators such as fundamental human rights, the rule of law, robust democratic values, and the prevalence of justice thrive, military intervention is less likely to occur. On the other hand, breaches in these indicators increase the likelihood of military intervention and rule. The theory recommends building strong political institutions to counter this trend and combat underdevelopment in developing or less developed countries (Edeh & Ugwueze, 2014). The absence of key political development indicators can cause a legitimacy crisis for the government. When these indicators are lacking, it undermines the trust and confidence of the populace in the government's ability to govern effectively and fairly. This erosion of legitimacy can lead to unrest, protests, or even rebellion against the government (Adedire & Olanrewaju, 2021).

However, societies with robust political development typically uphold fundamental human rights, the rule of law, equity, and justice. These attributes contribute to a stable and functioning democratic system where citizens' rights are respected, and governance is conducted transparently and accountably. In this case, military intervention becomes challenging because there is a strong foundation of legitimacy and public support for civilian rule. Weak political institutions and a low political culture prevalent in many developing countries serve as breeding grounds for military intervention in politics. When institutions lack the capacity to effectively govern and uphold democratic principles, there is a greater likelihood of military intervention to fill the perceived governance vacuum or address political instability. In West Africa, achieving, consolidating, and sustaining democratic governance is often impeded by weak governmental institutions. These institutions may struggle to maintain

stability, enforce the rule of law, and ensure equitable distribution of resources and opportunities. As a result, West African countries frequently grapple with challenges such as corruption, political repression, stifling of the press and dictatorship, which can create a cosy accommodation for military intervention in politics (Adedire & Olanrewaju, 2021).

4. History of Military Coups in West Africa

Military coups have played a significant role in West African politics since the mid-20th century. Many West African nations gained independence from European colonial powers in the 1950s and 1960s. The transition from colonial rule to self-governance was often turbulent, marked by power struggles and instability. From 1945 to 1985, over 350 coups were attempted globally (Acho & Tacham, 2023), with West Africa witnessing some of the earliest ones, such as the 1963 overthrow of President Sylvanus Olympio in Togo. These coups, often fueled by factors like corruption, social inequalities, and ethnic tensions, persisted throughout the 1980s and 1990s. Notable examples include Yahya Jammeh's 1994 coup in Gambia and multiple power struggles in Liberia during its civil war (Acho & Tacham, 2023; Eldem, 2020). As highlighted by **Anifowose & Francis (2005)**, military takeovers often resulted from dissatisfaction with perceived ineffective civilian governments and were symptomatic of broader political and socioeconomic instability across the region.

In West Africa, from the period of independence to 2004, Patrick, (2006) documented a significant history of political instability marked by forty-four successful military-led coups, along with numerous failed attempts, coup plots, civil wars, and other forms of conflict, further cementing its reputation as one of the most coup-prone regions in the world. These coups often had long-lasting impacts, destabilising political systems, weakening institutions, and hindering economic development. Countries like Niger, Burkina Faso, and Mali have seen multiple coups in recent years, driven by issues like institutional fragility, political instability, corruption, and ethnic divisions (Acho & Tacham, 2023; Daniel, 2011). Recent examples include Mali's 2020 coup and Niger's 2023 military intervention, which have raised concerns about the future of democracy and governance in the region (Felix, 2023). Despite the challenges,

regional organisations like ECOWAS continue to play a crucial role in attempting to restore constitutional order and stability (Okechukwu, 2023).

5. Factors Contributing to the Prevalence of Coups in West Africa

Several factors contribute to the prevalence of military coups in West Africa. A key motive for military interventions is the allegations of corruption, unnecessary interference with the courts and legislations, sit-tight syndrome tendencies as a result of several leaders attempting to abolish and succeeding in abolishing presidential term limits. Meanwhile, different countries have varying vulnerabilities to coups based on how well plotters can organise and execute their plans. Leaders often try to prevent coups by improving conditions for their armed forces, such as increasing resources or pay. These efforts, known as coup-proofing, are widely discussed but have not been thoroughly tested " (Powell, 2012). Political instability is another major cause, as multiple regime changes lead to a lack of trust in democratic institutions. Protests against constitutional manipulations, such as Blaise Compaoré's attempt to extend his term in Burkina Faso, often result in military coups. Ethnic tensions, foreign interventions, and public frustration with corruption further fuel these takeovers – (Adebanwi & Obadare, 2011; Ajala, 2023). Economic factors also play a significant role in driving coups. Poverty, unemployment, and inequality are common in West Africa, exacerbated by corruption and poor management. In countries like Mali and Niger, poor institutional frameworks and marginalization of ethnic groups lead to public unrest, which often precedes military intervention (Boas & Hagberg, 2016). Additionally, neocolonialism continues to impact the region, sustaining poverty and underdevelopment, which create fertile conditions for military takeovers – (Oyebade, 2007; Sesay, 2015). In countries like Mali, weakened democratic institutions and high levels of corruption have further eroded public trust, leading to frequent protests and military interventions (Adetuyi, 2021).

6. Democracy and Military Intervention in Niger Republic Politics

Following its independence from France in 1960, Niger became a polity with prospects of statehood growth towards democratic rule. Niger held

several overthrows of governments through elections based on multi-party democratic governance principles where people participated in the election of their leaders. During the same period, however, Niger's political environment, precisely its instability, became eminent, as there were multiple frequent government changes, coups, and military involvement in leadership transition and political and executive governance. On April 14, 1974, the nation faced a major political disruption and leadership change when the military led by Lieutenant Colonel Seyni Kountché staged a coup and ousted the then-ruling government for 14 years since independence. It can be seen that this event made Niger the twenty-fifth African nation and the eighth of the former French colonies under military (Higgott & Fuglestad, 1975). As a result, this event started a long series of military interventions in Nigerien politics. Ultimately, the 1974 coup in Niger was triggered by intermingling forces of corruption, privilege monopolization, generational conflicts, recession, unexpected gasoline price raises, and dramatic droughts. Public sector workers and students led unprecedented protests against the regime, met with repression by the government and military. The coup was also fueled by dissatisfaction with the president's 15-year reign, marked by injustices, corruption, and indifference towards the people. Additionally, negotiations with the French government for a significant increase in the price of uranium, a key national resource, heightened tensions and provided additional impetus for the coup (Le Monde, 1974; van Walraven, 2014).

Since the 1974 coup, Niger has faced several instances of military intervention. After 1991, Niger witnessed the establishment of a multi-party political system, leading to the emergence of several political parties (Gambo, 2021). In 1996, army officers ousted President Mahamane Ousmane and Prime Minister Hama Amadou, citing a political deadlock threatening economic reforms and drawing criticism from former colonial power France " (Al Jazeera, 2023c). The demise of Kountché in 1987 prompted the election of General Ali Saibou by the Supreme Military Council as his successor. During his tenure, Saibou employed various measures to address criticism and opposition, aiming to strengthen his hold on power (von & Schritt, 2018). Mahamane Ousmane, through the Social Democratic Convention, assumed the presidency following Niger's

inaugural multiparty presidential elections held in 1993 '(Munro, 2024). However, Ousmane was ousted from office in the 1996 coup.

Lieutenant Colonel Ibrahim Bare Mainassara assumed leadership, emphasising that the coup aimed to facilitate a fresh start rather than abolish multiparty democracy. Mainassara's tenure ended abruptly in 1999 when dissident soldiers ambushed and killed him at Niamey airport, leading to another coup. Daouda Malam Wanke, commander of the presidential guard, assumed power in 1999, pledging a return to civilian rule by 2000. However, political instability persisted. In 2010, the Supreme Council for the Restoration of Democracy (CSDR), led by General Salou Djibo, seized control, suspending the constitution and dissolving state bodies. The military justified their actions as necessary to prevent the manipulation of the constitution by President Mamadou Tandja, who dissolved parliament and extended his term beyond a second term since 1999 when the military returned power to civilian administration "(Al Jazeera, 2023c). Ajayi & Olu-Adeyemi (2015) added that Mamadou Tandja established a new Constitutional Court expressly to enable him to call a referendum to continue in office past 2009. As a result, he attempted to remove term limits and win a third term in power. Meanwhile, the military leaders who toppled Mamadou Tandja expressed their commitment to restoring democracy in the country and 2011, presidential elections were conducted after the completion of a one-year transition plan established by the Independent National Consultative Council "Ajayi & Olu-Adeyemi, 2015) (Al Jazeera, 2023; . As a result, Mahamadou Issoufou's National Party for Democracy and Socialism (PNDS) assumed control, marking a shift from the previous regime.

Issoufou ruled the country from 2011 to 2021. Going further, former Interior Minister Mohamed Bazoum was declared winner of the 2021 Niger's presidential election, marking the country's first democratic transition following its history of coups. However, the election outcome generated outrage and led to protests from supporters of the opposition candidate Mahamane Ousmane, who allege electoral irregularities. Meanwhile, Niger faces numerous challenges, including recurring droughts, widespread poverty and insecurity (BBC, 2021). In 2023, Niger experienced yet another session of instability when members of the

presidential guard, led by General Omar Tchiani, detained President Bazoum, prompting regional and international concern. The military declared the suspension of the constitutions, closure of borders, and imposition of a curfew, marking another chapter in Niger's history of political instability"(Al Jazeera, 2023c).

Despite periodic attempts to establish democratic governance, including the adoption of new constitutions and the holding of multi-party elections, Niger continued to grapple with political instability and military interference in its political affairs. Military coups in 1994, 1996, 1999, 2010 and 2023 further underscored the fragility of Niger's democratic institutions and the persistent influence of the military in its politics.

In July 2023, the coup planners capitalized on widespread opposition to the ruling party in Niger, which was accused of institutionalizing nepotism and corruption, despite military officers also benefiting from these practices. President Bazoum's efforts to restructure the presidential guard and internal power struggles within the security forces were believed to be the primary catalysts for the coup, according to many observers. General Tchiani received temporary reinforcement from the army chief of staff's backing post-coup, although challenges persisted. General Tchiani released an announcement concerning a three-year transition time before the reestablishment of the constitutional regime by the middle of August 19 (Bruno et al., 2023; Marc, 2023).

7. Factors that Contribute to Niger's Democracy Vulnerability to Military Coups

Several factors contribute to Niger's democracy being exposed to military coups. These factors include internal and external factors. First, widespread discontent with the ruling regime's party due to accusations of corruption and institutionalised nepotism contributed to the high coup cases. Additionally, Bazoum's attempts to reform the presidential guard and the power wrangles among the security forces officials were pointed out as the main cause of the coup in the country (Bruno et al., 2023; Marc, 2023).

Moreover, the historical precedents also expose a threat to Niger's

democracy concerning military interventions. On one hand, M. Tandja's willingness to maintain the office at all costs, exceeding the term limit-based constitutional order. Although the President conducted a number of critical democratic reforms, his desire to serve a third term represented a challenge to the previous legal agreements, undermining the overall public opinion of the democratic base. On the other hand, the 1974 coup-d'etat as evidence of the countries vulnerability to the military intervention was provoked by a range of national grievances including corruption, monopolization of the political and economic privileges, political instability, and economic hardship, exacerbated by the foreign factors and severe draughts (Le Monde, 1974; van Walraven, 2014).

Furthermore, various external pressures and geopolitical factors have also created preconditions for military intrusions in Niger's socio-political track. The negotiation with the French government for profitable contracts and advantageous agreements, including essential and crucial uranium price rises, had a short-term effect on raising tensions around coups. The soldiers' representation as the defenders of the nation's interests against exploitation and corruption from the outer world had mingled with their ambition for political power (Ajayi & Olu-Adeyemi, 2015a; Al Jazeera, 2023b). Insecurity is another factor of Niger vulnerability to military incursion into democratic politics. Nsaibia, (2023) corroborated this by highlighting several security challenges facing Niger across different regions to include:

- In the West, there's the Sahelian insurgency propelled by IS Sahel and the al-Qaeda-affiliated Jama'at Nusrat al-Islam wal-Muslimin (JNIM).
- The Southeastern Diffa region is affected by the insurgency of ISWAP and Boko Haram.
- The Central Tahoua region experiences a mix of IS Sahel militancy and banditry.
- Maradi, along the Southern border with Nigeria, deals with active organised bandit gangs.
- The Agadez region, rich in gold and smuggling routes, attracts various armed groups, including rebels, drug traffickers, and criminal gangs.

Under President Issoufou's tenure, which lasted from 2011 to 2021, Niger experienced significant challenges with security, particularly from groups like IS Sahel. The Nigerien security forces faced heavy losses during this period due to attacks orchestrated by IS Sahel militants. These attacks intensified, particularly in 2019 and 2020, resulting in significant casualties among both military personnel and civilians. The transition to President Bazoum in 2021 occurred amidst a backdrop of heightened conflict in Niger. The year 2021 saw a notable escalation in violence and conflict within the country. This increase in conflict coincided with President Bazoum taking office, marking a challenging period for the new administration as it grappled with security issues inherited from the previous government(Nsaibia, 2023).

Figure 2. Factors that contribute to the Vulnerability of Niger's Democracy to Military Coups



Source: Authors' compilation from different sources.

Summarily, the vulnerability of Niger's democracy to military coups stems from a complex interplay of governance crisis such as corruption, nepotism, historical grievances, economic hardships, sit-tight tight syndrome and external pressures.

1. The Rising Trend of Illiberal Democracy in West Africa and the Military Coup in Niger

The growing tendencies of illiberal democracy in West Africa have a direct relationship with the resurgence of military coups in countries like Niger. Illiberal democracy, characterised by the erosion of political rights and civil liberties despite holding regular elections, has taken root in many West African countries (Moller, 2008). Governments in these systems often manipulate democratic norms to remain in power, employing tactics like voter suppression, corruption, and interference with electoral processes. These authoritarian practices, combined with governance failures, have led to widespread dissatisfaction, particularly when leaders refuse to address crucial issues like security, economic hardship, and corruption. In Niger, for example, the military ousted President Mohamed Bazoum in 2023, citing the government's failure to manage security threats and its involvement in corrupt practices (Felix, 2023). Such actions reflect a pattern seen across the region, where illiberal governance creates instability that ultimately leads to military intervention.

The interplay between illiberal democracy and military coups becomes evident as the deterioration of democratic values further destabilizes already fragile states. Leaders in illiberal democracies often resort to autocratic measures to suppress opposition and maintain power, weakening democratic institutions and contributing to social unrest. Military coups in countries like Mali, Burkina Faso, and Guinea were justified by coup leaders as necessary responses to corruption, economic mismanagement, and security failures (Acho & Tacham, 2023). However, while military interventions may provide a temporary solution to these issues, they often exacerbate political instability and hinder the establishment of sustainable democratic governance. As these regimes face ongoing governance and security challenges, they present a complex dilemma between maintaining stability and upholding democratic values.

2. The Impact of Military Intervention on Democratic Consolidation and Regional Stability in West Africa

Military intervention in Niger Republic and its broader implications for regional stability in West Africa have significant impacts on democratic consolidation and governance. Such interventions disrupt the democratic process by overthrowing elected governments, undermining the rule of law and constitutional order. This creates a cycle of political instability, hindering the establishment of stable democratic institutions and eroding public trust in democratic governance. Moreover, military coups often lead to authoritarian rule, curtailing civil liberties, and suppressing political opposition, further entrenching autocratic tendencies and impeding the development of a vibrant democratic culture. Frank & Ukpere (2012) added that the erosion of governance norms often leads to the emergence of a militarised political culture, characterised by authoritarian behaviours and a disregard for democratic principles. This shift in civic culture resulted in a focus on order through combat rather than dialogue, along with a pattern of disregarding court orders and violating human rights.

Regionally, military interventions in Niger may destabilize the entire region, creating security concerns and threatening regional peace and stability. When one country is undergoing political instability, the unrest tends to flow into the neighbouring nation, making the issue of conflict dynamics even more complex. Military takeovers disrupt the efforts of regional coordination, such as economic interdependence and security cooperation. As a result, the region suffers tremendous economic hardship and increased points of insecurity. The loss of democratic rule and the rule of law due to military takeovers also incapacitates regional institutions in their ability to handle regionally shared problems such as terrorism, organised crime, and cross-border conflicts.

Furthermore, military intervention in Niger Republic pose serious threat to democratic consolidation and governance in the country and West Africa causing political instability, one of the greatest challenge to regional cooperation and can trigger contagion military takeovers (Al Jazeera, 2023a).

3. Conclusion and Recommendations

Conclusively, the article explores the issues of illiberal democracy and the incident of military coups in the Niger Republic. This incident involved the suspension of the constitution and the possession of political power by the military led by General Abdourahamane Tchiani, also known as the Head of the Presidential Guard. The main justification for the military intervention is the dissatisfaction with the democratic government. The other justifications were related to economic instability and concerns with national security. The study pointed out that factors such as the manipulation of electoral processes, which include but not limited to lack of free and fair elections, voter intimidation, ballot snatching, and suppression of opposition, creates a fertile ground for military coups, and this threatens the stability of democratic governance in Niger and across the sub-region.

However, the article concludes that individual national governments, sub-regional organisations, and the international community also need to promote democratic principles and policies that strengthen democratic institutions and ensure non-violent transitions of leadership. Additionally, all involved parties should foster regional collaboration and communication in a context that addresses and resolves the underlying factors contributing to political instability and insecurity in West Africa, emphasising that democratic governance is a vital tool for achieving sustainable economic growth and a peaceful nation. Democratic governance not only guarantees political freedom but also supports economic development and sustainability. To achieve this, democratization advocates in Niger must develop new strategies for supporting and solidifying public support for democracy. This includes engaging with the public, disseminating democratic messages, and addressing challenges or concerns that may erode public trust in democratic governance. Cultivating and maintaining a democratic mindset among the Nigerian people and all West Africans is crucial for the long-term stability and progress of Niger.

References

- Acho, M. C., & Tacham, F. P. (2023). Examining the Reasons For and Effects of Military Coups in West Africa since 1990: The Obstacles to Democracy and Progress. *International Journal of Humanity and Social Sciences*, 1(2), 20–33. <https://doi.org/10.47941/ijhss.1536>
- Adebanwi, W., & Obadare, E. (2011). When the Military is in Charge: The Nigerian Experience. *African Affairs*, 110(439), 209–228.
- Adedire, S. A., & Olanrewaju, John. S. (2021). Military Intervention in Nigerian Politics. In R. Ajayi & J. Y. Fashagba (Eds.), *Nigerian Politics* (pp. 395–405). Springer International Publishing. https://doi.org/10.1007/978-3-030-50509-7_22
- Adetuyi, A. (2021). Military Coup and Its Effect on the Democratization Process in Mali and in the Region. *IPSS Policy Brief*, 15.
- Adeyeye, J. A., & Adeyeye, A. O. (2024). THE RESURGENCE OF MILITARY COUP D'ETATS IN AFRICA: A STEP FORWARD OR BACKWARD IN DEMOCRATIC GOVERNANCE? *UCC Law Journal*, 3(2), Article 2. <https://doi.org/10.47963/ucclj.v3i2.1362>
- Ajala, O. (2023). Understanding the Crisis of Democracy in West Africa and the Sahel. GCSP Publication. <https://www.gcsp.ch/publications/understanding-crisis-democracy-west-africa-and-sahel>
- Ajayi, A. I., & Olu-Adeyemi, L. (2015a). Resurgent Military Political Adventurism in West Africa: Implications for the Survival of Democracy. *African Research Review*, 9(2), Article 2. <https://doi.org/10.4314/afrrrev.v9i2.7>
- Ajayi, A. I., & Olu-Adeyemi, L. (2015b). Resurgent Military Political Adventurism in West Africa: Implications for the Survival of Democracy. *African Research Review*, 9(2), 91–103.
- Al Jazeera. (2023a). Niger, Mali, Burkina Faso announce withdrawal from ECOWAS. *Al Jazeera*. <https://www.aljazeera.com/news/2024/1/28/niger-mali-burkina-faso-announce-withdrawal-from-ecowas>
- Al Jazeera. (2023b). 'Security situation': Brief history of Sahel coupists' preferred reason. *Al Jazeera*. <https://www.aljazeera.com/news/2023/7/27/deteriorating-security-brief-history-of-sahel-coupists-favoured-reason>

- Al Jazeera. (2023c). Timeline: A history of coups in Niger. Al Jazeera. <https://www.aljazeera.com/news/2023/7/27/timeline-a-history-of-coups-in-niger>
- Anifowose, A., & Francis, E. (2005). *Elements of Politics*. Sam Iroanusi Publications.
- Azubuikwe, A. J., Matthew, O. I., & Vincent, N. F. (2024). Evaluating the Re-emergence of Coups and the Democratic Consolidation in West Africa: A Critical Analysis. *IAA JOURNAL OF SOCIAL SCIENCES*, 10 (1) , 52 – 64 . <https://doi.org/10.59298/IAAJSS/2024/101.52.64000>
- Basin, B. (1987). *The Blackwell Encyclopedia of Political Institutions*. Blackwell.
- BBC. (2021, February 23). Niger election: Mohamed Bazoum wins landmark vote amid protests. <https://www.bbc.com/news/world-africa-56175439>
- Boas, M., & Hagberg, S. (2016). Military coups in West Africa since the 1990s: Successes and failures. *African Affairs*, 115(459), 246–267
- Bruno, B., Eric, P., & Sammy, C. (2023). *The coup in Niger Consequences for EU policies in the Sahel*. EPRS | European Parliamentary Research Service.
- Buchan, R., & Tsagourias, N. (2023, August 21). *The Niger Coup and the Prospect of ECOWAS Military Intervention: An International Law Appraisal*. Lieber Institute West Point. <https://lieber.westpoint.edu/niger-coup-ecowas-military-intervention-international-law-appraisal/>
- Chilaka, F. C., & Peter, T. O. (2022). Resurgence of Military Coups in West Africa: Implications for ECOWAS. *African Journal of Social Sciences and Humanities Research*, 5(2), 52–64. <https://doi.org/10.52589/AJSSHR-W9F5VAXE>
- Daniel, D. Z. (2011). *The Impact of Military Coups D'etats on West Africa's Socio-Economic and Political Development [Thesis]*. U.S. Army Command and General Staff College.
- Davenport, C. (1996). 'Constitutional Promises' and Repressive Reality: A Cross-National Time Series Investigation of Why Political and Civil Liberties Are Suppressed. *Journal of Politics*, 58(3): 627-654.
- Durotoye, A. (2016). Resurgent Backsliding and Democracy in Africa. *International Journal of African and Asian Studies*, 18, 39–46.

- Edeh, H. C., & Ugwueze, M. I. (2014). Military and Politics: Understanding the Theoretical Underpinnings of Military Incursion in Third World Politics | Mediterranean Journal of Social Sciences. *Mediterranean Journal of Social Sciences*, 5(20). <https://doi.org/10.5901/mjss.2014.v5n20p2047>
- Eldem, T. (2020). *Military Coups and Military Disengagement*. Springer Nature Switzerland AG. https://doi.org/10.1007/978-3-319-31816-5_4171-1
- Felix, B. (2023, November 28). Recent coups in West and Central Africa. Reuters. <https://www.reuters.com/world/africa/recent-coups-west-central-africa-2023-11-28/>
- Frank, E. O., & Ukpere, W. I. (2012). The Impact of Military Rule on Democracy in Nigeria. *Journal of Social Sciences*, 33(3), 285–292. <https://doi.org/10.1080/09718923.2012.11893106>
- Gambo, E. A. (2021). MEDIA AND THE FEATURES OF DEMOCRACY IN NIGER REPUBLIC. Université de Zinder, République Du Niger. <https://revues.acaref.net/wp-content/uploads/sites/3/2021/12/Gambo-ELHADJI-ABDOU.pdf>
- Gratton, G. and Lee, B.E. (2024). Liberty, Security, and Accountability: The Rise and Fall of Illiberal Democracies, *The Review of Economic Studies*, 91(1), 340–371, <https://doi.org/10.1093/restud/rdad030>
- Higgott, R., & Fuglestad, F. (1975). The 1974 Coup d'État in Niger: Towards an Explanation. *The Journal of Modern African Studies*, 13(3), 383–398. <https://doi.org/10.1017/S0022278X00052332>
- Le Monde. (1974, April 16). Coup d'État au Niger Le président Diouri Hamani remplacé par le chef de l'armée. *Le Monde.fr*. https://www.lemonde.fr/archives/article/1974/04/16/coup-d-etat-au-niger-le-president-diouri-hamani-remplace-par-le-chef-de-l-armee_3089245_1819218.html
- Moller, J. (2008). A Critical Note on 'The Rise of Illiberal Democracy.' *Australian Journal of Political Science*. <https://doi.org/10.1080/10361140802267316>
- Madubuegwu, C. E., Okechukwu, G. P., & Dominic, O. E. (2021). Nigerian Political Development: Theoretical and Empirical Nexus. *NG-Journal of Social Development*, 10(1), 27–36. <https://doi.org/10.12816/0060687>

- Marc, O. (2023). Unpacking Niger's Coup and Regional Implications. Brussels International Centre.
- Marsteintredet, L., & Malamud, A. (2020). Coup with Adjectives: Conceptual Stretching or Innovation in Comparative Research? *Political Studies*, 68(4), 1014–1035. <https://doi.org/10.1177/0032321719888857>
- McGowan, P. J. (2006). Coups and Conflict in West Africa, 1955-2004: Part II, Empirical Findings. *Armed Forces & Society*, 32(2), 234–253. <https://doi.org/10.1177/0095327X05277886>
- Munro, A. (2024, March 11). Organisation Internationale de la Francophonie (OIF) | Britannica. <https://www.britannica.com/place/Niger/Independence-and-conflict>
- Nsaibia, H. (2023, August 3). Fact Sheet: Military Coup in Niger. ACLED. <https://acleddata.com/2023/08/03/fact-sheet-military-coup-in-niger/>
- Ochefu, Y. A. (2007). Democracy and Development in West Africa: How Integral is the Relationship? *Economic and Policy Review*, 13(1), Article 1.
- Okechukwu, C. O. (2023). The Re-Emergence of Military Coups in West Africa and the Efficacy of Nigerian-Led ECOWAS Interventions. *VUNA Journal of History and International Relations*, 7(2).
- Omotola, J. S. (n.d.). Unconstitutional changes of government in Africa. What Implications for Democratic Consolidation? Nordiska Afrikainstitutet.
- Oyebade, A. (2007). *The Curse of Berlin: Africa After the Cold War*. Boydell & Brewer.
- Plecka, D. (2022). Non-Liberal Democracy and the Possibilities of Its Consolidation. *Polish Political Science Yearbook*, 51(4), 25–34. <https://doi.org/10.15804/ppsy202260>
- Powell, J. (2012). Determinants of the Attempting and Outcome of Coups d'Etat. *Journal of Conflict Resolution*, 56, 1017–1040. <https://doi.org/10.1177/0022002712445732>
- Sesay, A. (2015). Neocolonialism in West Africa: The Case of Sierra Leone. *Journal of Pan African Studies*, 8(4), 147–163.
- van Walraven, K. (2014). « Opération Somme »: La French Connection et le coup d'État de Seyni Kountché au Niger en avril 1974 (A. Judell, Trans.). *Politique africaine*, 134(2), 133–154.

<https://doi.org/10.3917/polaf.134.0133>

von, vorgelegt, & Schritt, J. (2018). Petro-Democracy: Oil, Power and Politics in Niger. der Georg-August-Universität Göttingen.

<https://d-nb.info/1166950697/3>

Zakaria, F. (1997). The Rise of Illiberal Democracy. *Foreign Affairs*, 76: 22-43

**REFOCUSING THE REGULATORY ROLE OF
NATIONAL UNIVERSITIES COMMISSION (NUC):
PROSPECTS AND CHALLENGES**

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Introduction

The word 'University' according to Oloyede (2013), can be traced to the Latin word “universitas magistrorum et scholarium” which means “a community of teachers and scholars”. It has been defined in several ways across the ages but its contemporary perspective, it is seen as an institution of higher education and research which grants degrees in a variety of subjects; an establishment that provides both undergraduate and postgraduate education. Fielden and Lockwood (1973) viewed a university as a multi-purpose organization undertaking research and public services and its outputs are extremely difficult to measure in meaningful terms. The composition of its members also provides a difference; for example, most of the academic and administrative staff in effect possesses virtual life tenure whereas most of the student population is replaced every three to five years. Universities are permanent organizations; although there may be differences of opinion about the form in which it will continue to exist, the question of its survival does not trouble the minds of its members.

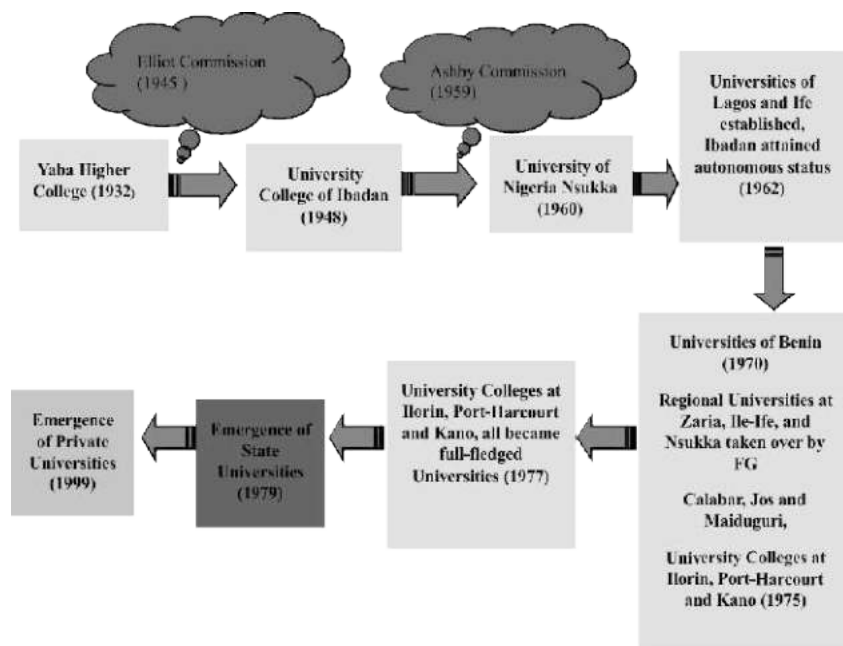
Oloyede (2013) clearly argued that a university is the epitome of scholarship, the pinnacle of research and the cornerstone of development. It is a place where civilizations are shaped, where the youth are prepared and the future of a country is determined. Okojie (2013) posits that:

You wouldn't have good Nigerian University System without the National Universities Commission. I would say, it is not only here, this is what obtains all over the world. If Central Bank was not there, what would happen to the banks? If NAFDAC was not there, what

would happen to pharmaceutical companies? If Standards Organisation of Nigeria wasn't there, what would happen? So regulation is what people need and there is no one more important than the education sector.

The National Universities Commission is constitutionally mandated to ensure the orderly development of Nigerian Universities for the production of quality graduates relevant to national development and global competition “through renewed thought and service”.

Development of the Nigerian University System (NUS).



Source: Okojie, 2013.

The diagram above depicts the development of the Nigerian University System. It evolved with Yaba Medical College/Yaba Higher College as its precursor. The University College, Ibadan commenced in January 1948 as a campus of the University of London. Before independence, Nigeria could

only boast of the University College, Ibadan which, as the name implies, was a college of the University of London. By 1960 however, the Eastern Region established the University of Nigeria, Nsukka which was closely followed by the University of Ife (now Obafemi Awolowo University, Ile-Ife) in the West and Ahmadu Bello University (ABU), Zaria in the Northern region. The Federal government also established the University of Lagos in the same year. These were the first-generation universities. Other universities were founded with the passage of time, to further underscore the significance of university education to the newly independent country. Thus, there has been considerable growth in the number of universities in Nigeria over the years as the country forged ahead in search of academic excellence necessary for her upliftment in the comity of nations. Thus, for more than two decades after independence, tertiary education was the exclusive preserve of the Federal Government.

Oguche (2011) asserts that, the above narrative was to change in 1979, following Nigeria's return to constitutional rule when education was put on the concurrent list. The state governments became free to establish universities. Starting with Rivers State, state governments established universities in succession such that by the end of the Second Republic, almost all the states had established own universities. As more states were created by the Federal government, more state universities were established.

Two decades later, beginning in 1999 under Nigeria's Fourth Republic, another phase began in university education proprietorship. This was the era of private sector participation in tertiary education. The growing number of private universities, its popularity with the Nigerian elite and the deluge of applications for license are strong indications that private universities are becoming popular in Nigeria. Also, in its drive to diversify and expand access to university education, the government upgraded the Nigerian Defence Academy (NDA), Kaduna to a degree awarding institution while the government restored the suspended National Open University to begin operation.

National Universities Commission (NUC) and its Regulatory Framework

The Eric Ashby Commission Report (1960) clearly states that, where there is more than one university in a country, the Government needs advice on the distribution of the limited funds available for higher education...the body which gives advice must have the confidence of the government on one hand and of the universities on the other. It must have the interests of both at heart to protect universities at all times from control from outside and to protect the public against needless duplication or wastage of scarce resources. On all matters relating to universities, both sides must be willing to listen to its advice with respect. It must be at the same time a counsellor and a watchdog". The report further states;

We are strongly of the opinion that a body should be set up in Nigeria without delay which will play a vital part in securing money for universities and distributing it to them, in coordinating (without interfering with) their activities and in providing cohesion for the whole system of higher education in Nigeria...

(Eric Ashby Commission Report, 1960)

The National Universities Commission (NUC) is a regulatory agency of the Federal Ministry of Education charged with the responsibility of coordinating the orderly development of the Nigerian University System. The NUC started as an advisory agency in the Cabinet Office in 1962. However, in 1974, it became a corporate body with statutory functions and powers by virtue of the National Universities Commission Act No. 1 of 1974. The extant enabling Act is now in Cap. N81 Laws of the Federation of Nigeria 2004. Under this Act, the Commission is charged, among others, with the responsibility of:

- i. advising the President and Governors of states, through the minister, on the creation of new universities and other degree-granting institutions in Nigeria;
- ii. recommendations for the establishment of new academic units in

- existing universities or the approval or disapproval of proposals to establish such academic units;
- iii. making such other investigations relating to higher education as the Commission may consider necessary in the national interest;
 - iv. making such other recommendations to the Federal and State Governments, relating to universities and other degree-awarding institutions as the Commission may consider to be in the national interest; and
 - v. carrying out such other activities as are conducive to the discharge of its functions under the Act. (Cap. N81 Laws of the Federation of Nigeria, 2004).

The vision of NUC as stated in the NUC Service Charter is to be a dynamic regulatory agency acting as a catalyst for positive change and innovation for the delivery of quality university education in Nigeria. The mission of NUC, as defined by the mandates governing its establishment is to ensure the orderly development of a well-coordinated and productive university system that will guarantee quality and relevant education for national development and global competitiveness.

The Federal Ministry of Education has authorized the NUC to achieve its mission statement through the delivery of the following mandates:

- i. Approval of courses and programmes;
- ii. Determination and maintenance of Minimum Academic Standards;
- iii. Monitoring of Universities;
- iv. Accreditation of Academic Programmes; and
- v. Provision of guidelines and processing of applications for the establishment of private universities.

In addition to the above, the power to set minimum standards for all universities and other institutions of higher learning in the federation and the accreditation of their degree programmes and other academic awards is vested in the National Universities Commission by virtue of Section 10(1) of the Education (National Minimum Standards and Establishment of Institutions) Act, Cap. E3, Laws of the Federation, 2004 (formerly

Section 10 of Act No. 16 of 1985). This Act vests in the NUC very wide and enormous powers with respect to the supervision and regulation of university education in Nigeria. Under Section 15, the NUC (which is the “appropriate authority” under Section 25 of the Act) is empowered to appoint inspectors to visit universities and report on the sufficiency or otherwise of the instruction given and the examinations as a result of which approved qualifications are attained and appropriate certificates are awarded and any other matter relating to the institutions or examinations as the NUC may direct. By Section 16 of the Act, the NUC may, following adverse report from inspectors to the effect that an institution has infringed the provisions of the Act or any subsidiary legislation, after due process, withdraw recognition for any academic or other programme thereafter issued by the institution.

Section 22 of the Education (National Minimum Standards and Establishment of Institutions) Act, Cap. E3, Laws of the Federation, 2004 (formerly Section 10 of Act No. 16 of 1985) empowers the NUC, after due process, to close down any institution established contrary to the provisions of Section 19, 20 or 21 of the Act. Section 24 of the Act also empowers the NUC to issue guidelines to universities on a number of issues relating to university education. These provisions are all-embracing and encompassing. Pursuant to these powers, in 1989, the NUC employed the services of various experts including members of the Professional Regulatory Bodies to prepare the Minimum Academic Standard (MAS) for the disciplines taught in Nigerian universities. This provided the basis for accreditation of all degree programmes including professional disciplines in the universities. In 2004, the NUC reviewed the Minimum Academic Standard (MAS) also using distinguished experts including members of the Professional Regulatory Bodies and this exercise culminated in the evolution of Benchmarks Minimum Academic Standard (BMAS) for the various disciplines in the Nigerian University System and these documents have been used to conduct subsequent accreditation exercises in the universities to date.

