Public Relations and Waste Management in Nigeria: A Study of National Environmental Standard Regulatory and Enforcement Agency (NESREA)

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ABSTRACT

The World Bank Group's Environment Strategy 2021-2022 emphasised the relevance of clean environment to healthy living and reduction of the risk of contracting a long list of diseases. The current study investigated the effect of indiscriminate waste disposal on human health and environment and the public relations strategies that NESREA could adopt to improve waste disposal. The study was anchored on Two-way Symmetrical Model of Grunig and Hunt. Survey research method was employed and questionnaire was the instrument used for data collection. Data was analysed using cross tabulation and Chi-square test. Findings revealed that, phone in programmes on radio and television, effective press release and media relations were effective public relations strategies that NESREA could use to encourage proper disposal of waste. Also, the study showed that two-way communication was critical to the success of public relations campaigns and that NESREA could achieve this through the use of phone in programmes on radio and television. It was discovered that, indiscriminate disposal of waste could result in loss of habitat and water pollution. Again, it was revealed that, disease and death of plant is another negative effective of improper disposal of waste. Therefore, the study recommended that NESREA should adopt press release as a public relation strategy to increase awareness on the need for proper waste disposal. And also, in creating awareness on how indiscriminate waste disposal could lead to air and land pollution, NASREA should adopt public relation strategies that are akin to each geopolitical zone.

Keyword: Environment, NESREA, Waste Disposal, Public Relations, Two-way Communication

INTRODUCTION

The need for proper disposal of waste is a thing of great concern, indiscriminate disposal of waste has far reaching consequences on health and the environment. Also, the general well-being of people according to Esera, Gwandzang, Emmanuel and Chinanuife (2025) contributes to economic progress. Aside that, improper waste disposal could release harmful chemicals and pollutants, endangering public health by contaminating air, water, and soil. Waste disposal regulations serve as a shield, ensuring safe waste management to safeguard human well-being. Omula, Chinanuife, Agu and Chiobi (2025) argue that awareness creation is a strong public relation strategy that could be used to strengthen relationship between an organization and the public. Thus, enhancing public knowledge and skills in waste management activities, communities can actively contribute towards achieving sustainable waste management practices. An agency in Nigeria saddled with the responsibility of enforcing environmental regulations and standards in the country is the National Environmental Standards and Regulations Enforcement Agency (NESREA). Established in 2007, NESREA is tasked with ensuring compliance with environmental laws, regulations, and standards to protect the environment and promote sustainable development. (NESREA official website)

Inadequate sensitization could impede the dissemination of information and commitment needed for proper waste disposal. Also, effective public awareness campaigns can foster a culture of responsible waste management and environmental sustainability within communities. A glaring challenge in Nigeria appears to be the lack of community participation in waste management efforts, as highlighted by Amujiri (2009) cited in Nmere, Okolo, Abugu, Alio, and Anetoh (2020). This issue is exacerbated by a multitude of factors, including insufficient environmental policies, limited awareness, technological deficiencies, funding gaps, urban planning oversights, and corruption, as noted by Ebikapade & Jim (2017), cited in Nmere, Okolo, Abugu, Alio,and Anetoh,(2020).

In the context of waste disposal, public relations play a crucial role in assisting companies, regulatory bodies, and government agencies involved in waste disposal to interact with members of the public. This can help fashion out the best way to resolve waste management issues. This is so because, public relations involve disseminating information, addressing concerns, and engaging with stakeholders and getting feedback from them, so as to be able to promote understanding that supports waste management initiatives. Public relations also play a vital role in raising awareness about environmental pollution and its impacts. This is true in that; Public relations can create the needed awareness on the dangers of indiscriminate waste disposal.

Objectives of the study

To ascertain public relations strategies that National Environmental Standard Regulatory and Enforcement Agency (NESREA) could use in the promotion of waste disposal in Nigeria.

To investigate the negative effects of indiscriminate waste disposal on health and the environment.

Hypotheses of the study

The study tests the hypotheses that Nigerians view of the negative effect of indiscriminate waste disposal is independent of the geopolitical zones. Therefore, in its null form, the hypotheses are specified as;

H0: Nigerians view on whether disease and death of plants were some negative effects of improper waste disposal is independent of geopolitical zones.

H0: Nigerians view on whether disease and death of plants were some negative effects of improper waste disposal is independent of geopolitical zones.

