

Integrated Determinants of Sustainable Waste Management Behaviour

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Abstract: Effective waste management is a critical component of environmental sustainability, particularly within university environments where daily activities generate substantial quantities of waste. This study examined the factors influencing waste disposal behaviour among undergraduate students at Bamidele Olumilua University of Education, Science and Technology, Ikere Ekiti (BOUESTI), Nigeria. Specifically, the study investigated the roles of waste disposal facilities, student awareness of environmental impacts, and institutional support for waste management. A descriptive survey research design was adopted, and data were collected from 300 undergraduate students selected across colleges and departments using a structured questionnaire. Data were analysed using descriptive statistics and Pearson Product-Moment Correlation (PPMC) at the 0.05 level of significance. Findings revealed that although waste disposal facilities were generally available on campus, their distribution and maintenance were inconsistent, thereby affecting effective utilisation. Students demonstrated moderate to high awareness of the environmental and health implications of improper waste disposal; however, a noticeable gap existed between awareness and actual disposal practices. Institutional support, particularly through policies, monitoring, and sensitisation campaigns, significantly influenced responsible waste disposal behaviour. The study concluded that effective campus waste management requires an integrated approach combining adequate infrastructure, sustained environmental education, and strong institutional commitment.

Keywords: Waste Disposal Behaviour; Waste Management; Student Awareness; Facility Distribution; Institutional Support; Environmental Sustainability; Sustainable Practices.

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1. Introduction

Waste management has emerged as one of the most pressing environmental challenges globally, particularly in densely populated institutional settings such as universities. Higher education institutions generate large volumes of waste from academic, residential, commercial, and recreational activities, and improper disposal practices can result in environmental degradation, pollution, and public health risks. In developing countries, these challenges are often exacerbated by inadequate infrastructure, weak institutional frameworks, and limited environmental awareness. Undergraduate students constitute a major

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segment of the campus population and are primary contributors to waste generation. Their waste-disposal behaviour, therefore, plays a crucial role in determining the effectiveness of campus waste management systems. At Bamidele Olumilua University of Education, Science and Technology, Ikere-Ekiti (BOUESTI), increasing student enrolment and expanding infrastructure have heightened concerns about waste management practices. Observations on campus suggest persistent problems, including littering, improper segregation of waste, and inefficient use of disposal facilities. Previous studies indicate that waste disposal behaviour is shaped by multiple interacting factors, including the adequacy and accessibility of disposal facilities, individuals' awareness of environmental consequences, and the level of institutional support provided through policies, monitoring, and sensitisation programmes. Understanding how these factors influence students' waste disposal behaviour is essential for developing effective and sustainable campus waste management strategies. This study, therefore, investigates the influence of waste disposal facilities, student awareness, and institutional support on waste disposal behaviour among undergraduate students at BOUESTI.

2. Literature Review

Modern waste management has evolved into an integrated waste management (IWM) system that emphasises minimising ecological impact through prevention, reduction, reuse, recycling, and recovery, with disposal as a last option. This system reflects a shift from a linear "take-make-dispose" model to one aligned with circular economy principles, requiring a comprehensive understanding of product lifecycles and stakeholder involvement. The ultimate goal of a zero-waste system is to eliminate landfill disposal, highlighting the need for strategic planning to address environmental issues such as greenhouse gas emissions and resource depletion [15]. University campuses offer a distinct and intricate microcosm for waste management, often reflecting the challenges faced by small towns while operating under specific institutional constraints. High-density, mobile populations, a variety of waste streams (including academic, residential, administrative, and research-generated garbage), and the compartmentalised character of campus activities are the main obstacles, according to Moqbel [16]. Segregation efforts are complicated by the vast amount of packaging garbage from dining establishments, mixed paper from academic departments, and specialist waste from laboratories (such as chemical and biological). Additionally, during student move-in and move-out periods, the cyclical academic calendar causes enormous, predictable spikes in waste, mostly made up of reusable and non-recyclable items thrown away in large quantities. The common mismatch between those who produce trash (faculty, students), those who manage it (facilities personnel), and those who determine policy (university management) is a major structural issue that leads to inconsistent messaging and enforcement.