In 2005, the Commission introduced new academic curricula for all Nigerian Universities. The aim was to provide better skilled and entrepreneurial graduates suitable for not only the Nigerian labour

market but also for the global market. The new curricula are aimed at eradicating the outdated curricula and replaced them with modern ones that are relevant to the needs of the country. The NUC also made available, material resources to improve communication system. The Commission installed E-mail facilities in some campuses in Federal Universities in the country.

For better data collection and analysis, the National Universities Commission introduced the computer-based Management Information system (MIS) into the Nigerian University system. In 2013/2014, the Commission (NUC) established the carrying capacity of every programme to be offered in Nigerian Universities. Carrying capability is the minimum number of students that the human and material resources available in the university can support for quality delivery of education.

Furthermore, the NUC had been responsible for granting of licences for the establishment of private universities in Nigeria. As at 2023, there were about 263 universities in the country made of public and private universities, while more are yet to be established. The NUC had also made possible introduction of E-Learning technology in Nigeria universities. The main aims of E-Learning technology are: to improve the quality of learning; to provide learners with skills needed for their professional development; to widen access to university education; and to reduce cost and improve cost effectiveness of e-learning education. The Commission had also strengthened the National Open University by way of human and material resources to enable it enroll many students as projected in its blueprint.

Programme Resource Verification

The NUC has established a policy of programme verification in the Nigerian University System. It is expected that for any university that intends to establish a new degree programme or split an existing programme into to apply to the NUC for clearance and approval. Before the approval is granted by the NUC, the University must have completed a set of application forms including all detailed information about the viability of the proposed programme. The submission by the university is thoroughly scrutinized and the claims by the university verified during a

physical inspection conducted by a team of NUC personnel in addition to some invited experts in that particular discipline.

Accreditation of Programmes

Accreditation is a quality assurance procedure of assessing the performance of universities and their academic programmes respectively, to meet the requirements of the BMAS. However, the programme accreditation consists of undergraduate programme accreditation and postgraduate programme accreditation. For the successful completion of accreditation exercise, instruments were developed which include:

- ❖ Manual for Accreditation Procedures for Academic Programmes in Nigeria Universities;
- ❖ Self-Study Form (SSF);
- ❖ Programme Evaluation Form (PEF);
- ❖ Accreditation Panel Report Form (APRF); and
- ❖ Accreditation Re-visitation Form (ARF).

When a programme is due for accreditation, the following procedures are taken:

- The Commission gives at least a three-month notice to the concerned university;
- The Commission sends at the time of notice, a self-study form for completion and return to the Commission;
- The Commission constitutes ad-hoc accreditation panels consisting of subject matter expert academics from universities, representatives of statutory regulatory boards and councils, and professional councils in discipline arrears to be accredited. Each ad-hoc accreditation panel is meticulously constituted taking into consideration requisite academic specializations, a balanced geopolitical spread and ensuring that no panel member is assigned to evaluate a program in his or her university;
- The Commission fixes a date for the on-site visitation and communicates the date to the University concerned and to all members of the panel;

- The ad-hoc accreditation panel arrives at the institution in which the accreditation exercise is to be conducted;
- A copy of the completed Self-Study Form (SSF) and a Program Evaluation Form are given to the members upon arrival at the institution in which the accreditation exercise is to be carried out;
- The ad-hoc accreditation panel commences the evaluation of the program which have the following objectives:
 - To determine if the particular program, discipline or sub-discipline to be accredited in the University has in all respects met the approved minimum academic standards; and
 - To confirm or otherwise refute the statements of fact supplied by the University in the completed Self-Study Form.
- The panel holds discussions with the officials of the University; and
- The panel prepares Accreditation Panel Report Form (APRF) as a statement of fact or report for discussion with relevant officials of the University on the last day of the visit.

Criteria for Programm Evaluation

Programmes are evaluated and scored based on the following criteria:

Criteria	Maximum Score
▪ Staffing	32
▪ Academic Content	23
▪ Physical Facilities	25
▪ Library	12
▪ Funding	5
▪ Employer's Rating	3
Total	<u>100</u>

Each criterion has component indices with varying weightings as contained in the Manual of Accreditation Procedures for academic programmes in Nigerian Universities. The accreditation status for programmes are predetermined after a summary of scores awarded by each panel member entered into the Accreditation Panel Report Form which now becomes the ad-hoc accreditation panel's recommendation. The criteria for award of accreditation status for programmes is as follows:

- a. Full Accreditation Status – A total over-all score of 70% and above in addition to scoring at least 70% in each of the four-core areas of staffing, academic content, physical facilities and library.
- b. Interim Accreditation Status – An over-all total score of 60% or more but less than 70% OR an over-all total score of 70% and above but with a score of less than 70% in any of the four areas identified in (a) above.
- c. Denied Accreditation Status – An over-all total score of less than 60%.

Implications of Accreditation Status

- i. When an academic programme has been denied accreditation status, the Commission shall inform the Vice-Chancellor of the University concerned in writing, stating the reasons for assessing the programme at denied status and the steps to be taken to bring the programme up to the Minimum Academic Standard required for full accreditation status;
- ii. When this decision is communicated to the University, it shall cease to admit students into such programme with effect from the next admission exercise;
- iii. The Commission shall also inform the general public and such relevant bodies as the Joint Admissions and Matriculation Board, National Youth Service Corps, Civil Service Commission, Nigerian Employers Consultative Association, Nigerian Student Loans Board, National Directorate of Employment and the various Federal and State Scholarship Boards about the denied accreditation status of the programme; and
- iv. Programmes granted interim accreditation which fails to rectify the identified deficiencies within the stipulated maximum period of two academic sessions shall automatically convert to the status of denied accreditation at the end of the period (back-to-back accreditation).

Impact of Accreditation on the NUC

Accreditation has impacted on the NUC in the following ways:

- i. NUC accreditation is recognized both nationally and internationally;
- ii. The Commission has introduced the concept of external monitoring of its accreditation process to further lend credibility to the process;
- iii. The success recorded with undergraduate accreditation serves as an impetus for preparations toward the accreditation of postgraduate programmes; and
- iv. Due its effectiveness, NUC is involved in the training of staff of some regulatory agencies in West Africa.

Impact of Accreditation on Universities

Accreditation exercise often gives academic departments the opportunity of getting Universities to improve on the quantity and quality of equipment for teaching and research. Nevertheless, the Commission believes that with time, Nigerian Universities will imbibe the culture of self-assessment for continuous quality improvement, thus making internal quality assurance processes in universities complimentary to the external process conducted by the National Universities Commission.

Development of Core Curriculum and Minimum Academic Standards (CCMAS)

In keeping with its mandate of ensuring the orderly development of a well-coordinated university system that can guarantee quality and relevant education for national development and global competitiveness, the NUC commenced the journey of restructuring the BMAS in 2018, introducing in its place the Core Curriculum and Minimum Academic Standards (CCMAS) to reflect 21st Century realities and new disciplines and programmes in the Nigerian University System. The new curriculum is for 17 disciplines and 238 academic programmes. Furthermore, the NUC has continued to discharge its responsibilities to the Universities in accordance with its original mandate of quality assurance in respect of the establishment of private universities.

Guidelines for the Establishment of Private Universities

Consistent with the Federal Government's policy on quality and access to

university education, the Commission developed 14 basic steps/requirements for the Establishment of Private Universities. These include:

Step 1: Application, in writing, stating the intent for the establishment of the University- Interested applicants are expected to apply in writing to the NUC Executive Secretary, stating the intent for the establishment of the university. The declaration of intent should include, in brief, the name of the proposed University, the location, the mission and vision, the nature of the proposed university and its proposed focal niche in the current Nigerian University System, etc.

Step 2: Interview of Promoters to ascertain their Seriousness- This initial contact between applicants and officials of the Commission takes place to assess and ascertain the level of seriousness of the applicants. This is before applicants are allowed to collect application forms.

Step 3: Collection of Application Forms- Following due consideration of the application in writing and preliminary interview with the Commission's officials, individuals or corporate bodies seeking to establish a private university are expected to send a representative to come to the Commission with the prescribed payment to collect a set of ten (10) application forms in person. Upon collection of the forms, copies of guidelines and other requirements are also given for proper guidance. Other clarifications are sought and given as appropriate.

Step 4: Submission of Application Forms and Relevant Documents- The completed application forms are forwarded with a non-refundable processing fee in Bank Draft addressed to NUC along with one or more of the following documents, if ready:

- * Draft Academic Brief;
- * Draft Physical Masterplan;
- * Draft University Law;
- * Counterpart Deed of Assignment;
- * Certificate of Incorporation/Registration of Proprietors (accompanied with Articles and Memorandum of Association);
- * Deed of Assignment/Certificate of Occupancy;

- * Letter of Available Liquid Cash; and
- * Bank Guarantee of Funds to the tune of ₦200 Million from a reputable Bank.

It is usually advised that the last two documents should not be procured by the applicant until processing of the application has reached an advanced stage. Submission should also be at the instance of the Directorate of Establishment of Private Universities (DEPU).

Step 5: Interactive Meeting of DEPU with the proposed University- Normally, DEPU invites members of the Planning & Implementation Committee of the proposed university to NUC for an interactive meeting as a prelude to the first verification visit to its campus site. During the meeting, the process of documentation and other matters bordering on university governance are discussed and many grey areas are resolved. The meeting also affords promoters of the proposed university the opportunity to interact with the Executive Secretary/Chief Executive of NUC and his Management Team for words of advice and encouragement. Also, a seminar presentation is delivered to avail the prospective proprietors of the basic philosophy of universities and their societal roles.

Step 6: Completion of Submission of Outstanding relevant documents- Proprietors of private universities who had submitted part of the relevant documents, are expected to make full submissions at this stage. The relevant documents, include the draft Academic Briefs, draft Masterplan and the draft University Law.

Step 7: Intensive Review/Analysis of Documents by experts in Relevant NUC Departments- Following submission of the completed application forms and relevant documents, the documents are forwarded to the professional Departments for analysis after which their comments and observations on such documents are sent to the Committee for onward transmission to the proposed university. For instance, Academic Brief and Masterplan documents are forwarded to the Department of Academic Standards. Legal documents such as the University Law, Counterpart Deed of Assignment, Certificate of Incorporation/Registration and Deed of Assignment/Certificate of

Occupancy are usually forwarded to the Legal Unit of the Office of the Executive Secretary.

Step 8: First Verification Visit- DEPU undertakes a verification visit to the proposed university to review their documents with them on one-on-one basis and to assess the level of preparedness in terms of documentation. During this visit, inspection of physical facilities is also undertaken to ascertain their adequacy for the proposed Colleges for the first phase. In addition, courtesy calls are paid to government establishments that provide infrastructural facilities such as electricity, water and telecommunication including the traditional rulers and local government headquarters of the area where the proposed university is located. These visits are undertaken to solicit support of the host community for the proposed university and also let them know that a university is being proposed in that area. This visit is considered very important as it reveals whether the proprietor is committed to the project and is a prerequisite to the final verification visit.

Step 9: Revision of Documentation by Proprietors based on Report by DEPU of NUC- Following the first visit, the proposed university is expected to revise its documents and undertake the modifications of its facilities to reflect the prescriptions given during the visit. The revised documents are forwarded to NUC for assessment of compliance. If found that progress has been made in that direction, the second (final) verification visit is scheduled to the proposed university.

Step 10: Second Verification Visit- This is expected to be the final visit to the proposed university, depending on the level of compliance with the given prescriptions. As a result, the documents are reviewed along with the Planning & Implementation Committee with a view to perfecting them as to bring them to an acceptable level. The evidence of available liquid cash documents are inspected and analyzed by the financial expert on the Committee. The Bank Guarantee of Fund to the tune of ₦200 million will also be sighted along with other legal documents for eventual submission to NUC. Final inspection of physical facilities is also carried out to ascertain whether they are in consonance with the approved NUC norms.

Step 11: Security Screening of Proprietors and Members of the Board of Trustees- The purpose of screening the proprietor (Promoter) and members of Board of Trustees of the proposed universities is to enable the Government to ascertain the credibility of those who are sponsoring the university project and to ensure that they are not persons of questionable character.

Step 12: Approval by NUC Management- DEPU, on return to NUC from the final verification visit, writes a comprehensive report with scores to the NUC Management for its consideration and further necessary action.

Step 13: Approval By NUC Board- The NUC Management, upon receipt of DEPU's report on the proposed university, considers and makes appropriate recommendations to the University Development Committee (UDC) of the NUC Board for its consideration after which the latter submits the report to the Board for ratification. Thereafter, the Board forwards its recommendations to the Federal Government through the Minister of Education for its consideration and approval.

Step 14: Approval by Federal Executive Council -The Federal Executive Council considers the recommendations of the NUC Board and Security report on the proposed university's promoters. If approved, a three-year Provisional Licence is granted the proprietor. Only satisfactory performance during the probationary period will earn the proprietor a substantive license.

Review of Provisional License of Private Universities

In view of the growing numbers of private universities in Nigeria, the Commission has, over the years, put in place adequate mechanisms to ensure orderliness in the establishment and development of private universities. Having satisfied the 14 steps, the Commission issues each proprietor of the private universities a Provisional Licence for a probationary period of three (3) years. At the end of the probation period, the Commission through the Directorate of Inspection and Monitoring, conducts a monitoring exercise to determine whether the university should be granted any of the following:

- i. Full Operational Licence:**
This is granted if the University scores 60% and above, an indication that the University largely complied with the terms of its Provisional Licence.
- ii. Extension of Probationary Period for One Year:**
This means that the University has complied with at least 50% of the terms of its Provisional Licence and is recommended for mentoring.
- iii. Extension of Probationary Period for Two (2) Years:**
This is when the University scores less than 40%. It means that the University has failed to comply with the terms of its Provisional Licence. The affected University will immediately stop further enrolment into all programmes, until the identified deficiencies are remedied.
- iv. Suspension/Withdrawal of Provisional Operational Licence:**
The decision to suspend or withdraw the Provisional Operational Licence may be taken in case where the Private University performed extremely poorly in all ramifications of the University's operations.

Objectives of NUC Review of Provisional Operational Licence of Private Universities

The objectives of the review are as follows:

- ✓ To examine the Universities' development by Phases as contained in the approved Academic Brief and Master Plan;
- ✓ To examine the existence and functionality of a Governance Structure to ascertain their conformity with extant laws;
- ✓ To ascertain the total number of academic and non-academic staff by programme, rank and qualifications with dates;
- ✓ To assess the standard of infrastructural and teaching facilities in the Universities (lecture rooms, laboratories/workshops, library (including e-books /journals) etc;
- ✓ To assess the campus security situation as well as the existence or otherwise of social vices (cultism, examination malpractices, sales of hand-outs, religious and cultural intolerance, etc); and

- ✓ To assess the relationship of the Universities with their assigned mentor(s).

Supervisory Role of Parent Universities on Affiliate Institutions

In pursuit of the government policy on expanding access to university education, the NUC granted approval in 2008 to non-degree awarding tertiary education institutions to offer degree programmes in affiliation with Nigerian Universities. These Universities are in this regard known and addressed as **Parent Universities** and the non-degree awarding institutions are referred to as **Affiliate Institutions**. As part of quality assurance activities undertaken in 2018, the Commission conducted the maiden monitoring assessment exercise on the *Supervisory Role of Parent Universities on Affiliate Institutions in the Nigerian Universities*. The main objectives were to ascertain the level of compliance with NUC Guidelines on Affiliation and Memorandum of Understanding between the Parent Universities and their Affiliate Institutions. A mop-up exercise was conducted in 2019 to the Affiliate Institutions that could not be visited during the first exercise in 2018. At the end of the exercises, so many deficiencies were discovered in the affiliation relationship between Parent Universities and Affiliate Institutions. At the 86th and 87th meetings of the NUC Board held on 18th October 2018 and 28th March 2019 respectively, the Board considered and approved the recommendations of the 2018 and 2019 reports and directed that NUC should vigorously monitor the supervisory role of Parent Universities of Affiliate institutions with a view to curbing infractions.

Sequel to the aforementioned, the Commission hosted a one-day interactive meeting with Parent Universities and their Affiliate Institutions in January, 2020, and discussed the Panels' findings on the 2018 and 2019 monitoring assessments and way forward on the identified deficiencies. One of the recommendations at the interactive meeting was that NUC should be conducting Biennial System-wide Monitoring and Evaluation Exercise on all affiliation relationships in the Nigerian University System to ensure the quality of affiliate degree programmes and strengthen affiliation relationships. It is against this background that the NUC Management gave approval to the Directorate of

Inspection and Monitoring to carry out monitoring visits to all affiliate institutions in Nigeria with the intent of determining the level of supervision of the affiliate institutions by their parent universities and to verify the level of remediation on the findings of the 2018 and 2019 exercises respectively. The exercise was carried out from 24th October – 14th November, 2021 and executed under the NUC Quality Assurance Non-Tangible Capital Projects Grant.

Objectives of the System-wide Monitoring and Evaluation Exercise

The objectives of the exercise/visits were to:

- i. Ensure that the identified deficiencies of the 2018 and 2019 exercises were remedied as recommended in the technical report(s);
- ii. Ascertain the level of compliance with NUC guidelines on affiliations;
- iii. Determine the level of compliance with the Memorandum of Understanding between the Parent Universities and the Affiliate Institutions;
- iv. Determine if the identified illegal affiliations had been terminated;
- v. Determine the level of involvement of Parent Universities in the running of the undergraduate programmes of the Affiliate Institutions after the previous exercises; and
- vi. Ascertain the level of compliance of the Affiliate Institutions with NUC BMAS

Justification for the System-wide Monitoring and Evaluation Exercise

The exercise was conducted:

- i. To strengthen affiliate relationships in the Nigerian University System;
- ii. Ensure quality of graduate output in the Affiliate Institutions;
- iii. Ensure constant supervision of the degree programmes of the Affiliate Institutions by their Parent Universities;
- iv. Enable the Commission ascertain the quality of graduate output of Affiliate Institutions; and
- v. Ensure that Affiliate Institutions do not run postgraduate programmes.

Challenges of the National Universities Commission in Regulating Nigerian Universities

Despite the enormous efforts made by the NUC over the years as highlighted in this paper, there are some challenges that the Commission was exposed to and these includes among others:

NUC Laws

In its bid to continue to carry out its regulatory mandates in line with the laws establishing it, the NUC has been confronted with antagonism in the discharge of its mandate due to some loopholes in its laws. This makes the review and strengthening of NUC laws imperative for effectiveness in ensuring the orderly development of all aspects of university education in Nigeria.

Proliferation of Illegal Universities (Degree Mills)

As part of the challenge of access, there has been the emergence of a number of illegal degree awarding institutions in Nigeria. There are over fifty of these institutions already published by the Commission in its *Weekly Bulletin* for the attention of unsuspecting vulnerable members of the public. Despite the efforts of the Commission to curtail the proliferation of illegal universities in Nigeria, the menace has remained a serious threat which must be confronted and overcome decisively. The Commission must continue to rely on the assistance of all stakeholders to expose the activities and locations of these institutions.

Instability in the Educational System

Nigerian University System has witnessed much instability and this has adversely affected the effectiveness of NUC's regulatory role. If the teachers are not on strike, it is the non – academic staff or the students are on rampage.

Inadequate Research and Learning Facilities

It is very difficult to effectively assure quality in tertiary institutions in the face of inadequate research materials, overcrowded lecture theaters, where equipment and laboratories are inadequate and outdated library books and journals and there is acute shortage of office and staff accommodation.

Inadequate Capacity Building

An effective and functional regulatory system requires frequent training and re-training of staff who are regularly engaged in regulatory activities. The last decade had experienced a surge in the number of private and public universities, summing up to 295 universities in 2025 as against only 36 universities in 1999. The quality of the human resources of any regulatory agency is essential to its success. Thus, the Commission must seek to improve the quality of its workforce. One way of achieving this is through training. The importance of training can only be appreciated with a clear understanding of its direct impact on staff performance.

Insecurity

The recent surge in insecurity experienced in most parts of the country had affected the effectiveness of NUC's regulatory role. Staff of the Commission are today wary of visiting some parts of the country for regulatory purposes because of the current security challenges in the country.

Conclusion

This paper has made an attempt to critically examine the role of the National Universities Commission (NUC) in its efforts at assuring quality in the Nigerian University System. The Commission carries out different forms of regulatory activities and exercises in Nigerian universities and other degree awarding institutions. The impact of NUC's regulatory role has brought some remarkable benefits to the Nigerian University System. It is apparent that there are still hurdles that the NUC must scale in order to effectively ensure the orderly development of a well-coordinated university system that can guarantee quality and relevant education for national development and global competitiveness.

References

- Federal Republic of Nigeria (2004): National Policy on Education. Yaba-Lagos: NERDC Press.
- Fielden, J. and Lockwood, G. (1973): "Planning and Management in Universities". Chatto and Windus London, England.
- Mafiana. C.F (2014), Assuring Quality of University Education: The National Universities Commission and University Education in

- Nigeria: Perspectives on the Development of a System. Yaliam Press
- National Universities Commission (1999) Manual of Accreditation Procedures for Academics Programmes in Nigeria Universities, NUC Abuja, Nigeria.
- National Universities Commission (2013) Manual of Accreditation Procedures for Postgraduate Programmes in Nigeria Universities, NUC Abuja, Nigeria.
- National Universities Commission (2022): List of Nigerian Universities with approved Postgraduate Programme. NUC Abuja, Nigeria.
- National Universities Commission (2024): Regulatory Activities of the Directorate of Inspection and Monitoring. NUC Abuja, Nigeria.
- Ogwuche, G.A. (2011): National Universities Commission: 1962-Date: Presentation at the Induction Course for Management Trainees of the National Universities Commission: Rock View Hotel, Abuja.
- Okojie, J.A. (2013): Overview of the Nigerian University System: Presentation at the NUC Retreat for Newly Inaugurated Governing Councils of Federal Universities, Abuja.
- Oloyede, I. O. (2013): University Academic culture and traditional: Presentation at the NUC Retreat for Newly Inaugurated Governing Councils of Federal Universities, Abuja.
- Uvah, I.I. (2008). Accreditation in Nigerian universities: The role of the academic planner. Available from www.codapnu.org/downloads/Accreditation.ppt.

Ending Social Cannibalism in Nigeria: Tomorrow May Be Too Late

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Abstract

The implications of social cannibalism for good governance and public good have started manifesting as a cause of pervasive poverty in Nigeria. To minimize the fierceness of the impact of corrupt practices on socioeconomic development, this article examines the causes, consequences, and solutions of social cannibalism in Nigeria. It uses a qualitative method to collect cleaned and sorted secondary data into themes consistent with its objective before conducting content and thematic analyses. The diffusion of innovation theory helps to explain how social cannibalism spreads in Nigeria. Drawing on literature from the social sciences, the article explored peer-referred publications on social cannibalism and structural violence from major databases for an informed understanding of the contexts in which political recklessness locks up a section of the population in multidimensional poverty. Findings indicate that nepotism, greed, and godfatherism fertilize social cannibalism in Nigeria. The article concluded that Nigerians require structured political re-orientation to capture the democratic discipline that subordinates the pursuit of narrow individual interests to the public good. It suggests mass empowerment of the citizens to liberate them from the captivity of multidimensional poverty. Moreover, social cannibalistic offenders against Nigeria should be prosecuted and punished to make the anticorruption fight substantially serious.

Keywords: social cannibalism, politics, multidimensional poverty, inequity, Nigeria

1.0 Introduction

In decent societies, human cannibalism is no longer fashionable because it is inconsistent with modern morality. Even the devotees of traditional

religious thoughts, who once tolerated human sacrifices, now see cannibalism as manifestly odious. While the human cannibals cause their victims to die out by eating them up, the social cannibals subject their victims to incremental ordeals that encourage them to die back in sorry situations. The phrase “social cannibalism” is a metaphor aimed at repackaging corruption and stimulating moral and civic outrage against it to project the true meaning of fairness, equity, and good conscience in public affairs. With this clarification, the coming generation would see the harmful and inherent self-aggrandizement content of social cannibalism against good governance. Regrettably, the modern elites present social cannibalism as a “privileged crime” (Akpotor, 2003, p. 355). Either because it “is no longer taboo” (International Council on Human Rights Policy and Transparency International, 2009, p. 1), or it is justified by its global presence (Ioris, 2016). Unless the toxic content of social cannibalism is exposed, the younger generation may never appreciate how it disrupts collective progress to validate a paradigm shift. Corruption has become a cliché despite its potential danger to good governance and social order in Nigeria. In 2015, as the presidential candidate of the All Progressive Congress (APC), Buhari advised Nigerians to kill corruption to avoid being consumed by the monster. Lamentably, after two consecutive terms of four years as Nigeria's president, his anticorruption policies were a mere political façade calculated to gain political support (Gbadamosi & Ajogbeje, 2018). His trick is now clearer to Nigerians.

2.0 Literature Review

The word cannibal is claimed to be a heritage of the 1493 second journey of Columbus to the Caribbean (Hulme, 1992, p. 16). The word took root from *Caníbales*, the Spanish term for the Caribe Indians of the Lesser Antilles who were recognized as consumers of human flesh (Fernández-Jalvo et al., 1996). Literature investigating social cannibalism is inadequate. However, studies have examined patterns detected among criminals who perpetrate mutilation (Petreca, Burgess, Stone, & Brucato, 2020), which involves castration (removal of the testes), evisceration (removal of the internal organs), and flaying (removal of the skin) (Stone & Brucato, 2019). Besides comparing the flesh-eating practices of notorious monsters such as Jeffrey Dahmer, Issei Sagawa, or Idi Amin to the criticality of the career-consuming social cannibals for effect and public

attention, the former does not, however, come any close to the focus of this paper. Social cannibalism is concerned with who becomes what, when, and how. Therefore, the attention of social cannibals in Nigeria shifted from how to bake a better and bigger “national cake” to how the available cake could be shared under the supervision of godfathers who see electoral politics as one huge investment opportunity to pillage public treasury (Gambo, 2006).

Since the late 1990s, the quality and availability of corruption data have increased due to the exploding empirical research that offers significant insights into better-directed and more efficacious anticorruption policy measures (Lambsdorff & Schulze, 2015). Being inextricably tied to politics, social cannibalism cannot be said to be newer than independent Nigeria. However, the characteristics of social cannibalism make the social blight seem older as social cannibals who exercise political power in formal positions abuse it for illegitimate personal, group, or sectional benefits. Therefore, social cannibalism attempts to obtain prosperity for personal advantage at public cost (Lipset & Lenz, 2000). The trajectory of social cannibalism in Nigeria has followed this carefully thought-out pattern. While “the Gowon regime encouraged corruption, Babangida legitimized it, Abacha institutionalized it” (Onyeonoru, 2002, p. 306), and finally, Obasanjo democratized the monster (Ayodele, 2019). These effects have blossomed into structural violence, which Galtung (1969) describes as an injury specifically inflicted on vulnerable individuals through unfairly graduated social relations within and between societies. The structures now cause individuals who wield power to tyrannize, abuse, and control vulnerable others who have diminished capacity to access basic housing, job, or healthcare... through the framework of structural violence (Galtung, 1969; Choiniere, MacDonnell, Campbell, & Smele, 2014; Khan, Lorway, Chevrier, et al., 2018; Whittle, Palar, Hufstedler, Seligman, Frongillo, & Weiser, 2015).

This article uses social cannibalism as a metaphor for economic imperialism, which seeks to subordinate the poor majority “prey” to the avaricious few “predator” (Lima & Dill, 1990, p. 619–640). It shows how the latter controls the institutions of coercion and media to perpetuate their illegitimate domination of the former. Corruption re-conceptualized

as social cannibalism implies an abuse of public power, position, or resources for personal interest or gain (Independent Broad-based Anti-Corruption Commission, 2017). The impacts of social cannibalism on vulnerable Nigerians must have compelled Cameron (2016) to refer to Nigeria as a fantastically corrupt country likened by Trump (2018) to a shithole country. These remarks subtly indict the 6th highest exporter of crude oil in the world and, paradoxically, the global headquarters of poverty (Aderemi et al. 2020). Therefore, the objective of this article is to trace the causes, consequences, and solutions of social cannibalism in Nigeria. For logical consistency, this article refers to corruption with 'social cannibalism' in its remaining parts. To achieve its objective, this article answers the following questions. (i). What is social cannibalism? (ii). What are the causes of social cannibalism in Nigeria? (iii). What are the techniques through which social cannibalism gains expression in Nigeria? (iv). What are the implications of social cannibalism for social justice in Nigeria? (v). What are the measures that can be taken to de-escalate social cannibalism in Nigeria? How the eradication of social cannibalism would make life more abundant for Nigerians through public good anchored on good governance is the knowledge gap that this article hopes to bridge.

Theoretical Framework

This article adopts the diffusion of innovation theory to explain the problem of social cannibalism. Everett Rogers propounded the theory in 1962 to underscore the adoption process of new knowledge and technology. Diffusion is a social process that occurs among people, usually in response to learning about an innovation, such as, in this instance, a new norm of social cannibalism that spreads across Nigeria. Diffusion consists of an innovation conveyed through certain channels over time among the members of a social system (Rogers, 2003, cited in Dearing & Cox, 2018). Failures are vital, as most innovations fail to diffuse. The decision to embrace an innovation frequently implies forsaking an earlier one (Greve, 2011), and non-adopters have their decision to reject an innovation socially validated (Miner, Kim, Holzinger & Haunschild, 1999). The theory explains how social cannibalism spreads across Nigeria and the factors that drive the adoption of innovations to be more beneficial than the idea it attempts to replace. The idea has to be comprehensive and consistent with

the values, norms, and lived experiences of the potential adopters. Finally, the innovation must be capable of providing concrete results.

3.0 Methodology

This article embarked on an extensive literature review that involved the primary search approach in five databases, including Google Scholar, Research Gate, Directory of Open Access Journals (DOAJ), JSTOR, and Scopus. It only included articles published between 2010 and 2024. The search terms used in the search approach include “corruption, exploitation, cannibalism, culture, and abuse of public office, Nigeria, and other related terms. The researcher linked the terms with “AND” or “OR.” he also independently reviewed the abstracts and titles of all downloaded articles for relevance. The exclusion/inclusion criteria are that articles were included if they were published between 2010 and 2024, published in the English language, and included a discussion of Nigerian culture, particularly about corruption. In other words, articles were excluded if they were published before 2010, not published in the English Language, and unrelated to corruption that may be adapted to suit the account of the phenomenon in Nigeria. By sticking with scientific procedures, the researcher steered the article to harvest objective findings that are both valid and reliable. The author ensured that all the sources for the collection of data were credible and could be fact-checked. He observed all ethical considerations in avoiding bias in the reporting of the analyzed data.

After the in-depth electronic database search, overall, the author systematically reviewed 63 articles for analysis. The author used thematic and content methods to analyze the collected data. This method is instructive because it does not depend on the physical collection of data from respondents. The databases the researcher used are reputable within the scientific community as objective, having been extensively used by colleagues to produce accurate and suitable scholarly data for qualitative and statistical analyses. We selected the databases because they comply with protocol necessities and protocol-specific factors for scientific reviews. An in-depth analysis revealed four duplicates from the 63 published articles, the author removed the duplicated articles. Upon review of the titles and abstracts, 3 articles were excluded because they

did not meet the inclusion criteria regarding language and study focus. Overall, 56 articles were systematically reviewed for qualitative analysis. The patterns and themes of the article and its research questions emerged from the researchers' interrogation of the literature on corruption, exploitation, and products of poor governance that exposed Nigerians to multidimensional poverty from academic articles, newspapers, government reports, international organizations' publications, and case studies.

4.0 Results

Meaning of Social Cannibalism in Nigeria

Social cannibalism is very difficult to define (Li, 2016). However, the goals of social cannibals become easily attainable only when vulnerable citizens are disempowered, suppressed, and impoverished to tolerate their oppressors' condescending behavior. The elite, the corrupt, and the *ojelu* are conceptual and substantial representations of social cannibals in Nigeria (Ayodele & Adebuseyi, 2024). Therefore, the cannibals, consisting of former public office holders who have stolen public funds and are fewer than 10 percent of the population, control over 200 million people, and own oil wells in Nigeria (Echime, 2022). The social cannibals typify the dangerous clique that held Goodluck Jonathan back from constructing Almajiri schools in the North, opposed polio vaccination, and claimed that it was intended to decimate their population (Tor, 2022). It is tragic that social cannibals home in on immaterial issues of who governs and the ethno-religious problem of identity politics to deviate from the concrete challenge of development (Olurode, 2022).

Having conceptually clarified who social cannibals are in the context of Nigerian realities, this article will now relate the existing occupations to the critical prevalence of social cannibalism. Beginning with the most recent incidence of cannibalism, Ikwechegh (2024), who has acknowledged his cannibalistic conduct by public apology, is a classic example of legislative cannibalism, with his public disrespect towards an Uber driver sent to deliver a waybill for him. If not for the power of social media, actively critical social outcry by a vigilant public, the Uber driver would probably have successfully "disappeared." Michael Atiba, a doctor

at the Gbagada Hospital, and Ugbeye Michael, a consultant with the National Orthopaedic Hospital, were arraigned before a court in Lagos on October 21, 2023, over an alleged unintentional manslaughter of Ejiro Ugorobi (Azeez, 2024). This is an instance of medical cannibalism. The Police in Ekiti State investigated Dare in a case of domestic cannibalism against his wife, Arinola, whom he killed in the Adebayo area of Ado Ekiti on Saturday, April 27, 2024. The children of the couple reported the crime to the police. Marital infidelity allegedly triggered the fight that ended the life of the woman (Abutu, 2024). Domestic cannibalism is not a respecter of gender. In the Federal Capital Territory, Rahimat Salaum, a 23-year-old woman, reportedly killed her husband, Shehu, during a fight and dumped her late husband's burnt corpse in an uncompleted building (Adeh, 2024).

In a case of judicial cannibalism, the Department of State Services arrested Sylvester Ngwuta and Inyang Okoro (both of the Supreme Court); Mohammed Tsamiya (Court of Appeal); Adeniyi Ademola and Muazu Pindiga (both of the Federal High Court); Innocent Umezulike (Chief Judge, Enugu State); and Kabir Auta (Kano State High Court), from whom a whopping sum of N363 million was recovered from the houses of three of the judges (Punch Editorial Board, 2016). A survey between 2018 and 2020 was conducted on 50 human and corporate entities involving the selection of one scheme, one species of fraud called contract and procurement fraud. Nigeria lost N2.9 trillion within three years (Olukoyede, 2023) to contracting cannibals. A few cases of gubernatorial cannibalism may suffice. The Economic and Financial Crimes Commission (EFCC) accused Lucky Igbinedion, ex-governor of Edo State of stealing \$24 million (£12m); Late Diepreye Alamieyeseigha, ex-governor of Bayelsa state, was jailed two years for social cannibalism and money laundering; James Bala Ngilari, former seven-month governor of Adamawa state was convicted of awarding a contract for the procurement of 25 vehicles for 167 million Naira (\$548,891) without following due process; Orji Kalu, ex-Abia State governor, was convicted and sentenced to 12 years in prison for N7.65 billion fraud; Joshua Dariye, ex-Plateau state governor, was accused of stealing about \$9m of public funds and money laundering (EFCC, 2019).

Typologies of social cannibalism do not end there. The 30-year-old caregiver social cannibal, Kabiru Wasiu, was arraigned before a Court in

Lagos for defiling a teenager and also raping a woman with Down syndrome (Solarin, 2020). There is also evidence of spiritual cannibalism. Mr Atuche, a one-time Bank PHB Managing Director, transferred N45 million to two Catholic Church branches in Delta State from Bank PHB Mortgage Limited as tithes from stolen money (Ogunbunmi, 2012). Also, Lawrence Agada, a pastoral assistant with Christ Embassy Church and cashier who stole N39,000,000 over some time from Sheraton Hotels, Lagos, had paid the stolen money as tithe and offering to a parish of Christ Embassy Church, Lagos. In response to the cheerful giver, the General Overseer, Pastor Chris Oyakhilome, blessed him with a commendation letter. When the crime became a public issue, the church acknowledged the receipt of the stolen fund but did not effect a refund (Nigerian Voice, 2010).

