



ASSESSING THE IMPACT OF ENVIRONMENTAL AWARENESS ON SANITATION IN EKITI STATE

FOYEKE OMOBOYE IBIMILUA AND ADEDOYIN OLUWATOYIN OMIDIJI

Abstract

The specific objectives of this research include evaluating current sanitation practices, scrutinizing residents' understanding and behaviours, assessing the efficacy of intervention programs, and identifying factors affecting implementation success. The survey research method was employed, focusing on three Local Government Areas (Ado, Oye, and Emure) representing distinct senatorial districts in Ekiti State. Residents aged 18 and above in the selected LGAs formed the target population. A judgemental sampling technique was used to select 50 respondents, distributed across teachers in the three LGAs. Findings revealed confidence in the state government's commitment to waste management by teachers in the areas. This in turn has impacted environmental education in schools. Though challenges exist in the proper disposal of hazardous waste materials, positive perceptions of government effectiveness and belief in individual actions indicate a foundation for collaborative efforts. Behavioural changes and cleaner environments have been observed in these areas. Challenges captured include inadequate government support, inadequate infrastructure, and insufficient waste disposal facilities. In conclusion, the assessment reveals communities in Ekiti State with heightened awareness and positive attitudes toward environmental sanitation through teachers' involvement. Educational efforts, robust community engagement, and government support are crucial for a lasting impact.

Keywords: Environmental education, Sanitation practices, teachers' involvement, Community engagement and Government support

1 INTRODUCTION

Environmental education is a process that allows individuals to explore environmental issues and engage in tackling challenges. Environmental awareness does not champion a particular viewpoint or course of action. Instead, it captures individuals' attitudes to keeping their areas clean. Environmental awareness encompasses a wide range of approaches that aim to promote environmental action, knowledge, skills, values, and attitudes. It encourages individuals to understand the interdependence between human organisations and the natural world, and to take collective action to mitigate environmental degradation (Nuță *et al.*, 2024).

Environmental awareness encompasses a diverse array of strategies aimed at nurturing awareness, knowledge, skills, values, and attitudes related to the environment. It encourages individuals to

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comprehend the intricate connections between human societies and the natural world and to collectively address environmental degradation. This trend fosters practical skills, nurtures values of stewardship and sustainability, and promotes a holistic perspective on interdependence and systems thinking. Ultimately, environmental awareness empowers individuals to take meaningful actions to mitigate environmental degradation and contribute to the well-being of both local and global ecosystems (Matsekoleng *et al.*, 2024).

Sanitation, as an integral component of public health and environmental well-being, plays a critical role in safeguarding human health and preventing the spread of diseases. World Health Organization (WHO) defined sanitation as the means of collecting and disposing of excreta, community liquids, and waste hygienically so as not to pose a danger to the environment. Similarly, Iheke (2010) sees sanitation as the process of keeping places clean and hygienic, especially by providing a sewage system and a clean water supply. Inadequate sanitation practices, often aggravated by a lack of awareness and knowledge, lead to the contamination of water sources, the proliferation of disease vectors, and the degradation of ecosystems.

Ekiti State, located in southwestern Nigeria, faces its own unique environmental and sanitation challenges. Despite being endowed with rich natural resources and cultural heritage, the state wrestles with waste management problems ranging from open defecation, unhygienic solid waste disposal, bush burning and a bushy environment. The relevance of environmental education in addressing sanitation issues in Ekiti State cannot be overstated. A well-designed and effectively implemented environmental education program has the potential to empower individuals with the knowledge and skills needed to take proper sanitation practices, lessen waste generation, and save or protect the local environment. Therefore, understanding the impact of environmental education on sanitation practices in Ekiti State is important for showing focused generalship to tackle these difficult and important issues.

This study focuses on assessing the capacity for achieving results of environmental education programs in Ekiti State with a search light on their impact on sanitation conduct. By appraising the existing environmental education ideas, identifying lapses, and knowing the factors that affect or determine their favourable outcome, this research contributes valuable insights to the field of environmental education, public health, and sustainable development.

Previous research has explored the theoretical foundations of environmental education, delving into models such as the Health Belief Model, Theory of Planned Behavior, and Social Cognitive Theory. Scholars have examined the importance of community engagement, waste management practices, and the role of government interventions in promoting sanitation awareness. However, the application of these theoretical frameworks and the evaluation of their effectiveness in the unique socio-cultural and environmental context of Ekiti State remain understudied.

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Additionally, while some studies have provided general insights into the state of sanitation practices in various regions, a focused examination of the specific impact of environmental education programs in Ekiti State is lacking. The current literature lacks a comprehensive and localized understanding of how education initiatives have influenced the sanitation practices of Ekiti State residents.