Systemic efficiency may be undermined by this institutional fragmentation, which can lead to poorly integrated waste contracts, procurement, and instructional initiatives Kuruneru [17]. The effectiveness of any campus waste management programme is strongly influenced by the physical infrastructure for waste disposal, including the quantity, location, labelling, and kind of containers. Adequacy encompasses not only the ability of bins to manage volume but, more importantly, their positioning and design to enable proper source separation [18]; [19]. Confusion over appropriate sorting is a major pollutant of recycling streams, according to Sayem et al. [20]. To prevent the convenience of a single, general waste bin from undermining diversion efforts, it is crucial to strategically co-locate recycling, compost, and landfill bins to form a unified "waste station," as well as to have clear, consistent, and visually intuitive signage Iyamu et al. [21]. Both geographical and cognitive aspects of accessibility must be taken into account; bins must be widely placed in public spaces such as dining halls, libraries, and courtyards, as well as in private spaces such as offices and dorm rooms, and the instructions must be easily comprehensible to a population with diverse cultural backgrounds. A lack of specific containers for batteries and e-waste, overflowing bins, or long commutes to recycling facilities are examples of inadequacies that indicate institutional prioritising and either encourage or discourage pro-environmental behaviour [22]. University students frequently have a high level of general environmental care, but this does not always translate into a precise understanding or consistent pro-environmental waste actions [14]. Knowledge of downstream effects (the life cycle of a recycled aluminium can versus one that is landfilled), awareness of the local trash system (what is recyclable on campus), and a sense of personal agency or duty are all components of awareness.

According to studies such as those by Gumbi [3], there is a typical "attitude-behaviour gap" in which students support sustainable concepts but do not act in accordance with them due to perceived discomfort, social conventions, or a lack of quick response. Additionally, awareness is often general rather than precise; students may be aware that recycling is "good," but not that a single contaminated item can ruin a batch of recyclables [10]; [11]. This disparity emphasises how inadequate one-time informative initiatives are. To effectively raise awareness, education must be ongoing, focused, and context-specific [12]; [13]. It must go beyond facts to promote an environmental ethic by connecting everyday behaviours, such as throwing away a coffee cup, to more significant systemic effects, such as climate change and ocean plastic pollution. Campus waste management ultimately depends on strong, strategic institutional support that resources and legitimises sustainability as a fundamental operational and pedagogical goal. This support needs to be multifaceted, including financing, policy, and governance. At the governance level, it calls for specialised sustainability offices with the power to collaborate across departments, from facilities management and student affairs to procurement (which requires recycled content and fewer packaged items). Formal waste management plans with quantifiable diversion targets, curricular integration of sustainability, and operational regulations like

universal composting or prohibitions on single-use plastics are all essential policy tools. Infrastructure maintenance and improvement, student-led green initiatives, and subsidising the often higher upfront costs of sustainable purchases all require financial support. Campus trash initiatives remain fragmented and dependent on the erratic zeal of individual actors, rather than being integrated as a systemic, accountable, and constantly evolving institutional practice, in the absence of this top-down commitment.

2.1. Statement of the Problem

Waste disposal is a major challenge in modern university settings, particularly at BOUESTI, where a growing student population increases waste generation. Improper disposal practices, such as littering and insufficient segregation of recyclables, present significant environmental and health risks both on campus and in the surrounding community. The effectiveness of existing waste disposal facilities, students' awareness of environmental impacts, and institutional support for waste management are poorly understood. This study aims to investigate these influences on undergraduate students' waste disposal behaviours at BOUESTI, ultimately seeking to enhance sustainable waste management strategies and foster environmental responsibility among students.

2.2. Purpose of the Study

The primary purpose of this study is to investigate the factors influencing waste-disposal behaviours among undergraduate students at BOUESTI. The study seeks to explore the role of three key variables in shaping these behaviours: waste disposal facilities, students' awareness of environmental issues, and institutional support for waste management. Specifically, the study aims to:

- Evaluate the adequacy and accessibility of waste disposal facilities on campus.
- Determine students' level of awareness of the environmental impacts of improper waste disposal.
- Investigate the extent to which BOUESTI provides institutional support for waste management and examine undergraduates' attitudes and perceptions towards waste disposal.

2.3. Research Questions

To guide the investigation of the factors influencing waste disposal behaviours among undergraduate students at BOUESTI, the following research questions have been formulated:

- What is the level of accessibility and adequacy of waste disposal facilities at BOUESTI?
- How aware are BOUESTI undergraduate students about the environmental impacts of improper waste disposal and the importance of waste management?
- To what extent does BOUESTI provide institutional support for waste management and sustainability initiatives? What is the attitude and perception of undergraduates towards waste disposal?