Federal might social cannibalism also exists. The International Oil Companies (IOCs) under the Deep Offshore and Inland Basin Production Sharing Contracts Act owe Nigeria \$60 billion. Following the action of Rivers, Akwa Ibom, and Bayelsa States' governments at the Supreme Court, ordered the Federal Government on October 20, 2018, to collect the arrears of royalty for 18 years, but the outstanding \$62 billion remains hitherto uncollected (Falana, 2024). The existence of academic cannibalism cannot be swept under the carpet. Sadly, over 39 lecturers in Nigeria's institutions of higher learning have been accused and sacked over sexual offences in the past five years (Tolu-Kolawole, 2024). As molders of the consciences of younger Nigerians, lecturers owe their undergraduate students and posterity a duty. If the academic vigilance of lecturers equips them to reverse the logic in the saying *ile lati nko eso rode* (charity takes its roots at home) to denigrate particularistic values and edify universalistic values, extort students, or trade-in score alteration for sex, it could be assumed that something seemingly irreversibly hurtful is fundamentally wrong the Nigerian lecturers and their knowledge structure.

Causes of Social Cannibalism in Nigeria

The state character of Nigeria, which essentially pits one ethnic group against the other in the sharing of the national cake, fertilizes social cannibalism. Multidimensional poverty, ineffective leadership, and faulty

moral upbringing are major causes of corruption in Nigeria. The failure of electoral democracy to institutionalize a procedure for the conduct of legitimate government businesses promotes the politics of pay-off, causing some influential politicians to be awarded undeserved and over-inflated contracts for the enjoyment of relative peace and legitimacy (Orji, 2011). This also undermines the legal framework and low opportunity cost of corruption (Michael, 2002). Boenner (2020) interrogated the causal connection between colonialism and political cannibalism as the outcome of a continuous interplay between the state of Nigeria, its colonial precursors, and foreign companies functioning in the Nigerian territory. Out of the 50 most politically cannibalistic countries, 25 are within the African continent. Barring some countries, many were previously parts of European empires.

This concern triggered the question of whether there exists a causal linkage between the cannibalistic practices from which Nigerians presently suffer and their British colonial connection. The first formal incident of social cannibalism in Nigeria's public service was in the 1950s when Dr Azikwe was alleged to have abused his office to cause the investment of public funds in the bank in which he had an interest. Therefore, in 1956, the first panel of inquiry, the Forster-Sulton Commission, investigated the African Continental Bank (ACB)-Nnamdi Azikwe case. The commission's report indicted Dr Azikiwe, who had to transfer all his rights and interests in the bank to the Eastern Nigeria government (Nwankwo, 1999). In 1962, Chief Obafemi Awolowo was accused of not being transparent over the relationship between his Western Nigerian government and the National Investment and Property Company that owed the regional government up to \$7,200.00. On June 20, 1962, Justice G.B. Coker's Commission of Inquiry investigated the allegations. The commission indicted Chief Awolowo, and the Western regional government acquired all the properties of the National Investment and Property Company. The Minister of Aviation, K.O. Nbadiwe, and the Minister of Finance, Chief F. S. Okotie-Eboh, were accused of social cannibalistic wealth accumulation offences (Federal House of Representatives Debates, 1965).

The 1964 and 1965 elections began the history of electoral cannibalism in

Nigeria. The ruling Northern People's Congress (NPC) and the Tafawa Balewa-headed Federal Government were alleged to have scandalously abused the electoral process to the disadvantage of the Action Group (AG). All the opposition parties rejected the result of the election, which resulted in murder, arson, and vandalism of properties in the old western region. The violence led some middle-ranking military officers to stage a coup d'état on January 15, 1966, that ousted Tafawa Balewa and his First Republic Government (Dudley, 1982). Between 1967 and 1979, the duration of the first military era, social cannibalism assumed a pattern and documented trends. Okotie-Eboh and Ribadu had companies for which they used their official influence to secure contracts (Report of Tribunal, NPA, 1967). Nigerian Railway Corporation Chairman, Dr Ikejiani, inflated the contract for building the Railway Medical Centre from \$75.00 to \$440.00. Investigation found that Dr Ikejiani had diverted the railway funds to construct his private clinic in Lagos, and the architect who supervised the Railway Medical Centre designed the hospital gratis (Report of Tribunal of Inquiry; NRC, 1967). On July 19th, 1975, the shameless social cannibalistic conduct of the officials of Gowon's government caused the fall of his administration.

Probably nauseated by the extent of social cannibalism in the public service, Murtala embarked on an anti-corruption sweep. He subjected the Gowon administration to intense investigation with the Asset Investigation Panel, which he set up on September 16th, 1975, to probe the assets of all Gowon's top-ranking officials. On February 3rd, 1976, the panel indicted ten military Governors for gross misconduct and involvement in social cannibalism. It confiscated properties and money worth N10 million. He also embarked on a mass purge of public service, leading to the retirement and dismissal of over 10,000 public servants nationally (Anazodo, Okoye & Chukwuemaka, 2012). The involvement of Obasanjo in the design, construction, equipping, and furnishing of the international trade fair in Lagos was a social cannibalistic practice. His administration reviewed contract No, 13/1731, initially costing N45, 216,000, first to N95, 820, 000 and then to N116, 257, 893. Around that time, the Punch newspaper blew the whistle on the disappearance of 2.84 billion from the sale of crude oil. The Shagari administration established the Justice Ayo Irikefe panel to probe the missing money. It traced the

money to the London Branch of the Bank of Credit and Commercial International (BCCI) between 1977 and 1978 with accumulated interest on the initial amount. During the 2nd Republic, the scope of social cannibalism in Nigeria expanded as the politicians squandered about N40.5 billion in crude oil sales. In addition, they cleared the inherited external reserves of N2.3 billion in 1979 and replaced that with an astounding external debt of N10.21 billion. The second republic effortlessly yielded on 31st December 1983 to a coup. On the whole, it is shocking that since Nigeria's independence, political leaders have cannibalized an estimated \$ 600 billion from Nigeria (Economist, 2019, 10th October).

Techniques that Facilitate the Prevalence of Social Cannibalism in Nigeria

Despite the numerous institutions and structures that successive governments have put in place to deal with corrupt individuals, Ayodele (2019) identifies seven models of escape from justice that prevent the success of anti-corruption struggles and perpetuate social cannibalism in Nigeria. These justice undermining models are: the Executive-Induced Escape Model (ELEM), which found the July 2007 conviction of late Alamiyeseigha, former Governor of Bayelsa State, granted a state pardon on 12 March 2013 by the former President Jonathan (Adangor, 2015). Secondly, the Legislature-Induced Escape Model (LIEM) is exemplified by the members of the Nigerian legislative houses who are rogues and armed robbers protected to rob with the impunity clause to weaken anti-corruption struggles in Nigeria (Obasanjo, 2012). Thirdly, the Judiciary-Induced Escape Model (JIEM) is underscored by Andrew Oru and Joe Igbuzor, who accused James Ibori, the Governor of Delta State from 1999–2007, of being an ex-convict and therefore, unfit to be Governor in 2003. An Abuja High Court and a Federal High Court in Asaba discharged and acquitted Ibori on 8 November 2004 and 17 December 2009, respectively. At last, Ibori was extradited to London from Dubai, where he was confronted with a 10-count charge for money laundering and conspiracy to defraud Delta State. He pleaded guilty to the charges against him (Anele, 2012). Guided by the Ibori case, one could conclude that the kind of judicial interpretation of laws in Nigeria appears wired to find the guilty innocent and vice versa.

Fourthly, Lawyers' Dilatory-Tactics-Induced Escape Model (LDTIEM) presents how the delay of judicial verdicts in the fight against social cannibalism involving serving or former political office holders may confirm local and international fears about the justification of innocence or guilt (Buhari, 2015). Fifthly, the Criminal Arrival Escape Model (CAEM) dramatically occurred at the level of international jurisprudence when, following his arrest at Heathrow Airport in 2005, late Alamiyeseigha was sure of conviction. To avoid the cause of justice, he dressed like a woman and absconded through Mexico. Sixthly, Criminal Departure Escape Model (CDEM) The EFCC under Ribadu went after Ibori and arrested him without presidential approval. Ribadu was redeployed to the Nigerian Institute of Policy and Strategic Studies on a course. On the death of Yar'Adua, pressured by the United States, Jonathan directed the then-new EFCC boss, Waziri, to launch a fresh offensive against Ibori. Realizing that he had been declared wanted, Ibori went into hiding from where he fled to Dubai to exemplify an escape-from-justice-by-departure model. Following an alert by the Metropolitan Police, Interpol arrested and extradited him to London (Mojeed, 2012), where he was tried and jailed. Seventhly, the Citizens' Culture-of-Canonization-of-Corruption Escape Model (CCCCEM) presents the network of celebrators of criminals as harmful to the interest of collective living as their criminal mentors. In some cases, supporters of notorious individuals have tried to prevent the law enforcement agency from apprehending wanted criminals simply because the suspects were 'their' criminals (Ayodele, 2019, pp. 8-9).

Today, government officials have become increasingly "indifferent to the propriety of conduct..." people "had to bribe their way through ministries and parastatals to get attention. And one government had to bribe another government agency to obtain the release of their statutory allocation of funds" (Igbinovia, P. & Igbinovia, B. 2014, pp. 35-36). Almost every Nigerian is fixated on cannibalistic entitlement, such that social cannibalism is assuming the status of being formally institutionalized. Nigeria has laws that prevent social cannibalism, but they are obeyed more in breach. If the extant laws were religiously enforced, Nigeria would have accomplished a significant milestone in the fight against social cannibalism and cannibalistic practices in Nigeria (Tambuwal, 2013). For example, Obasanjo publicly claimed that "the national assembly cabal of

today is worse than any cabal that anybody may find anywhere in our national governance system at any time... pay themselves allowances for staff and offices they do not have or maintain. Once you are a member, you are co-opted and your mouth is stuffed with rottenness ... as you go home with not less than N15 million a month for a senator and N10 million a month for a member of the House of Representatives... when the guard is the thief, only God can keep the house safe and secure” (Sotubo, 2014, p. np). If Nigerians elected people to represent them across the country and the elected people are thieves, then the Nigerian electorate cannot be better than their representatives. This analysis makes social cannibalism seem institutionalized, when in fact, it is not.

The failure of the judicial system complicates the systemic cannibalistic practices in Nigeria, giving the impression that they enjoy widespread acceptance. Anti-corruption agencies such as the EFCC and the Independent Corrupt Practices Commission (ICPC) are equipped hunters, who specialize in hunting rodents to avoid the buffalo. To the extent that the commissions are not doing conscience-driven clean-up exercises, empowered criminals in government will continue to use them to scare unprotected articulate oppositions (Businessday Editorial Board, 2024), who might challenge the ascendancy of cannibalism in public offices. Under this circumstance, Nigerian leaders had cannibalized \$380m since independence in 1960 (Ribadu, 2023). Therefore, James Ibori, former governor of Delta State, was convicted abroad “...while the governor could have enjoyed immunity from prosecution in his home state...” (Hatchard, 2014, p. 297). The way Nigeria is presently structured allows protected social cannibals in the context of public service. The Justice System does not prosecute official cannibals effectively as it enables unpatriotic adjournments, high-profile social cannibalism cases to linger for years, without consequence for the culprits. That some convicted social cannibals are in government, wielding political influence, reinforces the assumption that social cannibalism is normative and therefore tolerated (Businessday Editorial Board, 2024). “While the few transparency-loving Nigerians applaud the *oselu* (system boosters) and condemn *ojelu* (system compromisers), the corruption-embracing majority across Nigeria belittle the virtues of the former and extol the vices of the latter for their parochial interests” (Ayodele & Adebusi, 2024, p. 106). This normative

reaction to social cannibalism implies a subtle acknowledgment of the institutional status of the frustrating danger.

Implications of Social Cannibalism for Social Justice in Nigeria

Many scholars have documented the effects of social cannibalism on the Nigerian economy (African Economic Outlook, 2015), which causes developing countries to lose about 1.2 trillion dollars yearly (Wale, 2017). Social cannibalism has harmful effects that undermine Nigeria's economic efficiency, exacerbate social inequities, and damage the operational efficacy of democracy (Fishman & Golden, 2017). It intensely threatens the capacity to contend with poverty commendably and flourishes where the compensations are possibly great and the risks are attractively low (Hatchard, 2014). Even the World Economic Forum approximates the annual cost of social cannibalism in contemporary times at US\$3.6 trillion (Johnson, 2018). If social cannibalism had no critical effects, successive governments in Nigeria would not have concentrated their efforts on the fight against corruption since independence in 1960 (Adebayo, 2014). The literature is replete with evidence of corruption being a symptom and a consequence of poverty. Social cannibalism breeds poverty, and poverty aids social cannibalism to flourish. It is not a miscalculation that the World Economic Forum estimates that social cannibalism “increases the cost of doing business by up to 10% on average” (Kimeu, 2014, p. 231). Because in societies and all institutions, social cannibalism transforms into a recycled evil (Arellano, Hernández, & Lepore, 2015). Therefore, apart from corruption undermining public services, it can also make local or foreign businesses costly (Giles, 2016).

Other impacts of social cannibalism include election rigging, buying and selling of votes, political assassination, contract killing, and cancellation of votes, ballot stuffing, and manipulation of electoral registers, outright inducement of electoral officers and security agents, inflation of electoral votes and the use of political offices for personal advantage at the expense of public interest (Ajogbeje, 2016). Gbadamosi & Ajogbeje (2018) confirm that all these items are very significant effects of social cannibalism practices among the political leaders on democratic polity in Nigeria. To ensure that society is safe for citizens to go about their daily productive routines, the government allocates funds to the security sector. This

makes it “the single most funded public sector in Nigeria” (Lawal, 2020, p. 2). Despite Nigerians' dire need for security, 55 citizens stole 6.8 billion dollars between 2006 and 2013 to further underdevelop Nigeria (Mohammed, 2016). Alone, Sambo Dasuki misapplied US\$2.1 billion, and N19.4 billion was initially earmarked to procure arms for the army (Nnoch, 2016). Similarly, Olisa Metuh diverted N400 million and US\$2 million initially earmarked for national security to vote-buying (Yahaya, 2020). Why, then, will there not be nationwide insecurity? Between 2015 and 2020, the Buhari government allegedly spent N1.48 trillion on maintaining the four national refineries (Premium Times, 15th May 2022), from which a litre of refined fuel did not drop!

The abuse of public office by social cannibals for private advantage wears away public trust in government and institutions, rips public policies of effectiveness and fairness, and draws taxpayers' money away from essential public goods. The unfair access of social cannibals to political influence caused Nigeria to lose about 800 billion naira to tax waivers and concessions to businesses and corporations between 2011 and 2013 (Okonjo-Iweala, 2017). Cannibalism undermines the capacity of the government to develop the economy to the advantage of every single citizen. In its new fiscal monitor, the analysis of over 180 countries by the International Monetary Fund (IMF) found that countries where social cannibalism drives transactional interactions, collect less taxes since individuals can bribe their way out of tax payment because tax payment can be easily avoided. In sum, the fiscal monitor concludes that countries with low cannibalistic perception enjoy significantly less waste in public investment projects (Gaspar, Mauro & Medas, 2019). Social cannibalism harmfully functions as a disincentive to Foreign Direct Investments (FDIs) because almost all prospective investors are cautious of investing in any country grappling with widespread social cannibalism (Andrew, 2016). The soaring prices of commodities are evidence of the market manipulation and profiteering strategies of the economic cannibals at the expense of the Nigerian people (Adeleye, 2024). Greater social cannibalism could theoretically worsen the brain drain problems of a country, as highly skilled individuals are likely to be more predisposed to emigrating for greener pastures (Dimant et al., 2013). Granted that contrary to the information that Nigerians were being fed, the fuel subsidy

is characterized by a narrative of “untold and hidden frauds” (Street Journal, 2012, p. np), despite the huge petroleum resource wealth, subsidies go to phantom fuel that never came into Nigeria (Sanusi, 2021).

De-escalating Social Cannibalism in Nigeria

Acknowledging that a silver bullet for tackling social cannibalism does not exist anywhere across the world, Transparency International (2016) suggests ending impunity, reforming public administration and finance management, promoting transparency and access to information, empowering citizens to hold government accountable to build mutual trust between citizens and government, and closing international loopholes are potent in curtailing social cannibalism. A regime that lacks the political will to create viable economic institutions to enforce the ethos of integrity and accountability across its socioeconomic space may not competently fight social cannibalism beyond the level of the usual rhetoric. Subsequent governments lacked the political will to implement anticorruption laws because the eradication of social cannibalism amounts to commission of political suicide by politicians and their military-bureaucratic counterparts (Ogundiya, 2009). Therefore, to succeed in the fight against social cannibalism, Nigeria should invest robustly in manifest transparency and independent external scrutiny. The country should devise reform frameworks to confront cannibalism from all possible directions. Moreover, it should build transparent, merit-based recruitment procedures and prevent cannibalistic opportunities. Remaining abreast of new trials as technology and prospects for wrongdoing come to life, especially in procurement, revenue administration, and management of natural resources, helps to emphasize active internal control mechanisms. The potency of cross-border partnerships in frustrating the crime of internationalizing the crime of social cannibalism that emerges in areas of keeping laundered money in impenetrable financial institutions cannot be overemphasized (Gaspar, Mauro & Medas, 2019).

A gradual but effective cannibalism-curbing policy tool lies in making younger persons imbibe attitudes and norms of hatred for social cannibalistic practices and their outcomes from childhood. The effective termination of social cannibalism involves “...reduction programs in

developing countries, and the transition economies need to address the root causes of corruption with deep and long-running reform programs” (Fredriksson & Neumayer, 2016, p. 452). Funding education can significantly expedite the limiting of tolerance to social cannibalism (Carrasco et al., 2020). Boenner (2020) compared Nigeria to Botswana, which has a similar historical past and mineral credentials. Comparatively, Botswana experiences low levels of political cannibalism. This implies that Nigeria can avoid social cannibalism if it so wishes through meritocratic leadership. However, as Nigeria contends with widespread hunger, looking at the country's leadership for a solution should not be a misplaced expectation. Mohamed Ould Abdel Aziz, the President of Mauritania, stated that the Mauritanian Senate is “useless and too costly.” He called for its abolition and got an 85% referendum approval for the radical reform from the voters to activate local forms of lawmaking and establish good governance (BBC News, August 7, 2017). Even when the Nigerian legislature is “an assemblage of thieves and rogues” (Obasanjo, 2016), the former president did not intervene to rescue Nigerians from the legislative cannibalism the same way Abdel Aziz did. Obasanjo is, therefore, as complicit as the legislators he accused.

To evolve a “value-based political class that understands ethical policies... we cannot afford to be spectators. We all should, therefore, arise and fix our nation...” (Ezekwesili, 2022, p. np). To end cannibalism in Nigeria, the federal government should eradicate impunity and prosecute all the individuals involved in the fuel subsidy scam (Yuguda, 2023). The media must be active not only in cannibalism exposure but also in promoting and celebrating ethical conduct. The Media must elevate individuals with impeccable credentials as role models for younger Nigerians to emulate. It is for these categories of citizens that national awards make instructive sense... The courts must deliver swift and impartial justice, and cannibalistic officials must face not only legal consequences but societal condemnation (Businessday Editorial Board, 2024). Tackling corruption is not a one-shot endeavor, but a challenging long-term undertaking (Brinkerhoff, 2000 in Ogundiya, 2009), requiring a high level of commitment and continuity in policies. Here, this article appreciates the resilience of the new culture of online activism championed by Martins Otse, aka Very Dark Man (VDM). His methodology may be hurtful.

Nonetheless, discerning Nigerians will connect with and acknowledge the beauty of the cause of public good he defends with passion. This article commends VDM for his wonderful trans-ethnic engagement with the war against social cannibalism in Nigeria.

Through citizenship education, the right values such as patriotism, honesty, hard work, tolerance, equality, etc, can be inculcated into the citizens from the primary school level. It should be noted, however, that the war against social cannibalism in Nigeria presents some tragic paradoxes as some appointees of the President and investigators of fraud cases in Nigeria have trivialized the war against social cannibalism. It is an irony that two successive Inspectors General of Police (IGPs) in a corruption-fighting country were indicted for social cannibalism. Tafa Balogun was convicted of N12 billion fraud (Aluko, 2005). Sunday Ehindero was implicated by his aides who tried to smuggle N21m in stolen money (\$161,000) out of police headquarters (The Daily Sun, 18 June 2007). A few days before the exit of former President Obasanjo from office, he was alleged to have sold two of the three distressed oil refineries of Nigeria in a contentious atmosphere . . . (Transcorp press release, 2007). Granted that corruption exists in all countries (Ioris, 2016), it is regrettable that some cases of social cannibalism have been under investigation for over a decade (Ethelbert, 2016), in Nigeria. It is a tragic irony that former president Jonathan pardoned Alamieyeseigha and conferred a national merit award on the criminal. He later turned around to admonish Nigerians to stop celebrating people with ill-gotten wealth to discourage corruption in the country (Jonathan, 2015). His position here speaks volumes.

Moreover, Ibrahim Lamorde, as Chairman of EFCC, was accused of having fraudulently diverted over N1tn proceeds from the recoveries which the agency had made from social cannibalism (Adeyemi, 2016). In another case, Philomena Chieshe claimed she did not steal 36 million naira belonging to the Joint Admissions and Matriculations Board (JAMB) but confessed that her housemaid connived with another JAMB staff, Joan Asen, to steal the amount from JAMB's vault through a money-swallowing snake. These narratives underscore the hypocrisy of the anticorruption struggle. Some of these dishonorable compromises played out in the way

corruption thrived in the Buhari-led, corruption-fighting government (Adeoye, 2018). While Jonathan's government promptly fired two ministers (Professor Barth Nnaji and Stella Oduah) mentioned in social cannibalism scandals, the Buhari-led government shields officials accused of social cannibalism (Omokri, 2017). In 2012, the Treasury Single Account (TSA) policy prevented Nigeria from losing about N500 billion from frivolous spending (Clementina, 2016). The Buhari-led government complemented the TSA with the Biodata Verification Number (BVN) to block numerous leakages. With intense surveillance of financial transactions, criminals no longer rush to the banks or overseas with their ill-gotten wealth.

Discussion

This article examines the causes, consequences, and solutions of social cannibalism in Nigeria. It explored numerous dimensions of social cannibalism to corroborate the finding of Li (2016) that the concept of social cannibalism is not easy to define. Social cannibalism has different causes from locality to locality. Also, this article finds multidimensional poverty, ineffective leadership and faulty moral upbringing as major causes of social cannibalism in Nigeria to corroborate the findings of Orji (2011) which identified avarice, greed and get rich quick syndrome and Eze (2002) which identified ineffective leadership and shaky moral foundation in upbringing as major causes of cannibalism in Nigeria. Exploring the techniques through which social cannibalism gains expression in Nigeria, Ayodele (2019) identifies seven place-specific models of escape from justice that prevent the success of anti-corruption struggles in Nigeria, which are similar to the indices that this article has corroborated. The insidious entry of cannibalistic practices into the fabric of Nigeria's socioeconomic mainstream culture is not exclusive, even if peculiar. The finding of this article is consistent with that of Igbinovia, P. & Igbinovia, B. (2014, pp. 35-36) that for interaction to be effective even in interagency dealings, bribes are offered and taken. On the harmful effects of social cannibalism, the findings of this article are consistent with those identified by Fishman & Golden (2017) that undermine the economic efficiency, worsen social inequities, and damage the operational efficacy of democracy in Nigeria.

A critical analysis of the military and civilian leaders' vulnerability to social cannibalism across regimes has pushed some realities of the phenomenon to the fore in Nigeria. First, social cannibalism disregards cultural boundaries. Second, the investigation of 11 out of 12 states' military governors and later 31 state civilian governors out of 36 states seems to have validly established the national spread of social cannibalistic disposition among Nigerian leaders. Third, besides a few politicians who had issues with the party in power, most financially opaque governors left office to enjoy their loots, not even with a protest from any affected 31 states. Fourth, two former Inspectors General of Police in Nigeria were indicted for cannibalistic behavior. Recently, Dipeolu (2024) ordered the final forfeiture of the sum of \$2.045 million, seven landed properties, and the two share certificates of Queensdorf Global Fund Limited Trust, embezzled by the former Governor of the Central Bank of Nigeria, Godwin Emefiele. With all this evidence of social cannibalism among highly placed Nigerians, the monster appears to have assumed an institutional status in Nigeria.

The widespread presence of social cannibalism, which this article found as tending towards having cultural roots in Nigeria, agrees substantially with the finding of Klitgaard (2013) in the saying in some parts of Africa that anyone who resists robbing the state deprives his kith and kin of prosperity. Consistent with the findings of this paper, Mazar & Aggarwal (2011) found social cannibalistic assumptions in some African communities, which hold the practice as simply implying nothing more than gift-giving, reciprocity, or a form of self-advancement in cultures with a high collectivist orientation. However, there is nothing with a beginning that lacks a foreseeable ending. This article finds that among the measures to de-escalate social cannibalism in Nigeria is the need to eradicate impunity and prosecute social cannibals, which corroborates the position of Yuguda (2023) on the prosecution of all fuel subsidy scammers.

Conclusion

This article examined the causes, consequences, and solutions of social cannibalism in Nigeria. It answers the five research questions the article posed. It found that the concept of social cannibalism does not enjoy a one-size-fits-all definition. The article discussed the numerous factors that

cause social cannibalism in Nigeria. The article provided the seven place-specific models of techniques through which social cannibals escape justice to make the social blight gain widespread patronage in Nigeria. The article also offered the implications of social cannibalism for social justice in Nigeria. Finally, the paper gave measures that can help to de-escalate social cannibalism in Nigeria. It anchored its explanation of the problem on the diffusion of innovation theory. It should be noted, however, that if primary data were obtained using mixed methods to collect and interpret data, the article would have had greater insights into the causes, effects, and solutions of social cannibalism and would have harvested a more robust research report. If Nigeria can neutralize all the social cannibals that threaten the collective progress of Nigerians, Nigeria will be great again.

Recommendations

Based on the findings of this article, it makes the following recommendations:

- Public policy should eradicate impunity, proscribe godfatherism to make the polity a lot people-focused system.
- Nepotism should be criminalized because it endangers equity, good conscience, and national integration.
- For anti-graft staff, merit-based recruitment procedures should be adopted to frustrate cannibalistic opportunities for individuals who tend to commit social cannibalism.
- Massive citizen education aimed at reducing social cannibalism should be anchored on deep, inclusive, and long-running reform programs to stimulate citizens' understanding of the importance of altruistic disposition to development in sustainable electoral democracy.
- The judiciary must deliver swift and impartial justice, which sets the innocent free and punishes the social cannibals without allowing them freedom through plea bargaining. Punishment should deter other intending offenders.
- The Media should promote and celebrate ethical conduct in ways that identify responsible role models for the younger generation to emulate.
- The kind of trial and punishment that kept the ilk of Awolowo,

Azikiwe, Nbadiwe, Okotie-Eboh, and other earlier politicians from graft should be reinstated to make for financial resilience and discipline in Nigeria.

- Cross-border partnerships should frustrate the internationalization of the crime of social cannibalism that encourages the keeping of laundered money in obscure financial institutions.
- Scoundrels should not be allowed to invade the Nigerian judiciary. Therefore, the criminal justice system should undergo systemic reform to sustain the ascendancy of meritocratic leadership in the broader society.
- In the future, the Nigerian government should prevent any social cannibals who intend to leave foreign countries illegally to enjoy their stolen monies in Nigeria from embarrassing the country and its citizens.
- In the future, the government should insist on a value-based political class that understands ethical policies and monitors migration procedures to ensure that the national boundary is not porous to enable criminals to leave the shores of Nigeria undetected

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References

Abutu, S. (2024). Police begin probe as man kills wife in Ekiti. Retrieved on October 26, 2024, from <https://punchng.com.cdn.ampproject.org/v/s/punchng.com/police-begin-probe-as-man-kills-wife-in-ekiti/>

Adangor, Z. (2015). The presidential pardon granted chief D. S. P.

- Alamiyeseigha: Time to revisit the president's pardoning power under section 175 of the constitution of the Federal Republic of Nigeria, 1999 (as amended). *Journal of Law, Policy, and Globalization*, 39, 2015. ISSN 2224-3240 (Paper) ISSN 2224-3259. Retrieved from www.iiste.org
- Adebayo, A. O. (2014). Ethical issues in public service. *International Journal of Social Science and Humanity*, 4(5), 410–413.
- Adeh, J. (2024). 23-year-old wife beats husband to death, burns corpse in FCT. Retrieved on October 26, 2024, from https://punchng.com.cdn.ampproject.org/v/s/punchng.com_/23-year-old-wife-beats-husband-to-death-burns-corpse-in-fct/
- Adeleye, M. (2024). Nigeria's economy and the saboteurs within. Retrieved on October 14, 2024, from <https://punchng.com/nigerias-economy-and-the-saboteurs-within/>
- Adeoye, A. (2018 February 15). Snake swallows N36m in JAMB office: Govt has become a looting business centre – ADP. Retrieved from www.vanguardngr.com
- Aderemi, T. A.; Amusa, B.O.; Elufisian, O. O. & Abalaba, B.P. (2020). Does Capital Flight Move Nigeria to the World's Poverty Headquarters? An Implication for Sustainable Development. *Journal of Academic Research in Economics*, 12(1), p. 31-44.
- Adeyemi, O. (2016). 10 biggest corruption cases that shook Nigeria in 2015. Nigeria: Green News Publication.
- African Economic Outlook (2015). Table 21 – Corruption Perception Index.
- Ajogbeje, O.O. (2016). Civic learning as a veritable tool for curbing political corruption in Nigeria. Paper presented at the Annual National SOSAN conference on Dec. 14th to 15th
- Akpotor, S. (2003). Corruption: The civil society and government. In M. Dukor (Ed.), *Philosophy and politics: Discourse on values, politics and power in Africa*. (p. 355). Lagos: Malthouse Press.
- Aluko, M. E. (2005). FRIDAY ESSAY: On the issue of governor “Queen” Alamiyeseigha's escape from London to Yenagoa. Retrieved from <https://www.laits.utexas.edu/africa/ads/1372.html>
- Anazodo, R. O., Okoye, J. C. & Chukwuemaka, E. E. O. (2012). Civil Service Reforms In Nigeria: The Journey So Far In Service Delivery. *American Journal of Social and Management Sciences*, 3, p. 17-19. <https://doi.org/10.5251/ajsms.2012.3.1.17.29>

- Andrew, S. (2016). The Impact of Corruption on Nigeria Economy” in.
- Anele, D. (2012). James Ibori and the vicissitudes of life (1). Retrieved from
- Arellano, G., D., Hernández, G., J. F., & Lepore, W. (2015). Corrupción sistémica: Límites y desafíos de las agencias anticorrupción. El Caso de la Oficina Anticorrupción de Argentina. *Revista del CLAD Reformay Democracia*, 61, 75–106.
- Ayodele, J. O. (2019). Temporal dynamics of solidarity and corruption-reporting practices: an appraisal of Durkheim's theoretical assumptions in Nigeria. *African Identities* <https://doi.org/10.1080/14725843.2019.1670618>
- Ayodele, J. O. & Adebusuyi, J. R. (2024). Elite Governance, Development, and Public Safety in Nigeria. *African Journal of Political Science (AJPS)* 12(1), 106-118
- Azeez, A. O. (2024). Two doctors arraigned for involuntary manslaughter in Lagos. Retrieved on October 19, 2024, from <https://punchng.com.cdn.ampproject.org/v/s/punchng.com/two-doctors-arraigned-for-involuntary-manslaughter-in-lagos>
- BBC News, August 7, 2017.
- Boenner, A. (2020). Nigeria – An Archaeology of Political Corruption. Berliner Wissenschafts-Verlag. p. 1-323.
- Brinkerhoff, (2000). In Ogundiya, I. S. (2009). Political corruption in Nigeria: theoretical perspectives and some explanations. *The Anthropologist*, 11(4), 281-292.
- Buhari, M. (2015). Buhari blasts judges, lawyers frustrating his anti-corruption war at the opening the 2015 all Nigeria judges' conference in Abuja, Buhari accused corrupt lawyers and judges of sabotaging his efforts to recover stolen assets. Retrieved from <http://dailypost.ng/2015/11/24/buhari-blasts-judges-lawyers-frustrating-his-anti-corruption-war/>
- Businessday Editorial Board (2024). Corruption's cultural roots: The moral imperative for a corruption-free Nigeria. Retrieved on October 16, 2024, from
- Cameron, D. (2016). David Cameron calls Nigeria and Afghanistan “fantastically corrupt.” Retrieved on October 16, 2024, from <https://www-bbc-com.cdn.ampproject.org/v/s/www.bbc.com/news/uk-politics>

- Carrasco, D., Banerjee, R., Treviño, E., & Villalobos, C., (2020). Civic knowledge and open classroom discussion: explaining tolerance of corruption among 8th grade students in Latin America. *Educ. Psychol.* 40, p.186–206.
- Choiniere, J. A., MacDonnell, J. A., Campbell, A. L., & Smele, S. (2014). Conceptualizing structural violence in the context of mental health nursing. *Nurs Inq.* 21(1), 39–50. <https://doi.org/10.1111/nin.12028>
- Clementina. (2016). In Igbekoyi Olusola Esther and Agbaje Wale Henry an assessment of the implication of treasury single account adoption on public sector accountability and transparency. *European Journal of Accounting Auditing and Finance Research* 5(8), 33–49
- Dearing, J. W. & Cox, J. G. (2018). Diffusion of Innovations Theory, Principles, and Practice. *Health Affairs* 37(2), p. 183–190. doi: 10.1377/hlthaff.2017.1104
- Dipeolu, D. (2024). Court Orders Final Forfeiture of \$2.m, Other Properties Linked to Emefiele. Retrieved on November 2, 2024, from <https://punchng-com.cdn.ampproject.org/v/s/punchng.com/court-orders-final-forfeiture-of-2-m-other-properties-linked-to-emefiele/>
- Dimant, E., Krieger, T. & Meierrieks, D. (2013). The effect of corruption on migration, 1985–2000. *Applied Economics Letters* 20(13), p. 1270–1274.
- Dudley, B. J. (1982). *Nigerian Government and Politics*. London: Macmillian Press.
- Echime, D. (2022). Why the elite cannot help Nigeria. Retrieved on October 17, 2024, from <https://businessday.ng/politics/article/why-the-elite-cannot-help-nigeria/>
- EFCC (2019). Meet 6 Nigerian ex-governors who have been to prison. Retrieved on October 19, 2024, from <https://pmnewsnigeria-com.cdn.ampproject.org/v/s/pmnewsnigeria.com/2019/12/11/meet-6-nigerian-ex-governors-who-have-been-to-prison/>
- Ethelbert, O., L. (2016). Economic and Financial Crimes Commission (EFCC) and the challenges of managing corruption in Nigeria: A critical analysis. *International Journal of Scientific and Research Publications*, 6(4), 339–349.
- Eze, N. (2002). *Causes of corruption in Nigeria and the way forward in* Ugwu C. O. T. (ed) Nssuka: Chuka Educational Publishers.