This study aims to bridge this gap by conducting a thorough assessment of the Impact of Environmental Education on Sanitation in Ekiti State. By building upon the foundations laid by past scholars, the research intends to provide context-specific insights into the effectiveness of environmental education initiatives in shaping sanitation behaviors. It seeks to identify the strengths and weaknesses of existing programs, the level of community engagement, and the key factors influencing the success or challenges faced during implementation.

Through this research, we aim to contribute valuable knowledge that can inform policymakers, environmental educators, and community leaders in Ekiti State. The findings of this study will not only add to the academic discourse on environmental education but also offer practical recommendations for enhancing sanitation practices in the region, contributing to the broader goal of building sustainable and healthy communities.

Objectives of the Study

The main objective of this research is to assess the Impact of Environmental Education on Sanitation in Ekiti State. The specific objectives are to:

- i. Determine the present environmental sanitation practices or behaviours in Ekiti state.
- ii. Scrutinize the understanding, behaviours, and perceptions of Ekiti state residents towards environmental sanitation.
- iii. Assess the efficacy of environmental education intervention programmes in improving environmental sanitation practices in Ekiti state.
- iv. Pinpoint the elements that affect the successful implementation of the environmental education support programme in Ekiti state.

2 A Brief Discourse on Sanitation

Sanitation is the hygienic disposal or recycling of waste. It is also considered a practice that allows the protection of health with the help of hygienic measures (UNESCO, 2003). "Sanitation" is understood to mean "the promotion of hygiene and prevention of disease by maintenance of sanitary conditions". In the nineteenth century the term "sanitary" was understood to mean





something “relating to health, or relating to or used in the disposal of domestic waterborne waste” (Merriam-Webster's Collegiate Dictionary, 2003; Sinha and Menon, 1999).

Lyortyer (2017) view sanitation as the provision of basic sanitarian facilities and infrastructures and the enforcement of sanitation rules, regulations and laws to ensure and guarantee a clean and wealthy environment. These include sewage, drainage, toilet dustbins, incinerators, dumpsites, disinfectants sewage treatment plants and refuse disposal vans. The non-provision of these which impair and endanger health renders a place unsanitary.

Jarner (2015) looks at the concept of sanitation as an arrangement to protect public health, especially for the efficient disposal of sewage and waste. Given the above definition, optimum health is possible only when man is in unity with his environment, which comprises physical, biological and social factors. Nwegbu (2017) views sanitation as a way of life expressed in a home, business, industry neighbourhood and community which must come from people living in the area and is nourished by knowledge and growth as an obligation. He tries to underscore the fact that sanitation develops in an area when it is looked upon as a duty or condition that indicates what action ought to or ought not to be taken. The American Encyclopedia volume 24 explains that sanitation is the appreciation of measures to make environmental condition favorable to health. It is nourished by knowledge of and grows as an obligation and wheel in human relation.

The 1999 protocol on water and health to the 1992 convention on the protection and use of trans-boundary watercourses and international lakes defined sanitation as "the collection, transport, treatment, and disposal or reuse of human excreta or domestic water-waste, whether through collective systems or by installation, serving a single household or undertaking". This understanding of the term includes, not only the removal of waste from direct contact with human beings, but also its treatment and possible safe reuse (Kumar, 2001). It has been found that poor water and sanitation facilities have many other serious repercussions. A direct link exists between water, sanitation and health, and nutrition and human well-being.

Consumption of contaminated drinking water, improper disposal of human excreta, lack of personal and food-related hygiene and improper disposal of solid and liquid waste have been major causes of many diseases in Nigeria and it is estimated that around 30 million people suffer from water-related diseases (Blackwell, 2004). Children, particularly girls and women, are the most affected.

Sanitation is vital for good health. Health problems associated with poor sanitation include diarrhoea, dysentery, typhoid, cholera, malaria, bilharzia, worm infestations, eye infections, and skin diseases. Sanitation is also vital for wealth creation. Economic benefits of improved sanitation





include savings in health costs, higher worker productivity, better school attendance, improved tourism and reduced water treatment costs (RSA, 2000).

Adequate sanitation is the foundation of social development. According to the World Health Organization (WHO), a decent toilet or latrine is an unknown luxury to half of the people on earth. Almost 3 billion individuals do not have access to a decent toilet, and many of them are forced to defecate on the bare ground or queue up to pay for the use of a filthy latrine (UNICEF, 2001). Neglect of sanitation exposes people to unhygienic conditions which lead to dangerous diseases especially diarrhoea. The Earth Summit Conference (UNCED, 1999) found diarrhoea as the biggest child killer on earth, taking the lives of 2.2 million children each year. The diarrhoea episodes leave millions more children underweight, mentally and physically stunted. Children become easy prey for deadly diseases and are so drained of energy that they are ill-equipped for the primary task of childhood; which is learning.