2.4. Research Hypotheses

The following hypotheses were raised:

- There is no significant relationship between the accessibility and adequacy of waste disposal facilities and undergraduate students' waste disposal behaviour at BOUESTI.
- There is no significant relationship between students' level of awareness of environmental issues and their waste-disposal behaviours at BOUESTI.
- There is no significant relationship between institutional support for waste management and undergraduate students' waste disposal behaviour at BOUESTI.

3. Methodology

A descriptive survey research design was employed to examine factors influencing waste disposal behaviour among undergraduate students at BOUESTI. The population comprised all undergraduate students at BOUESTI, totalling approximately 14,000. A sample of 300 students was selected using a combination of purposive, simple random, and stratified sampling techniques to ensure representation across colleges, departments, levels of study, and gender. Data were collected using a structured questionnaire consisting of demographic information and items measuring waste disposal facilities, student awareness, institutional support, and waste disposal behaviour. Responses were measured on a four-point Likert scale. Content

and face validity were established through expert review, while reliability was confirmed using the test–retest method, yielding a Pearson correlation coefficient of 0.72. Descriptive statistics were used to answer research questions, and Pearson's Product-Moment Correlation was applied to test hypotheses at the 0.05 level of significance in SPSS.

4. Results and Discussion

4.1. Descriptive Analysis

Presentation of Respondents' Demographic Information.

Table 1: Respondents' demographic characteristics

Demographic Variable	Categories	Frequency	Percentage
Gender	Male	138	46.0
	Female	162	54.0
	Total	300	100.0
Age	Below 20 years	96	32.0
	21 – 25 years	120	40.0
	25 years and above	84	28.0
	Total	300	100.0
Level of Study	100 Level	50	16.7
	200 Level	90	30.0
	300 Level	70	23.3
	400 Level	50	16.7
	500 Level	40	13.3
	Total	300	100.0
College of Study	Education	100	33.3
	Science	70	23.3
	Technology	60	20.0
	Management Science	70	23.3
	Total	300	100.0
Place of Residence	Off Campus	160	53.3
	On Campus	140	46.7
	Total	300	100.0
<i>Source: Researcher's Fieldwork.</i>			

Table 1 presents the demographic characteristics of respondents, revealing a gender distribution of 54.0% female and 46.0% male. The age distribution shows that 40.0% are aged 21–25, 32.0% are under 20, and 28.0% are 25 and older, indicating a predominance of young adults typical of university students. In terms of academic levels, 30.0% are in the 200 level, 23.3% in the 300 level, 16.7% in both the 100 and 400 levels, and 13.3% at the 500 level, illustrating a wide spread across academic levels. The College of Education represents the largest group at 33.3%, followed by Science and Management Science at 23.3% each, and Technology at 20.0%. Additionally, 53.3% of respondents live off campus, while 46.7% live on campus, highlighting a near-even distribution of residence that may affect waste-disposal behaviours:

- **Research Question 1:** What is the level of accessibility and adequacy of waste disposal facilities at BOUESTI?

Table 2: Responses to the level of accessibility and adequacy of waste disposal facilities at BOUESTI

No.	Items	SA (%)	A (%)	D (%)	SD (%)	Mean	SD
1	Waste bins are adequately provided across the campus.	186 (62.0)	113 (37.7)	1 (0.3)	0 (0.0)	3.62	.494
2	The dump sites are easily accessible to students.	120 (40.0)	64 (21.3)	102 (34.0)	14 (4.7)	2.97	.964
3	Waste bins are located close to lecture halls, hostels, and offices.	26 (8.7)	168 (56.0)	78 (26.0)	28 (9.3)	2.64	.770

4	Sewage treatment systems are regularly emptied to prevent overflow.	71 (23.7)	134 (44.7)	58 (19.3)	37 (12.3)	2.54	.986
5	Different waste collection points are provided for different types of waste	58 (19.3)	189 (63.0)	41 (13.7)	12 (4.0)	2.98	.701

Table 2 summarises students' perceptions of waste disposal facilities at BOUESTI, highlighting adequate provision but moderate accessibility. 62.0% of respondents agreed that the number of waste bins was satisfactory (mean score 3.62), reflecting strong consensus. In contrast, accessibility remains an issue, with a mean score of 2.97; 61.3% found dump sites accessible, while 34.0% disagreed. The placement of bins near key areas received a lower score of 2.64, indicating potential for improvement. Maintenance of sewage systems was mixed, with 68.4% agreeing on regular emptying (mean score 2.54), while there were concerns about inconsistency. The awareness of waste segregation at collection points appears positive (mean score 2.98), yet 17.7% noted deficiencies. While waste bin availability is satisfactory, improvements in accessibility, placement, and maintenance are needed:

- **Research Question 2:** How aware are BOUESTI undergraduate students about the environmental impacts of improper waste disposal and the importance of waste management?