- Ezekwesili, O. (2022). Why the elite cannot help Nigeria. Retrieved on October 17, 2024, from <https://businessday.ng/politics/article/why-the-elite-cannot-help-nigeria/>
- Falana, F. (2024). Nigeria's "Vampire Elites, Ruling Class" In Catalogue of Lootings Subject Nigerians to Excruciating Economic Pains, By Femi Falana, SAN. Retrieved on October 14, 2024, from <https://saharareporters.com/2024/08/11/nigerias-vampire-elites-ruling-class-catalogue-lootings-subject-nigerians-excruciating>
- Federal House of Representatives (1965). Hansard: containing the Debates. April 5th 1965. P606
- Fishman, R. & Golden, M. (2017). Corruption: what everybody needs to know? Oxford University press, p. 2.
- Fernández-Jalvo, Y., Díez, J. C., Bermúdez de Castro, J. M., Carbonell, E. & Arsuaga, J. L. (1996). Evidence of early cannibalism. *Science*. 271, 277–278. doi:10.1126/science.271.5247.277.
- Fredriksson, P.G. & Neumayer, E., (2016). Corruption and climate change policies: do the bad old days matter? *Environ. Resour. Econ.* 63, 451–469.
- Galtung, J. (1969). 'Violence, Peace and Peace Research,' *J Peace Res.* 6(3), 167-191. <https://doi.org/10.1177/002234336900600301>
- Gambo, A. N. (2006). Godfatherism and electoral politics. In: Nigeria in Money, Politics and Corruption in Nigeria. A Publication of IFES, 88-104.
- Gaspar, V., Mauro, P. & Medas, P. (2019). Tackling Corruption in Government. Retrieved on October 29, 2024, from <https://www.imf.org/en/Blogs/Articles/2019/04/04/blog-fm-ch2-tackling-corruption-in-government>
- Gbadamosi, T. V. & Ajogbeje, O. O. (2018). Causes and Effects of Political Corruption in Nigeria: Implication for Social Studies Education. *Nigerian Journal of Social Studies*, XXI (1).
- Giles, S. (2016). Anti-bribery & corruption and whistleblowing. Highview Consultants. Retrieved from <http://www.gaco.gi/images/pdf/2016-april/GACO-ABC.pdf>
- Greve, H. R. (2011). Fast and Expensive: The Diffusion of a Disappointing Innovation. *Strategic Management Journal*. 32, 949-958. DOI:10.1002/smj.922

- Hatchard, J. (2014). *Combating corruption legal approaches to supporting good governance and integrity in Africa*. Edward Elgar publishing Ltd., p.297.
- Hulme, P. (1992). *Colonial Encounters. Europe and the Native Caribbean 1492–1797*. London: Routledge
- Igbinovia, P. & Igbinovia, B. (2014). *Oil Theft and Pipeline Vandalization in Nigeria*. Ibadan: Safari Book Publishers, pp. 35-36.
- Igwe, I. (2005). *The World Bank, international monetary fund and Nigeria's reform process* in D. A. Briggs (ed.) *Nigeria*, Kuru: NIPSS.
- Ikwechegh, A. (2024). *My behaviour was bad I'm sorry; Rep Ikwechegh apologises*. Retrieved on October 28, 2024, from <https://www.politiceconomistng.com/181751-2/>
- Independent Broad-based Anti-corruption Commission (2017). "What is Corruption?" in www.IBAC.V.C.gov.au
- International Council on Human Rights Policy and Transparency International (2009). *Corruption and human rights: Making the connection* (Switzerland, international council on human rights policy, 15).
- Ioris, A. A. R. (2016). "La plata llega sola" [the money arrives on its own]: Reflections on corruption trends in Peru. *Diálogos Latinoamericanos*, 25, 82–98.
- Johnson, S. (2018). *Corruption is costing the global economy \$3.6 trillion dollars every year*. World Economic Forum. Available at <https://www.weforum.org/agenda/2018/12/the-global-economy-loses-3-6-trillion-to-corruption-each-year-says-u-n>
- Jonathan, G. E. (2015). *Corruption: Jonathan urges Nigerians to stop celebrating ill-gotten wealth*. Participation in the Presidential Debate organised by the Nigeria Elections Debate Group on Sunday in Abuja. Retrieved from <https://www.premiumtimesng.com/news/top-news/178932-corruption-jonathan-urges-nigerians-to-stop-celebrating-ill-gotten-wealth.html>
- Khan, S., Lorway, R., Chevrier, C, et al. (2018). *Dutiful daughters: HIV/AIDS, moral pragmatics, female citizenship and structural violence among Devadasis in northern Karnataka, India*. *Glob Public Health*. 13 (8) , 1 0 6 5 - 1 0 8 0 . <https://doi.org/10.1080/17441692.2017.1280070>

- Kimeu, S. (2014). Corruption as a challenge to global ethics: The role of transparency international. *Journal of Global Ethics*, 10(2), 231–237
- Klitgaard, R. (2013). *Tropical Gangsters II: Adventures in Development in the World's Poorest Places*. Amazon: KDP Books.
- Lambsdorff, J.G. & Schulze, G.G. (2015). What can we know about corruption? A very short history of corruption research and a list of what we should aim for. *Journal of Economics and Statistics (Jahrbuecher fuer Nationaloekonomie und Statistik)* 235(2), 100–114.
- Lawal, A. A. (2020). *Towards an Accountable Security Sector in Nigeria*. Friedrich-Ebert-Stiftung (FES) Nigeria in collaboration with the Civil Society Legislative Advocacy Centre and co-founded by the European Union
- Li, X. (2016). Measuring local corruption in China: A cautionary tale. *Journal of Chinese Political Science*, 21(1), 21–38.
- Lima, S. L. & Dill, L. M. (1990). Behavioral decisions made under the risk of predation: a review and prospectus. *Canadian Journal of Zoology* 68, p. 619–640.
- Lipset, S. M. & Gabriel S. Lenz. (2000). Corruption, culture and markets. In *Culture Matters: How Values Shape Human Progress*, eds. Lawrence, E. Harrison and Samuel Huntington. New York: Basic; 112-127.
- Mazar, N., & Aggarwal, P. (2011). The final, definitive version of this paper has been published in *Psychological Science*, 22 (7), by SAGE Publications, Inc.
- Michael, W. C. (2002). The effects of political corruption on Caribbean development. Paper prepared for the Caribbean Studies Association Annual Conference, held in Nassau, Bahamas. Between May 27 to June 2
- Miner, A. S., Kim, J. -Y., Holzinger, L. & Haunschild, P. R. (1999). Fruits of failure: Organizational failure and population level learning. In A. S. Miner & P. Anderson (Eds.), *Advances In Strategic Management: Population Learning And Industry Change*, 16, pp. 187-220. Greenwich, CT: JAI Press
- Mohammed, L. (2016, January 18). 55 Nigerians stole over N1.34 trillion in 8 years – Lai Mohammed. Retrieved on Monday 23, 2024.

- Mojeed, M. (2012). How Ibori, the thief in Government House, admitted stealing \$ 250 million. Retrieved from <https://www.premiumtimesng.com/news/3972-how-ibori-the-thief-ingovernment-house-admitted-stealing-250million.html>
- Nigerian Voice (2010). \$35million money laundering: Rev. Oyakhilome Agents attempts to destroy evidence in Nigerian Voice of 2nd December, 2010: Retrieved from huhuonline.com
- Nnoch, N. D. I. (2016). Cited in Vincent Eseoghene EFEBEH and Benjamin Okhawere OHIS. The Menace of Vote Buying In Nigeria Electoral System: Issues, Causes and Solutions 2015-2023. *Journal of Public Administration, Finance and Law*. Issue 28/2023 <https://doi.org/10.47743/jopafl-2023-28-08>
- Nwankwo, A. A (1999). *The Stolen Billions*. Enugu: Frontline Publishers
- Obasanjo, O. (2012, May 23). Rogues, armed robbers in national assembly. Punch. Retrieved from <http://www.punchng.com/news/rogues-armed-robbers-in-nassembly-obasanjo/>
- Obasanjo, O. (2016). In *The Cable* (2016, November 16). Obasanjo: National assembly is a den of corruption occupied by unarmed robbers. <https://www.thecable.ng/obasanjo-nassembly-den-corruption-occupied-unarmed-robbers>
- Ogunbunmi, B (2012). "PHB ex-Boss Atuche paid N54million to church as tithes from Stolen money" Retrieved on 16/8/2022; from <https://www.nigeriafilm.coms/news>.
- Ogundiya, I. S. (2009). Political corruption in Nigeria: theoretical perspectives and some explanations. *The Anthropologist*, 11(4), 281-292.
- Ogundiya, I. S. (2010). Corruption: the bane of democratic stability in Nigeria. *Current Research Journal of Social Sciences* 2 (4), 233-241
- Okonjo-Iweala, N. (2017). 'Shameful' Nigeria: a country that doesn't care about inequality. Retrieved on October 17, 2024, from <https://www.theguardian.com/inequality/2017/jul/18/shameful-nigeria-doesnt-care-about-inequality-corruption>
- Olukoyede, O. (2023). Nigeria lost ₦2.9trn through contract fraud in three years. Retrieved on October 19, 2024, from <https://www.premiumtimesng.com/news/headlines/635020-nigeria-lost-%E2%82%A62-9trn-through-contract-fraud-in-three-years.html?tztc=1>

- Olurode, L. (2022). Why the elite cannot help Nigeria. Retrieved on February 29, 2024, from <https://businessday.ng/politics/article/why-the-elite-cannot-help-nigeria/>
- Omokri, R. (2017). Omokri: GEJ fired ministers accused of corruption but there are 'looters' in this govt. Retrieved from <https://www.thecable.ng/omokri-gej-fired-ministers-accused-corruptionlooters-govt>
- Onyeonoru, I. (2002). Anomie and workplace deviance: A sociological analysis of bureaucratic corruption in Nigeria. In U. C. Isiugo-Abanihe, A. N. Isamah, & J. O. Adesina (Eds.), *Currents and perspectives in sociology* (p. 306). Ibadan: Department of Sociology, University of Ibadan.
- Orji, D. O. (2011). The role of the churches in combating corruption among political leaders in Anambra state, Nigeria. An Unpublished Ph.D Thesis of the Faculty of Social Sciences. University of Nigeria, Nsukka.
- Petrecu, V.G., Burgess, A. W., Stone, M. & Brucato, G. (2020). Cited in Petrecu, V.G., Brucato, G., Burgess, A.W. & Dixon, E. (2020). *Criminal Cannibalism: An Examination of Patterns and Styles, Aggression and Violent Behavior*, <https://doi.org/10.1016/j.avb.2020.101531>
- Premium Times (2022, May15th). SERAP sues Buhari for spending N1.48 trillion on maintaining refineries with no crude oil. Retrieved on October 25, 2024, from
- Punch Editorial Board (2016). Let corrupt judges go to jail. Retrieved on October 19, 2024, from <https://punchng.com.cdn.ampproject.org/v/s/punchng.com/let-corrupt-judges-go-jail>
- Report of Tribunal (1967). Nigerian Port Authority.
- Report of Tribunal (1967). Nigeria Railway Corporation.
- Ribadu, N. (2023). Forgotten Cases of Looting. Retrieved on October 21, 2024, from https://pmnewsnigeria.com/2012/10/29/forgotten-cases-of-looting/#google_vignette
- Rogers, E. M. (2003). *Diffusion of innovations*. 5th ed. New York (NY): Free Press.

- Sanusi, M. (2021). Sanusi describes fuel subsidy as a scam, says people in power make billions of dollars from it. Retrieved on October 29, 2024, from <https://thestreetjournal.org/sanusi-describes-fuel-subsidy-as-a-scam-says-people-in-power-make-billions-of-dollars-from-it/>
- Solarin, I. (2020). Caregiver Allegedly Defiles Teenager, Rapes Woman With Down Syndrome. Retrieved on October 19, 2024, from <https://dailytrust.com/caregiver-allegedly-defiles-teenager-rapes-woman-with-down-syndrome/>
- Sotubo, M. (2014, November 27). Ex-president says national assembly members are thieves. Pulse TV. <https://www.pulse.ng/olusegun-obasanjo-ex-president-says-national-assembly-members-are-thieves/nglkmj5>.
- Stone, M., & Brucato G. (2019). The new evil: Understanding the emergence of modern violent crime. Amherst, NY: Prometheus Books.
- Street Journal (2012). Fuel subsidy removal: A catalogue of frauds. Retrieved on October 29, 2024, from <https://thestreetjournal.org/fuel-subsidy-removal-a-catalogue-of-frauds/>
- Tambuwal, W. (2013, December 31). How to win anti-graft war. The Nation
- The Daily Sun Newspaper, (2007 June 18
- The Economist Magazine (2019, 10th October).
- Tolu-Kolawole, D. (2024). 39 lecturers indicted for sexual harassment in five years – Report. Retrieved on October 19, 2024, from <https://punchng.com/author/dtolu-kolawole>
- Tor, S. (2022). Why the elite cannot help Nigeria. Retrieved on October 17, 2024, from <https://businessday.ng/politics/article/why-the-elite-cannot-help-nigeria/>
- Transcorp press release, (2007 May 17). Bluestar consortium wins bid for port harcourt refining company. Retrieved from <http://www.transcornigeria.com/corporatecom/news.php?page=fullstoryandnid=49>

- Transparency International (2016). How to Stop Corruption: 5 Key Ingredients. Retrieved on October 29, 2024, from <https://www.transparency.org/en/news/how-to-stop-corruption-5-key-ingredients>
- Trump, D. (2018). Nigeria and Trump's shithole comment. Retrieved from <https://punchng.com/nigeria-and-trumps-shithole-comment/>
- Wale, O. (2017). Nigeria Out of Top 10 Most Corrupt Nations in Daily Post. Dailypost.ng
- Whittle, H. J., Palar, K., Hufstedler, L. L., Seligman, H. K., Frongillo, E. A. & Weiser, S. D. (2015). Food insecurity, chronic illness, and gentrification in the San Francisco Bay area: an example of structural violence in United States public policy. *Soc Sci Med.*143, 154-161. <https://doi.org/10.1016/j.socscimed.2015.08.027>
- Yahaya, U. (2020). Cited in Vincent Eseoghene EFEBEH and Benjamin Okhawere OHIS. The Menace of Vote Buying In Nigeria Electoral System: Issues, Causes and Solutions 2015-2023. *Journal of Public Administration, Finance and Law*. Issue 28/2023 <https://doi.org/10.47743/jopaf-2023-28-08>
- Yuguda, I. (2023). Fuel Subsidy Pure Scam, My Friend Got Tired Of Making Money From It – Former Bauchi Gov, Isa Yuguda Reveals. Retrieved on October 29, 2024, from <https://thestreetjournal.org/fuel-subsidy-pure-scam-my-friend-got-tired-of-making-money-from-it-former-bauchi-gov-isa-yuguda-reveals/>

School Characteristics and Sexual Violence among In-school Adolescents in Ekiti State

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Abstract

The study investigated the influence of school characteristics on the prevalence of sexual violence among secondary school adolescents in Ekiti State. The population of the study consisted of both male and female adolescents, in public and private secondary schools. A sample size of 1100 was achieved through multistage sampling technique. Semi-structured questionnaire was employed in collecting quantitative data from 1100 respondents from 55 secondary schools in the three senatorial districts of the State. Both descriptive and inferential analyses were done in achieving the objectives of the study at $p < 0.05$ level of significance. Hypotheses raised, were tested using t-test, ANOVA and Pearson Product Moment Correlation Coefficient. The findings of the study indicated that the process and form of transit in and out of school; inadequate and improper toilet facilities; and perimeter fencing are significant issues in the prevalence of sexual violence among in-school adolescents.

Key words: sexual violence, in-school adolescents, school characteristics.

Introduction

Sexual violence is any sexual act that is forced on an individual or that an individual is manipulated to participate in. The act is in various forms,

which are perpetrated through physical, verbal or virtual means. It includes sexual abuse, rape, sexual harassment, sexual exploitation and sexual assault. It has no time or geographical restrictions. Women and adolescent girls are classified as the at-risk group. Females aged 16 – 19 years are 4 times more likely than the general population to be victims of sexual violence (Bureau of Justice Statistics, 2020)

As most of the incidents of sexual violence occur in homes and residential buildings, focussing on schools for pattern of sexual violence is a relatively recent development. Reports of Magwa (2015) and Human Rights Watch (2018) are indicators that sexual violence takes place in school communities. Sexual violence in schools is when the school serves as the place of occurrence. It is any form of inappropriate sexual activity that occurs in the school setting, with the perpetrator as any member of the school community. Teachers, supporting staff and even students could be perpetrators. However, cases of sexual violence are under reported in schools due to sentiments about the status of the perpetrator (Robinson, 2022) and the negative press that it could attract to the school. Since when there is an occurrence, it could be covered up easily, the tendency for victims' silence increases (Altinyelkan and Mat, 2018).

There are various forms of sexual violence. Willy and Ploem (2018) identified the physical form as rape, fondling, inappropriate touching, kissing, penetration with objects, sodomy and attempted rape. Non-contact forms were also identified as showing of sexual materials, masturbation and/or exposure of sexual parts before the victim, making sexual comments and showing sexual video to a child. Non-contact sexual violence sometimes involves the use of social media platforms to facilitate victimization (Ireton, 2022). Most of the physically perpetrated sexual violence could also be facilitated by the internet, especially in this age of online dating relationships. Children in their adolescent ages (13 years and above) are the mostly affected (Idoko, Nwobodo and Idoko, 2020). This could possibly be because as the internet generation or Gen-Z, they tend to easily comply with information on the internet, without verifying the veracity.

The Child Rights Act bestowed the responsibility of the security of each

child, particularly, the adolescents on the State. The International Treaty legally vested the rights of protection of children, particularly on issues relating to gender-based violence and specifically, sexual violence, in the State (Kar, 2015). Ekiti State has been in the vanguard of the “war against sexual violence” and even declared a State of Emergency on it. The State, thus, took the lead in the domestication of Child's Rights Law in Nigeria (Awofadeji, 2019). Bills in respect of this were passed into law and accented to in 2020 (Ekiti State Gender Based Policy, 2021). The Law included compulsory free treatment for child victims, and other welfare packages. A policy that opposes bail and reject plea bargain from perpetrators was introduced and an unhindered justice was promised (Ezeamalu, 2020).

Other notable initiatives of the Ekiti State Government against gender-based violence including sexual violence are: (i) Sexual Assault Referral Centre (SARC), known as Moremi Clinic, to provide medical, legal, and counseling support to survivors of sexual violence; (ii) GBV Management Committee, to oversee the implementation of GBV laws; and (iii) Toll-free lines: for the reporting of GBV cases. Moreover, Ekiti State has specifically benefitted from the Adolescent Girls Initiative for Learning and Empowerment (AGILE) Project, a World Bank assisted Federal Ministry of Education project, geared at improving secondary education opportunities for adolescent girls, aged 10 to 20 years. It focused on infrastructural deficit that could contribute to the vulnerability of the girl child and prevent them from completing secondary education among other reasons. It is against this backdrop that this paper examines school characteristics as factors not only in the vulnerability but the prevalence of sexual violence among in-school adolescents.

School characteristics are the components that make up the school and thus define each school. They include the human, the physical as well as the administrative structure of the school. The human component includes the students, teaching and non-teaching staff. The physical structures include the buildings consisting of the classrooms, the staffrooms, offices, playgrounds, toilets and perimeter fence. The road that leads to the school, the distance between the school and the residential areas, mode of transportation, the nature of school (whether

single sex or mixed), the type of school (private or public) are equally part of the physical structure. The administrative structure includes the principal, the vice-principal, the school counsellor and counselling activities as well as the registrar.

Objectives of the Study

The objectives of the study are to:

- (i) investigate the prevalence of sexual violence among in-school adolescents;
- (ii) probe school characteristics as factors in the experience of sexual violence among in-school adolescents to sexual violence.

Theoretical Framework

The focus of the study was hinged on the Ecological Systems Theory that analysed sexual violence using five major assumptions, which are: (i) micro system, (ii) mesosystem, (iii) exosystem, (iv) macrosystem and (v) chronosystem (Evans, 2023). Emphasis in this study is on the macro system which shows how the social cultural and geographical location, the poverty level of the community, access to facilities such as toilet, fence and other structural facilities of the child affect their vulnerability. Since the significance of the school community in the life of every in-school adolescent cannot be overemphasized, it is assumed that inadequate or unavailability of facilities that has to do with security and conveniences in the school community could increase their vulnerability.

Method

Semi-structured questionnaire was the instrument employed in data collection. The face, content and construct validity of the instrument (appropriateness of the items for target participants and assurance of objective coverage), were ascertained by experts in the field of Guidance and Counselling and Sociology. Sixty-nine items were submitted to the expert. Items were found usable after corrections had been made. The internal consistency of the instrument was obtained using the split-half method. The items were divided into two, with the odd and the even numbers separately. Scores from each part were correlated using Kuder Richardson's formula to determine the reliability of the instruments and the result revealed 0.86 level of correlation.

The population of the study consisted of both male and female adolescents, in public and private secondary schools in Ekiti State. Multistage sampling procedure involving, stratified, proportional, purposive and simple random sampling techniques were employed in the study. Adequate Senatorial representation was ensured through stratification of the State into three; Ekiti Central, Ekiti North and Ekiti South to align with the existing Senatorial Districts in the State. A representative sample was drawn from public secondary schools in each of the divide in proportion with the estimated population of students in the various Senatorial Districts. These represented 43.2%, 30% and 25.8% of the total number of secondary school students in Ekiti State. Hence, the sample was drawn according to this proportion, which translated into 22, 15 and 13 public secondary schools from the Central, South and the North Senatorial Districts, respectively. In all, a total of 50 public secondary schools was selected across the three Senatorial Districts. Each school selected was stratified into both Junior and Senior sections, for adequate representation of the two levels of study. Moreover, five private secondary schools were randomly selected from Ekiti Central Senatorial District, to complement samples from public secondary schools. The Central Senatorial District was purposively considered in the regard because of the concentration of private schools in the District. Twenty students, consisting 10 male 10 female, with their ages ranging between 13 and 19 years were randomly selected from each of the selected schools (public and private) making a sample size of 1100 respondents.

The research instruments were administered by the researcher and trained research assistants (school counsellors). The process of data collection adhered to the ethical process of anonymity, confidentiality, permission and informed consent. Permission for access to the respondents and administration of the research instrument was obtained from the principal of each participating School. To ensure confidentiality, research assistants were trained to guard against third party's interference, and to ensure that participants were adequately informed of the purpose of the information collection before their participation. The findings were reported in a manner that ensured that the identities of participants and that of their Schools were not disclosed.

After data cleaning and editing, 1,067 out of the 1,100 copies of the questionnaire administered could be subjected to data analysis. Data collected were analyzed, using Statistical Package for Social Sciences (SPSS Version 25). Both descriptive and inferential analyses were undertaken towards achieving the objectives of the study at $p < 0.05$ level of significance. Hypotheses raised, were tested using t-test, ANOVA and Pearson Moment Correlation Coefficient.

Data Analysis

The demographic characteristics of respondents are shown in Tables I. Respondents are presented according to their distribution by school characteristics. The Table shows that the sex ratio of the respondents across the selected Senatorial Districts (SD) is in a close range (58% were female while 41.1% were male). Majority (88.4%) were from mixed sex schools. The disparity in the sample size (two from each of the SD) is due to the relative low number of single sex schools in the State. Also, 60.2% of the respondents accessed their schools by trekking especially through bushy paths that could serve as hideouts to hoodlums. While 22.9% of the respondent reported that they accessed their schools by motorbike (popularly called okada); 14% went by taxi. This is an indication that the process of accessing school could predispose adolescents to SV, particularly when they are alone.

The percentage of respondents in schools not fenced was 41.8%, while the proportion whose schools were fenced was 58.2%. In some of the schools sampled, as observed by the researcher, there was only surface fencing, like mere extension of the gate for aesthetic purposes or just about two blocks above the foundation. Security of students which is the primary reason for

Table I: Distribution of Respondents by Sex and School Characteristics

Characteristics	Male (N=439)		Female (N=628)		Both sexes (N=1,067)	
	N	%	N	%	N	%
Distribution by Senatorial District (SD)						
Central	212	19.8	300	28.1	512	47.9
South	125	11.7	176	16.5	301	28.2
North	102	9.5	152	14.2	254	23.8
School type						
Private	42	3.9	58	5.4	100	9.3
Public	397	37.2	570	53.4	967	90.6
Nature of school						
Single	47	4.4	78	7.3	125	11.7
Mixed sex	392	36.7	550	51.5	942	88.5
Mode of transportation						
By trekking	253	23.7	390	36.6	643	60.2
Okada	101	9.5	144	13.5	245	22.9
Taxi	76	7.1	80	7.4	156	14.6
Others (tricycle and bicycle)	09	0.8	14	1.3	23	2.2
School fence						
Yes	264	24.7	357	33.6	621	58.3
No	175	16.4	271	25.3	446	41.7
Toilet facilities						
Pit toilet	121	11.3	93	8.7	214	20.1
Water system	195	18.2	280	26.2	475	44.5
Open defecation	151	14.2	227	21.3	378	35.4
Distance from school						
One kilometer and less	247	23.1	347	32.5	594	55.6
Above one kilometer	192	18.0	281	26.3	473	44.3

fencing is hence defeated. The Central SD had about one-third (29.4%) of the fenced schools while the North SD had the least at 10%.

Regarding respondents' access to toilet facilities, 20% of the respondents had access to latrine, 44.5% to water closet while 35.4% only had access to open defecation. The researcher observed that some of the water cistern toilets were never in use because of unavailability of electricity to power water pumping machine. Where generators were available, there was the fuel challenge. By inference, students in such schools still ended up

defecating in the open. Open defecation happens in all the SD, 55.4% of the participants had access to the undesirable toilet types. Toilet facility no doubt happens to be one of the essential facilities or infrastructures in the school system, lack of which forced students to defecate in the open, particularly in the hidden bushy section of the compound. The most desirable type of toilet was the most unavailable. Latrine is not desirable because more often the doors are compromised. The most undesirable is the open defecation; it is unhygienic and it exposes users to risks, such as physical attack, reptile and even sexual predators.

Moreover, distribution of respondents by distance from respondents' homes to their schools showed that 55.6% reported less than one kilometer from home, while respondents whose place of residence was more than one km from school were 44.3%. By inference respondents who lived far from school forms 44.3% of the absolute. Students who lived far from school definitely had to make some choice of other means of transportation apart from walking.

Prevalence of Sexual Violence

Towards investigating the prevalence of sexual violence among the study population, data on their experience of sexual violence are presented in Table II while the forms experienced are as shown in Figure I. The Table shows that a significant proportion (62%) of the respondents had experienced at least one form of sexual violence. The experience is relatively higher among female. This further goes to confirm that sexual violence is more prevalent among female adolescents (Maduakolam, Adonor, Ede and Okoh, 2023). The forms of sexual violence, usually experienced were mostly forceful touching of sensual areas (39.9%); forceful sex/rape (29.2%) and unsolicited kissing/hugging (27.6%) (Figure I).

Table II: Distribution of Respondents by Experience of SV

Ever experienced SV	Sex		
	Male	Female	Both sexes
	N / %	N / %	N / %
Yes	266 (25.1)	398 (37.2%)	664(62.3%)
No	173 (16.2%)	230 (21.5%)	403 (37.7%)
Total	439 (41.3)	628 (58.7)	1067 (100%)

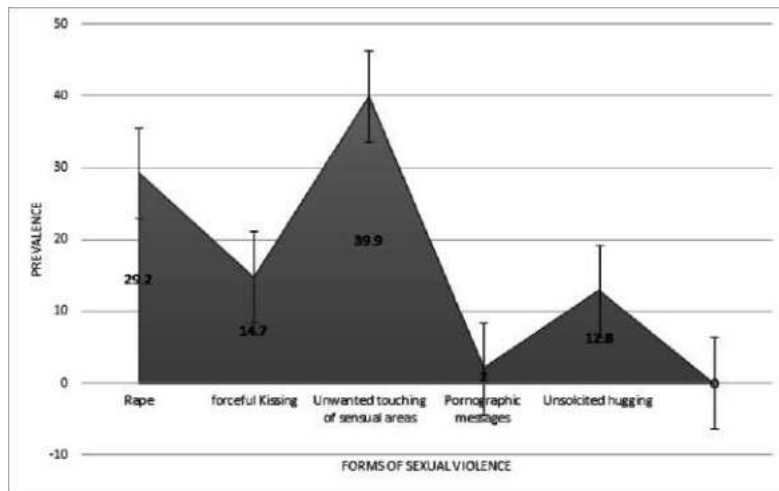


Figure I: Prevalence of sexual violence by form experienced by respondents.

That as many as about two-fifth (37.7%) of the adolescents had never experienced any form of sexual violence is reassuring, as it could be indicative of the effectiveness of the interventions and programmes of the Ekiti State Government towards reducing the incidence of gender-based violence, especially sexual violence to the barest minimum.

School characteristics as factors in adolescents' experience of SV

An attempt to position school characteristics as issues in the experience of sexual violence among in-school adolescents is captured in this section. Data in the regard are presented in Table III. The Table revealed that students in private schools are as susceptible to sexual violence as those in public schools. Relative comparison showed that nature of school has influence on the experience sexual violence. In essence, adolescents who are in mixed sex schools tend to be

Table III: Relationship between school characteristics and SV Experience

School Characteristics	SV Experience (664)
Type of school	
Private	83 (12.5%)
Public	581 (87.5%)
Nature of school	
Single sex	62 (9.3%)
Mixed sex	602 (90.7%)
Toilet Facilities	
Latrine	109 (16.4%)
Water Closet	279 (42%)
Open defecation	276 (41.6%)
Mode of transportation	
Trekking	431 (64.9%)
Motorbike (Okada)	147 (22.3%)
Taxi	73 (10.9%)
Others	13 (1.9%)
School fence	
Yes	350 (52.7%)
No	314 (47.3%)
Distance between home and school	
1 km and below	319 (48.1%)
Above 1km	345 (51.9%)

victims of sexual violence more than their counterparts in single sex schools. The findings of the study also show that 41.6% of victims of sexual violence engaged in open defecation and that 73% of participants who had defecated in the open had been victims of SV. Therefore, for every three adolescents that had used open space for defecation, two were victims of sexual violence. Apparently, adolescents who defecated in the open were vulnerable to miscreants, dysfunctional students and random hoodlums who often used bushes as hideouts.

Also, respondents that made use of compromised door latrine had 16.4% prevalence. It is worth noting that respondents who used pit latrine formed 20% of the sample and out of these 50.9% had experienced SV. The

implication of this is that more than half of the students who used compromised door latrine had experienced SV. Moreover, 42% of the victims had access to water system toilets in their schools. Since 68% of the victims did not have access to the best toilet systems, toilet facility could be classified as a risk factor in the prevalence of sexual violence among in-school adolescents.

Mode of transportation to school is equally indicated as a predisposing factor in sexual violation of in-school adolescents (Nasman & Langefors, 2020). The data in Table III confirms this opinion, as it shows that 64.9% of the victims trek to their schools, 22.3% did through commercial motorcycle and 10.9% through Taxis. However, the findings of the study showed that whether or not schools are fenced or distant from home, respondents still experience sexual violence.

To have more in-depth understanding of the issue of concern in the study, the following three hypotheses were formulated and tested. While hypotheses I and II were tested using one-way ANOVA (Tables IV and V), the test of hypothesis III was through Pearson Product Moment Correlation Coefficient (r) (Table VI).

- (i) There is no significant difference in the prevalence of sexual violence by nature of school;
- (ii) There is no significant difference in the prevalence of sexual violence among adolescents in private and public schools
- (iii) There is no significant difference between school facilities and sexual violence prevalence

As indicated in Table IV, given that $F = 8.482$; $p = .004$ (less than 0.05), the Null Hypothesis which states that there is no significant difference in prevalence of sexual violence by nature of school is rejected in favour of the alternative hypothesis. This goes to show that by comparing the level of significance with the pre-determined p-value ($p (.004) < .05$), nature of school could statistically determine sexual violence prevalence. Therefore, schools being mixed sex or single sex could determine the prevalence of sexual violence among adolescents.

Table IV: One-way ANOVA Showing Difference in Sexual Violence Prevalence by Nature of School

Nature of school	Sum of squares	Df	Mean squares	F	Sig
Between groups	0.872	1	0.872	8.482	0.004
Within groups	109.484	1065	0.103		
Total	110.356	1066			

p - Value < .05. *df* = degree of freedom.

Table V presents the Analysis of Variance on the test relating to whether or not there is significant difference between the prevalence of sexual violence among adolescents in private and public schools. The result shows that there was no statistically significant difference between the two groups as demonstrated by one-way ANOVA ($F(.027)$; $P = .870$). Thus, there is no significant difference in the prevalence of sexual violence among private and public school students.

Table V: One-way ANOVA Showing the Difference between Prevalence of Sexual Violence among Adolescents in Public and Private Schools

Type of school	Sum of squares	Df	Mean squares	F	Sig
Between groups	.003	1	.003	.027	0.870
Within groups	115.667	1065	109		
Total	115.670	1066			

P - Value > .05.

The findings from the descriptive analysis of the relevant data collected in the study which indicated nature of school, toilet facility and fencing as significant school characteristics predisposing in-school adolescents to sexual violence experience were considered in the test of hypothesis III (see Table VI). The result of the test of hypothesis III as shown in Table VI revealed significant negative relationships between nature of school ($r = -.790$, $p = .002$), toilet facility ($r = -.714$, $p = .002$), fencing ($r = -.413$, $p = .000$) and sexual violence prevalence while toilet facility and nature of school had strong negative relationship with sexual violence prevalence. The implication of the result is that, increase in toilet facilities and fencing

could reduce sexual violence prevalence. However, the scope of the relationship between sexual violence and fencing is relatively weaker. Type of school on its own, has weak positive but significant relationship with sexual violence ($r = .05, p = .022$).

Table VI: *Correlation between Sexual Violence and School Physical Components*

	Sexual Violence	School Type	Nature of School	Toilet Facility	Fencing
Sexual Violence	1.000	.05	-.790**	-.714**	-.413**
r		.022	.002	.000	.000
Sig		1.88	2.84	2.15	1.42
Mean	1.38	.329	.470	.729	.493
SD	.485				
Type of school	.05	1.000	.041	.070*	.063*
r			.128	.022	.000
Sig	.022				
Mean	1.88				
SD	.329				
Nature of school	-.790**	.041	1.000	.603	.277**
r		.182			.000
Sig	.002				
Mean	2.84				
SD	.470				
Toilet facility	-.714**	.063*	.277**	1.000	-.045
r		.041	.000		.142
Sig	.000				
Mean	2.15				
SD	.729				
Fencing	-.413**	.070*	-.016	1.000	1.000
r		.022	.603		
Sig	.000				
Mean	1.42			1067	1067
SD	.493				

**Correlation is significant at 0.01 level (2 tailed)

* Correlation is significant at 0.05 level (2 tailed)

Discussion of findings

The prevalence of sexual violence is observed to be high among in-school adolescents in Ekiti State. Girls are more at risk but the prevalence gap by sex is not as wide as earlier anticipated and reported (Ezechi, Musa, David, Wapmuk, Gbajabiamila, Idigbe, et. al. (2016). Aspects of school characteristics, especially those relating to school physical structure such as mode of transportation to school; toilet facility; and perimeter fencing were found to be significant factors in the observed high prevalence of sexual violence among in-school adolescents. Undeniably, trekking and motor biking as common means of getting to school contribute significantly to students' level of vulnerability and experience of sexual violence. Usually, when students are in transit trekking, there is poor

social control as they are in the midst of themselves and without any visible adult to check their excesses. The level of prevalence among students who used commercial motorcycle might not be far from the fact that riders are often alone with their passengers going through lonely bush paths. As hoodlums could loiter around these paths, female passengers being conveyed to school may become victims of sexual violation either by riders and/or loitering hoodlums as perpetrators. That those who boarded taxis were the least affected is not unexpected. Obviously, most schools cannot be accessed by taxis due to road network issues, hence the preference for commercial motorcycles.

Generally, toilet facility is a major issue in Ekiti State Secondary Schools. This possibly explains the observed rate at which mode of toileting relates to experience and prevalence of sexual violence in schools. Students, particularly, female students having their conveniences in open spaces, where anyone can easily see them, are often exposed to sexual violation. As such open spaces are accessible to mischievous students as well as miscreants, it could have provided opportunities for assailants and predators to sexually assault students. Thus, in line with the finding of Ukpabi (2023) that lack of adequate and proper toilet facilities are key issues in the prevalence of sexual violence among in-school adolescents. Perimeter Fencing is a security facility that ensures the control of movement in and outside the school compound. It is the facility that gives the school premises the preface compound. The security of life and property of a school is compromised when the school is not fenced. Interestingly adolescents in both fenced and non-fenced schools had experienced sexual violence at about the same proportion. This may not be unrelated to the fact that the schools of more than half of the respondents were not fenced while there were more aesthetic fences than perimeter fences in many of the schools. Some of the schools had beautiful gates and a little painted extension that does not extend beyond the frontage.

Conclusion and Recommendations

Consequent on the findings of the study, it is clear that the experience of sexual violence is prevalent among in school adolescents. School characteristics, especially the mode of transportation to schools and

availability of toilet facility in schools are significant issues in this regard. Against this background, the following recommendations are suggested.

- i. Adequate modern toilet facilities should be provided in schools by stakeholders (the Government, Parent Teachers Associations (PTA), School Based Management Committee (SBMC); Old students Association). This should be complemented by funding the availability of other facilities, such as water for water system toilet; power supply to assist in getting sufficient water for the toilets;
- ii. Government should reconsider the reinstatement of boarding facilities in Secondary Schools, and parents should buy into the relevant policy, so as to forestall vulnerability through daily transit.

References

- Altinyelkan, H. K. & Mat, M. L. (2018). Sexual violence schooling and silence: teacher narratives from a secondary school in Ethiopia. *Compare: A Journal of Comparative and International Education*, 48(4), 648-664. Retrieved from <http://doi.org/10.1080/03057925.2017.1332517>
- Awofadeji, S. (2019). Non-Domestication of the Child Rights Act by 11 Northern states Worries Unicef. *This Day Newspaper*, November 24. <http://www.thisdaylive.com>.
- Bureau of Justice Statistics (2020). National Crime victimization survey.
- Convention on the Rights of the Child (1989). Office of the commission for human rights. <http://www.ohchc.org>.
- Ekiti State Gender-Based violence (prohibition) Law (2011).
- Ekiti Gender-Based policy (2021).
- Evans, O. G. (2023). Bronfenbrenner's. Ecological systems theory. *Child psychology and development*. <https://www.simplypsychology.org>>...
- Ezeamalu, B. (2015). "Fact check: Nigeria's sexual offences bill stipulates 18years, not 11years as the age of consent". Premium Times, 30 June, 2015.
- Ezechi, O. C., Adesolamusa, Z., David, A. N., Wapmuk, A. E., Gbajabiamila, T.