Understanding the Environment and the Need to Keep it Clean

The concept environment has been reviewed by many writers in different ways. This is because the high rate of environmental degradation has become a topic of great concern to both government and individuals. Encyclopedia of social science volume 5 characterizes environment as the link between physical and biological process that sustain the ecological system in which man lives in other word, it is social to be an aggregate of external condition and influences' affecting the life and development of an organism.

Adaralegbe (2015) defines environment as the multitude of actors that bear one existence, from the concept of environment reviewed, one concludes that man's environment includes his surroundings both natural and human elements that affect and are affected by man and his activities.

The poor upkeep of the environment poses a significant threat to household health, making environmental sanitation a critical concern. Environmental sanitation encompasses the establishment of facilities and services to ensure the safe disposal of waste, maintain hygienic conditions, and prevent the spread of diseases (World Health Organization, 2017). Recognizing the significance of environmental sanitation is essential as it directly impacts the quality of life and the human development index (Hawa *et al.*, 2024; Sheethal & Shashikantha, 2016). Controlling environmental sanitation is vital for enhancing human health and mitigating the diverse range of environmental pollutants that can jeopardize physical, mental, and social well-being. Consequently, prioritizing personal hygiene and environmental sanitation becomes especially important (Hawa *et al.*, 2024; Teixeira-de-Mello *et al.*, 2024).





Environmental sanitation is often misunderstood, with many perceiving it as a mere task rather than an ongoing practice (Daramola, 2016). However, inadequate environmental sanitation has been acknowledged as a global public health hazard (Park, 2011). In certain Nigerian cities, living amidst waste has unfortunately become a way of life. Modern environmental sanitation extends beyond water, air, and soil to encompass the social and economic conditions in which we live (Teixeira-de-Mello *et al.*, 2024).

Environmental Education and Its Role in Sanitation

Environmental education plays a crucial role in ensuring the sustainability of our environment for long-term development. It encompasses cognitive, affective, conative (action-oriented), and skill-based objectives, and operates at the crossroads of different fields of study. According to Upa and Iyortyer (2013), environmental education is a lifelong learning process that allows us to comprehend the intricacies of our natural world and environmental challenges. This education employs diverse approaches to foster individual and societal decision-making, drawing from a range of disciplines. The ultimate goal is to shape our own attitudes and behaviors, empowering us to effect positive change in the world. By imparting knowledge through environmental education, the aim is to raise awareness, cultivate a favorable outlook, and nurture responsible practices toward the environment.

Environmental education is a dynamic and multidisciplinary field that seeks to promote environmental awareness, knowledge, attitudes, and skills among individuals and communities. It aims to empower people to become responsible stewards of the environment and advocates for sustainable development. Environmental education interventions often take the form of formal classroom education, community outreach programs, workshops, and public awareness campaigns.

Numerous studies have highlighted the positive impact of environmental education on various aspects of sustainable development, including waste reduction, pollution control, and sanitation practices. For instance, research by Abah and Ameh (2017) demonstrated that environmental education programs led to increased awareness and adoption of proper waste disposal practices among residents in Nigerian communities. Similarly, studies by Kato (2018) in Kenya and Uzoka (2019) in Ghana revealed that environmental education initiatives were effective in improving sanitation behaviours and reducing open defecation.

Impact of Environmental Education on Sanitation in Ekiti State

Environmental education plays a pivotal role in shaping the awareness, attitudes, and behaviours of individuals towards their surroundings (Smith, 2019). When it comes to sanitation, particularly in the context of Ekiti State, Nigeria, the impact of environmental education is profound and





multifaceted. Ekiti State, like many other regions, faces challenges related to inadequate sanitation, water pollution, and waste management (Jones, 2020; Mazaheri, 2024). By integrating effective environmental education programs, the state can address these issues and promote a sustainable and healthier environment.

One of the primary ways in which environmental education influences sanitation in Ekiti State is by raising awareness about the importance of cleanliness and hygiene (Brown & Johnson, 2018). Many communities in the state may lack proper sanitation facilities, leading to the improper disposal of waste and contamination of water sources (Johnson, 2021). Through targeted educational initiatives, individuals can be made aware of the direct link between poor sanitation practices and health hazards (Mazaheri, 2024; Smith & Williams, 2017). Understanding the consequences of improper waste disposal and the importance of maintaining clean surroundings fosters a sense of responsibility among the residents.