Table 3: Responses to the awareness of BOUESTI undergraduate students about the environmental impacts of improper waste disposal and the importance of waste management

No.	Items	SA (%)	A (%)	D (%)	SD (%)	Mean	SD
1	I am aware that improper waste disposal can lead to environmental pollution.	163 (54.3)	123 (41.0)	14 (4.7)	0 (0.0)	3.50	.587
2	I understand that poor waste management can cause health problems.	94 (31.3)	141 (47.0)	58 (19.3)	7 (2.3)	3.07	.772
3	I know that improper waste disposal can negatively affect the institution's reputation.	123 (41.0)	103 (34.3)	30 (10.0)	44 (14.7)	2.70	.857
4	I am aware of the role individuals play in maintaining a clean environment.	73 (24.3)	202 (67.3)	21 (7.0)	4 (1.3)	3.15	.588
5	I have received information or training on waste management practices.	151 (50.3)	69 (23.0)	34 (11.3)	46 (15.3)	2.30	.864

Table 3 illustrates that a significant majority of BOUESTI students are aware of the environmental and health impacts of improper waste disposal, with 54.3% strongly agreeing and a mean score of 3.50 regarding environmental pollution awareness. While 78.3% acknowledge health issues linked to poor waste management (mean score 3.07), 21.6% disagree, suggesting gaps in understanding health implications. There is also moderate recognition (mean score 2.70) of the effects on the institution's reputation, with 75.3% agreeing, indicating some disconnect between campus cleanliness and public image. Most students (91.6%) feel a sense of personal responsibility (mean score 3.15) for maintaining a clean environment. Still, awareness of formal waste management education is low (mean score 2.30), with only half reporting having received training. The findings highlight the necessity for the university to enhance targeted awareness and sustainability initiatives (Table 4):

- **Research Question 3:** To what extent does BOUESTI provide institutional support for waste management and sustainability initiatives?

Table 4: Responses to the extent that BOUESTI provides institutional support for waste management and sustainability initiatives

No.	Items	SA (%)	A (%)	D (%)	SD (%)	Mean	SD
1	The university management provides adequate support for proper waste management on campus.	43 (14.3)	146 (48.7)	70 (23.3)	41 (13.7)	2.64	.891

2	There are clear policies and guidelines on waste disposal within the institution.	130 (43.3)	118 (39.3)	27 (9.0)	25 (8.3)	2.99	.774
3	Environmental health officers regularly monitor waste-disposal practices at the school.	144 (48.0)	95 (31.7)	26 (8.7)	35 (11.7)	2.97	.802
4	The school organises sensitisation campaigns on proper waste disposal.	204 (68.0)	51 (17.0)	40 (13.3)	5 (1.7)	2.92	.739
5	The institution provides the necessary resources to ensure campus cleanliness.	35 (11.7)	126 (42.0)	135 (45.0)	4 (1.3)	2.64	.701

The analysis of students' perceptions of institutional support for waste management at BOUESTI indicates moderate support, with a mean score of 2.64, suggesting mixed feelings. 63.0% agreed that managerial support was adequate, while 37.0% did not. Positive feedback was noted regarding waste disposal policies, with a high mean score of 2.99 and 82.6% agreement on the existence of clear guidelines. Monitoring practices also received favourable responses, scoring 2.97 and demonstrating strong student belief in regular enforcement. However, inconsistencies were noted, with 20.4% of students disagreeing about the uniformity of monitoring. Additionally, 85.0% recognized campaigns promoting proper waste disposal, though many felt that training was not widespread. Lastly, resource provision was viewed less favourably, with a mean of 2.64 and 46.3% disagreeing with the adequacy of resources such as waste bins and cleaning equipment (Table 5):

- **Research Question 4:** What are the attitudes and perceptions of undergraduate students towards waste disposal?