- A., Eugeniaidigbe, I., Ezeobi, P. M., Ohihoin, A. G. & Ujah, A. I. (2016). Trends and patterns of sexual assault in Lagos South-Western, Nigeria. *Pan African medical Journal*. <https://doi.org/10.11604/pamj.2016.24.261.9172>.
- Human Rights Watch (2018). Sexual exploitation, harassment and abuse in secondary schools in Senegal. www.hrw.org
- Idoko, C. A., Nwobodo, E. D. and Idoko, C. I. (2020). Trends in rape cases in a Nigerian State. *African health Sciences*. 20(2); 668-675. [doi:10.4314/ahs.v20i2.17](https://doi.org/10.4314/ahs.v20i2.17)
- Ireton, J. (2022, November 02). Newdata shows increase in reports of sexual abuse in schools. CBC News. <https://cbc.ca/delivered>.
- Maduakolam, I.O, Adonor, J.O, Ede, S.S & Okoh, C.F (2023). Knowledge and experience of sexual violence among female Adolescents in public Schools in Enugu State during the covid-19 pandemic. Pg 204-224. <https://doi.org/10.1080/10538712.2023.2181902>.
- Magwa, S. (2015). Child sexual abuse by teachers in secondary schools in the Masvingo District, Zimbabwe: Perception of selected stakeholders. Unpublished doctoral dissertation in psychology of education. University of South Africa.
- Nasman P. & Langefors L. (2020) Sexual violence on the move. An assessment of youth's victimization in public transportation <https://doi.org/10.1080/08974454.2020.1733732>.
- Robinson, A. (2022). Child sexual abuse and victimization by K-12 school personnel in Canada. Canadian Centre for Child Protection. <https://protectchild.ca>
- Ukpabi M.C (2023) open defecation: Health and Social effects on Nigerian Women. *African journal of social and behavioural Science*, <https://journal.apriapub.com/index.php/AJSBS/article/view/2026>.
- Willy, V. B & Ploem, R. (2018). Sexual Violence Knowledge File. Rutgers, The Netherlands. www.nutgers.international.

**ASSESSING THE IMPACT OF POLITICAL REFORMS ON
DEVELOPMENT OF NIGERIA'S NIGER DELTA REGION.**

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Abstract

The paper examines the essence of political reforms on Nigeria's development, focusing on Niger Delta region. It evaluates some socio-economic and political reforms undertaken by the Nigerian government. It also analyses the impact of the reforms as well the implications for the development of Niger Delta region. Sustainable Policy Framework was adopted as the basis of analysis, the methodology adopted was secondary which involves desktop research, textbooks, occasion papers and electronic research and the data collected were analyzed qualitatively, using content and thematic analysis. The study revealed that; leadership failure, poverty and corruption among the major stake holders and the nature of political democratization is the bane of Niger Delta region. The research draws its conclusion from the above observation that; poor implementation of the reforms among others, contributed immensely to the challenges of Niger Delta Development. It therefore recommends some strategies for successful and effective implementation of reforms in the country which includes; the need for government to come up with a scheme for the unemployed youths in the Niger Delta region that would entail training and provision of social security and also, government should embark on developmental project that

can improve the standard of living of the people in the region; democratization of the processes of policy and program interventions; transparency and accountability of the reform implementation in Niger Delta region by the both the political and community leader.

Key Words: *Democracy, political reforms, National Development, Niger Delta.*

Introduction

The Nigerian political reforms over the years have been subjected to various academic discourse and policy targets particularly in the area of development. This arises from the fact that the country's public sector performs below expectations and in most cases renders services that were classified as ineffective, inefficient and to an extent "appears to be counter-productive" despite the huge budgetary allocation directed to Niger Delta region, just like other public sectors, it suffers from a number of well-known bureau pathologies, inefficiency, centralization, fragmentation, poor leadership, and poor policy implementation, lack of capacity, corruption, and poor accountability and legitimacy (Therkildsen, 2001). Nigeria is richly endowed by providence with human and material resources that are essential for national development. However, since political independence, Nigeria has continued to meander the path befitting a weak state. This is a state that had very great prospects at independence and was touted to lead Africa out of the backwoods of underdevelopment and economic dependency, is still stuck in the league of very poor and underdeveloped country and an open perversion of justice. This is in line with Agagu (2010), who also observed Nigeria as a country that manifest contradictions in many ways as; apparent poverty among its citizenry in spite its abundance resources; problems of underdevelopment in spite of its human and natural resources; its massive continues brain drain in its critical sectors in spite of the fact that economy and various sectors are begging for development; it's the authoritarianism that characterizes its democracy; level of poverty in producing region and among others. Agagu (2010).

Thus, one cannot but agree with the position that Nigeria is a victim of

poor leadership and convoluted systemic corruption which has become pervasive and cancerous in the country's national life. This view has been held strongly in literature by scholars and writers who have identified the inexorable nexus between leadership crisis and corruption in the country as the continued reason for Nigeria's inglorious economic throes, political convolutions and national underdevelopment. Current debates rest on the conclusion that Nigerian leadership suffers from extreme moral depravity and attitudinal debauchery (Agbor, 2012; Agagu, 2010). In fact, Agbor argues that the success or failure of any society depends largely on the mannerism and idiosyncratic attributes of its leadership. This, however, does not exonerate the role played by civilian components of the military ruling elites in addition to their allied comprador bourgeoisie oligarchies during the military era. Therefore, upon return to democratic governance, Nigeria was faced with the challenges of seeking strong development performance with weak governance institutions (Federal Government of Nigeria, 2015). It is on the background that this paper seek to examine the different reforms carried out by the federal government with the intention of enhancing development in the Niger Delta region of Nigeria.

This paper is very significant in the sense that, issue of development in Niger Delta region is very pivotal being the economic hub of the nation. Nigeria largely depends on oil income, taxes and royalties paid by transnational oil companies and on profits gained from its equity stakes in those companies' investment. Oil products accounts for about 80% of Nigerian Government revenues, 95% of export receipts and 90% of foreign exchange. The Niger-Delta alone accounts for over 90% of Nigeria's oil revenue. The paper will also contribute to the existing literatures on Niger Delta issues for the purpose of further research.

Statement of the Problems

The environmental crisis has led to incessant agitations and repression as well as the growth of pressure groups in the in Niger Delta areas which informed different reforms by Government in order to douse the tensions of agitation for development in the region. A careful study of events since the discovery of oil in the region up to the return of democratic governance show that successive governments from military rule to democratic government neglected the region. However, the return of the country to

democratic governance in 1999, which marked the beginning of fourth republic, the agitation of the people of the region reached alarming proportion, which culminated in unprecedented level of insecurity of lives and property. Not only that, the crisis in the region brought about dwindling economic fortunes in the country as it crippled oil exploration activities in the region, on account of serial premeditated attacks launched on the equipment and installations belonging to major multi-national oil firms operating in the region. Oil production in the region reduced to an all-time low of 700,000 barrels per day, a development that crippled the running of affairs of the government since crude oil exportation is the mainstay of the nation's economy. Different reforms adopted by Nigeria government to tackle the problem of development and insecurity always failed in the process of implementation as it lacks good background for policy formulation. This paper focuses on these specific objectives as; it examines the reforms in the Niger Delta Region; accessing the impacts of the reforms on the national development and also evaluate the challenges of the reforms.

Methodology

This research is analytical and descriptive. Method of data collection was majorly secondary, which was basically on literatures i.e peer-reviewed journals, newspaper magazine, seminar papers, chapters in book on Niger Delta issues etc. Content and thematic analyses was explored as a framework to evaluate the data collected. The reason for preferring this method of data collection was that, they are numerous literatures, where both qualitative and quantitative data have been carried out. It was therefore easier for the researcher to leverage on the existing abundant material for this research. The scope of this work is Nigerian fourth republic but specifically, 1999-2015. This was the period when significant reforms were carried out on Niger Delta vi-a-viz; Niger Delta Development Commission(NDDC), Oil and Mineral Produce Area Development Commission (OMPADEC) and Amnesty International within the period of Olusegun Obasanjo, Umaru Yar'adua and Goodluck Jonathan's administrations. The paper is therefore structured into different segments; introduction/background, literature review, theoretical framework, the motive behind different political reforms in Niger delta regions, dimensions of Niger delta agitations, Government

policies on Niger Delta issues, impact of the reforms on Niger delta development, conclusions, and recommendations.

Literature Review

Concept of Development

The concept of development has undergone great transformation in the last few decades due to the emergence of various schools that have scrutinized the goals and impacts of development. This has provided a robust view on the concept. For instance Ayres (1995), in Agagu, 2010 'Development and underdevelopment', observed that the neo-classical approach to development "put emphasis on economic growth, capital accumulations, free trade policies, open market and individual decision-making. The neo-classical argue that, the choice between the agricultural and industrial commodities should be based on comparative advantages". From the perspective, Todaro (2000) posited that,

In strictly economic terms, development has traditionally meant capacity of national economy whose initial economic conditions has been more or less static for long time to generate and sustain an annual increase in its Gross National Product (GDP) at rate of perhaps 5% to 7% or more. Agagu, (2010).

The irony of it is that, the experience of 1950s and 1960s when many third world countries did realized their economic growth target but the level of living of the masses remained the most part unchanged. It was an indication that something was actually wrong with the narrow definition of development. As a result, it therefore led to the shift of paradigm of development on the emphasis from 1970s form of economic development, reduction or elimination of poverty, inequality, and unemployment within the context of a growing economy. Agagu, (2010). In the light of new perceptions, Seers, 1995) quarried that, 'why do we confused development with economic growth'? He argued that in discussing the challenge we are facing, one has to dispel the fog around world 'development' and decide more precisely what we mean by it. Only then will be able to devise meaningful target or indications, and thus help improve policy national or international. Seers, (1995).

Theories of Development

Development has been defined by some in terms of escape from underdevelopment meanwhile, some see it as mere euphemism used to refer United States' hegemony. (Thomas, 2000) opined that development was originally a political or ideological concept and a positive alternative to identification with poverty or development. He went further to distinguished three main senses in which the term development was used. One as a vision, describing or measuring the state of being a desirable society. Two, as an historical process of social change in which societies are transformed over a long periods. Three, as deliberate efforts aimed at improving on the part of various agencies, including government, all kinds of organizations and social movements (Thomas, 2000). However, Mabogunge, (2000), suggested, two ideas underline the notion of development. The first is that, development is about wealth creation for the benefits of the citizens while that second, is that every society succeeds best, when in this direction as well as its general attitudes of the people towards the attainment of goals (Mabogunje, 2000)

Political reform and democratization

Nigeria's political reforms and democratisation began in 1999 after about three decades of military domination of the country's political system, marking it a travesty of political history. While the country has transitioned to civilian rule and witnessed alternating power between political parties, the process has been marked by challenges, including irregularities in elections and a lack of strong democratic institutions, political crisis, militancy and insurgency. Nigeria's transition to democracy in 1999, with the inauguration of Olusegun Obasanjo as president, was a significant step towards a more democratic system. Despite the progress, Nigeria's democratic consolidation faced challenges as highlighted above.

A wide-ranging reform program was introduced by the government during the second term of President Obasanjo from 2003 to 2007. The scope of reform has however been limited to the federal government level and its impact remains fragile and uneven. While progress has been made in the area of public financial management, democratic accountability remains weak, as witnessed by the flawed 2007 elections. Utomi, P,

Duncan, A. and Williams, G., (2007). Various political and economic factors have driven and supported the reform process. Contextual factors have played an important role, for example, through greater public acceptance of the need for change and increased government revenues that gave the administration more room to maneuver.

Other key factors include; Strong political leadership, particularly at the federal level; Opposition to reform from interest groups has been addressed by compensating or side-lining opponents. However, it has proven difficult to challenge more powerful vested interests or to implement measures that are unpopular with the public; Business interests of the political elite have been a significant driver of reform, reflected in the perception that these groups have been the main beneficiaries of privatization; Early 'quick wins' (e.g. deregulation of the mobile telephone sector) have been crucial to creating public support and raising public expectations for institutional change. However, the reforms have had little impact on employment opportunities and the lives of poor people; Support from external actors has also played a role including: debt relief and technical assistance; cooperation with OECD countries on financial crime, corruption and stolen assets; commitments from multinational corporations to higher standards of ethics and transparency; and the influence of regional groupings (e.g. African Union, NEPAD, ECOWAS) on domestic policy reform. Utomi, P., Duncan, A. and Williams, G., (2007).

Development in oil-producing region

The Niger Delta is the oil producing region and has been the [center of international concern](#) over extensive pollution which is often used as an example of [ecocide](#). The principal cause is major [oil spills](#) by [multinational corporations](#) of the [petroleum industry](#). Bubaraye (2021). Development in oil-producing regions is characterised with multifaceted challenges despite abundant resources, including environmental degradation, socioeconomic inequalities, and conflicts. However, strategic interventions and a shift towards sustainable practices can lead to more equitable and beneficial development. These challenges are x-rayed below;

Environmental Degradation: Oil exploration and extraction activities have caused so many significant environmental damages to the people and the environment which includes; pollution from oil spills, gas flaring, and industrial waste. Government can restore the degraded environments through reforestation, soil rehabilitation, and water purification. These remedies can mitigate the negative impacts of oil activities and reduce the level of poverty among the people in the Niger Delta region.

Socioeconomic Inequality: Oil wealth doesn't always translate into improved living standards for local communities. Many struggle with poverty, unemployment, and lack of basic amenities like healthcare and education and has led to frustration of the people in that region especially the youths and eventually induced aggression and youths' restiveness in the region.

Conflict and Instability: Resource competition, environmental concerns, and unequal benefit-sharing always lead to conflicts and unrest, hindering development efforts and also frustrate the effort of the government in consolidating the national economy. Development in oil-producing regions requires a holistic approach that addresses environmental, social, and economic issues simultaneously. This includes:

Environmental Protection: Implementing strict environmental regulations and promoting sustainable practices to minimize pollution and degradation. This will enable the people of the region to live in a healthy environment and personal healthy lives.

Community Empowerment: Ensuring that local communities have a voice in decision-making and benefit from oil wealth. The government, oil multinational and the people of Niger Delta should come together and design a strategy for the development of the area in order to reduce poverty. Investing in other sectors beyond oil to create a more resilient economy.

Good Governance: Fighting corruption and promoting transparency to ensure that oil revenues are used effectively for the development of particularly the Niger Delta area (Bubaraye, 2021).

The Niger Delta and Governance Crises

The Niger Delta is one of the world's largest wetlands, and Africa's largest delta, covering some 70 000 km² (Badmus, 2010; EAYinla & Ukpo, 2006; World Bank 1995). The region is rich in renewable and non-renewable natural resources such as oil, gas, bitumen, non-timber forest products and timber forest products, wildlife, etc. 95 per cent of the total revenue for the Nigerian government is generated from oil and gas exploration. Okunmagba, A. (2022). A geo-political definition of the region include those states of Nigeria that border the coast waters of the Atlantic.

Overview of the Niger Delta Area

The Niger Delta, as officially defined by the Nigerian government, extends over 70,000 km² and makes up 7.5% of Nigeria's land mass. Historically and cartographically, it initially consists of the following States; Bayelsa, Delta, and Rivers States. By extension in year 2000, Obasanjo's administration included Abia, Akwa-Ibom, Cross River, Edo, Imo and Ondo States respectively. These are the states that constitute Niger Delta region. Some 31 million people of more than 40 ethnic groups including the Bini, Efik, Ibibio, Annang, Oron, Ijaw, Itsekiri, Isoko, Urhobo, Ilaje, and Yoruba constitute the inhabitants in the Niger Delta region. The search for oil began in the Delta in the 1950s and by 1956 towards Nigeria's preparation for independence, it was discovered in commercial quantities. Less than two years later it was being commercially produced and sold internationally. Currently, approximately two million barrels of oil are extracted daily in the Niger Delta making it the world's eighth largest oil producer in a country that remains one of the world's poorest as the oil revenues is cornered by only few people. Foreign companies extract the oil and it has been alleged that they do so without any regard for local economy or the local environment which has been ravaged by environmental degradation like; oil spills, gas flaring, fires, pollution, deforestation and poor waste management (Adeyemo, 2002).

Niger Delta Security and Development

Niger Delta crisis is not only a national problem; it's also a global issue that should deserve a global attention. The world has long perceived Nigeria as an unstable economy and a sinkhole that could swallow their investment. Crude oil is an important material input in the production of goods and services. Any disturbances in the flow of oil in Nigeria (as the mid-1970s

Middle East oil crisis) will impact negatively on the world economy. It's a known fact that, most of the world's oil supply originates in the oil fields of the Niger Delta and this is the more reason why political leaders need to work harder for peace in the Niger Delta, because Peace is a major determinant of growth and development. As Jeffrey Sachs notes, "peace is not easily (achieved or) guaranteed (Dike, 2013).

In line with Dike (2013), the political economy of the agitation for peace and security in the Niger Delta areas by the government and the oil multinationals is not only for the genuine purpose for the development of the region but majorly for economic reasons because, the implications of the crisis in the Niger Delta region is counter-productive to the National development. The literature on the Niger Delta agrees that, it has undermined the area's development as argued by (Olusola, 2013); (Badmus, 2006). For example, Aaron (2006) has noted that; oil has meant for the indigenes of the Niger Delta, wrenching poverty. People's Rights have come under severe assault by the ecologically unfriendly practices of oil Transnational Corporations (TNCs). In addition, "State laws and policies as they relate to petroleum resources, expropriate the indigenous peoples of the Niger Delta of their 'right' to their natural resources.

Conceptual framework

A Sustainable Policy Framework was employed as conceptual framework for Policy and Development on Niger Delta issues. Sustainable development is a concept used in development studies in diverse ways. It has extended beyond issues of environment to cover many issues that bother on good livelihood. Hence, issues such as security, poverty, participation and democracy are of significance to sustainable development (Agagu, 2011). The underlying issue is that, sometimes the resources we currently employ for development pose environmental risks not only for the present but for future generations. Resulting from this, Brundtland Commission (1987) depicts sustainable development as "development that meets the needs of the present without compromising the ability of future generations or jeopardizing their interest to meet their own needs". The fact that some needs may change from one generation to another has created some controversy as to what is to be sustained. This notwithstanding, it is expedient that the current gains or

profit in the exploitation of resources should not exhaust resources needed for the development of future generations. As noted by World Development Report (2003) when Brundtland Commission defined the concept of sustainability, it did not define the concept of needs or its implications. The report identified three pillars—economic, environmental, and social—around which contemporary definitions of sustainability are built.

One critical issue here is that development should not undermine the inter-generational well-being. Thus, the issue of sustainable development needs a holistic and all inclusive analysis. As a result, the issues of ecological systems, natural stock of resources or critical natural capital, the principles governing the organization of social systems administering the use of these resources, ownership and management of these resources as well as distributive politics and political economy need to be taken into consideration (Redclift, 2008). Indicators for measuring sustainability have been identified by World Development Report (2003) to include national accounts, the assessment of environmental degradation, oil spillage and gas flaring as well as the negative implications for the well-being of the people in terms of their health and agriculture which constitute the means of livelihood of the people as well as their health. Not only that, but also, government's policy failure, problem of policy sustainability's, strained relations between oil multinationals and the affected communities, resource control and other associated problems. All these are the challenging issues that government needs to handle holistically in the implementation of a reforms like; presidential amnesty program and other previous reforms. Measuring issues as acidification or emissions of greenhouse gases, economic flow, and recently, there has been emphasis on the relevance of democratization at all levels of government and governance in the context of sustainability.

According to Redclift (2008), the questions of sustainability are linked intellectually and politically to human rights and identity. It also involves right-based development with ethical consideration policy directive. Given the complexity of the issue, it is expedient to have a multifaceted framework to guide public policy intervention in the Niger delta of Nigeria so as to achieve success. The concepts of sustainability, corporate social

responsibility, millennium development goals, development and social welfare or human rights as well as participatory development are expected to reverse the top-down strategy associated with government position that robs local people in taking active part in decisions affecting their lives.

The totality of sustainable policy framework is the need to accommodate key issues in the formulation of enduring policies that would address development issues both now and in future as well as eliminate possible negative effects of development. It is expected to enhance efficiency and effectiveness of malfunctioning institutions as well as correcting them by involving the beneficiaries (Mohan, 2008). The crisis in the Niger Delta derives from absence of 'invited' spaces of participation. Nigerian government has formulated a number of policies on Niger delta with considerations for only the economic values of the state and oil companies. Unfortunately, these policies have not engendered the necessary development. Indeed, public policy faces serious challenges in many developing countries as a result of political instability and lack of political will. This is particularly true of Nigeria where many policies are haphazardly made or poorly implemented (Agagu, 2011). Thus, this review hinges the discussion on the need for appropriate policy framework that can enhance development and sustainability. It is on the basis that this policy framework will entrench sustainable policy framework that can resolve the problem in the Niger delta, in supporting the assertion of Agagu, (2011).

Dimensions of Socio-Political Reforms in Niger Delta

The agitations for regional and National development particularly in the Niger Delta areas eventually induced the Federal Government in this fourth republic to have undertaken different reforms as interventionists to control and regulate the crises in the region and to also design measures for development in the area with the sequential establishment of NDDB, RBDAs, OMPADEC, NDDC, MND, and Presidential Amnesty.

Economic Development in the Niger Delta Region

A common assertion is that there is little to show for the 13 per cent derivation fund of oil income already going to the oil producing states.

Despite the allocation, the population has seen minimal tangible benefits, raising concerns about transparency and accountability. The current set of governors seems to be making progress in terms of transparency and moving benefits down to the grassroots, but much more progress are expected in the region. Similarly, the three percent of oil income that goes to the Niger Delta Development Commission to be used for regional development does not seem to be effectively spent. So, the first step toward enhancing the development of the region is to ensure that the funds already allocated for this purpose are more effectively and honestly spent (Smock, 2009).

Interventionists Attentions to the Niger Delta Region

Early in the life of oil exploration in the Niger Delta, the need to pay special attention to the region because of its difficult terrain was not lost on the leadership of the country (Yishau, 2008). The first of such moves to address the Niger Delta question was the establishment of the Niger Delta Development Board, NDDB. This was the product of Sir Henry Willink's Commission of 1958, which recommended that the area deserved special developmental attention. But it was not until 1960 that this board came into being. It had the mandate to manage the developmental needs and challenges of the region then segmented into the Yenagoa Province, Degeme Province, the Ogoni Division of Port Harcourt and the Western Ijaw Division of Delta Province. But for the seven years it existed, it made no significant mark. It faded into oblivion with the military coup of 1967. Indeed, the Board was not well funded.

The next attempt at developing the Niger Delta by the Federal Government was in the establishment of River Basin Development Authorities (RBDAs), with the setting up the Niger Delta River Basin Development Authority (NDRBA) in 1976. But the important point to note here is the extent to which the RBDAs program was designed to develop the Niger Delta region. Some sectors have described it as a fraud on the part of the Federal Government (Yishau, 2008). Following agitations for a special focus on the development of the region, the Shehu Shagari administration set up a presidential task force, better known as the 1.5 percent committee, with the mandate to address the peculiarities of the region. It was allocated 1.5 percent of the Federation Account to carry out its

assignment. The coups that brought the two retired generals; Muhammadu Buhari and Ibrahim Babangida to power, did not immediately end the reform of Shehu Shagari but a few years into Babangida regime, it was abandoned. Cumulatively, it could not make any success of the mandate given to it. However, its impacts were unnoticeable on the welfare of the people of the oil-producing communities (Yishau, 2008).

Babangida Administration saw the need to move forward in addressing the Niger Delta question. So, in 1992, he set up the Oil Minerals Producing Area Development Commission, OMPADEC and therefore gave OMPADEC the mandate of turning around the faces and the phases of the region. However, by 1999, when it was wound up, OMPADEC projects had no direct bearing on poverty reduction, which is considered a major challenge in the area (Sam, 2004). OMPADEC also had problems of mismanagement, corruption and policy inconsistency Olusegun Obasanjo, met a region in chaos and miasma. The deplorable situation led him to come up with the Niger Delta Development Commission (NDDC) in the year 2000, with the mandate of facilitating “the rapid, even and sustainable development of the Niger Delta into a region that is economically prosperous, socially stable, ecologically regenerative and politically peaceful.” Well, with the Umaru Yar'Adua's administration, which believes that ending the crisis in the Niger Delta is a matter of strategic importance to the country, many believe that it is time to ensure that bottlenecks such as poor funding, corruption and bureaucracy that weighed down past interventionist agencies are moved far away from the NDDC. From the Niger Delta Development Board to the 1.5 percent Committee to Oil Minerals Producing Areas Development Commission and now the Niger Delta Development Commission, government's efforts at alleviating the sufferings of the people of the Niger Delta remain largely insufficient (Ajakaiye, 2008). The reason for this is not hard to find. The marginalized peoples, the communities in the Niger Delta have no say in political and economic decision. Again, while the internal resources needed to support eradication of poverty from the Niger Delta are available through oil revenue, poverty eradication has remained a problem of heightened dimensions (Ajakaiye, 2008).

The Management and Challenges of Niger Delta Crisis

The principles of oil derivation was introduced immediately Olusegun Obasanjo assumed office in 1999 as part of strategies to manage the conflict in the Niger Delta region. Effort to redistribute wealth was introduced and therefore decided to be giving 13 percent of the proceeds from oil sales to the producing states as oil derivation for the Niger Delta region. This implies a minimum of 13% of fund accruing from the exploitation of natural resources is allocated to the region of the extracted resources, specifically, the Niger Delta. There some existing rules on oil benefit for oil producing states before Nigeria's independence. Moreover, Obasanjo's administration in 1992 allocated 48 percent to the federal, 24 percent to the state, 20 percent to local government and 7.5 percent to special fund (Akinola 2011).

However, there is little accountability on how these funds were spent. Much of the oil resources simply disappeared or wasted by inefficient or corrupt local officials (Afinotan & Ojakorotu, 2009). The ethnic unrest and conflict of the late 1990s (such as those between Ijaw and Itsekiri), coupled with a spike in the availability of small arms and other weapons, led increasingly to the militarization of the Delta region. Companies like Shell Petroleum Development Company Limited, Chevron Corporation and Mobil Oil Nigerian Limited are currently involved in development activities in the Niger Delta Region in education, health and provision of other infrastructural facilities to rural communities.

During Obasanjo's administration, despite that oil production is being disrupted by militant youths through kidnapping of foreign workers, vandalization of oil pipelines, ambush of supplies at the Creeks, attack of contractors and security staff of oil companies and attack of government security agencies (Police and Army) personnel were deployed to maintain peace in the region (Afinotan & Ojakorotu, 2009). The question then is; how can this matter be resolved? The region transverses nine out of the 36 states of the Federal Republic of Nigeria; these are Abia, Akwa Ibom, Bayelsa, Cross River, Delta, Edo, Imo, Ondo and Rivers States as earlier mentioned. Apart from the Niger Delta Nigeria as argued by (Etekpe, 2007), there are other deltas in the world, namely, Mekong Delta, in China and Mississippi Delta in United State of America (USA). Whereas, the three

Deltas have similar problems and require similar attentions for development, the Government of China and USA have addressed and promoted their Delta areas to the point that they are now part of United Nations General Ledger for development, Etekpe, (2007).

Challenges of Niger Delta Development Commission (NDDC).

The Niger Delta Region is characterized by poverty, corruption, environmental degradation, economic challenges, environmental problems and neglect, coupled with instability and militarization due to youths restiveness which have made the region highly volatile and problematic not only to Nigerian Government but to the world as these problems affects other economies through the production and the price of crude oil at the international market.

Corruption

Corruption is one of the greatest problems of the Nigerian society and it also finds its ugly and devastating effects in all sectors of the polity including the Niger Delta Development Commission. The Governors of the Delta region have not contributed meaningfully to the development of the region. Although the Niger Delta states receive special allocations in addition to their federal revenue shares which is 13% as specified in the revenue sharing formulae based on derivation as fixed by section 162 (2) of the 1999 Constitution (Akinola 2011).Section 308 of the Nigerian Constitution grants state governors and their deputies' immunity against prosecution and these have protected the state governors and encouraged them to steal and syphon the state treasury.

Poverty

Poverty in the Niger delta region has persisted over the years because of the governmental and stake holders approach in tackling it and the stakeholders here includes the multinational oil companies, the various commissions and parastatals, Poverty in Niger Delta is estimated to be quite high with the significant population living below poverty line. Some sources suggest over 47% of the Niger Delta live below poverty line while others see it as could be as high as 70%. This wide spread poverty line could be link to various factors like; environmental degradation, lack of industrialization among others in the region. NGOs and communities

themselves. There has not been a well-articulated poverty alleviation program that carried the communities along in its planning and implementation and even when there is better designed program, the corruption and implementation lapses makes the programs ineffective. There has not been provision of alternative means of livelihood for the citizens of the region since there was destruction of farm land and aquatic activities which are main occupation of the communities are destroyed by the activities of oil exploration (Multidimensional Poverty Index (MPI) Survey, 2022).www.nigerianstat.gov.ng)

Poverty rate in Nigeria generally is currently estimated at 38.9%. This means that approximately 87 million Nigerians are living below the poverty line, making it the second-largest poor population in the world after India. While the national poverty line is #137, 430 per year (roughly \$449.3), poverty is more prevalent in rural areas which about (52.1%) than in urban areas (18%). In 2022, 63% of the population were identified as multidimensional poverty in Nigeria. (Multidimensional Poverty Index (MPI) Survey, 2022).www.nigerianstat.gov.ng.

Inadequate Funding

The issue of inadequate funding as a challenge to NDDC projects and the Niger Delta Region has generated lots of argument and counter arguments. Most times the Commission has hinged their inadequate performance and lots of abandoned projects to lack of funds to execute these projects. On the other hand the communities and government have indicated that the level of corruption and misappropriation of funds annually budgeted and allocated to NDDC are the reasons for their poor performance.

Environmental Factors

The nature and topography of the Niger delta region poses a serious challenge to both the inhabitants and developmental projects at the locations. Former president Obasanjo corroborated this assertion and identified the problems of the Niger delta to include the environmental situation "Another challenge is the problem of environmental degradation and pollution" Niger Delta Development Commission Publication (Capitol 2010). Pointing out the social and environmental costs of oil production in

the region, Ejibunu (2007) opined that it's very extensive. The usual problems emanating from oil activities includes; destruction of wildlife and biodiversity; loss of fertile soil; pollution of air and water, degradation of farmland and damage to aquatic ecosystems, all of which usually cause serious health challenges for the inhabitants of areas surrounding oil production. It is ironical that environmental regulations which are common practice in developed nations are often not followed in Nigeria due to the lack of power and influence, wealth and equity of the affected communities.

As a result, oil companies often evacuate inhabitants from their homelands, that further jeopardize their yearning and aspirations. The local people can no longer take to farming and fishing which are their major occupations. The system of oil production in Nigeria is skewed in favour of oil multinationals and government elites who are the direct beneficiaries of oil production revenue. As a result of the impact of oil activities on the environment and the ecosystem of the region, the United Nations warned in a report that "the degree and rate of degradation are pushing the Delta towards ecological disaster". The oil multinationals contributes significantly to the environmental destruction of the Niger Delta (Ejibunu 2007).

Militancy

Militancy in the Niger Delta region has been a challenge to both NDDC projects and the environment. The level of violence, kidnapping, hostage taking and other menace of the militants have hampered the smooth operations of the contracting staff as well as the stakeholder's participation in the implementation of NDDC projects in the region. It was explained that one of the major road construction companies in Nigeria, Julius Berger had to abandon some of their projects within the Niger Delta Region because of high rate of kidnapping of their staff (Adejumobi, 2002). One of the biggest security challenges in contemporary Nigerian State is the activities of ethnic militias in the Niger Delta and this has led to the deployment of military base to the critical riverine to curtail the violence and abduction of expatriate oil workers and to safe guard the continued oil production by addressing the challenges of the region. (Okumagba, 2012).

The Presidential Amnesty Program in Nigeria

Attacks on pipelines had become common activities and insurgency in the Niger Delta region due to the challenges that seems unsurmountable but eventually ended after Yar'adua's government on June 26, 2009, announced that it would grant amnesty an unconditional pardon to militants in the Niger Delta which lasted for 60 days beginning on 6 August, ending 4 October 2009 as earlier mentioned. Former President Umaru Musa Yar Adua signed the amnesty after consultation with the National Council of State. During the 60-day period, armed youths were required to surrender their weapons to the government in return for training and rehabilitation by the government.

Amnesty international has been the one of the diplomatic means of restoring peace and justice in the society. Nigeria Amnesty program came up far later than that of South Africa on Human right abuse and apartheid and equally that of Colombia on human right violation. The amnesty in Nigeria was to restore peace and tranquility after many years of hostility of the Niger Delta militants as a result of the violent agitations for their right and the development of the Niger Delta region.

Amnesty South Africa's achievements in the 1990s included lobbying to abolish the death penalty; developing a national police human rights training program focusing on children's rights; and lobbying to stop South African arms sales to states such as Turkey, Rwanda and Burundi, whose human rights records were questionable. In 1995 [Pierre Sane](#), Amnesty International's secretary general, visited South Africa and met the deputy president Thabo Mbeki to discuss human rights abuses in [South Africa](#), [Nigeria](#) and the [African Great Lakes](#) region. In 1997, Amnesty South Africa hosted the international movement's ICM meeting in Cape Town, also attended by Nobel prizewinner Archbishop [Desmond Tutu](#).

In 2006 the membership at the AGM voted for the Program for Growth which allowed the International Mobilisation Fund, based at the International Secretariat, to take over governance and management of the organisation for a period of 2–3 years (Amnesty International, 2013).

In the same vain, Amnesty International expresses its continued

appreciation of the work of the Office of the UN High Commissioner for Human Rights in Colombia to improve respect for human rights in the country, including through insistence on the full implementation of repeated UN recommendations. This statement presents an overview of Amnesty International's concerns in Colombia and recommendations to the Human Rights Council. The start of formal peace talks between the government and the Revolutionary Armed Forces of Colombia (Fuerzas Armadas Revolucionarias de Colombia, FARC) has raised expectations that the armed conflict with the country's largest guerrilla group could come to an end after almost 50 years of hostilities. However, a stable peace will remain elusive unless the two sides put a definitive end to human rights violations and abuses and violations of international humanitarian law (IHL) and those responsible for such abuses and violations are brought to justice in civilian courts (Amnesty International, 2013)

On assumption of office in May 2007, former Nigeria's President Umaru Musa Yar'Adua included the Niger-Delta as part of his administration's seven-point agenda. The government scheduled a meeting with the stakeholders in the region, which Reuben Abati described as "an insincere attempt to keep the people talking." The Yar'Adua's administration also proposed a Niger-Delta summit that died on the ground of controversy, and created the Niger-Delta Ministry to focus mainly on the needs of populations in the region. To address the worrisome situation in the Niger-Delta, and considering the failure of previous efforts at resolving the conflict, the government set up the Niger-Delta Technical Committee, which was mandated to collate and review all previous reports and recommendations on ways of resolving the conflict. Thereafter, the Presidential Committee on Amnesty and Disarmament of Militants in the Niger-Delta was mandated to design a framework of disarmament, demobilization and rehabilitation or reintegration of the militants. This culminated in the presidential proclamation of amnesty on 25 June 2009, to encourage non-state combatants in the Delta to abandon violence, which lapsed on 4 October 2009, pursuant to section 175 of the Constitution of the Federal Republic of Nigeria. Ubhenin (2013).

Militants led their groups to surrender weapons such as rocket-propelled grenades, guns, explosives, and ammunition. Even gunboats were

surrendered to the government. Over 30,000 purported members signed up between October 2009 and May 2011 in exchange for monthly payments and in some cases lucrative contracts for guarding the pipelines. Though the programme was extended till Goodluck Jonathan's administration until he lost out in his second ambition to continue in office. Ubhenin (2013).