H0: Nigerians view on whether loss of habitat and water pollution could be caused by improper disposal of waste is independent of geopolitical zones.

LITERATURE REVIEW

Public Relations Strategies Used to Promote Waste Management

Effective communication is a public relations strategy that can be employed in a public relations campaign. Effective communication entails ensuring that, the message is clear and complete. It also entails that the message is concise and to the point, Little wonder, Gisclard-Biondi (2021) avers that, for a communication to be effective the 7Cs of communication should reflect in such communication situation. These 7Cs as noted by Gisclard-Biondi (2021) are: clear, concise, concrete, correct, coherent, complete and courteous. For a message to resonate with the audience, the communicator should take the 7Cs into consideration and also ensure that the message is brief and to the point. NESREA, can adopt this in her PR efforts.

Two- way communication is a public relations strategy that can be used to promote proper disposal of waste. This is true in that, one way of achieving effective communication is by getting feedback from the audience. Two-way communication is a communication model that ensures feedback from the audience. This is true in that public relations according to Black, cited in Omula (2021) is a practice aimed at establishing a two-way communication seeking common ground or areas of mutual interest, and to establish understanding based on truth, knowledge and full information. This implies that communication is at the heart of public relations

practice. However, such communication must be effective, truthful and not unilateral. This is true in that, communication plays a crucial role in influencing individuals' environmental behaviour, particularly in waste management practices. The foregoing connotes that, two-way communication is crucial to the success of public relations campaigns. This position holds true in that, two-way communication can ensure active participation of stakeholders in solid waste management efforts. Such participation could create more awareness on the dangers of indiscriminate waste disposal, therefore ensuring that, the environment is safe. Little wonder Nwodu, (2004) posits that, environmental communication involves a deliberate effort to educate individuals about environmental issues, discourage harmful actions towards the environment, and encourage a greater commitment to environmental conservation activities. Again, Nwabueze (2007) highlights the significance of communication in environmental management, by portraying it as a fundamental component in promoting sustainability and fostering environmental stewardship. The foregoing connotes that, two-way communication is a strategy that public relations team should not relegate to the oblivion in a public relations campaign.

Media relations is another public relations strategy that can be used to achieve a successful campaign. Media relations means an organisation establishing and maintaining a good rapport with media outlets. One-way NESREA could have a successful public relations campaign is through media relations. This relationship will help a great deal in the coverage and reportage of the public relations activities of NESERA that are geared towards creating awareness. Chile & Chiakaan (2015), cited Nwosu (1997), who argues that, media relations is efficient in handling relationship between an organisation (business or non-business) and one of its 'most significant public, which is the media institution or the press. Media relations ensures a strong relationship between an organisation and media outlets, this will earn the organisation positive coverage from the media. Effective media relations is an important component of effective public relations strategies. Media relations is an important aspect of public relations, it assists organisations to reach their target audience. For media relations to yield positive results the PR team needs a deep understanding of the media landscape.

Research and Data Collection is another public relations strategy that could assist NESREA a great deal in her public relations efforts towards waste management. Giving credence to the preceding point Usuala (2005) according to Elijah (2021), sees research as a process of arriving at dependable revelations and findings through planned and systematic collection, analysis and interpretation of data. The foregoing connotes that research, is vital in the attainment of set objectives of an organisation like NESREA. This is true in that; it is through research and data collection that an organisation like NESREA could collect relevant information that will assist her carry out a campaign that will yield positive result. This means that every public relations campaign should commence with a research. It is through research that you can tell the merits and demerits of particular public communication approaches for particular purposes. Research creates room for effective allocation of resources, it also helps in the choice of media and message placement.

Phone in programme on radio and television is another public relations strategy that organisation like NESREA could use to achieve a successful public relations campaign. Phone in programme is a situation whereby an organisation invites an expert to a radio or television station to come and talk on matters that are of importance to the viewers or listeners. In the course of the programme viewers and listeners are given opportunities to ask questions or make contributions. Viewers' contribution and questions are made through phone calls. Phone in programmes give viewers and listeners a sense of belonging, meaning they are ''active but not passive' audiences. Participation is key to the success of development oriented programmes or project. Giving credence to the preceding point Asadu (2012, P.103) quoted David Dollar who said "projects that involved beneficiaries had a 90% success rate. Those that did not had a 10% success rate.