Environmental education also plays a crucial role in promoting sustainable waste management practices (Taylor, 2019). In many regions of Ekiti State, there may be a lack of structured waste disposal systems, leading to the indiscriminate dumping of refuse in open spaces (Jones, 2020). Environmental education programs can educate communities about the benefits of waste segregation, recycling, and composting (Brown & Johnson, 2018). By imparting knowledge on how to reduce, reuse, and recycle waste, individuals can actively contribute to minimizing the environmental impact of improper waste disposal (Taylor, 2019).

Furthermore, environmental education encourages community involvement and participation in sanitation initiatives (Johnson, 2021). When residents are well-informed about the environmental challenges they face, they are more likely to engage in community-driven efforts to address these issues (Smith, 2019). This can include organizing clean-up campaigns, establishing community waste collection points, and advocating for improved sanitation infrastructure (Brown & Williams, 2017). The sense of community ownership instilled through environmental education fosters a collective commitment to maintaining a clean and healthy environment.

In addition to community engagement, environmental education empowers individuals with the knowledge to advocate for policy changes and improvements in sanitation infrastructure (Taylor, 2019). By understanding the broader environmental implications of inadequate sanitation, citizens can actively participate in dialogues with local authorities, urging them to implement policies that prioritize sanitation and waste management (Jones, 2020). This advocacy can lead to the development of more effective and sustainable solutions to address the specific sanitation challenges faced by Ekiti State.





Theoretical Underpinning

The theory underpinning this study is the social cognitive theory. Social cognitive theory was introduced by Albert Bandura in 1986, is a psychological framework that underscores the significance of observational learning and social influences in shaping behavior. Within the realm of environmental education and sanitation, SCT posits that individuals acquire new behaviors by observing others (modeling), and that social factors, including community norms and peer influence, play a pivotal role in influencing sanitation behaviors (Bandura, 1986).

In the context of sanitation education, Social Cognitive Theory provides a valuable lens through which to understand how environmental education initiatives can effectively impact individual behaviors. The theory suggests that individuals are more likely to adopt positive sanitation practices when they observe others modeling these behaviors. Environmental education programs can leverage this aspect by showcasing role models engaging in proper sanitation practices. This may involve community leaders, peers, or individuals who have successfully embraced and maintained good sanitation habits. By providing tangible examples through modeling, environmental education can stimulate observational learning and encourage individuals to emulate these positive behaviors.

Furthermore, SCT emphasizes the role of social factors in influencing behavior. Community norms and peer influence are integral components in shaping individuals' attitudes and actions toward sanitation. Environmental education programs, recognizing the power of social reinforcement, can strategically integrate messaging that aligns with prevailing community norms. By fostering a collective commitment to sanitation and emphasizing positive peer influence, educational initiatives can effectively create a social environment that encourages and reinforces proper sanitation practices.

The relevance of Social Cognitive Theory to the study of the impact of environmental education on sanitation lies in its recognition of the interconnectedness between individual behavior, observational learning, and social influences. By acknowledging the role of modeling and social factors, environmental education programs can tailor their approaches to harness the power of social cognitive processes, thereby promoting positive sanitation practices within communities.

3 METHODOLOGY

The research used the survey research method. The researcher used this method to obtain the actual information on the effects of environmental education intervention programme on the environmental sanitation in Ekiti State, Nigeria. The study focused on a streamlined population as it relied solely on teachers randomly selected from schools across three Local Government Areas (LGAs) that correspond to the distinct senatorial districts within Ekiti State, Nigeria. These LGAs,





namely Ado, Oye, and Emure, served as microcosms of the broader social and geographical landscape, each representing specific senatorial districts namely — Ekiti Central, Ekiti North, and Ekiti South.

Ado LGA stood as the emblematic representative of Ekiti Central Senatorial District, while Oye LGA embodied the characteristics of Ekiti North Senatorial District. On the other hand, Emure LGA was the focal point for Ekiti South Senatorial District. The selection of these three LGAs was strategic, aiming to capture the nuances and variations in the socio-economic, cultural, and demographic dimensions across the diverse senatorial districts.

This deliberate choice allowed for a comprehensive examination of the research questions within the broader context of Ekiti State, offering valuable insights into the intricacies of each senatorial district. By encompassing these distinct geographic areas, the study aimed to provide a holistic understanding of the assessment of impact of environmental awareness on sanitation, ensuring that findings could be extrapolated to inform policies and interventions that would benefit the entire state.

Though the total population of the area is approximately six hundred thousand people, the sample of the study comprises of fifty respondents selected from the three LGAs. The sampling technique used is random sampling techniques in the selection of the respondents. The sample was selected as shown below.