The new government of Muhammad Buhari sees it as a potentially enabling corruption and so feels that cannot be continued indefinitely. The amnesty office worked to reintegrate the fighters into society, primarily by placing and sponsoring them in vocational and higher education courses in Nigeria and abroad. Program proved to be a success, with violence and kidnappings decreasing sharply. Petroleum production and exports have increased from about 700,000 barrels per day (bpd) in mid-2009 to between 2.2 and 2.4 million bpd since 2011. However, the program is costly and chronic poverty and catastrophic oil pollution, which fuelled the earlier rebellion, remain largely unaddressed. With Nigerian President Goodluck Jonathan's defeat in the March 2015 election, the amnesty program seems likely ended in December 2015 and with patronage to former militant leaders terminated, local discontent was deepening Ibeanu (2000).

Challenges of Presidential Amnesty Program

There are allegations that the PAP is being mismanaged on the following grounds. Moreover, the Nigerian Presidential Amnesty Program was faced with numerous challenges in process of implementation as result of Incomplete DDR Processes:

Disarmament: While the program aimed to disarm militants, some reports suggest that not all weapons were surrendered, and some individuals may have re-armed with the intention of resurging their activities in case government fails in their responsibilities.

Demobilization: The process of demobilizing militants has faced challenges, with some individuals experiencing difficulties in finding employment or integrating into society as government did not rehabilitate most of the disarmed militants and as a result remained jobless and this poses danger to the security of the country.

Reintegration: The reintegration component, crucial for long-term peace, has been criticized for not addressing the root causes of militancy, such as poverty and unemployment which are the central issues in the Niger Delta region. Government failed to realize that Amnesty program only captures the militants youths and left behind the young and aged groups who also surfer the challenges of the region.

Poverty and Unemployment: The program's success hinges on addressing the underlying socio-economic factors that fuel conflict, such as poverty, unemployment, and lack of economic opportunities. All these issues were not holistically addressed by the government which implies that the program may be seen as a waste of country's resources for not solving the affected population of the region.

Environmental Degradation: Oil spills and environmental pollution in the Niger Delta continue to be a source of resentment and frustration, impacting communities and potentially driving conflict and resulted in poverty as people's farmland and aquatic system were destroyed.

Corruption and Inadequate Funding: Corruption and lack of adequate funding can hinder the effective implementation of the amnesty program and its related projects.

Political Will and Implementation: Lack of political commitment insufficient political will can lead to delays, inconsistencies, and a lack of genuine commitment to addressing the root causes of conflict in the Niger Delta region. Some communities may perceive the amnesty program as a superficial measure and lack trust in the government's commitment to addressing their concerns. Implementing the program effectively across multiple stakeholders, including government agencies, local communities, and civil society organizations, can be challenging.

The program's success in the long term depends on addressing the underlying structural issues and providing sustainable solutions for the affected communities. The failure to address root causes can lead to renewed conflict and insecurity in the Niger Delta region because the community perception and lack of trust, the program faced criticism for

prioritizing certain groups of beneficiaries while leaving others behind, leading to feelings of injustice and inequality.

Conclusion

Niger Delta is a sensitive and pivotal region to the development of Nigeria being the economic hub of the nation because of its mineral resources like crude oil. However, the resources of the region poses an immense challenge as a result of violent agitation for the development of the region which affected policy making and political reforms to work effectively and efficiently. Different reforms have been carried out as strategies to address the issues and challenges of development in the region. Apart from the well-established nature of life in the region for decades as they feed off the wider community's genuine grievances, and their motives and objectives are wide-ranging and often in conflict. The militant groups have a specific history and the picture varies greatly from state to state but all for development. There is the need for government to come up with a scheme for the unemployed youths in the Niger Delta region that would entail training and provision of social security. The processes of determining, selecting, recruiting and remunerating of participating unemployed youths should be transparent. This will compensate them with higher ratings in the amnesty program established, while allowing the government and its institution to take charge of the program. This will also safeguard a key objective of the DDR principle to reduce the propensity for militant regrouping. Government should more fundamental and deep-seated introduced intervention mechanism to curtail youth militancy in Nigeria. Minimum wages for workers should be increased to replace the tokenism and monetization of government strategy towards combatting militancy. Job creation and development should be prioritized in state effort at improving security.

Recommendations

In other to sustained reform in Nigeria including weak political institutions, conflict relating to oil, and societal divisions, a long-term structural economic change is needed to diversify the economy beyond oil and promote a more open and competitive private sector. The following recommendations are key to the solutions of Political/economic reform in Nigeria and particularly, the Niger Delta region;

1. Niger Delta Development Commission (NDDC) should be empowered and made responsible by the federal government, to the yearnings and aspirations of the Niger Delta people and be more focused on the development of social and physical infrastructures, ecological/environmental remediation and human development.
2. Oil Producing Area Development Commissions (OMPADEC) should be made significantly responsible and remain focus in abiding by the commission's rules and regulations as regards local and environmental issues with appropriate feedback mechanism to the federal government through (NDDC).
3. Federal government needs strengthening commission's accountability in the area of NDDC performance, service delivery, and due process in procurement and Ensuring that the benefits of reform are experienced by the wider population of the Niger Delta people so as to build support for reform process in the medium term.
4. Nigerian government should return to derivative /resource control measure at resolving the salient issues in Niger Delta. The issue of resource control should be entrenched in the concurrent list to avoid over centralization in resource allocation. It should be well-established so that communities can negotiate for royalties on the resources located on their land with exploring companies as a special reform for national development.
5. Government should also finding ways of making reform more durable and sustainable, by introducing institutional or structural changes that cannot be easily reversed and accelerating the passage of legislation by extending reform beyond the federal level and state to local government levels.
6. Government should endeavor to addressing violent conflict with all strategies for economic growth and building the institutional

capacity through technical assistance on the basis of genuine demand.

7. Special attention should be paid to the investment in the development of people and delta region .The Niger Delta ministry and NDDC should not be politicized but encouraged to accomplish the goals for which they are established and Government should also finally discourage war-war tactics and divide and rule system in calming down the aggrieved agitators, instead they should engage them in negotiation since their plights are understandable.
8. Every Organisation responsible for environmental management in the Niger Delta should adopt an integrated approach. In this regards, bodies such as the OMPADEC, NDDC and FEPA, should coordinate, integrate and streamline, their policy objectives, since they are set up to achieve the same goals

References

- Aaron, K. (2006). *Human Rights Violation and Environmental Degradation in the Niger Delta*, in Porter, Elizabeth & Offord, Baden (eds), *Activating Human Rights*. New York: Peter Long, Oxford Borne.
- Adeyemo, A. (2002). *The Oil Industry, Extra-Ministerial Institutions and Sustainable Agricultural Development: A Case Study of Okrika LGA in Rivers State*. Nigerian Journal of Oil and Politics 2 (1), 60-78.
- Adejumobi, S. 2002. The Military and the National Question. In the National Question in Nigeria: Comparative Perspective, edited by A. Momoh and S. Adejumobi. Aldershot: Ashgate.
- Afinotan, L. and Ojatorotu, V. (2009) *The Niger Delta crisis: Issues, challenges and prospects*, African Journal of Political Science and International Relations, Vol. 3 (5)
- Ajakaiye, B. (2008). Restiveness, a major problem in Niger Delta. Tell, February 18, pp. 76.
- Agagu, A. A. (2011) "Entrenching Sustainable Policy Framework in the Niger Delta: Issues and Challenges"; Being a Paper Presented during a Workshop organized by CPED and TTI at Benin City, July 28-29, 2011.

- Agagu, A. A. and Ola, R.F (2004) (eds), Development Agenda of the Nigerian State. Ibadan, FIAG (Nigeria) Publishers.
- Agbor, U. I. (2012). Leadership behaviour and the crises of state failure in Nigeria: Towards a transformational leadership attitude for addressing .
- Agbo, A. (2012). The oversight function. Lagos, Tell Magazine., Agbu, O ... Nigeria: Time for Leadership in Constitutionalism and Good Governance in Africa.
- Akinola, S.R. (2008). "Coping with Social Deprivation through Self Governing Institutions in Oil Communities in Nigeria". Africa Today, Vol 55(1): 89- 107.
- Akinola S. R. and Ayo Adesopo (2011). Derivation Principle Dilemma and National (Dis) Unity in Nigeria: A Polycentric Planning Perspective on the Niger Delta. Journal of Sustainable Development. Vol. 4, No. 5; October.
- Amnesty International, an NGO grouped Nigeria as one of the 50 most corrupt nations in world out of 180 nations surveyed in its 2009 annual survey. Available at www.amnesty.org. Accessed on 15th July 2010.
- Ayres, R. (1995)"School of Development Thought' 'in Ayres, R. (ed) Development Studies: An Introduction Through Selected Readings Dartford: Greenwich University.
- Badmus, I. (2006). Ethnic Militia Movements and the Crisis of Political Order in PostMilitary Nigeria. Journal of Social Sciences, 13(3), 191-198.
- Bubaraye (2021). *The Riddle of the Oil Thief*. Lagos: Purple Shelves. pp. 117–170. [ISBN 9789789889907](https://doi.org/10.1007/978-978-988-9907-1).
- Brundtland Commission (World Commission on Environment and Development) (1987) *Our Common Future*, Oxford: Oxford University Press
- Dike, E (2013): Niger Delta Crisis and Nigeria Economy, Occasion Paper.
- Ejibunu, Hassan, T (2010). *Nigeria Niger Deltan Crisis; Roots causes of peacelessness*. EPU Research Paper.
- Etekpe,A (2007),The politics of conflict over oil and gas in Niger Delta: The Bayelsa State Experience. Port Harcourt, Treasure Gate Resources Limited.

- Etekpe,A(2012),Peace and Development in Nigeria: The amnesty experience in Niger Delta of Nigeria.
- Eyinla, P. and Ukpo, J. (2006) Nigeria: The Travesty of Oil and Gas Wealth. The Catholic Secretariat of Nigeria, Lagos.
- Ibeanu, O. (1997). *Oil Conflict and Security in Rural Nigeria: Issues in Ogoni Crisis*. African Association of Political Science, Occasional Paper Series 1, Harare, 1997.
- Redclift, m. (2008) "Sustainable Development" in Desai, V. and Potter, R.B. (eds) *The Companion to Development Studies*. London: Hodder: Education.
- Seers, D (1995)"What are we trying to measure" in Ayres, R. (ed) *Development Studies; An introduction through Selected Readings*. Hartford: Greenwich University.
- Smock, D. (2009). USIPEACE Briefing: Crisis in the Niger Delta. Washington, DC: United States Institute for Peace (USIP).
- Smock, D. (2009). "Crisis in the Niger Delta". United States Institute of Peace.
- Thomas, A. & Allen,T. (2000)" Agencies of Development "in Allen, T. & Thomas, A. (eds) *poverty and Development into 21st Century* Oxford: Oxford University Press.
- Therkildsen, O. (2001). "Efficiency, Accountability and Implementation Public Sector Reform in East and Southern Africa". UNRISD, Democracy, Governance and Human Rights Programme Paper Number 3
- Ubhenin, O.E. and Aiya, F. (2013) 'Methodological challenges of Enumerating the costs of Niger delta conflict', *Journal of Human Security*, vol.6, no.2, 2010, pp.58-71. 16
- Utomi, P, Duncan, A. and Williams, G., 2007, 'Nigeria: The Political Economy of Reform - Strengthening Incentives for Economic Growth', *The Policy Practice*, London.
- Yishau, O. (2008). *Simply Tokenism*. Tell, February 18, pp. 78,79.
- UNDP, (2015). *Multi-Dimensional Poverty Index (MPI). Ranking Of Nigerian States By Poverty Rates*. July, 1. Assessed April 5, 2025
- Multidimensional Poverty Index (MPI) Survey, 2022*).www.nigerianstat.gov.ng. Assessed April 5, 2025.

- Mabogunje, A. (2000). A concept of Development: Development Policy Centre Ibadan
- World Bank (2023), World Development Report; Sustainable Development Dynamic World.
- World Bank. (1995). Defining an environmental strategy for the Niger Delta. Nigeria: World Bank Industry and Energy Operations Division, West Central Africa Department.
- Okoko, K. (2002). "Federalism and Revenue Allocation" In Journal of Oil and Politics.
- Olusola, B. (2013) when will Nigeria stop the Crude Oil Theft business Day. October 17.
- Okumagba, A. (2002) "Resource Control: A bond of Unity, Beneficial to all" The Challenges of true Federalism and Resource Control in Nigeria. Ed. Akpo Odje. Lagos: Quadro Impressions
- Okumagba, P. O. (2012). Militancy and Human Right Violation in the Niger Delta. International Review of Social Sciences and Humanities, 3 (2), 28-37.

Impact Of Green Urbanism on Land Surface Temperature: Implication for Sustainable City

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ABSTRACT

Geographic Information System (GIS) was used in this study to investigate how Green Belts (GB) affect Land Surface Temperature (LST) and how that affects the development of sustainable urban settings in Ikeja, Lagos State, Nigeria. The research employed the use of Landsat Imageries of the study area from 1988 to 2018. The study revealed that the presence of green spaces and vegetation belts can significantly reduce land surface temperatures, with implications for urban planning, design, and policy development. By promoting green urbanism strategies, cities can enhance environmental sustainability, improve quality of life, and mitigate the adverse effects of climate change.

Keywords: Green Urbanism, Land Surface Temperature, Sustainable Cities, Geographic Information System, Urban Heat Island, Urban Thermal Discomfort

1. INTRODUCTION

The adoption of urban green belts or Green Urbanism (GU) concept is very vital in designing new or already existing cities like Ikeja, Lagos State, Nigeria, in order to reduce negative environmental impacts such as high Land Surface Temperature (LST). Due to the increasing Land Surface Temperature that resulted from Green House Gas (GHG) emission and the conversion of natural surfaces to artificial impervious surfaces, the world has to establish sustainable Cities that are Eco- friendly.

The rise in minimum Land Surface Temperature experienced in Cities is in response to conversion of vegetation land use to built-up land use as a

result of the rapid increase in population (Olofin, 2019). The climate in the Cities is altered by modifications made to the surface of the Earth by human being during urbanization (Streuker, 2002). As Cities rapidly develop to accommodate the growing urban population, a transformation in landscape becomes inevitable leading to changes in natural land cover to artificial land cover. The expansion of impervious surface area has altered the micro-climate within urban environment, raising a range of climatic issues (Champman et al, 2017). Thermal discomfort is a climatic problem caused by rapid urbanization and manifested by high Land Surface Temperature in urban area (Venter et al., 2021). Therefore, it has become a major research focus in urban climatology since first reported in 1818 (Howard, 1818).

As Cities are growing to meet the present needs, the needs of the future generations must also be put into consideration. Thus, a better understanding and practice of sustainable city can go a long way to preserve the natural landscapes in Ikeja, Lagos State, Nigeria, even in the phase of urbanization. To achieve this, there should be an attempt to bridge the gap between nature and Cities through the introduction of green belts into the Cities. This will help to mitigate the effect of Urban Heat Island (UHI) and Thermal Discomfort in our Cities (Olofin and Adebayo, 2016).

Urban green belt can effectively reduce their surrounding temperature and create a cold island. Many studies have shown that trees reduce Land Surface Temperature through evapotranspiration, provision of shade and absorption of latent heat (Rahman et al., 2020). Based on this understanding, the premise of the current study is grounded. It posits that green belts strategically distributed across urban areas could play a pivotal role in mitigating Urban Thermal Discomfort by reducing land surface temperature in Ikeja, Lagos State, Nigeria. These green belts exhibited greater cooling capacity against high Land Surface Temperature Contributing to the improvement in the urban thermal environment and the sustainability of our cities (Olofin, 2019).

2. MATERIALS AND METHODS

2.1. Study Area

Ikeja is a typical example in the history of growth and development in Nigeria. The City became Capital City of Lagos State in 1967 with improved road networks to cater for increase in concentration of pedestrian and vehicular movements. Similarly, commercial activities like banking, small and large-scale business and professional services congregated to take advantage of nearness to seat of Government. In addition to this development, government acquired agricultural and forest land uses for its Airport project, Police college, Military barracks and the Ikeja Government Residential Area (G.R.A.). The development of these urban features led to the conversion of natural landscapes to artificial landscapes in Ikeja (Fig.1).



Fig. 1: THE ADMINISTRATIVE MAP OF THE STUDY AREA
Source: GIS, 2024

2.2 Methods

The study employed Landsat Thematic Mapper (TM) and Enhanced Thematic Mapper (ETM) images with a 30m spatial resolution. These images were collected from the website of the United States Geological Survey (USGS) of the National Centre for Earth Resources Observation and Science (EROS). The Land Use/Land Cover and Land Surface Temperature in Ikeja for thirty (30) years were investigated from 1988 to 2018.

Vegetation, Open surface and Built-up land uses were the classes of Land Use/Land Cover that were considered for this study. A supervised classification with the maximum likelihood algorithm was conducted to classify the Landsat images using bands 2 (green), 3 (red) and 4 (blue). Visual image interpretation was done with reference to Landsat images of the study area.

Geographic link and enquire tools of ERDAS IMAGING 9.2 were used to investigate the Land Surface Temperature value of the study area from 1988 to 2018. The percentage of changes in size of each class of land use from 1988 to 2018 with its corresponding Land Surface Temperature values were compiled and tabulated in order to understand the contribution of vegetation Land Surface Temperature (LST) and its implications for creating sustainable urban environments in Ikeja, Lagos State, Nigeria (Table 1).

Table 1 The Description of Satellite Imageries used in the Study

Acquisition Date	Source	Path/Role	Resolution	Landsat Series
04 Dec. 1988	USGS	190/55	30M.	L5
17 Dec. 1988	USGS	191/55	30M.	L5
21 Jan. 1999	USGS	190/55	30M.	L5
18 Dec. 1999	USGS	191/55	30M.	L5
14 Dec. 2013	USGS	190/55	30M.	L7
27 Dec. 2013	USGS	191/55	30M.	L7
16 Jan. 2018	USGS	190/55	30M.	L8
03 Jan. 2018	USGS	191/55	30M.	L8

Source: USGS, 2018

Results and Discussion

Land Surface Temperature Assessment in the Study Area

The Land Surface Temperature maps for Ikeja from 1988 to 2018 were generated and presented in Figures 2a, 2b, 2c and 2d. The Land Surface Temperature values in built-up, open surfaces and vegetation land uses for Ikeja from 1988 to 2018 were obtained and presented in Table 2.

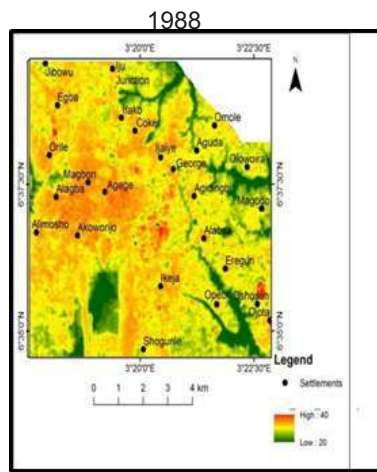


Fig 2a
2013

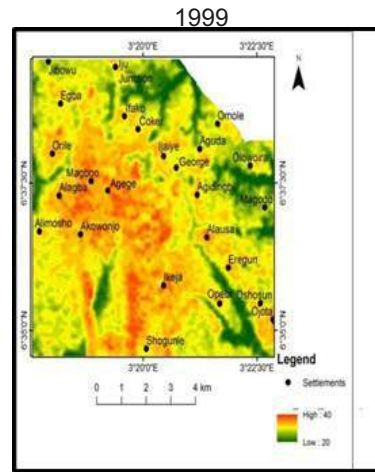


Fig 2b
2018

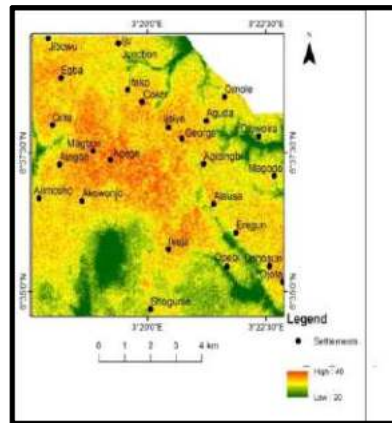


Fig 2c

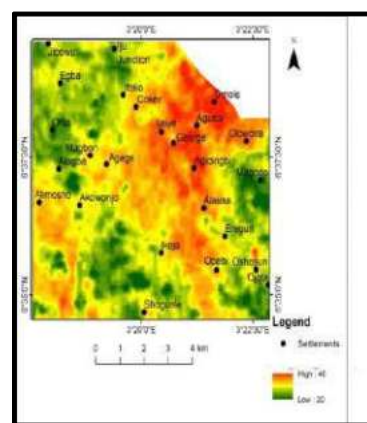


Fig 2d

Figure 2: Land Surface Temperature dynamics in Ikeja from 1988 to 2018
Source: GIS, 2018

From Figures 2a-d, the areas with high Land Surface Temperature represented with red colour designate built-up areas while the areas with low Land Surface Temperature represented with green colour indicate vegetated areas.

Table 2: Mean and Standard Deviation of Land Surface Temperature in Difference Land Use types in Ikeja, from 1988 to 2018

Land use	LST(1988)		LST(1999)		LST(2013)		LST(2018)	
	Temp.(^o C)	S. D.	Temp.(^o C)	S. D.	Temp.(^o C)	S.D	Temp.(^o C)	S.D.
Built-up	20.7	0.73	23.6	1.29	21.5	0.57	21.7	0.48
Open Surfaces	19.8	0.83	20.3	1.66	20.4	0.68	21.5	0.42
Vegetation	18.5	1.03	18.3	0.78	18.1	0.77	21.4	0.43

Source: Obtained from Landsat Images of 1988, 1999, 2013 and 2018

It was observed from Table 2, that Land Surface Temperature in the built-up land use which was 23.6^oC in 1999 was reduced to 21.7^oC in 2018 against the expectation of recording increase. The reduction LST recorded in 2018 may be the results of the efforts put in place by the Lagos State Government to mitigate the effects of Urban Heat Island (UHI) in Ikeja specifically and Lagos State in general through the creation of Green Belts (GB) in the following places:

- i. Babatunde Oduse Street, Ikeja;
- ii. Kola Amodu Street, Ikeja;
- iii. Alhaji Basheer Shittu Avenue, Ikeja;
- iv. Oluwole Akinosho Street, Ikeja;
- v. Tunde Obitayo Street, Ikeja;
- vi. Fatai Lapade Street, Ikeja;
- vii. Aderibigbe Shitta Street, Ikeja
- viii. Church Avenue, Ikeja.

Land use Types and Area Coverage from 1988 to 2018 in Ikeja

The areas covered by each land use types in Ikeja from 1988 to 2018 are

clearly shown in Table 3. Also landsat maps showing the built-up, open surfaces and vegetation land uses in Ikeja were produced and presented in Figures 3a, 3b, 3c and 3d respectively.

Table 3: Areas Covered by Land Use types from 1988 to 2018 in Ikeja

LandUses	Areas in 1988 (km ²)	Areas in 1999 (km ²)	Areas in 2013 (km ²)	Areas in 2018 (km ²)
Built-Up	38.01	77.64	79.22	71.30
Open Surfaces	29.82	5.95	6.39	3.03
Vegetation	17.24	1.49	0.39	10.76
Total	85.05	85.08	86.00	85.09

Source: Obtained from Landsat Images of 1988, 1999, 2013 and 2018

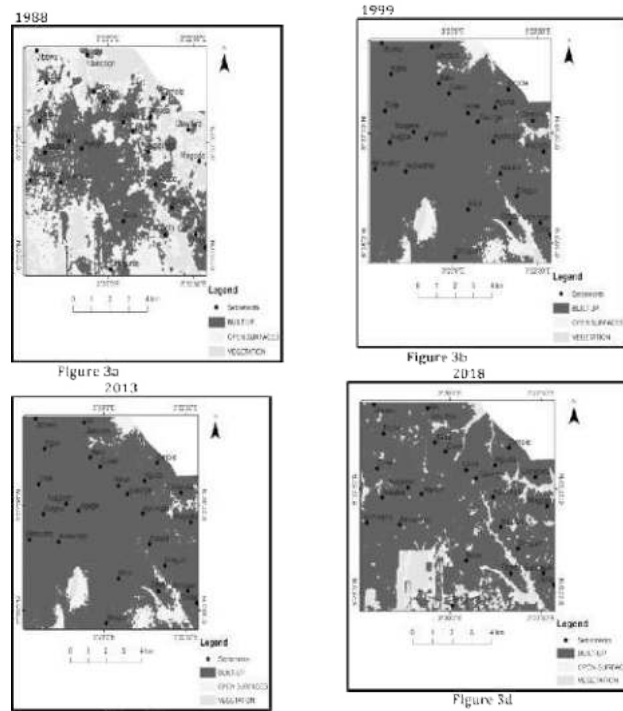


Figure 3: Landsat maps of 1988, 1999, 2013 and 2018 indicating area covered by land uses in Ikeja Source: GIS, 2018

Land Use and Land Cover maps of Ikeja for 1988, 1999, 2013 and 2018 are shown in Figures 3a-d. The total area of built-up, open surfaces and vegetation land use types from 1988 to 2018 were calculated and are clearly presented in Table 3. During the last 30 years in Ikeja, the built-up land use type covered a total area of 38.01km² in 1988, 77.64km² in 1999, 79.22km² in 2013 and 71.30km² in 2018. Open surfaces land use type covered a total area of 29.82km² in 1988, 5.95km² in 1999, 6.39km² in 2013 and 3.03km² in 2018. Vegetation land use type covered a total area of 17.24km² in 1988, 1.49km² in 1999, 0.39km² in 2013 and 10.76km² in 2018. From Table 3, it can be observed that there was a drastic increase in built-up land use type from 38.01km² in 1988 to 77.64km² in 1999 and from 77.64km² in 1999 to 79.22km² in 2013. However, between 2013 and 2018, built-up land use type declined drastically by 7.92km² and the reason for this decline in built-up land use type is not far from the fact that, the green belts planted within the city by the Lagos State Government has now grown into maturity so, instead of continuous increase in built-up land use type it was vegetation land use type that experienced expansion (see Figures 3a-d and Table 3). It can also be deduced from Table 3 that there was a drastic decline in open surfaces land use type from 29.82km² in 1988 to 3.03km² in 2018. Vegetation land use type also declined drastically from 17.24km² in 1988 to 0.39km² in 2013, but it increases from 0.39 km² in 2013 to 10.76km² in 2018. The increase in vegetation land use type in 2018 can be attributed or linked to the effect of the implementation of the concept of green urbanism by the Lagos State Government in Ikeja.

Conclusion

Adoption of the concept of Green Urbanism (GU) by planting Green Belts (GB) within the city will go a long way in sustaining our cities by reducing the amount of Land Surface Temperature (LST) within the city.

Vegetation makes use of solar radiation for transpiration and release water vapour that helps in reducing the amount of air temperature and potentially decrease the amount of Land Surface Temperature (Asmiwyati, 2016). It should be noted that the more the presence of vegetation covers the more its cooling effects on land surface. In addition to evaporative cooling effects of vegetation, the shade provided by the trees can act to cool the land surface by intercepting solar radiation and

preventing the increase in Diurnal Land Surface Temperature (Oke, 1989). The increment in the amount of Diurnal Surface Temperature recorded in the State Capital Cities of South-Western Nigeria can be attributed to the reduction in the areas covered by vegetation in the cities.

Based on the current findings, it was presumed that reduction in LST in Ikeja was in response to increase in vegetation Land Use/Land Cover (Urban Green Belts) in the study area. This result points to the need to have focused policies that can sustain and further encourage the introduction of Urban Green Belts within the cities and implementation of the concept of Green Urbanism by the various stake holders.

References

- Asmiwyati, A.R. (2016) Impact of Land Use Change on Urban Surface Temperature and Urban Green Space Planning; Case Study of the Island of Bali, Indonesia. *A Ph.D. Thesis Presented for the Degree of Doctor of Philosophy of Curtin University*. 27-28.
- Chapman, S., Watson, J.E.M., Salazar, A., Thatcher, M., Mcalpine, C.A., 2017. The impact of urbanization and climate change on urban temperatures: a systematic review. *Landsc. Ecol.* 32, 1921–1935.
- Howard, L., 1818. *The Climate of London, Deduced from Meteorological Observations, Made at Different Places in the Neighbourhood of the Metropolis*, vol. 2, W. Phillips, London, pp. 1818–1820.
- Jacob, R. J. (2015). Effects of Urban Growth on Temporal Variation of Surface Temperature in Katsina Metropolis, Nigeria. *An M.Sc. Thesis Submitted to the School of Postgraduate Studies, Ahmadu Bello University, Zaira*. 16-26.
- Oke, T.R. (1989). The micrometeorology of the urban forest. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 324 (1223), 335-349.
- Olofin, E.O. (2019) Responses of Land Surface Temperature to Settlement Growth in South-Western Nigeria. *Unpublished Ph.D. Thesis, Department of Geography and Planning Science, Ekiti State University, Ado-Ekiti*.
- Olofin, E.O. and Adebayo, W.O. (2016). A Comparative Analysis of Impact of Settlements on Temperature between Urban and Rural Areas of Ekiti State. *3rd Ekiti State University International Conference Proceeding, 2016. Pages 1-6*.

- Rahman, M.A., Stratopoulos, L.M.F, Moser-Reischl, A., Zolch, T, H aberle, K., Rotzer, T,
Pretzsch, H., Pauleit, S., 2020. Traits of trees for cooling urban heat islands: A meta analysis. *Build. Environ.* 170, 106606.
- Streutker, D. R. (2002). A Remote Sensing Study of the Urban Heat Island of Houston, Texas. *International Journal of Remote Sensing.* 23 (3): 2595-2605.
- Usman, I.J. (2014). An Evaluation of the influence of Land-use/Land-cover Change on the Surface Temperature of Federal Capital City (ABUJA) Using Remote Sensing and GIS. *An M.Sc. Thesis Submitted to the School of Postgraduate Studies, Ahmadu Bello University, Zaria.* 2-13.
- Venter, Z.S., Chakraborty, T., Lee, X., 2021. Crowdsourced air temperatures contrast satellite measures of the urban heat island and its mechanisms. *Sci. Adv.* 7, b9569

Impacts of Climate Change on Soil Fertility and Land Use Transitions in Ado-Ekiti, Nigeria (2003–2023)

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ABSTRACT

Climate change has become a significant threat to food production in Nigeria over the years due to changes in soil physicochemical properties, organic matter content as well as nutrient availability contributed to poor crop yield and vulnerability. This study assessed the spatiotemporal effects of climate change on soil fertility in Ado-Ekiti between 2003 and 2023. Climatic data (rainfall and temperature) and satellite-based vegetation indices (NDVI, SAVI, and EVI) were analyzed alongside land use and land cover (LULC) changes to evaluate how environmental variables have influenced the soil fertility. Results showed that 2013 recorded the most favorable climatic conditions, with high vegetation index values, moderate temperature, and abundant rainfall, corresponding to likely peak the soil fertility. Conversely, 2003 and 2023 experienced increased climatic stress, characterized by low vegetation cover, high temperatures, and reduced rainfall in 2023, leading to degraded soils and reduced fertility. LULC analysis revealed a significant decline in forest and agricultural land, replaced by built-up areas and bare land, further compounding the decline in soil fertility. The study concludes that rising temperatures, erratic rainfall, and land degradation are key drivers of crop yield reduction in the study area. The observation from the study recommends the promotion of climate-smart agricultural practices, improved land management, and continuous monitoring of climatic variables using geospatial tools to enhance soil health and its fertility.

Keywords: *Climate change, Soil fertility, Vegetation indices, Ado-Ekiti*

INTRODUCTION

Soil fertility is a key driver that facilitates crop growing and production in most parts of the world due to its rich in physicochemical properties and availability of organic matter and nutrients. It is one of the most important factors of crop production in West Africa, accounting for over 24% of the total cereal production (FAOSTAT 2006). Soil fertility for agricultural production was limited to small areas under the traditional farming system in the early days of Nigeria (Olaniyan, A. B. 2015). The sustainability of farming production requires accurate assessments of the combined impacts of climate change and soil fertility on crop yield. However, a knowledge gap remains regarding the interactions of climate and soil fertility for the determination of crop yield and sustainability.

Climate change, characterized by significant variations in global temperature, precipitation, and weather patterns over extended periods, has emerged as one of the most pressing challenges of the 21st century (Intergovernmental Panel on Climate Change [IPCC], 2021). It is widely recognized as a driver of environmental and socio-economic challenges, profoundly affecting natural and human systems (Enete & Amusa, 2010). One of the most affected sectors experiencing an imposing impact is agriculture, which, because of its climate stability, is perturbed at its very core and affects soil fertility and crop yield. According to Lal et al. (2017), changes in temperature, precipitation patterns, and the frequency of extreme weather events threaten the stability of agricultural systems worldwide, resulting in declining productivity and heightened vulnerability to food insecurity.

This is crucial to food security and the backbone of economic development. These shifts threaten global food production and exacerbate socio-economic inequalities, especially in developing regions such as sub-Saharan Africa (World Bank, 2020).

The selected sub-national case is Ado-Ekiti State, located in the south-western geopolitical zone of Nigeria, whose people rely on agriculture as a source of livelihood and a means of economic transformation. More so, being an agrarian region, the agricultural practice in this region is greatly influenced by the seasonality of climate (Olajide et al., 2020). With an

increase in temperatures all over the world, the occurrence of rainfall has become irregular, which results in unfair planting seasons, a high rate of soil erosion, and the production of poor yields (Rhodes, C. J, 2014). Such disruptions are not only a challenge to food security but also to the income of farmers, the core economic actors of the region (Egbetokun 2022).

In the last few decades, the interaction between climate and soil health has emerged as one of the important interfaces of research, emphasizing the complexities of agriculture production systems across the world (Lobell et al., 2011). However, literature in the area of supply chain, especially in Ado-Ekiti, is still limited. This gap brings the development of comprehensive and area-based research on changes in soil fertility and crop production due to climate change into focus. The findings can help implement corrective strategies designed to improve sustainability and farming outputs in response to climate vagaries.

According to Smith and Gregory (2013), soil and climate change have raised eyebrows on the need for sustainable management of soils and climate-smart agriculture. Nevertheless, there are relatively few scholarly contributions that have been concerned with 'contextual' or regional trends, much less with the design of context-specific solutions to problems such as those being experienced in Ado-Ekiti State. However, Abiodun et al. (2016) supported the call for improved studies at the regional level for the overall purpose of recognizing genuine vulnerabilities and feasible actions.

Aim: This study aims to assess the effects of climate change on soil fertility in Ado-Ekiti, Nigeria.

Objectives. The specific objectives are to

- (I) analyze the trends of climate change in Ado-Ekiti over time using geospatial data and remote sensing indices (NDVI, SAVI, and EVI).
- (ii) assess the impact of climate change on soil fertility by evaluating vegetation health and soil degradation patterns.
- (iii) recommend sustainable agricultural practices and climate adaptation strategies to improve soil fertility and enhance productivity in Ado-Ekiti.

2.0. Materials and Methods

2.1 STUDY AREA

This study focuses on Ado-Ekiti, Nigeria. Ado-Ekiti is a city in southwest Nigeria. It is the capital city of Ekiti State. Ado-Ekiti is situated between latitudes $7^{\circ}35'1''$ and $7^{\circ}38'$ North of the Equator and longitudes $5^{\circ}10'$ and $5^{\circ}15'$ East of the Greenwich Meridian (Arohunsoro and Omotoba, 2017). Ado Ekiti has a length and breadth of 32 and 28 km, respectively, and shares boundaries with six (6) of the administrative divisions of Ondo State. It is about 199km to the northern Ekiti and Erio to the north (43.5km), Ijero to the northeast (7.5km), southern and southeastern to the south (59km), and western Ekiti to the west (9km). It is located approximately 500 kilometers southwest of Abuja, the federal capital of Nigeria, and about 380 kilometers to Lagos the former capital of Nigeria.