Effects of Indiscriminate Waste Disposal on Health and the Environment.

Waste if not properly disposed could have lots of negative effects on the environment and health. Indiscriminate disposal of waste could disrupt the ecosystem of an affected area and also have negative effect on human health. Indiscriminate disposal of waste and environment close to dumpsites according to Ogunniran (2022) are exposed to huge increase in environmental degradation which has adverse effect on human health and agricultural plants in affected areas. Specifically indiscriminate disposal according Ogunniran (2022) could result to poor agricultural yield, wide spread of germs and diseases, and extinction of aquatic bodies. Giving credence to the preceding point Ichipi & Senekane (2023) assert that, when waste is not properly disposed of it could lead to

environmental degradation, and also posed a serious threat to health and well-being of communities and individuals. This is a clear indication that indiscriminate disposal of waste is not friendly to the environment and human health. The inability of the authorities to manage waste effectively can also be attributed to increase population. In countries like Nigeria the challenges associated with solid waste management is compounded by rapid population growth and increased urbanisation, poverty and inadequate government support (Ichipi & Senekane2023). The foregoing connotes that one of the reasons that accounts for the inability of waste management agencies to manage waste effectively is poor funding from the government and increased population.

Ecobarter (2024) notes that, indiscriminate disposal of waste has direct effect on public health. This is true in that, when wastes are not properly disposed, they create breeding spaces for disease carriers that spread malaria and cholera. Indiscriminate disposal of waste can also pollute water surface and make the air unbearable. (Ecobarter,2024). It is glaring that indiscriminate disposal of waste has far reaching consequences on human health. This is so in that, secondary data has revealed that, malaria and cholera are diseases that could occur as a result of indiscriminate disposal of waste. Besides the aforementioned negative effects of indiscriminate waste disposal, Clean management (n.d) has pointed out, other consequences of indiscriminate waste disposal, which includes: land pollution, water pollution, air pollution, climate change, extreme weather, disease, plant death, animal and marine death, loss of habitat, lower biodiversity, worsening infrastructure, radiation and hazardous materials and dead zones.

Land pollution occurs when content of indiscriminately disposed garbage decompose and trickle into an area - the surrounding area then absorbs the decomposed waste, which then pollutes the area, thereby making the area dangerous for people and animals in the affected area. **Water pollution,** this can happen when wastes are not put in landfills. This is true in that, wastes that are not in landfills eventually find their ways into rivers, oceans and other bodies of water. **Air pollution**, indiscriminate disposal of waste contributes to excess gases that enter the atmosphere. Greenhouse gases according to Clean management (n.d) build up in the atmosphere and cause massive global climate change. **Climate change,** this is one of the major effects that indiscriminate disposal of waste has on the environment. This assertion holds true in that, waste contributes to the gases that thicken the ozone layer. This in turn worsens the weather and melts the ice caps, raising the sea level and negatively impacting natural habitats and the homes of billions of people (Clean management n.d). **Extreme weather condition**, this is another devastating effect of indiscriminate disposal of waste. Giving credence to the preceding point, Clean management (n.d). states that, climate change caused by indiscriminate waste disposal has resulted in the gradual increase in the frequency of extreme weather and natural disaster, such as flood and tornadoes. **Lower biodiversity,** indiscriminate disposal of waste has resulted to the death of crops, the extinction and deaths of crops show that the biodiversity across the globe is slowly lowering. This is not good because lower biodiversity increases the chance of total extinction during disaster. (Clean management n.d). This simply means that, indiscriminate disposal of waste has the capacity to bring to extinction species of plants and animals in affected areas.

Radiation and hazardous materials, release of radiation and hazardous material is another consequence of not properly disposing waste and this has negative effect on health. Improper handling of waste according to Clean management (n.d.) can lead to radiation poisoning in areas near the waste. Besides radiation poisoning, other materials that are harmful to human health can find their ways into areas where wastes were improperly disposed of. **Dead zones**, the landfills where wastes were disposed of may eventually become useless for other activities besides dumping of wastes. This is so in that, the more dirt and garbage flow into these landfills, the bigger they grow and all these create places where nothing else can exist, as the space is only useful for dirt and garbage, thus making the area unfit for other purposes (Clean management n.d.).