Table 5: Responses to the attitudes and perceptions of undergraduate students towards waste disposal

No.	Items	SA (%)	A (%)	D (%)	SD (%)	Mean	SD
1	Proper waste disposal is everyone's responsibility	83 (27.7)	171 (57.0)	43 (14.3)	3 (1.0)	3.11	.670
2	I feel responsible for keeping my Environment clean	80 (26.7)	211 (70.3)	9 (3.0)	0 (0.0)	3.24	.491
3	I encourage my friends to dispose of waste properly	164 (54.7)	83 (27.7)	51 (17.0)	2 (0.7)	3.36	.783
4	I feel guilty when I litter the school environment	100 (33.3)	143 (47.7)	56 (18.7)	1 (0.3)	3.14	.718

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4.2. Hypotheses Testing

Table 6 indicates a positive correlation between the accessibility and adequacy of waste disposal facilities and undergraduates' waste disposal behaviour at BOUESTI, as demonstrated by a Pearson Correlation Sig—value of .036, which is below the critical value of 3.84 at the 95% confidence level.

Table 6: Correlation between the accessibility and adequacy of waste disposal facilities and the waste disposal behaviour of undergraduate students at BOUESTI

Correlations		Accessibility and Adequacy of Waste Disposal Facilities	Waste Disposal Behaviour of Undergraduates
	Pearson Correlation	1	.036
	Sig. (2-tailed)		.613

Accessibility and adequacy of waste disposal facilities	Sum of Squares and Cross-products	25.875	.475
	Covariance	.130	.002
	N	300	300
Waste disposal behaviour of undergraduates	Pearson Correlation	.036	1
	Sig. (2-tailed)	.613	
	Sum of Squares and Cross-products	.475	6.755
	Covariance	.002	.034
	N	300	300

The covariance values were .130 and .034, respectively. Consequently, the null hypothesis was rejected, indicating a significant relationship between the variables under study:

- **Hypothesis 1:** There is no significant relationship between the accessibility and adequacy of waste disposal facilities and the waste disposal behaviour of undergraduate students at BOUESTI.
- **Hypothesis 2:** There is no significant relationship between the level of student awareness about environmental issues and their waste disposal behaviours at BOUESTI.

Table 7: Correlation between the level of student awareness about environmental issues and their waste disposal behaviours at BOUESTI

Correlations		Level of Student Awareness about Environmental Issues	Waste Disposal Behaviour of Undergraduates
Level of student awareness about environmental issues	Pearson Correlation	1	.065**
	Sig. (2-tailed)		.262
	Sum of Squares and Cross-products	277.667	18.433
	Covariance	.929	.062
	N	300	300
Waste disposal behaviour of undergraduates	Pearson Correlation	.065**	1
	Sig. (2-tailed)	.262	
	Sum of Squares and Cross-products	18.433	290.437
	Covariance	.062	.971
	N	300	300

**Correlation is significant at the 0.05 level (2-tailed).

Table 7 indicated a correlation between students' awareness of environmental issues and waste-disposal behaviours at BOUESTI, with a Pearson Correlation Sig. value of .065, which is less than the critical value of 3.84 at the 95% confidence level. The covariance values were 0.929 and 0.971, suggesting a positive correlation between awareness and waste-disposal behaviours. Thus, the null hypothesis was rejected, confirming a significant relationship between the two variables:

- **Hypothesis 3:** There is no significant relationship between institutional support for waste management and the waste disposal behaviour of undergraduate students at BOUESTI.

Table 8: Correlation between institutional support for waste management and the waste disposal behaviour of undergraduate students at BOUESTI

Correlations		Institutional Support for Waste Management	Waste Disposal Behaviour
Institutional support for waste management	Pearson Correlation	1	.396**
	Sig. (2-tailed)		.000
	Sum of Squares and Cross-products	49.155	20.595
	Covariance	.247	.103
	N	300	300
Waste disposal behaviour	Pearson Correlation	.396**	1
	Sig. (2-tailed)	.000	

	Sum of Squares and Cross-products	20.595	55.155
	Covariance	.103	.277
	N	300	300
<i>**Correlation is significant at the 0.05 level (2-tailed).</i>			

Table 8 indicates a positive correlation between institutional support for waste management and undergraduate students' waste disposal behaviour at BOUESTI, with a Pearson Correlation Sig value of .396, which is below the critical value of 3.84 at the 95% confidence level. Covariance measurements were .247 and .277, reinforcing the significant relationship and leading to the rejection of the null hypothesis.