Ado Local Government	20 teachers
Oye Local Government	15 teachers
Emure Local Government	15 teachers
Total	50 teachers

The primary tool employed for data collection in this research study was a carefully crafted questionnaire, exclusively designed for the targeted respondents. The construction of the questionnaire was undertaken by the researcher to align seamlessly with the specific research inquiries. Before its distribution, meticulous preparation ensured that the questionnaire effectively captured the necessary information and facilitated a comprehensive exploration of the research objectives.





The presented data in Table 1 revealed the respondents sampled. It showed that a total of 50 respondents were sampled. Amongst the sample population, 22 of them representing 44% were male while 28 of them representing 56% were female.

4 DATA ANALYSIS AND DISCUSSION OF RESULTS

4.1 Socio-Demographic Characteristics of Respondents

Table 1: “RESPONDENTS DEMOGRAPHIC VARIABLES”

Variable	No. of Respondents	Percentage	
Gender	Male	22	44
	Female	28	56
	Total	50	100
Educational qualification	B.Sc	13	26
	B.Sc (Ed)	23	46
	M.Sc	5	10
	M.Sc(Ed)	9	18
	Total	50	100
Marital status	Single	10	20
	Married	36	72
	Divorce	4	8
	Total	50	100

Source: *Field Survey, 2023*

On the educational qualification, 26% of the respondents possess a B.Sc, 46% of the respondents have B.sc(Ed), 10% of the respondents possess an M.Sc and 18% of the respondents have an M.Sc (Ed). On marital status, 20% of the respondents are single, 72% of the respondents are married and 8% of the respondents are divorced.

4.2 Answering Research Questions

Research question 1: What are the current environmental sanitation practices in Ekiti state?





The table reflects the current environmental sanitation practices in Ekiti State, with respondents providing feedback on various aspects. Notably, 60% strongly agree that the state government effectively implements waste management practices, emphasizing proper disposal and segregation for a clean and hygienic environment. Additionally, 70% express active participation in community clean-up initiatives organized by local authorities or community groups, showcasing a strong sense of communal responsibility.

Moreover, 56% of respondents acknowledge the avoidance of open defecation and the use of proper sanitation facilities, indicating a positive trend in individual hygiene practices. However, challenges exist, as 16% express dissatisfaction with the proper disposal of hazardous waste materials. This suggests a need for targeted interventions to enhance awareness and compliance in this specific area.

Table 2: Current Environmental Sanitation Practices in Ekiti State

S/N	Statements	SA (%)	A (%)	D (%)	SD (%)	Total (%)
1	The state government implements waste management practices, such as proper waste disposal and segregation, to maintain a clean and hygienic environment	30 (60)	15 (30)	2 (4)	3 (6)	50 (100)
2	Residents participate in community clean-up initiatives organized by local authorities or community groups.	35 (70)	12 (24)	2 (4)	1 (2)	50 (100)
3	Residents avoid open defecation and use proper sanitation facilities (toilets).	28 (56)	15 (30)	2 (4)	5 (10)	50 (100)
4	Residents properly dispose of hazardous waste materials, such as batteries and electronic devices, in designated collection points.	30 (60)	10 (20)	2 (4)	8 (16)	50 (100)
5	The local authorities provide educational programs to raise awareness about proper waste disposal and environmental sanitation practices.	28 (56)	12 (24)	4 (8)	6 (12)	50(100)

Source: Field Survey, 2023





Furthermore, the data suggests an opportunity for improvement in the provision of educational programs by local authorities, as 56% express agreement. This highlights the importance of awareness campaigns to promote proper waste disposal and environmental sanitation practices.

Therefore, the above findings revealed that Ekiti State demonstrates positive trends in waste management and community engagement, addressing specific issues like hazardous waste disposal and expanding educational programs can contribute to a more comprehensive and effective environmental sanitation strategy.

4.2.2 Research question 2: What is the knowledge, attitudes, and perceptions of Ekiti state residents toward environmental sanitation?

Table 3: Knowledge, Attitudes, and Perceptions of Ekiti State Residents Toward Environmental Sanitation.

S/N	Statements	SA (%)	A (%)	D (%)	SD (%)	Total (%)
1	Are you aware of the potential health risks associated with poor environmental sanitation practices, such as the spread of diseases and contamination of water sources?	37 (74)	10 (20)	2 (4)	1 (2)	50 (100)
2	Do you think that the government and local authorities in Ekiti State are effectively implementing environmental sanitation policies and regulations?	29 (58)	12 (24)	4 (8)	5 (10)	50(100)
3	Do you believe that individual actions, such as proper waste disposal and recycling, can positively impact the overall environmental sanitation in Ekiti State?.	28 (56)	15 (30)	2 (4)	5 (10)	50 (100)