METHOD AND DATA

This study is anchored on Two-way Symmetrical Model. Two-way Symmetric Model according to Otuekere-Ubani (1996) is one of the four models propounded by Grunig & Hunt in 1984. Two-way Symmetric Model is a particular model of public relations that provides public relations professional a new role, no longer is the professional a persuader and a one-way communicator. Rather the professional has now become the mediator between an organisation and its publics. The foregoing suggests that, the thrust of Two-way Symmetric Model

is to ensure that there exists a two-way communication between an organisation and its publics. This connotes that, the public relations professional is expected to ensure flow of information from an organisation to its publics and also from the publics to the organisation. This implies that one of the core objectives of Two-way Symmetric Model is getting feedback from the publics. Two-way Symmetric Model of public relations argues that, the public relations executive should serve as an interface between an organisation and key publics, rather than as a persuader. Here, public relations executives are negotiators and use communication to ensure that all the parties involved benefit, not just the organisation that employs them. The term "Symmetrical" is used because the model attempts to create mutual beneficial situation. The Two-way Symmetric Model is deemed the most ethical model, one that public relations professionals should use or should aspire to use in their everyday tactics and strategies.

The Model was developed after a study commissioned by International Association of Business Communicators (ABC). Grunig & Hunt undertook an extensive study to determine the extent to which public relations makes an organisation more effective as well as the typical characteristics of public relations function (Grunig 2001). This implies that Two-way Symmetric Model was intended to improve communication effectiveness in organisations through public relations executives. The use of two-way symmetric communication by a public relations executive who functions at the strategic management level also allows for audience to have a voice at the executive table. This implies that Two-way Symmetric Model provides the organisation with a means that creates a level playing ground for negotiation between an organisation and its publics. Again, Two-way symmetric communication maintains the best interests of both the organisation and that of its publics in the most fair and balanced way.

Research Design

A descriptive and survey research design were used to generate data for the study. The study adopted a random sampling method to select the states and purposive sampling to select the local governments in which the capitals were situated. Also, the study randomly selected respondents for the questionnaire. The geopolitical zones, states and local government selected and their populations are contained in table 1. As a result, questionnaire was the instrument used for data collection.

Table 1 Population of the Study

Geo Political Zone	State & LGA Selected	Population of the LGA	Source of Information
North Central	Benue/ Makudi	472,000	Macrotrend,(2024). www.macrotrend,net
North West	Jigawa/ Dutse	431,800	City population (2022).www.citypopulation.de
North East	Gombe/ Gombe	446,800	City population (2022).www.citypopulation.de
South West	Lagos/ Ikeja	977,800	City population (2019).www.citypopulation.de
South East	Anambra/Awka	2,500,000	Wikivoyage(2018).www.en.m.wikivoyage.org
South South	Rivers/Port Hart court	3,637,000	Macrotrend,(2024). www.macrotrend,net
Total	6 states	8,465,400	

Source: Field Survey, 2025

To arrive at a representative sample the researchers used a statistical method provided by (Araoye 2004. Cited in Omula 2021). This formula can be used provided the population is greater than 10,000 (Araoye in Omula 2021). The formula is thus:

d^2

$n= \quad z^2p^9$

Where:

n= the desired sample size (when the population is greater than 10,000)

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z= the standard deviation usually set at 1.96 since a significant level of 95% is desired

p= the proportion in the target population estimated to have a particular characteristic under study. If there is no reasonable estimate, then 28% (i.e. 0.28) is used

q= 1.0-p (i.e. the proportion of the population that does not share the characteristics under study)

d= degree of accuracy desired

z= 1.96 level of significance is 28%

d^2

$n= z^2p^9$

p= 28% = 0.28

q= (1-p) 0.72

$d= (0.004)^2 = 0.042$

$n = (1.96)^2 (0.28) (0.72)$

0.0016

= 3.8416*0.28*0.72

0.0016

= 0.77446656

n= 484.04

The sample size for this study was four hundred and eighty-four (484). The sample size is justifiable because it allows every member of the population the opportunity to be included in the sample

Proportionate Sampling Technique was used to sample respondents proportionate to the population size of each of the state sampled. The formula for proportionate sampling is thus:

$$\frac{S \times n}{N}$$

Where:

S = Size of state

∩ = Sample size

N = Total population

Using the above formula, the proportionate sample is shown in table 2.