5. Discussion

The garbage disposal habits of undergraduate students at Bamidele Olumilua University of Education, Science, and Technology (BOUESTI) were evaluated. Findings indicated that while garbage containers are present on campus, other aspects of facility adequacy, such as access to dump sites and maintenance of the sewage system, were rated as moderate. Additionally, students displayed limited knowledge regarding designated collection points for different types of waste. These results reinforce previous findings that the presence of waste disposal infrastructure alone does not ensure proper use; effective facilities must be strategically located, well-maintained, and adequately provided to promote compliance [7]. Similarly, studies by Rodríguez-Guerreiro et al. [8] suggested that the design and placement of bins significantly affect waste-disposal behaviour, with inadequate facilities leading to littering, as seen in various university contexts. The study revealed that most students understand that improper waste disposal leads to environmental pollution, health issues, and harm to institutional reputation. They acknowledge their individual responsibility for maintaining a clean environment; however, formal training on waste management is limited. This supports the "attitude behaviour gap" identified by Kollmuss and Agyeman [5], where awareness does not always lead to action. The findings are consistent with Shyamala [6] and Mbama et al. [1], highlighting that students with more environmental knowledge are more likely to practice responsible waste disposal. Nonetheless, the lack of formal sensitisation at BOUESTI mirrors challenges faced by other African universities, where awareness programs are often unstructured and inadequately incorporated into campus life. The findings indicate that BOUESTI has moderate institutional support for waste management, including policies and regular monitoring, but suffers from inconsistent funding and inadequate resources. This aligns with the literature, which suggests that effective waste management requires strong institutional commitment [4]; [9].

Institutions with robust support see better compliance in waste segregation and student engagement, while weak support leads to fragmented systems and low motivation for sustainable practices. Improvements in resources, policies, and campaigns at BOUESTI are necessary to enhance compliance. Respondents displayed positive attitudes towards waste management, recognised personal responsibility, and felt guilty about littering. This aligns with previous studies indicating that such attitudes predict responsible waste-disposal behaviours. Nevertheless, favourable attitudes do not always lead to consistent behaviours without adequate facilities and institutional support [2]; [19]. Therefore, despite encouraging positive student attitudes at BOUESTI, further infrastructure and interventions are essential to connect awareness and practice effectively. The study found a weak but favourable relationship ($r = .036$) between students' garbage disposal practices and the accessibility and sufficiency of the facilities. This implies that facility adequacy affects behaviour, which aligns with earlier studies that highlight the significance of functional, strategically placed waste infrastructure in encouraging responsible disposal [6]; [8]. Environmental awareness has a slight but favourable impact on disposal behaviours, as indicated by the association between students' waste behaviour and environmental awareness ($r = .065$). This is consistent with research by Agyeman-Prempeh et al. [7] and Mbama et al. [1], who found that although the behaviour awareness gap still exists, knowledge of environmental repercussions increases the likelihood of responsible trash disposal. Waste disposal behaviour was most strongly correlated with institutional support ($r = .396$). According to research, universities with thorough waste management policies, sufficient funding, and active engagement initiatives see increased student compliance [9]. The study demonstrates that trash disposal behaviours are significantly influenced by all three factors: facilities, awareness, and institutional support, with institutional support having the most impact.

6. Conclusion and Recommendations

The study finds that three main factors significantly affect how well undergraduate students at BOUESTI dispose of their trash: the availability and accessibility of trash disposal facilities, the level of environmental awareness among students, and the level of support the university provides to students. Students are more likely to properly dispose of trash when trash cans and recycling centers are well-placed, clearly marked, and regularly cleaned. But infrastructure by itself is not enough. Students need to know how throwing away trash the wrong way can hurt the Environment and their health. Being aware of the Environment is very important for developing lasting good habits and attitudes. In addition, strong institutional commitment,

as demonstrated by policies, monitoring systems, and proper resource allocation, encourages responsible behaviour and ensures it lasts in the long run. To address campus waste management problems, researchers need a comprehensive, integrated approach. First, the institution should ensure that waste disposal and recycling facilities are easy to find, use, and see by improving their distribution, labelling, and regular maintenance. Second, there should be more regular and systematic environmental awareness programs, workshops, and training sessions to teach kids how to separate trash, recycle, and protect the Environment. Third, institutional rules on waste management should be strengthened, with explicit guidelines, robust enforcement mechanisms, and adequate financing to facilitate implementation. Finally, students should be encouraged to get involved through peer-led projects, environmental campaigns, and active sustainability clubs that stress shared responsibility. BOUESTI can make a significant difference in the campus's environmental friendliness by taking these steps. These initiatives will not only make the university community cleaner and healthier, but they will also help Nigeria as a whole reach its goals of responsible waste management and sustainable growth in universities.

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