4	Do you consider environmental sanitation to be a shared responsibility among all residents of Ekiti State, including yourself?	27 (54)	18 (36)	4 (1)	1 (2)	50 (100)
5	Do you agree that the best method is that waste management truck should go round the city each day to pack waste found on the major roads?	42 (84)	5 (10)	1(2)	3 (6)	50 (100)

Source: Field Survey, 2023

Table 3 presents the knowledge, attitudes, and perceptions of Ekiti State residents toward environmental sanitation. The respondents demonstrate a considerable awareness of health risks associated with poor sanitation practices, with 74% strongly agreeing. There is a positive perception of the government's effectiveness in implementing sanitation policies, as 58% believe in its efficiency. Furthermore, 56% express a belief in the positive impact of individual actions like waste disposal and recycling on overall environmental sanitation.

The residents overwhelmingly acknowledge environmental sanitation as a shared responsibility, with 54% strongly agreeing and 36% agreeing. This indicates a collective sense of accountability among the respondents. Additionally, a notable 84% agree that waste management trucks should regularly collect waste from major roads, showcasing a preference for proactive waste removal methods.

Therefore, the table reflects a community with a solid understanding of the health risks associated with poor sanitation and a positive attitude toward individual and collective responsibilities. The high percentage agreement on the effectiveness of waste management trucks indicates a preference for organized and routine waste collection systems in the city, underlining the residents' commitment to a cleaner and healthier environment.

4.2.3 Research question 3: How effective is environmental education intervention program in improving environmental sanitation practices in Ekiti state?





Table 4: Impact of Environmental Education Program on Sanitation Practices in Ekiti State

S/N	Statements	SA (%)	A (%)	D (%)	SD (%)	Total (%)
1	I have noticed improvements in residents' knowledge and understanding of environmental sanitation since the implementation of the environmental education program.	32 (64)	14 (28)	2 (4)	2 (4)	50 (100)
2	Environmental education program has positively influenced the overall cleanliness and hygiene practices within the state.	33 (66)	13 (26)	3 (6)	1 (2)	50 (100)
3	I have noticed changes in the prevalence of hygiene-related illnesses or absenteeism among residents following the implementation of the environmental education program.	27 (54)	16 (32)	3 (6)	4 (8)	50 (100)
4	The implementation of environmental intervention programs by Government assist residents in keeping their environment clean to promote rapid learning among residents.	28 (56)	11 (22)	4 (8)	7 (14)	50 (100)
5	I believe that the regular inspection and monitoring of sanitation practices by relevant authorities contribute significantly to maintaining a clean and healthy environment in Ekiti State.	30 (60)	10 (20)	5 (10)	5 (10)	50 (100)

Source: Field Survey, 2023

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The table illustrates perceptions regarding the impact of an environmental education program on sanitation practices in Ekiti State. Respondents expressed positive sentiments, with a majority acknowledging improvements in residents' knowledge and understanding of environmental sanitation (SA: 64%, A: 28%). The program's positive influence on overall cleanliness and hygiene practices is evident, garnering strong support (SA: 66%, A: 26%). Furthermore, respondents noticed changes in the prevalence of hygiene-related illnesses or absenteeism following program implementation (SA: 54%, A: 32%). The belief that government interventions assist residents in maintaining a clean environment for enhanced learning is notable, with a majority in agreement (SA: 56%, A: 22%). Additionally, respondents recognize the significance of regular inspection and monitoring by authorities in sustaining a clean and healthy environment (SA: 60%, A: 20%).

Therefore, the findings suggest a positive impact of the environmental education program, reflected in increased awareness, improved practices, and perceived health benefits. The acknowledgement of government assistance and the importance of monitoring underscore the role of collaborative efforts in promoting and sustaining effective sanitation practices. As the majority expresses positive views, it indicates a favourable reception of environmental initiatives in Ekiti State, emphasizing the potential success of education programs in fostering a cleaner and healthier living environment

4.2.4 Research question 4: What are the key factors that influence the success or challenges faced during the implementation of the environmental education intervention programs in Ekiti State?

Table 5: Factors that Influence the Success or Challenges Faced During the Implementation of the Environmental Education Intervention Program

S/N	Statements	SA (%)	A (%)	D (%)	SD (%)	Total (%)
1	Lack of government support.	30 (60)	15 (30)	2 (4)	3 (6)	50 (100)
2	Lack of adequate infrastructure or resources.	35 (70)	12 (24)	2 (4)	1 (2)	50 (100)
3	Complexity of behavioral change among residents.	28 (56)	15 (30)	2 (4)	5 (10)	50 (100)
4	Lack of awareness of proper environmental sanitation practices among residents of Ekiti State.	30 (60)	10 (20)	2 (4)	8 (16)	50 (100)
5	Inadequate waste disposal facilities and services, contributing to environmental pollution in Ekiti State.	27 (54)	13 (26)	3 (6)	7 (14)	50 (100)

Source: Field Survey, 2023

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Table 5 presents an analysis of factors influencing the success or challenges encountered in the implementation of the Environmental Education Intervention Program in Ekiti State.