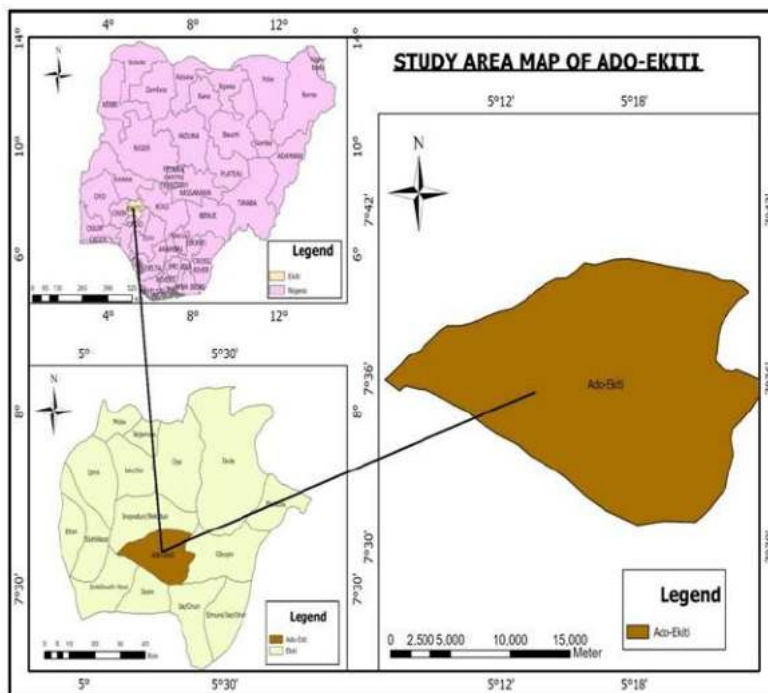


Fig 1.1: Study area map
Source: ArcGIS PRO 2024

2.2. Research Method

2.2.1 Data Sources

This study utilized secondary data from the following sources:

- (i) Landsat Satellite Imagery (for the years 2003, 2013, and 2023): Downloaded from the United States Geological Survey (USGS) Earth Explorer portal, used to compute vegetation indices (NDVI, SAVI, and EVI) and assess land cover changes.
- (ii) Climate Data: Historical temperature and rainfall data for Ado-Ekiti were sourced from the Nigerian Meteorological Agency (NiMet). The Ekiti State University Meteorological Station to provide localized validation and support for observed climatic patterns.
- (iii) Administrative Boundary and Land Use Maps: Downloaded from DIVA-GIS, which provided spatial data for delineating the study area and visualizing land cover classes.

2.2.2 Data Processing and Analysis

- (i) image Preprocessing: Landsat images were subjected to atmospheric correction, radiometric calibration, and geometric alignment to improve spatial accuracy and analytical reliability. Cloud masking was applied to eliminate interference in vegetation index calculation.
- (ii) Vegetation Index Computation:
 - a) NDVI (Normalized Difference Vegetation Index): Assessed the density and condition of vegetation.
 - b) SAVI (Soil Adjusted Vegetation Index): Reduced soil background effects, particularly in sparsely vegetated areas.
 - c) EVI (Enhanced Vegetation Index): Corrected for atmospheric and canopy background noise in densely vegetated zones.

These indices were computed using the ArcGIS Pro software.

2.2.3 Spatial and Temporal Analysis

- (I) Spatial Analysis: GIS techniques were used to map vegetation distribution, detect land cover change, and identify areas of soil

- degradation across Ado-Ekiti over 20 years.
- (ii) Temporal Trend Analysis: Vegetation index values from 2003, 2013, and 2023 were compared to identify the long-term impacts of climate change on soil fertility on the study areas.
 - (iii) Climate-Vegetation Correlation: Trends in rainfall and temperature were analyzed alongside vegetation indices to evaluate the influence of climatic variation on vegetation health and soil productivity.

3.0 RESULTS AND DISCUSSION

This section presents the study's results on how climate change is affecting soil fertility and productivity in Ado-Ekiti. The findings are based on rainfall and temperature data, remote sensing-derived vegetation indices, Normalized Difference Vegetation Index (NDVI), Soil Adjusted Vegetation Index (SAVI), and Enhanced Vegetation Index (EVI) and show how climate-related changes in vegetation and land use impact crop production over time.

3.1 Rainfall and Temperature Trends and Implications for crop production

Rainfall and temperature are two of the most significant climatic variables influencing soil fertility and productivity. Crops are growing in a rain-fed areas like Ado-Ekiti which is highly sensitive to fluctuations in weather patterns, especially during its critical growth stages such as germination, tasseling, silking, and grain filling. Understanding how these climatic factors have changed over time provides essential insight into the vulnerability of crop farming systems to climate variability in the region. As rainfall determines water availability and soil moisture balance, and temperature influences physiological development and evapotranspiration, both directly affect yield quantity and quality. Therefore, the analysis of climate trends is critical for assessing the impacts of climate change on crop production potential in Ado-Ekiti. (Ogundele and Jegede 2003).

Table 3.1: Average Rainfall and Temperature for Ado-Ekiti (2003, 2013, 2023)

Year	Average Annual Rainfall (mm)	Average Annual Temperature (°C)
2003	1068.5	31.4
2013	1112.5	30.9
2023	1161.5	32.1

Source: NiMet, (2025)

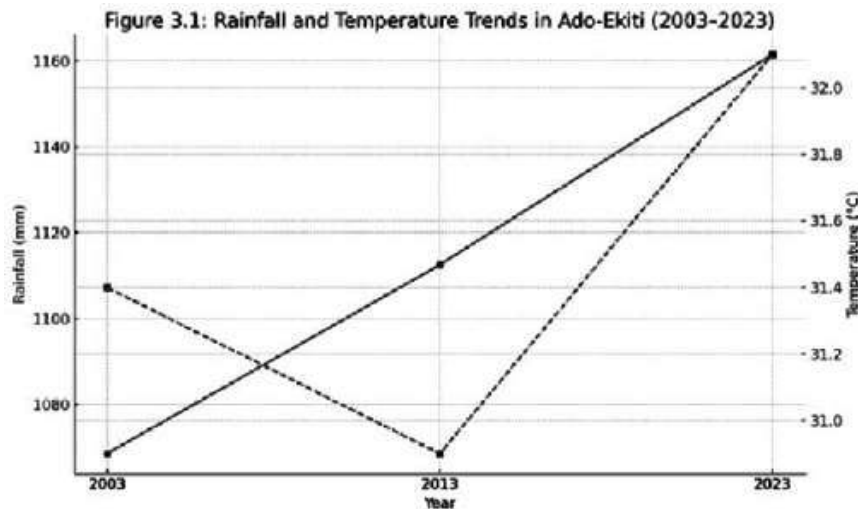


Fig 3.1: Rainfall and temperature trends in Ado-Ekiti from 2003 - 2023.

Source: Author's Analysis, (2025)

The rainfall and temperature patterns shown in Table 3.1 and Figure 3.1 reveal how climatic shifts over two decades have directly impacted crops yield in Ado-Ekiti. In 2003, while the annual rainfall was relatively low at 1068.5 mm, the temperature remained high at 31.4°C. This combination of low rainfall and elevated temperature likely caused insufficient soil moisture, early wilting, and weak crop germination. This would have limited nutrient availability, reduced pollination efficiency, and resulted in lower kernel formation, contributing to overall low yields that season.

In 2013, a peak rainfall of 1112.5 mm and a drop in average temperature to

30.9°C created a more favorable growing season and more favorable climatic conditions for crop production. This climate condition supported better flowering, reduced heat stress, improved kernel development, higher photosynthetic activity, grain filling, and improved crop resilience. It aligns with the high vegetation index observed in NDVI and SAVI for the same year, suggesting that crop yield would have peaked during this period.

However, by 2023, while rainfall increased further to 1161.5 mm, average temperature also rose to 32.1°C. This increase in temperature would have led to higher evapotranspiration rates, reducing the net water available for crop uptake. Moreover, excessive heat during critical growth phases could impair pollen viability and hinder grain formation. Thus, despite the rise in rainfall, the elevated temperature likely caused heat stress and partial crop failure, contributing to the declining vegetation indices and reduced crop productivity observed in recent years. This reinforces the conclusion that climate change, especially rising temperatures, is having a negative impact on crop cultivation in Ado-Ekiti.

3.2 Normalized Difference Vegetation Index (NDVI) Analysis

The Normalized Difference Vegetation Index (NDVI) reflects the greenness and density of vegetation, and thus serves as a proxy for plant health, chlorophyll content, and soil fertility. The NDVI values across the years reveal the following trends:

Table 3.2: NDVI Values for Ado-Ekiti (2003, 2013, 2023)

Year	Minimum NDVI	Maximum NDVI	Mean NDVI	Vegetation Condition
2003	0.03	0.30	0.17	Sparse Vegetation
2013	0.98	0.99	0.99	Dense Vegetation
2023	-0.009	0.43	0.24	Moderate Vegetation

Source: Author's Analysis (2025)

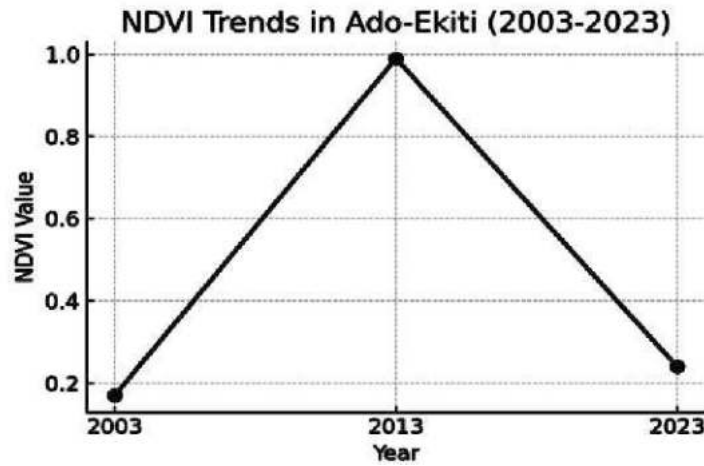


Figure 3.2: Trend of Mean NDVI Values in Ado-Ekiti (2003–2023)
Source: Author's Analysis (2025)

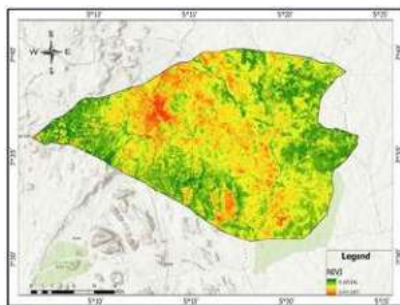


Fig 3.3: NDVI value (2003)
Source: ArcGIS Pro 2025

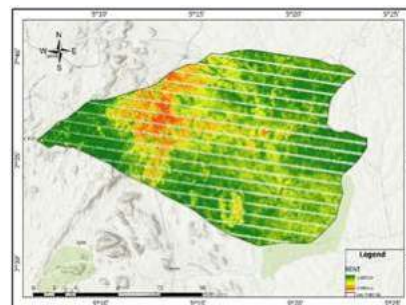


Fig 3.4: NDVI value (2013)
Source: ArcGIS Pro 2025

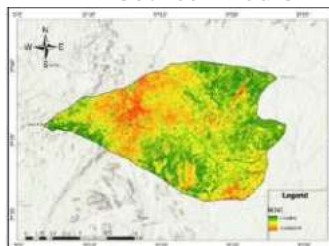


Fig 3.5: NDVI value (2023)
Source: ArcGIS Pro 2025

Table 3.2 above shows that, in 2003, the low mean NDVI value of 0.17 suggests a landscape characterized by low vegetation cover and possible degradation of arable lands. This corresponds with reduced productivity, as sparse vegetation typically results from nutrient-poor soils, inadequate rainfall, and possibly delayed planting. The low NDVI indicates limited photosynthetic activity, which is directly linked to poor crop canopy formation. Consequently, maize farmers during this period likely experienced low grain yields, uneven cob development, and smaller plant size.

In contrast, 2013 recorded a peak NDVI value of 0.99, representing a period of healthy vegetation growth. Such a high NDVI implies optimal rainfall distribution, good soil fertility, and favorable growing conditions. During this period, crops would have achieved full canopy cover, supported by high chlorophyll content and efficient water uptake. This would contribute to effective pollination, grain filling, and robust yields per hectare. The data suggests that 2013 was likely a bumper harvest year for farmers in Ado-Ekiti, especially those cultivating in areas with access to rich soils and less urban encroachment.

By 2023, the mean NDVI dropped to 0.24, reflecting a notable decline in vegetation health. This decline may be attributed to factors such as prolonged dry spells, reduced forest cover, and the expansion of built-up areas that reduce vegetative cover. For crop cultivation, this signals a negative shift in soil moisture availability, organic matter content, and general soil fertility. The reduction in vegetative vigor suggests declining crop yields and a growing dependency on chemical fertilizers to compensate for poor natural fertility. Such a trend is unsustainable and economically burdensome for smallholder farmers.

3.3 Soil-Adjusted Vegetation Index (SAVI) Analysis

SAVI is specifically designed to correct for the influence of soil brightness in areas with low vegetation cover. It is particularly useful for evaluating soil-vegetation dynamics in crop fields during early planting stages when leaf cover is minimal. In Ado-Ekiti, crops are primarily cultivated in open fields that are highly sensitive to soil degradation and rainfall irregularities.

Table 3.3: SAVI Values for Ado-Ekiti (2003, 2013, 2023)

Year	Minimum SAVI	Maximum SAVI	Mean SAVI	Vegetation Condition
2003	0.04	0.45	0.26	Sparse Vegetation
2013	1.48	1.49	1.49	Dense Vegetation
2023	-0.014	0.64	0.35	Moderate Vegetation

Source: Author's Analysis (2025)

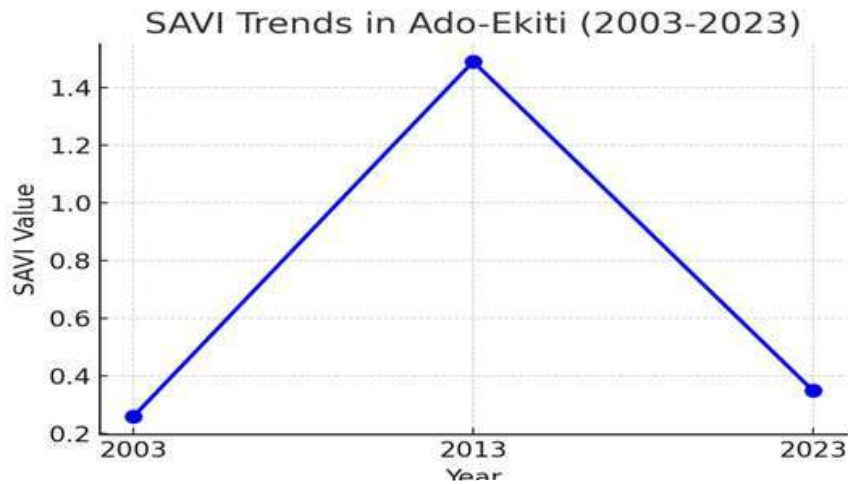


Figure 3.6: Trend of Mean SAVI Values in Ado-Ekiti (2003–2023)

Source: Author's Analysis (2025)

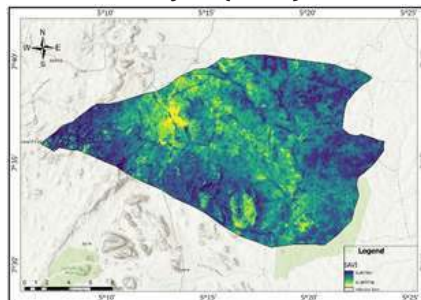


Fig 3.7: SAVI value (2003)

Source: ArcGIS Pro 2025

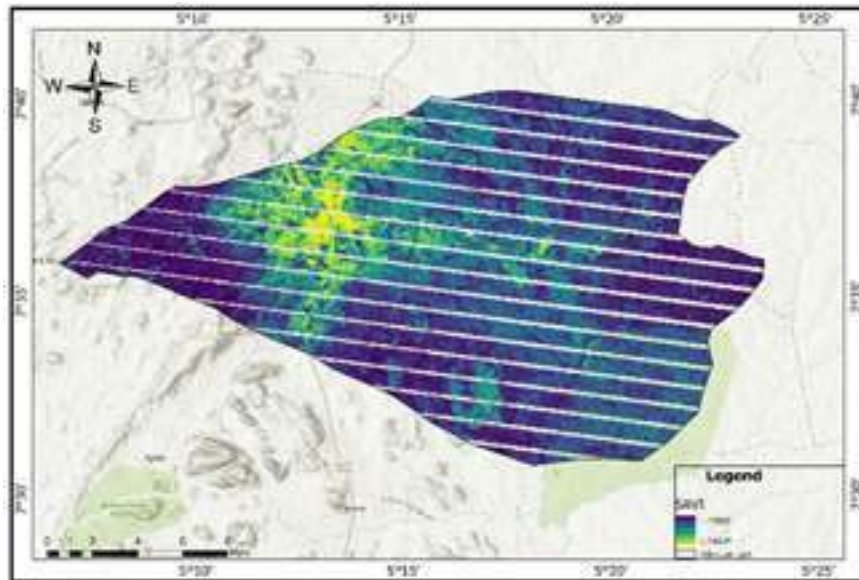


Fig 3.8: SAVI value (2013)
Source: ArcGIS Pro 2025

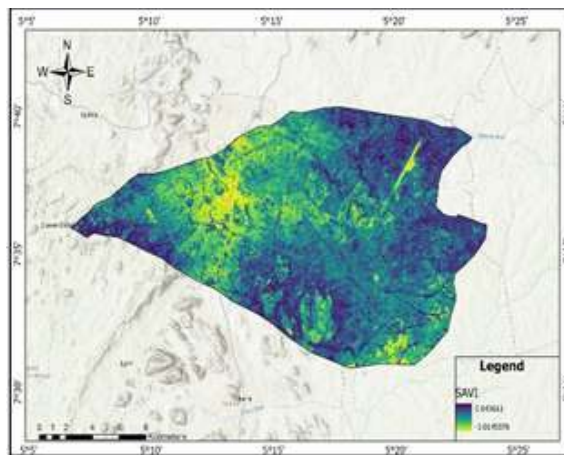


Fig 3.9: SAVI value (2023)
Source: ArcGIS Pro 2025

Table 3.3 shows that, in 2003, the SAVI value of 0.26 indicates that large portions of the crop-growing areas were affected by soil exposure and reduced vegetation. This could be due to poor tillage practices, loss of vegetative cover through burning or overgrazing, or climate-related soil erosion. These factors contribute to reduced crop germination, shallow root systems, and low crop stands.

By 2013, the SAVI surged to a peak of 1.49, indicating healthy plant-soil interaction and optimal ground coverage. This suggests a season marked by effective land preparation, good seed emergence, and minimal soil erosion. Under such conditions, crops benefit from improved nutrient uptake and deep rooting, leading to better grain formation and maturity.

In 2023, the drop in SAVI to 0.35 reflects a partial regression in soil fertility and vegetation health. Increased land-use pressure, bush burning, and urban development may have led to exposed topsoil and reduced soil organic matter. These conditions are detrimental to crops production as they reduce moisture retention and microbial activity in the soil. Consequently, crop yields would decline, and farmers would be forced to rely more heavily on inorganic fertilizers, which may further degrade the soil in the long run.

3.4 Enhanced Vegetation Index (EVI) Analysis

The Enhanced Vegetation Index (EVI) captures the influence of atmospheric disturbances and canopy background, making it suitable for monitoring vegetation in areas subject to climatic extremes. In crop cultivation, EVI is valuable for assessing crop performance under variable weather conditions, such as heatwaves, heavy rainfall, or prolonged drought.

Table 3.4: EVI Values for Ado-Ekiti (2003, 2013, 2023)

Year	Minimum EVI	Maximum EVI	Mean EVI
2003	-1.17	1.73	3.41
2013	-1.35	-0.39	-0.83
2023	-3.93	35.51	1.78

Source: Author's Analysis (2025)

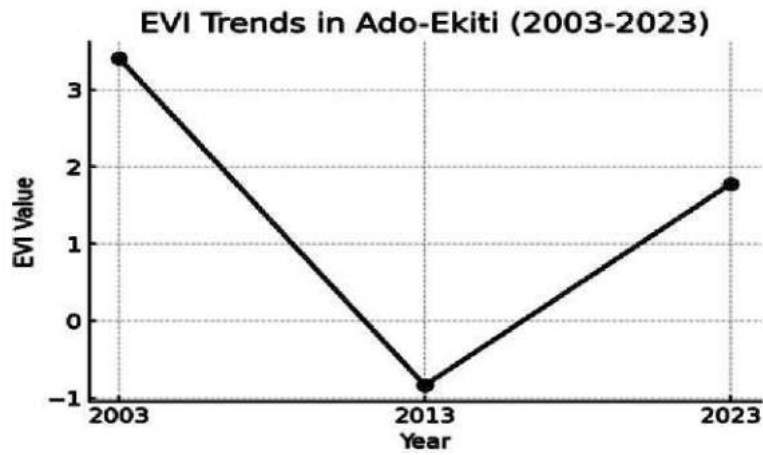


Figure 3.10: Trend of Mean EVI Values in Ado-Ekiti (2003-2023)

Source: Author's Analysis (2025)

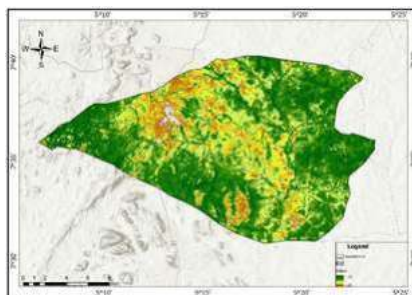


Fig 3.11: EVI value (2003)

Source: ArcGIS Pro 2025

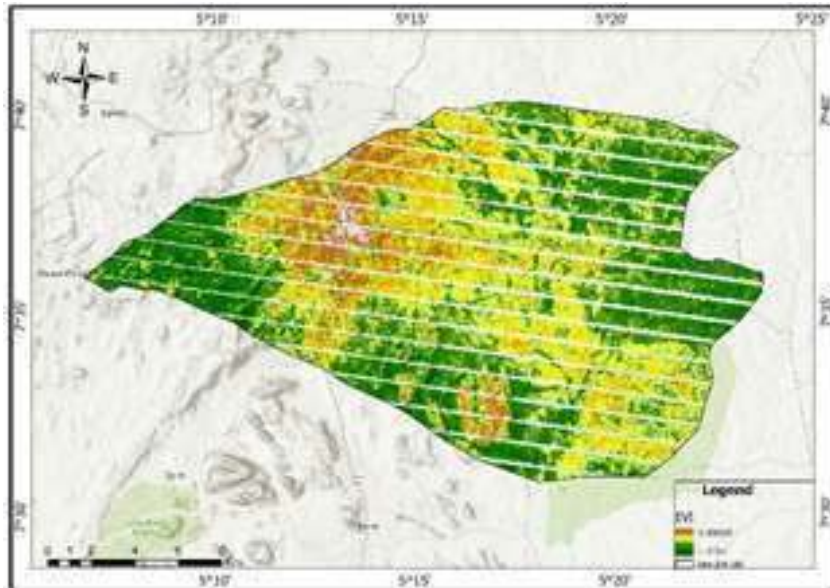


Fig 3.12: EVI value (2013)
Source: ArcGIS Pro 2025

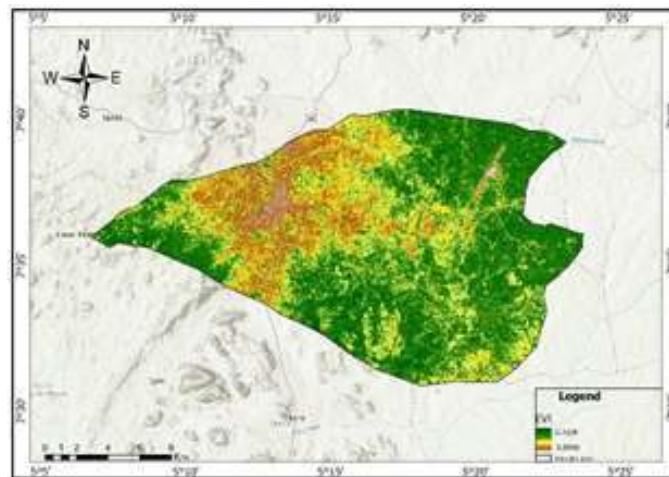


Fig 3.13: EVI value (2023)
Source: ArcGIS Pro 2025

Table 4.4 indicates that, in 2003, a high mean EVI value of 3.41 reflects a generally healthy vegetative condition, suggesting that plants were likely thriving under favorable microclimatic conditions. Good canopy coverage during this time would have ensured high evapotranspiration balance, leaf cooling, and nutrient circulation essential for crop kernel development.

However, 2013 saw a sharp drop in EVI to -0.83, indicating significant climatic stress. This could be due to erratic rainfall or an extended dry period, which would reduce crop yields by impairing pollen viability, silk emergence, and cob development. Crop is particularly sensitive to moisture availability during the tasseling and silking stages; any climatic disruption during this period leads to poor grain set and low harvests.

The EVI rise in 2023 (mean = 1.78) is an improvement but is accompanied by extreme fluctuations from -3.93 to 35.51, indicating uneven growth and possible crop failure in some locations. These extreme variations suggest that while some farmlands benefited from adequate rainfall and retained fertility, others experienced heat stress, waterlogging, or nutrient leaching. The spatial inconsistency reflects a growing unpredictability in crop production, reinforcing the vulnerability of the crop to climate change.

3.4 Land Use Land Cover Changes and Maize Farmland Reduction

Land Use Land Cover (LULC) dynamics directly influence the availability and quality of land for crop production. As vegetated and agricultural lands are converted to built-up and bare surfaces, the area suitable for crop farming declines. This also impacts soil fertility through the removal of topsoil and natural vegetation buffers.

Table 3.5: LULC Distribution (in m²) for Ado-Ekiti (2003–2023)

Land Use Type	2003 (m ²)	2013 (m ²)	2023 (m ²)
Bare Land	145	103	140
Built-Up	30	45	144
Forest	146	122	66
Water	0.28	0.21	1.23
Total	321.28	270.21	351.23

Source: Author's Analysis, (2025)

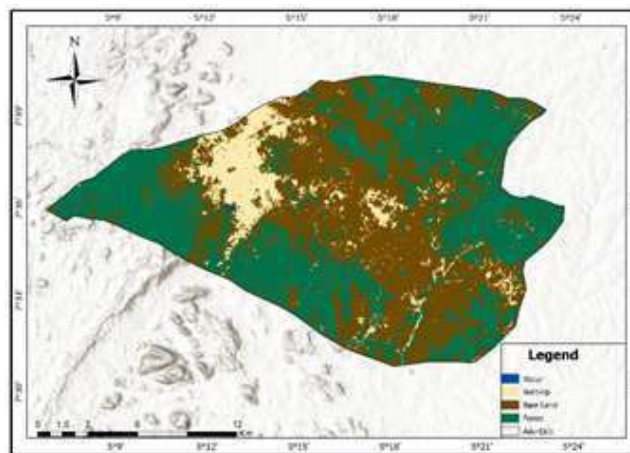


Fig 3.14: LULC (2003)
 Source: ArcGIS Pro 2024

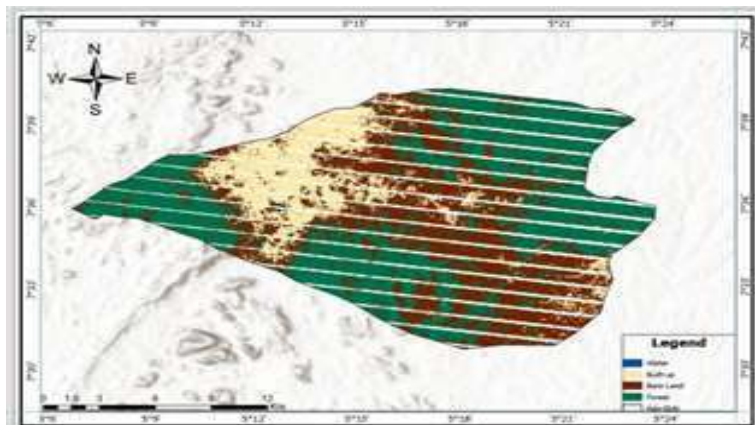


Fig 3.15: LULC (2013)
Source: ArcGIS Pro 2024

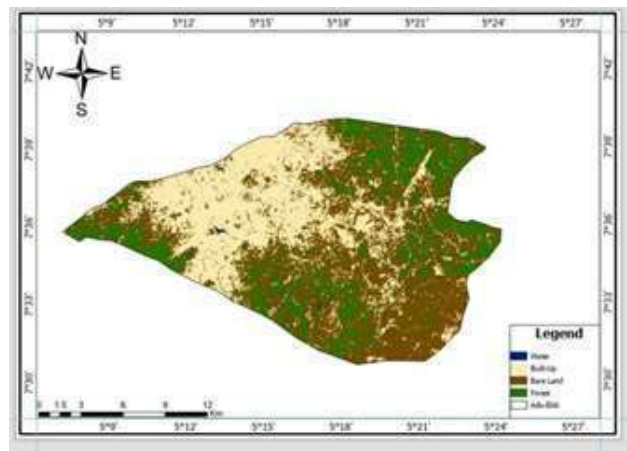


Fig 3.16: LULC (2023)
Source: ArcGIS Pro 2024

From the data above, it is evident that built-up land increased significantly from 30 m² in 2003 to 144 m² in 2023, reflecting the rapid urbanization of the study area. This expansion has encroached upon farmlands

traditionally used for cultivation. As urban areas grow, fertile soils are sealed under concrete and asphalt, resulting in the irreversible loss of arable land and disruption of the ecological balance required for sustainable agriculture.

Furthermore, forested areas declined from 146 m² to 66 m² over the study period. Forests are crucial for regulating soil temperature, enhancing organic matter content, and preventing erosion. Their decline directly affects soil fertility and the suitability of surrounding areas for crop farming. Without tree cover, farmlands become more vulnerable to erosion, nutrient leaching, and soil structure degradation. This results in lower productivity and higher input dependency.

An increase in bare land in 2023 suggests that more agricultural plots, including crop fields, are either abandoned due to declining fertility or degraded by overuse and lack of fallow periods. These lands are often unsuitable for crop without intensive rehabilitation. Farmers cultivating such areas often face declining yields, higher fertilizer costs, and water stress, especially during the peak growing seasons.

The LULC trends confirm a shrinking and increasingly degraded farming landscape in Ado-Ekiti. Without targeted land use control and the promotion of sustainable land management practices, crop production will continue to suffer both in terms of quantity and quality.

3.6 Synthesis of Findings and Link to Maize Productivity

This study's integrated analysis of climatic patterns, vegetation indices, and land use dynamics provides compelling evidence that crop productivity in Ado-Ekiti has been significantly compromised over the last two decades. The cumulative effect of these environmental and anthropogenic changes points to a landscape increasingly hostile to sustainable crop cultivation.

The rainfall and temperature trends revealed in Section 3.1 suggest that while rainfall has generally increased, temperature has also risen, especially in 2023, leading to intensified evapotranspiration and soil

moisture deficits. These conditions severely impact crop, a crop that thrives best under moderate temperatures and well-distributed rainfall. Higher temperatures accelerate crop maturity, shorten grain filling periods, and reduce final yield. The heat also weakens pollen viability during tasseling and silking, resulting in poor kernel development.

Vegetation indices (NDVI, SAVI, and EVI) further validate the impact of climate stress on maize health. NDVI values peaking in 2013 correspond to ideal growing conditions, whereas the decline in 2023 suggests vegetation stress and declining soil productivity. Low SAVI values indicate reduced vegetative cover and exposed soils, a sign of nutrient exhaustion and erosion, factors that disrupt crop root development and increase vulnerability to drought. The irregular EVI trends mirror unpredictable weather patterns, revealing a farming environment where stress events are becoming more frequent and more severe.

The LULC analysis cements the finding that the physical space for crop cultivation is shrinking. Forests, which historically shielded farms and enriched soils, have been cleared at an alarming rate. Built-up areas have consumed former farmlands, and the spread of bare land signals abandonment of once-productive plots. Farmers are increasingly forced onto marginal lands with poor fertility and little resilience to weather extremes. This not only reduces yields but also increases production costs and food insecurity.

In synthesis, the results show that the interaction of rising temperature, erratic rainfall, degraded soil conditions, and unsustainable land use are the principal forces reducing crop yields in Ado-Ekiti. These pressures are not operating in isolation but reinforcing one another, creating a cycle of decline that threatens the long-term viability of crop cultivation in the region. To break this cycle, it is essential to adopt climate-smart agricultural practices, promote land restoration, strengthen land use regulations, and invest in localized climate monitoring

Such interventions can help rebuild soil health, stabilize yields, and support farmers' resilience in the face of accelerating climate change.

CONCLUSION

This study has provided a comprehensive spatiotemporal assessment of the effects of climate change on soil fertility and crop yield in Ado-Ekiti between 2003 and 2023. By integrating climatic data (rainfall and temperature), vegetation indices (NDVI, SAVI, and EVI), and land use/land cover changes, the research has demonstrated that both natural and anthropogenic factors have significantly altered the agricultural landscape of the study area.

Findings revealed that 2013 presented the most favorable climatic conditions for crop cultivation, characterized by moderate temperatures, adequate rainfall, and dense vegetation. This year corresponded with higher vegetation index values, indicating better soil health and likely increased maize yields. However, by 2023, vegetation indices declined considerably, rainfall became less effective due to high evapotranspiration rates, and temperature rose beyond optimal levels, leading to reduced soil moisture, nutrient leaching, and poor crop performance.

Furthermore, land use analysis showed that extensive urban expansion and forest depletion have led to the loss of fertile farmland, leaving many farmers with degraded, marginal lands. The increasing spread of bare land suggests either abandonment or overuse of agricultural plots, indicating that soil fertility is in decline.

Overall, the study concludes that climate variability, particularly rising temperature and unsustainable land use patterns, are the primary drivers of declining crop productivity in Ado-Ekiti. Without strategic intervention, continued soil degradation and climate stress will worsen food insecurity and threaten the sustainability of crop farming in the region.

RECOMMENDATION

Based on the findings of this study, the following recommendations are proposed to mitigate the negative impacts of climate change on crop yield and soil fertility in Ado-Ekiti:

- (1) Farmers should be encouraged to adopt climate-smart practices such as minimum tillage, mulching, drought-resistant crop varieties, crop rotation, and integrated nutrient management.

- These techniques can improve soil structure, reduce erosion, and enhance resilience to climatic stress.
- (2) Tree planting campaigns and agroforestry systems should be promoted to reduce deforestation, improve soil organic matter, stabilize temperature, and reduce wind and water erosion on farmlands.
 - (3) Local governments should enforce zoning laws that protect agricultural lands from unregulated urban encroachment. Buffer zones should be established to preserve farmlands and forest reserves.
 - (4) Degraded crop fields should undergo soil rehabilitation through organic composting, green manuring, and cover cropping to restore fertility and moisture retention capacity.
 - (5) Agricultural extension services should provide regular training for farmers on the use of geospatial tools to monitor environmental changes, interpret early warning climate data, and implement adaptive farming practices.
 - (6) Establishing more meteorological stations and promoting access to seasonal forecasts will help farmers make informed planting decisions and better prepare for adverse weather events.

By implementing these recommendations, policymakers, researchers, and farming communities can work together to restore ecological balance, enhance soil fertility, and safeguard crop production in Ado-Ekiti against future climate risks.

REFERENCES

- Abiodun, B. J., Salami, A. T., & Tadross, M. (2016). Impact of climate change on extreme rainfall events over southern Nigeria. *Environmental Research Letters*, 11(7), 075001.
- Arohunsoro, O. O., & Omotoba, I. J. (2017). GIS-based analysis of land use dynamics in Ado-Ekiti, Nigeria. *Journal of Environmental Management and Safety*, 8(1), 122–137.
- Egbetokun, F. (2022). Climate change and food insecurity in Nigeria: Implications for rural livelihoods. *African Development Review*, 34(3), 287–301.
- Enete, A. A., & Amusa, T. A. (2010). Challenges of agricultural adaptation to

- climate change in Nigeria: A synthesis from the literature. Field Actions Science Reports. *The Journal of Field Actions*, Rhodes, C. J. (2014). Soil erosion, climate change and global food security: challenges and strategies. *Science progress*, 97(2), 97-153.
- FAOSTAT. (2006). Food and Agriculture Organization statistical database. Retrieved from <http://www.fao.org/faostat/en/>
- Intergovernmental Panel on Climate Change (IPCC). (2021). Climate change 2021: The physical science basis. Contribution of Working Group I to the Sixth Assessment Report of the IPCC. *Cambridge University Press*.
- Lal, R., Delgado, J. A., Groffman, P. M., Millar, N., Dell, C., & Rotz, A. (2017). *Management to mitigate and adapt to climate change. Journal of Soil and Water Conservation*, 66(4), 276–285.
- Lobell, D. B., Schlenker, W., & Costa-Roberts, J. (2011). Climate trends and global crop production since 1980. *Science*, 333(6042), 616–620.
- Olajide, O. A., Adebayo, K., & Akinbile, L. A. (2020). Impact of climate variability on maize farmers' productivity in southwest Nigeria. *Nigerian Journal of Rural Sociology*, 20(2), 45–55.
- Olaniyan, A. B. (2015). Maize: Panacea for hunger in Nigeria. *African Journal of Plant Science*, 9(3), 155-174.
- Smith, P., & Gregory, P. J. (2013). Climate change and sustainable food production. *Proceedings of the Nutrition Society*, 72(1), 21–28.
- World Bank. (2020). Climate-smart agriculture: Building resilience in developing countries. Washington, DC: The World Bank.