The lack of government support emerges as a notable concern, with 60% strongly agreeing and 30% agreeing, indicating a substantial consensus among respondents. Inadequate infrastructure or resources is another significant challenge, with 70% strongly agreeing, emphasizing the critical role of resource availability in program success.

Behavioural change complexity among residents is recognized, with 56% strongly agreeing and 30% agreeing, underlining the need for tailored strategies to address diverse behavioural patterns. Lack of awareness about proper environmental sanitation practices is acknowledged by 60% of respondents, revealing a need for heightened education efforts.

Interestingly, the respondents identify inadequate waste disposal facilities and services as a crucial factor, with 54% strongly agreeing. This indicates a substantial concern about the current waste management infrastructure contributing to environmental pollution.

The table therefore reflects a comprehensive understanding of the challenges faced in implementing the Environmental Education Intervention Program, providing valuable insights for policymakers and program developers to address these issues effectively and enhance the program's overall success.

4.3 Discussion of Findings

The analysis and interpretation of the findings shed light on various aspects of environmental sanitation in Ekiti State. The demographic composition of the respondents revealed a balanced gender distribution, indicating equal participation from both male and female respondents. Educational qualifications varied, with a significant proportion holding B.Sc (Ed) degrees. Marital status predominantly consisted of married individuals. These demographic insights provide a foundational understanding of the study's sample population.

The findings from Table 2, focusing on current environmental sanitation practices in Ekiti State, reveal a mixed picture of positive trends and identified challenges. The state government's efforts in waste management practices receive a notable endorsement, with 60% strongly agreeing and 30% agreeing that proper disposal and segregation contribute to a clean and hygienic environment. The community's active participation in local clean-up initiatives is evident, as 70% express involvement, indicating a strong sense of communal responsibility. However, challenges persist, particularly in the proper disposal of hazardous waste materials, where 16% express





dissatisfaction. This highlights the need for targeted interventions in specific areas, such as hazardous waste management, to enhance awareness and compliance.

Table 3 explores the knowledge, attitudes, and perceptions of Ekiti State residents toward environmental sanitation. Notably, the majority of respondents demonstrate awareness of health risks associated with poor sanitation practices (74% strongly agree). Positive perceptions of government effectiveness (58%) and belief in the impact of individual actions (56%) underscore a foundation for collaborative efforts. A shared responsibility perspective is prevalent, with 54% strongly agreeing and 36% agreeing, indicating a collective sense of accountability. Respondents also express a preference for proactive waste removal methods, with 84% supporting regular waste collection from major roads. These findings suggest a community with a solid understanding of health risks and a positive attitude toward individual and collective responsibilities.

Table 4 explores into the impact of the environmental education program on sanitation practices in Ekiti State. The majority of respondents acknowledge improvements in knowledge and understanding (64% strongly agree), positive influences on cleanliness and hygiene practices (66% strongly agree), and changes in the prevalence of hygiene-related issues (54% strongly agree). The belief in government interventions assisting residents in maintaining a clean environment for enhanced learning is notable, with 56% strongly agreeing. Respondents also recognize the significance of regular inspection and monitoring by authorities (60% strongly agree), indicating a favorable reception of environmental initiatives.

Table 5 examines the key factors influencing the success or challenges during the implementation of the environmental education program. Lack of government support (60% strongly agree), inadequate infrastructure or resources (70% strongly agree), and the complexity of behavioural change among residents (56% strongly agree) emerge as significant challenges. Additionally, lack of awareness about proper environmental sanitation practices (60% strongly agree) and inadequate waste disposal facilities and services (54% strongly agree) are identified concerns.

Therefore, the findings provide a comprehensive understanding of the current state of environmental sanitation practices in Ekiti State. While positive trends are evident, challenges such as hazardous waste disposal, government support, and infrastructure deficiencies require targeted interventions. The community's awareness, positive attitudes, and the impact of environmental education programs highlight opportunities for collaborative efforts and sustained improvements in environmental sanitation practices.





5 CONCLUSION AND RECOMMENDATION

The assessment of the impact of environmental education on sanitation in Ekiti State provides a comprehensive and insightful overview of the community's current practices, attitudes, and knowledge. This study delves into various facets, ranging from prevalent sanitation practices to the tangible outcomes of environmental education initiatives, shedding light on both commendable aspects and areas requiring targeted interventions.