GEOSPATIAL TECHNIQUES FOR COMBATING DEFORESTATION IN EMURE-EKITI, NIGERIA

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ABSTRACT

Emure-Ekiti, Ekiti State is an agrarian community that witnesses fast growth and expansion and as such deserves needs and values. The study investigates deforestation as a serious menace that requires prompt and quick attention because of its negative impact in the study area. Both primary and secondary data sources were used for the study. 150 copies of questionnaire were used for the primary source while Landsat satellite imageries of different types and years (Landsat 5TM of 1994, 7ETM of 2004, 8OLI 2014 and 8/9 OLI-TIRS 2024); all of path 190 and row 155 covering Ondo State, Ekiti State and Osun State were used for the change detection that have taken place using a supervised classification method as the secondary source. The study was sub-mapped to Ekiti region processed using Geospatial Techniques. The images taken were processed with supervised classification through pre-processing of geometric and radiometric correction, and land cover maps for each year of study and maps were produced. The land use for the study area was classified into three categories which includes: built-up area, bare land and forestland. The study found out and revealed that the depletion of the forested area was reduced from 71.74% in 1994 to 36.01% in 2024 were due to farming activities and infrastructural development. The possible effect of the loss was analyzed. The study recommends that effective planning and monitoring to check indiscriminate anthropogenic activities that might affect urbanization and depletion of the forested area must be put in place in order to achieve SDGs.

Keyword: Deforestation, land use, land cover, monitoring and Geospatial

INTRODUCTION

Biodiversity conservation is an invaluable phenomenon within the ecosystem for its roles such as provision of food, fuel, fibre and raw materials that are imperative to our everyday lives (Blaiser, 2010; Fasona et al., 2014). Food security has necessitated the need to invest in agricultural activities such as crops, livestock and forestry. These are the basic requirements for environmental goal setting particularly in the pursuance of the sustainable developmental goals for this millennium. And for environmental sustainability and food security to hold, the resources within the environment must be preserved, protected and well managed (Salako et al., 2005; Bofo, 2013)

Forests are resources that cover about one-third of the surface of the earth and play a vital role in the livelihood of man and the communities such as hydrological cycle, soil protection and biodiversity preservation (Ayodele and Ajayi, 2020; Bodo et al., 2021). Thus it requires, monitoring, management and the use of modern environmentalism approach for preserving the resources if it must be useful, valuable and sustained (Adegboyega and Adebayo, 2018; Ayodele and Ajayi, 2020).

Ayodele and Ajayi (2020) compared the principles of environmental resources management and resulted that are often of single purpose with those of environmental management which are invariably of multi-purposes effect. However, Adegboyega and Akintan (2021) opined that resources management focuses only on its resources and environmental management deals with both resources system and their environment for the socio-economic livelihood of the people in the community.

Thus, man in pursuance of his goals using the available opportunity in his environment to harness the resources for economic purposes has affected the communities adversely by felling trees in the forest (Afolabi, 2008; Sumit, 2012) and this has led to various changes in the environment and subsequently affecting the livelihood pattern of the residents in the environment. Such changes have modified the soil, influenced climate, affected geomorphic processes and the quality of some ecosystem and lives; which is an indication that most forest resources were destroyed consequences (Adebayo, 2010). The impact of these activities by man

within the environment in the forest making the environment pleasing to him are hazardous to man and his environment. (Myres,1994; Mubarak et.al.,2017).

The global rate of deforestation is alarming particularly in Africa and the conversion of forest to agricultural land occur at alarming and devastating rate (Mfon et.al.,2014 ;Gonzales and Moreno,2021) . Oribhabor (2016) discusses deforestation as the permanent removal of forest, or cutting down of trees without replacement and the conversion of forest to an alternatively permanent non-forested land use such as agriculture, grazing or urban development (Abere and Opera,2012) note fully, that forests are precious resources for biodiversity and for environmental sustainability. Forest in Nigeria, are cleared to give room for agricultural activities such as crop cultivation , livestock, grazing and logging. The loss of forested areas has serious consequences for biodiversity, water resources and carbon sequestration contributing vulnerability (Mubarak et.al., 2017;Bodo and Gimah,2020).

Deforestation happens in a particular area for urban development, road construction, buildings and agricultural purposes (Adegboyega and Adebayo, 2018). Thus, its impact affects millions of people who depend on forest for their living (Galma and Adi,2021).

Emure – Ekiti is an agrarian community that involves in agricultural activities that play a major role in the livelihood of the people of the study area because it provides food, fibre and raw-materials for agro-livestock production. These activities have eventually resulted to deforestation with adverse consequence on both the resources and the environment (Oyewole, 2006 ;Mfon et.al.,2014).

And UNEP (2020) opines that that the growth of urban centres has led to the encroachment of built –up area to agricultural land as more of the people enjoying the resources within their disposal. This is good more so that over 90% of people live in the rural settlement in Nigeria, but the over- exploitation of the resources together with population increase in the area needs adequate checks and balances, if not, greater danger is looming as it is a problem to life, properties and the plant communities

(Bodo and Gimah,2019). There is need to manage properly the forested area and ensure that the natural resources (the soil and vegetation) are not degraded .The approach to curbing this environmental menace deserves a geospatial solution(Adegboyega and Adebayo,2018) to assess the causes, the impact and proffer solution to the problem in Emure- Ekiti, Nigeria, the study area.

Aim: The study aims at using geospatial techniques to solve the menace of deforestation on the livelihood pattern of residents of Emure- Ekiti ,Nigeria .

Objectives. The specific objectives are to:

- (I). investigate the causes of deforestation in the study area;
- (ii) examine its impact on the study area ; and
- (iii). recommends policy measures needed for solving the imbalance faced in the study area.

2.0. Material and Methods

2.1. The Study Area

The Study Area is Emure - Ekiti , one of the Local Governmental Areas in Ekiti State Nigeria .It is located between latitude 7° 17' and 7° 33' North of the equator and lies between 5° 26' and 5° 36' East of the Greenwich Meridian, with the population of 90, 645 (NPC, 2006). The town is bounded in the West by Ise /Orun L.G.A, in the North by Gbonyin L.G.A and in the East and in the south by Ondo State (Akoko- South L.G.A, and Owo L.G.A respectively). And from its inception in 1996 when Ekiti State was created out of old Ondo State, Emure was carved out from old Emure/Ise/Orun L.G.A to make two LGAs with. Emure as one of the headquarters. It has a major road connecting it with Owo and that of Gbonyin L.G.A that links the town with Supare- Akoko in Akoko-North east of Ondo State.

The town has witnessed changes and growth in the recent time. This development has its consequential effects on the forested areas and the forestial ecosystem, hence its impact on our global sustainable development goal, SDGs Goal11-sustainable Cities and Communities

(Forestial, 2030). On this note, the study intends to investigate deforestation - a menace of forest- loss in Emure Ekiti over the years and its influence on the sustainable development of the town(Iloeje,2011).



Fig.1 Map of Nigeria showing Ekiti State
Source: Arc GIS PRO, 2024

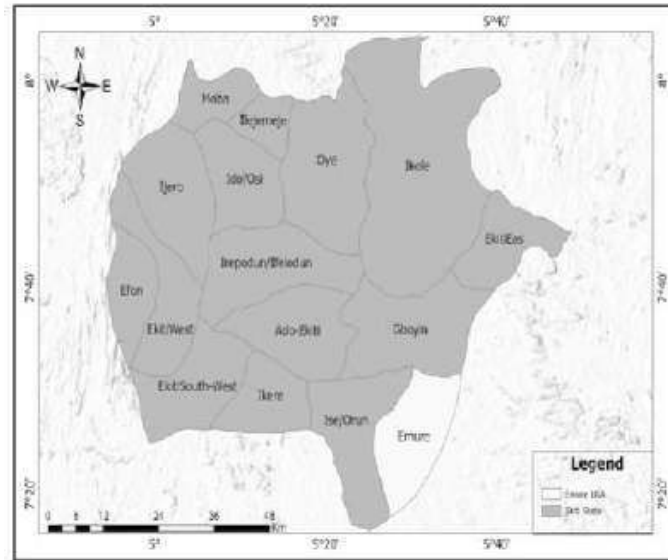


Fig.2 Map of Ekiti State showing Emure LGA
Source: Arc GIS PRO, 2024

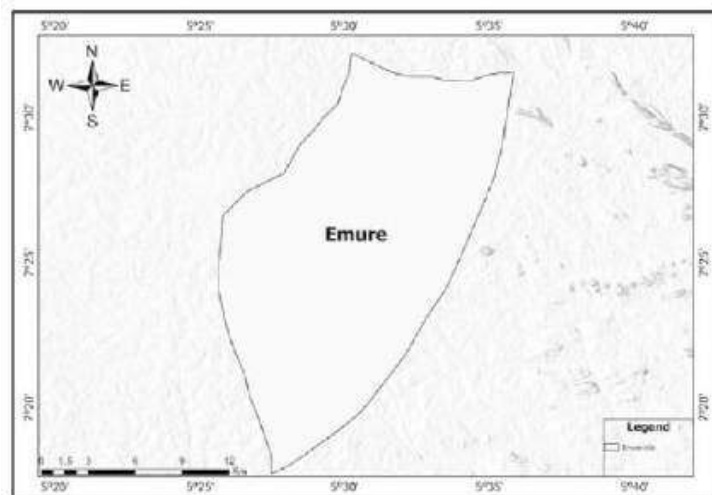


Fig. 3 Map of Emure LGA
Source: Arc GIS PRO, 2024 2.2.

Research Method

2.2.1 Primary Data Collection. Structured questionnaires were administered to 150 respondents across the selected households, farmlands, and forestry-involved communities. The questionnaire covered causes and consequences of deforestation, land preparation methods, forest resource usage, and perceived changes in the forest cover. In addition to the surveys, direct field observations were conducted to ground-truth the land cover types and validate geospatial analysis. A handheld GPS device was used to collect coordinates of deforested zones, shrublands, and built-up expansions.

2.2.2 Secondary Data Collection and Satellite Imagery

The study made use of multi-temporal Landsat satellite imagery acquired from the USGS Earth Explorer platform. The datasets used included:

- (i) Landsat 5 TM for 1994
- (ii) Landsat 7 ETM+ for 2004,
- (iii) Landsat 8 OLI for 2014
- (iv) Landsat 8/9 OLI-TIRS for the most recent imagery in 2024

All the images had a spatial resolution of 30 meters and covered Path 190, Row 055, which includes Emure-Ekiti and the surrounding areas. Cloud-free images from the dry season were selected for better differentiation of land cover types.

2.2.3 Image Pre-processing and Classification Using ArcGIS Pro

Image processing and analysis were carried out using ArcGIS Pro. The preprocessing steps included layer stacking, clipping to the Emure-Ekiti boundary, and histogram stretching for visualization enhancement. All images were georeferenced to the 1984 image to maintain spatial consistency.

Supervised classification was performed using the Maximum Likelihood Classification tool in ArcGIS Pro. Training samples were created for forest/vegetation, shrub/bareland, and built-up classes using the Training Sample Manager. Classification accuracy was ensured visually based on field observations and satellite reflectance patterns.

2.2.4 Land Use and Land Cover Area and Length Estimation

In order to determine the spatial extent of each land use/land cover (LULC) category, the classified raster maps were converted to vector format using the Raster to Polygon tool. The resulting polygons were then processed using the Dissolve tool based on similar LULC attributes. This allowed aggregation of fragmented polygons into single features per class. Using the Calculate Geometry tool in the attribute table, the total area (in square kilometers) and percentage (in percent) of each LULC class were computed. These values formed the basis for the quantitative reporting of forest loss and built-up area expansion in the results.

2.2.5 Data Visualization and Interpretation

The classified land cover maps and change detection outputs were symbolized in ArcGIS Pro using standard color codes. Layouts were designed for effective visual communication. Change detection results were summarized using charts, tables, and thematic maps. Spatial and statistical interpretation focused on identifying trends in forest reduction, an increase in bare land and built-up classes, and spatial hotspots of deforestation. These interpretations were used to guide policy-oriented conclusions and recommendations for forest conservation in Emure-Ekiti.

3.1 RESULTS

The land use /land cover of the town was carried out using trend analysis to monitor the area affected. The pattern of land use /land cover for the year 1994, 2004, 2014, and 2024. The results of the study were presented in maps and tables for discussion and for planning purposes. The various categories of land use and land cover discovered analyzed included Agricultural / Forest Land (AFL), Vegetation/ Bare Land (VBL) and Built-Up Areas (Developed)(1994 - 2024) Different colour based on USGS/Anderson classification system.

Table 1 Area of land use/land cover in Emure- Ekiti in 1994

Land Use and Land Cover (LULC)	Shape Length	Shape Area	Area	Percentage
BUILT -UP AREA(DEVELOPED)	205802.298926	5475878.207261	5.475878	1.91
VEGETATION (BARELAND)	1738970.210457	75448748.681758	75.448749	26.35
FOREST	1610803.851238	205395172.652194	205.395173	71.74
TOTAL	2,150,574.808309m	286,319,799.541213km ²	286.3198km ²	100 %

Source: Field work, 2024

Pattern of Land Cover in 1994

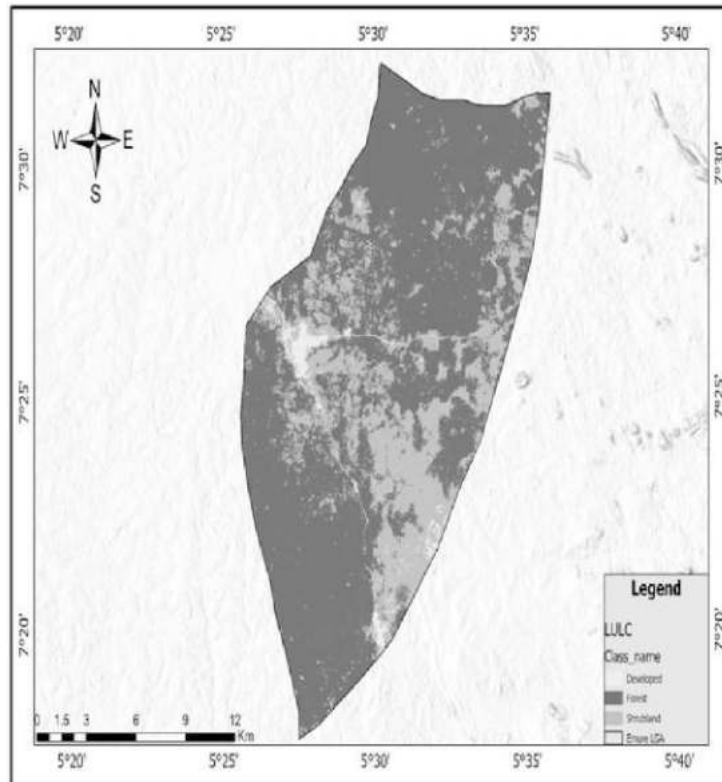


Fig.4 LULC of Emure LGA in 1994,
Source: Arc GIS PRO, 2024

Pattern of land cover in 2004

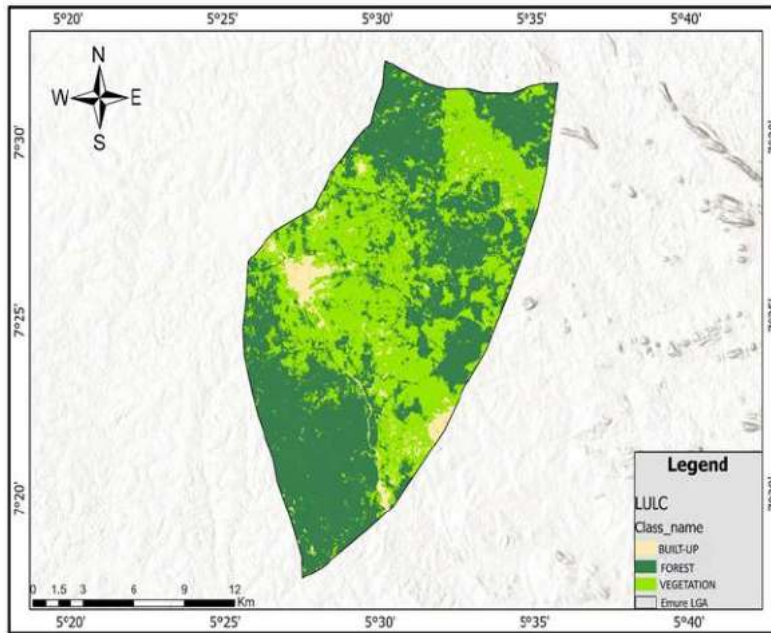


Fig.5 LULC,Emure-Ekiti

Source: Arc GIS PRO, 2024

Fig5 shows that (71.74%) in 1994 reduced to 53.27) in 2004. 14(41%) in a space of 10 years which has received gain in other land cover classes as built-up seem increase by (79.8%). Longest vegetation by 24.73%.

Table 2. Area of land use/land cover in Emure Ekiti in 2004

LULC	Shape Length	Shape Area	Area	Percentage
BUILT-UP AREA	385497.016079	11922891.708464	11.922892	4.16
VEGETATION	1725027.121801	121853617.612321	121.853618	42.56
FOREST	1421817.984642	152528231.009725	152.528231	53.27
TOTAL	3,532,342.122522m	286,304,740.33051km2	286.304741km2	100 %

Source :Field work,2024

Table 3. Area of land use/land cover in Emure Ekiti in 2014

Land Use/Land Cover(LULC)	Shape Length	Shape Area	Area	Percentage
BUILT-UP AREA	566742.150743	18923174.494338	18.923174	6.61
VEGETATION	1418832.988749	114197670.227734	114.19767	39.89
FOREST	1952587.990131	153190804.816377	153.190805	53.50
TOTAL	3,938,163.129623 m	286,311,649.538449km ²	286.31165km ²	100 %

Source : Field work,2024

Pattern of land cover in 2014.

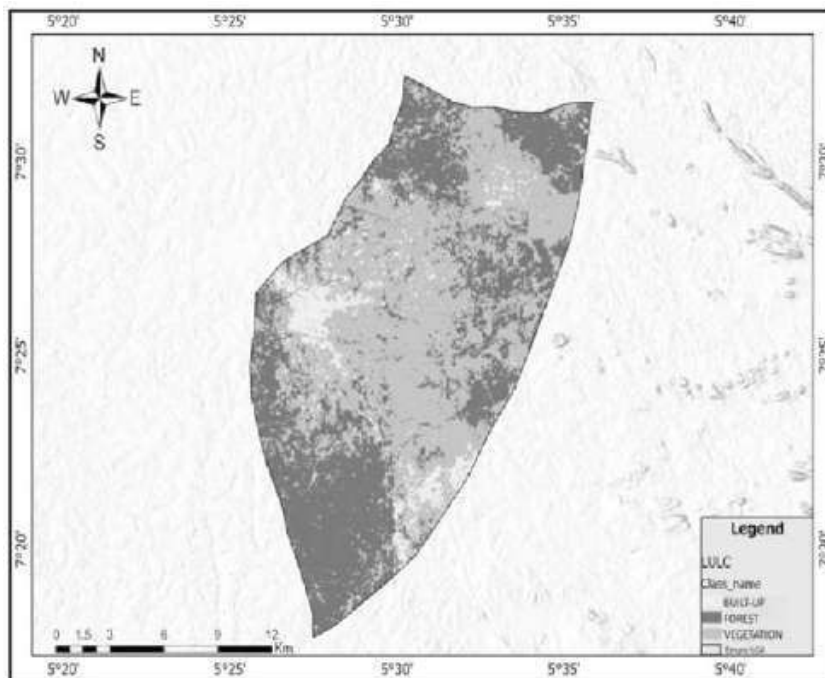


Fig.6.LULC, Emure-Ekiti

Source: Arc GIS PRO, 2024

Fig.6a. Developed area of land cover of Emure increased from 1.94% to 4.16% while thick vegetation decreased from 71.74% to 53.5%. This is (25.4%) reduction in a space of 30yrs which is 2.5% per year.

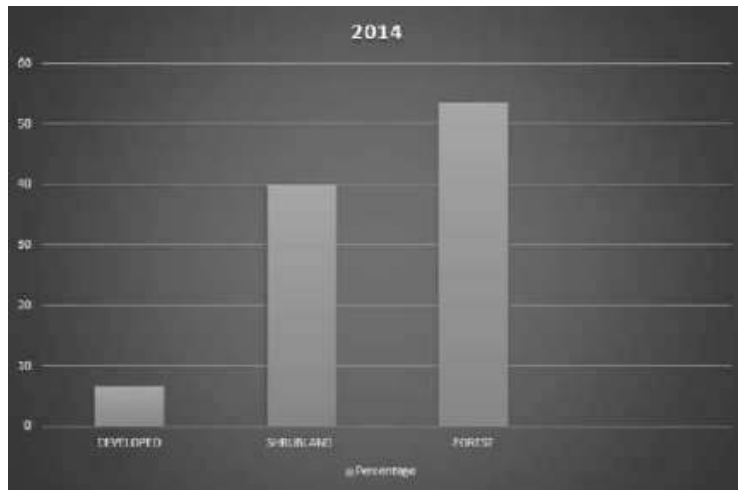


Fig.6b .Barchart of LULC, Emure-Ekiti
Source: Field work,2024

Pattern of land use and land cover in 2024

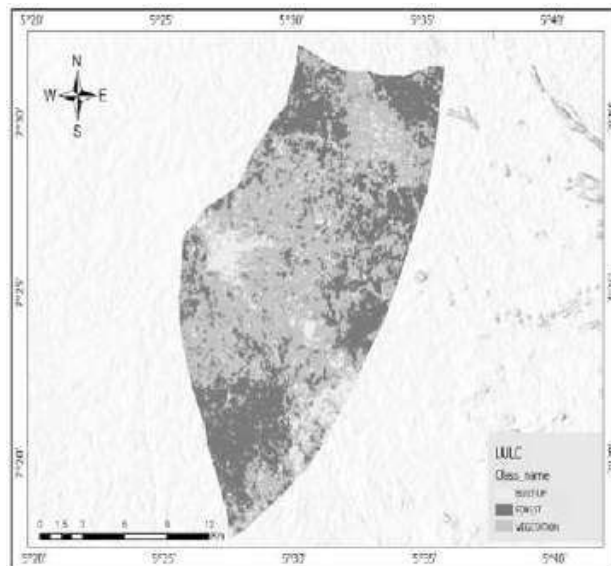


Fig7a. LULC, Map of Emure-Ekiti
Source: Arc GIS PRO, 2024

Fig.7a. Developed area of land cover of Emure-Ekiti increased from 1.94% to 9.45% while thick vegetation decreased from 71.74% to 36.01%. This is (99.61%) reduction in a space of 40yrs which is 2.5% per year.

Table 4. Area of land use/land cover in Emure-Ekiti in 2024

Land Use /Land Cover(LULC)	Shape Length	Shape Area	Area	Percentage
BUILT-UP AREA	885102.751031	27051660.908121	27.051661	9.45
VEGETATION	2297487.649328	156132341.994907	156.132342	54.53
FOREST	1427690.745656	103116993.425637	103.116993	36.01
TOTAL	4,610,281.146015 m ²	286,300,996.328665k m ²	286.300996k m ²	100 %

Field Survey,2024.

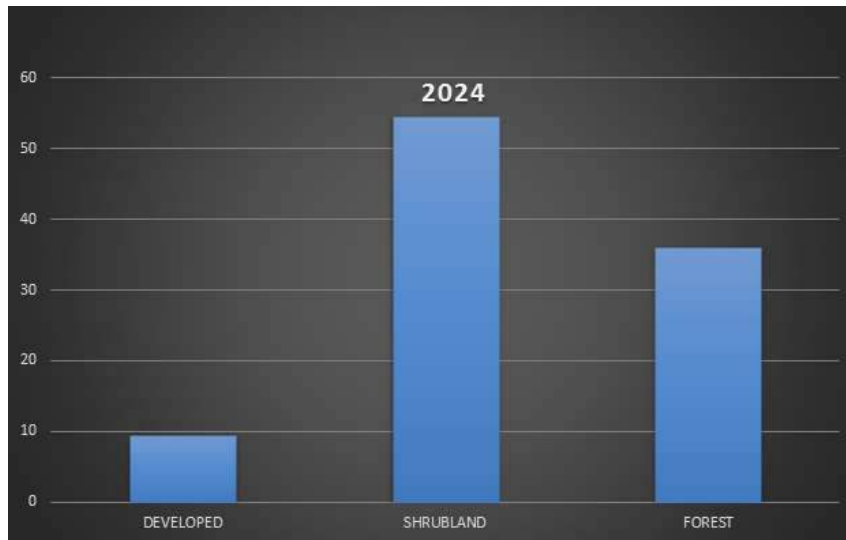


Fig.7b .Bar chart of LULC,Emure-Ekiti
Source :Field work,2024

Table5. Land Preparation Methods

Methods	Frequency	Percentage %
Slash and Burn	90	56.7
Tillage	50	33.3
Ecological farming	10	10
Total	150	100

Source :Field Survey,2024

Table 5 discussed the causes and the effect of deforestation in the study area.56.7% of the respondents showed that slash and burn system was the predominant method practised in the study area to prepare land for agricultural purposes. The slash and burn method depleted the forestland most and this often accounts for bush fire disaster and rapid deterioration of soil fertility in the study area. Whereas, 33.3% used tilling and 10% practised ecological farming respectively in the area which are environmentally friendly.

Table 6. Agricultural Practices in the study area

Crop	AREA CROPPED	AREA CROPPED	AREA CROPPED	Change (%)
	2004	2014	2024	
Maize	4820	5720	5700	18%
Rice	110	130	145	31.82%
Cassava	4000	4100	4400	10%
Yam	90	90.5	93.5	3.8%
Cocoyam	3480	3480	3480	0%
Plantain	8350	8360	8280	0.84%
Cocoa	10450	8530	7240	30.72%
Total	31,300	30,410.5	29,338.5	95.18%

Source: Ministry of Agriculture, Ekiti State, 2024

Table 7. Trend change

Epochs	Range	Changes		
1984-1994	10 years	38	26	
1995 - 2004	10yrs	38	26	
2005- 2014	10yrs	12	5	
2015- 2024	10yrs	5	31	

Source: Field survey,2024

The deforestation observed in the four epochs studied were taken from the archival records obtained from the Ministry of Agriculture. Several developments take place every year. The development witnessed turned subsistence farming agricultural arable lands to mechanized farming; turning arable land to estates, roads such as construction works (new built-up sites of various categories (Churches, L.G.A secretariat, schools, Roads (5km road) allotted for each L.G. Area (since it is one- town local government),75% of the road was done in Emure- Ekiti. The illegal and illicit tree felling affected the town within the last few decades. These were done without replacement which accounted for more destruction of forestland in the area.

Prediction of the Change expected to occur in 2024.

Changes in 6 layer

The base year =1984

Current year =2024

Changes between = 10.5%

Time difference =40yrs.

Possible impacts of deforestation on Emure- Ekiti.

The town witnessed a fast development due to creation of Ekiti State in 1996, and the carving out of the new local government area from the old Emure/ Ise/ Orun which made Emure LGA stands on her own. The development become unguarded and uncontrollable due to land use /land cover palaver. The forested area started fading off due to the growing population and conversion of subsistence farming method to mechanized farming for economic purposes. The urbanization process became obvious as many farms are replaced by buildings, roads, schools and churches. This corroborates with the findings of FAO (2020) and Popoola

(2016) that between 200,000 hectares to 400,000 hectares of land were lost annually in Nigeria. These are some of the impacts witnessed in the town on forest depletion (deforestation in the town).

Firstly, the town recorded a huge loss on the roof of the houses for many of the houses were blown off by windstorms due to rain. The early rain brings in inclement weather in the area as many of the trees which supposed to serve as wind breakers started disappearing due to the face-lift given to the town. Thus, this development posed threat to some individuals and corporate bodies in the study area.

The second impact is the loss of air quality. The disappearance of these trees not only pose threat to the people but has caused disappearance in fresh air quality thus making life boring. The natural air-conditioning that people enjoy due to the fresh air could no longer be enjoyed due to the cutting down of trees that provides oxygen to the environment.

Thirdly, there is a reduction of carbon emission. Tree plays a crucial role in reducing carbon emission from the town. A tree can absorb 150kg of CO_2 per year. Forests pump O_2 and the exhale CO_2 . So, also tree sinks carbon to supply two – ten people O_2 for survival. This act solves economy problem.

The fourth impact is the livelihood of the residents which are protected. The forest absorbs rain and protect the soil from environmental degradation. Less coverage cause soil erosion flood that takes mud, debris into the stream and rivers nearby thus make the water unsafe to drink.

The fifth point is on less socialization. Trees planted in front of houses provide avenues for people to come together for indoor games in the cool of the day (Gen.3:8-9). People play *ayo - olopon, ludo* and interact together every evening, but with the loss of these trees without any replacement such relationship and socialization have eroded away.

Food insecurity is another impact for consideration in the area. Nutrient depletion due to lack of soil fertility has affected farmers' produce in that, leaching causes direct sun on crops planted do scorch the product in such a way that fewer harvest are recorded as against bumper harvest that the town was known for in the past.

And many other developments that spring up early in the town have been dropped, for instance, many of the sawmills opened in the town are now 'moribund' as there are no more native trees found in the study area. Even the exotic trees (Repetto,1988; John,2010) are no longer planted to replace the cut down trees through spot logging and indiscriminate felling of trees.

CONCLUSION:

The actualisation of SDG is very paramount and it is the desire of all developing countries that their settlements grow and expand in such a way that they metamorphosise from village to towns and from towns to cities. This study revealed that there is a continuous transformation in the LULC of the study area, thus impacting the town both ways (positively and negatively). And that the adverse impact seemed outweighing the positive impact thus posing concern to the indigenes and to the residents in the study area so as not to affect the socio-economic improvement of the livelihood of the residents, nor combat the climate change , ensuring food security and environmental sustainability of the town.

Recommendations

1. It is thus recommended that , good agriculture practices such as precision agriculture should be carried out in the study area in a sustainable manner by contributing to food security such as fibre, fuel wood and raw materials that are imperatives for daily needs.
2. The Study area needs an over- hauling by allowing surveying, the bedrock of any meaningful development to take place in it for meaningful, well-planned, urban and regional planning of the town.
- (3). Forest management should be on the topmost by giving room for green space infrastructure for a more resilient, sustainable and equitably in the form of nutrition, food security, livelihood improvement and ecosystem conservation.
- (4). Deforestation should be stopped by improving forest practices using satellite imagery for monitoring forest that can remove up to seven billions tone of carbon dioxide annually (Igbokwe et.al.,2016).
- (5). In as much as we know that forests combat climate change which

is a global menace, it is advisable to encourage tree planting (TreePeople, 2020) in the town and to discourage hundreds of people planning to migrate to the area for massive food production and timber felling, and subsequently establish saw mills as entrepreneurial task; and to curb flooding and soil erosion in the study area.

REFERENCES

- Abere, S.A. and Opare, J. A., (2012): "Deforestation and Sustainable Development in the Tropics: Causes and Effects" *Journal of Educational and Social Research*, 2 (04):105- 109
- Adebayo, W.O (2010).The Human Environment: Something to Everyone, *29th Inaugural Lecture of the University of Ado-Ekiti, Ado-Ekiti* : 62.
- Adegboyega, E.R and Adebayo, W.O (2015).Ensuring Environmental Sustainability in Nigeria. *A Paper presented at the 9th International Conference on Children in Science and Technology, held in University of Iringa, Tanzania, East Africa. 4th-6th November.*
- Adegboyega, E. R. and Adebayo, W. O. (2018): Geo- Spatial Information for Sustainable Forest Management in Ekiti State, Nigeria, *African Journal of Social Sciences*, 8(1):75-83, England, United Kingdom.
- Adegboyega, E. R., and Akintan, O.B. (2021).Using Forest Resources for Economic Development and Poverty Reduction in Ekiti State, *International Journal of Applied Agricultural Sciences* , **New York, USA** 7(4): 183-189. *index in Cross Ref, Eurasian Scientific Journal*
- Afolabi, F.I. (2008): Entrepreneurship Development: Potentials, Practices and Problems, Lagos, *Solar Flares and Publishers*
- Ayodele, I.A. and Ajayi, O.O (2020).Introduction to Environmental Management, Ilorin, *Pablum Global Limited*
- Blaser, J. (2010): Forest Law Compliance and Governance in Tropical Countries: A Region-by-Region Assessment of the Status of Forest Law Compliance and Governance in the Tropics, and Recommendations for Improvement. *FAO and ITTO*
- Boafo, J. (2013): The impact of Deforestation on Forest Livelihoods in Ghana. *Backgrounder African; ortal: http:// www.africaportal.org*
the Environment: The Relevance of Environment Adult

- Education, *Earth of Environmental Science Research and Review*, 2(5):1-7.
- Bodo, T and Gimah, B.G (2020). The Destruction of the Niger Delta Region Ecosystem of Nigeria: Who is to be Blamed? *European Scientific Journal* 16 (5): 161-182.
- Bodo, T., Gimah, B. G. and Seomoni, (2021) Deforestation: Human Causes, Consequences and Possible Solutions, *Journal of Geographical Research* 04(02): 22-30.
- FAO (2020). Report of Sound Alarm on Soil Pollution, available at [http://www.fao.org/news/story/en/item/1126971/code/Retrieved_on August 8](http://www.fao.org/news/story/en/item/1126971/code/Retrieved_on_August_8).
- Fasona, M.J, Oloukoi, G, Olorunfemi, F.B., Elias, P.O and Adelayo, V. (2014). Natural Resources Management and Livelihood in Nigeria Savannah. Ibadan, *Penthhouse Publication*.
- Galma, D. W. and Adi, L.T. (2021) Deforestation: Causes, Factors Affecting Deforestation and Preventative Strategies in Pastoralist Dry Land Areas: The Case of Borena Pastoralist, *Research Trends (IJNSCFRT)* 10(1): 1-17.
- Igbokwe, S.O., Ogunlade, S.O., Ejikeme, J.O., and Igbokwe, E.C. (2016). Mapping and Monitoring Deforestation in Ondo State using Remote Sensing Techniques for Forest Resources Management. *Nigerian Journal of Surveying and Geo-informatics* 5(1):108-117
- Iloeje, M.(2011) . Deforestation and Impact on Biodiversity in Southeastern Nigeria. The case of Afi River Forest Reserve. *Biodiversity and Conservation* 20(9):2123-2136
- John, R (2010). Tree Play Key Role in Purifying our Water. *AJC.Com*
- Mfon, P. and Akintoye, O. and Mfon, G. and Olorundami, T. and Ukata, S. and Adesola A. T. (2014). Challenges of Deforestation in Nigeria and the Millennium Development Goals. *International Journal of Environmental and Bioenergy*, 9(2): 76-94.
- Mubarak , A.L, Ayobami, P, Adedeji ,O, Adediji, A. and Babalola, K (2017). City Expansion and Agricultural land loss within the Peri-urban Area of Osun State, Nigeria,, *Ghana Journal of Geography* (9(3):132-163
- Myers, N. (1994). Tropical Deforestation: Rates and Patterns. In *The Causes of Tropical of Tropical Deforestation. The economic and*

- statistical analysis of factors giving rise to the loss of the tropical forest, eds. Brown, K. Pearce, D. pp 27-40. UCL Press.
- Oribhabor, B.J.(2016). Impact of Human Activities on Biodiversity in Nigeria Aquatic Ecosystems. *Science International:12-20*
- Oyewole, A.O. (2006). Environmental Degradation, Poverty and Population. *International Journals of Environmental Issue.(1):21-28*
- Popoola, O (2016). Nigeria loses 400, 000...hectares of forest annually, Punch Newspaper, January.
- Repetto, R.(1988). The forest for the trees? Government policies and the misuse of forest resources. *World Resource Institute, Washington DC.*
- Salako, F.K., Adeniji, M.T. ,Ojanuga, A.G., Arowolo, T.A.,and Ojeniyi,S.O (eds.)2005. Managing Soil Resources for food Security and Sustainable Environment. *Proceeding of the 29th Annual Conference of the Soil Society of Nigeria held at University of Agriculture, Abeokuta, Nigeria December 6-10*
- Summit, K (2012). Deforestation: Causes, Effects and Control Strategies *ICAR Research Complex for Eastern Region, Research Centre, Plandu Ranchi, India.*
- Tree People (2020). Top 22 Benefits of Trees <https://www.treepeople.org/treebenefits>
- United Nations Environment Programme (UNEP, 2020). Eco-Labeling available at [https://www.unenvironment.org/explore-topic/resume-efficiency/whatwe do/responsible-industry and eco-labelling](https://www.unenvironment.org/explore-topic/resume-efficiency/whatwe-do/responsible-industry-and-eco-labelling) .Retrieved 23rd July.