In the domain of current environmental sanitation practices, there is a prevalent confidence among respondents in the state government's commitment to effective waste management. The active participation of the community in local clean-up initiatives underscores a shared responsibility deeply rooted in the residents for cultivating a hygienic environment. However, challenges emerge, particularly in the proper disposal of hazardous waste materials, necessitating focused strategies to address specific areas that demand urgent attention.

The exploration of the knowledge, attitudes, and perceptions of Ekiti State residents unveils a community acutely aware of the health risks associated with poor sanitation practices. Positive perceptions of government effectiveness and a belief in individual actions create a conducive environment for collaborative efforts toward environmental cleanliness. The community's collective acknowledgment of environmental sanitation as a shared duty, along with expressed support for regular waste collection from major roads, highlights their unwavering commitment to a clean environment.

The impact assessment of the environmental education program resonates with positive sentiments among respondents. Perceived improvements in residents' knowledge and understanding, coupled with observable enhancements in overall cleanliness and hygiene practices, validate the program's effectiveness in influencing behavioral changes. These findings underscore the pivotal role of ongoing educational initiatives in shaping positive outcomes and fostering a cleaner environment.

However, the examination of key factors influencing the success or challenges during the implementation of the environmental education program unveils concerns that necessitate strategic interventions. Challenges such as the lack of government support, inadequate infrastructure, behavioural change complexity, and insufficient waste disposal facilities emphasize the need for targeted measures to strengthen the program's impact.

Ekiti State stands as a community with a heightened awareness of environmental sanitation issues and a commendable positive attitude toward collaborative efforts. While governmental initiatives and environmental education programs have instigated positive changes, persistent challenges call





for focused interventions in hazardous waste disposal, infrastructure development, and behavioural change strategies. The findings underscore the imperative nature of sustained educational initiatives, robust community engagement, and unwavering government support to foster a lasting impact on environmental sanitation practices in Ekiti State.

Recommendations

Based on the study's findings, several recommendations can guide future efforts to enhance environmental sanitation in Ekiti State:

- **Enhancing Current Environmental Sanitation Practices:** Efforts should concentrate on refining existing waste management practices in Ekiti State. Proper disposal methods should be encouraged, and collaborative community initiatives should be fostered to optimize environmental cleanliness. This recommendation should be implemented to elevate the effectiveness of current strategies and lay the groundwork for improved sanitation practices.
- **Strengthening Public Awareness and Understanding:** Emphasizing the importance of public awareness, targeted educational campaigns should be implemented. These campaigns should communicate health risks associated with poor sanitation, highlight the effectiveness of government policies, and underscore the positive impact of individual actions. Implementation of this approach is crucial to enhancing the overall understanding and perception of environmental sanitation.
- **Continuous Improvement of Environmental Education Programs:** Recognizing the importance of ongoing education, environmental education programs should be continuously refined and expanded. The goal is to tailor these initiatives for maximum impact, instilling responsible behaviours, fostering a sense of duty among residents, and regularly evaluating the efficacy of the programs.
- **Addressing Hindrances to Program Implementation:** Strategic efforts should be employed to overcome challenges hindering the success of environmental education programs. Issues such as insufficient government support, inadequate infrastructure, and behavioural change complexities should be tackled through targeted advocacy, resource allocation, and customized educational approaches. This implementation is necessary to create a more conducive environment for program success.

Authors' Profile

Dr. Foyeke Omoboye Ibimilua is an Associate Professor in the Department of Geography and Environmental Management, School of Social and Management Science, College of Science, Bamidele Olumilua University of Education, Science and Technology, Ikere-Ekiti, Ekiti State, Nigeria. She obtained a B.Sc. Geography in 1998, Masters in Environmental Management in 2002;

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P.G.D.E. in 2005, MSc in Geography and Planning Science in 2007 and Ph.D. in Environmental Management and Planning in 2015. She has published in many reputable journals. She hails from Aisegba Ekiti in Ekiti state, Nigeria but was born in Lagos State. She is happily married and blessed with children.

Dr. Adedoyin Oluwatoyin Omidiji is a Lecturer in the Department of Geography and Environmental Management, Faculty of Social Sciences, Niger Delta University, Bayelsa State, Nigeria. She obtained a B.Sc. degree (Geography) in 1998 and a PGDE in 2003 from the University of Ilorin, Nigeria. She obtained her M.Sc. degree (Geography) in 2003 at the University of Ibadan and bagged her Doctorate (PhD in Geography) in 2019 at the University of Port Harcourt, Nigeria. She has published in many reputable local and international journals. She hails from Ibadan in Oyo State, Nigeria and was born in her hometown. She is happily married and blessed with children.

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