Table 2: Sample Size Selection

Geopolitical zone	State Selected	Population of the State	Sample selected
North Central	Benue	472,000	27
North West	Jigawa	431,800	25
North East	Gombe	446,800	25
South West	Lagos	977,800	56
South East	Anambra	2,500,000	143
South-South	Rivers	3,637,000	208
Total		8,465,400	484

Authors, 2025

RESULTS

Decision Rule. With the use of Likert scale, for any item or variable to qualify as a significant factor or to be accepted it has to have a mean score of 3.5 and above. This means that, a mean score that is less than 3.5 that is,3.4 below would be rejected while mean score that is 3.5 above would be accepted

Presentation of Data

Table 3: Audience response on Public relations strategies that NESREA can employ

Press Release Can Be Used to Promote Proper Disposal of Waste								
Benue	11 (46%)	7 (29%)	4 (17%)	1 (4%)	1 (4%)	98	4	Accepted
Jigawa	5 (22%)	12 (52%)	2 (8.6%)	2 (8.6%)	2 (8.6%)	85	3.7	Accepted
Gombe	9 (41%)	6 (27%)	4 (18%)	2 (9%)	1 (5%)	86	3.9	Accepted
Lagos	22 (43%)	20 (39%)	4 (8%)	2 (4%)	3 (6%)	209	4	Accepted
Anambra	80 (59%)	40 (29%)	7 (5%)	5 (4%)	4 (3%)	595	4.3	Accepted
Rivers	110 (56%)	75 (38%)	5 (3%)	2 (1%)	3 (2%)	872	4.4	Accepted
Total	237 (53%)	160 (35%)	26 (6%)	14 (3%)	14 (3%)	1945	4.3	Accepted
NESREA Can Use Phone-in Programmes to Encourage Proper Waste Disposal								
Benue	8 (33.3%)	12 (50%)	2 (8.3%)	1 (4.2%)	1 (4.2%)	97	4	Accepted
Jigawa	9 (39%)	9 (39%)	1 (4%)	2 (9%)	2 (9%)	90	3.9	Accepted
Gombe	9 (40%)	10 (45%)	1 (5%)	1 (5%)	1 (5%)	90	4.1	Accepted
Lagos	32 (63%)	12 (23%)	2 (4%)	2 (4%)	3 (6%)	221	4.3	Accepted
Anambra	30 (22%)	90 (66%)	8 (6%)	4 (3%)	4 (3%)	546	4	Accepted
Rivers	75 (38%)	110 (56%)	2 (1%)	5 (3%)	3 (2%)	834	4.2	Accepted
Total	163 (36%)	243 (54%)	16 (4%)	15 (3%)	14 (3%)	1879	4.1	Accepted
NESREA Can Create More Awareness by Having a Good Rapport with the Media								
Benue	13 (54%)	8 (33.3%)	1 (4.2%)	1 (4.2%)	1 (4.2%)	103	4.2	Accepted
Jigawa	11 (48%)	7 (30%)	3 (13%)	1 (4.3%)	1 (4.3%)	95	4.1	Accepted
Gombe	5 (23%)	12 (54.5%)	2 (9%)	2 (9%)	1 (4.5%)	84	3.8	Accepted
Lagos	34 (67%)	10 (20%)	1 (2%)	3 (5%)	3 (5%)	222	4.3	Accepted
Anambra	90 (66%)	36 (26.4%)	3 (2.2%)	3 (2.2%)	4 (3%)	613	4.5	Accepted
Rivers	65 (33%)	120 (61.5%)	2 (1%)	5 (3%)	3 (1.5%)	824	4.2	Accepted
Total	218 (48%)	193 (43%)	12 (2.7%)	15 (3.3%)	13 (3%)	1941	4.3	

Source: Field Survey 2025

Table 3 has shown public relations strategies that NESEREA could use to achieve result-oriented campaigns. While a total of 237 respondents (53%) from the six geo political zones, strongly agreed that, press release could be used to encourage proper waste disposal, another 160 respondents (35%) also agreed so respectively. Based

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on the opinion of majority respondents and the mean score of 4.3, it was established that, press release is an effective public relations strategy that NESREA could employ in her PR activities.

Data also revealed that phone in programme could also be used to encourage proper disposal of waste. This was the views of majority respondents,163 representing (36%) who strongly agreed so. This was also the views of 243 respondents (54%) who agreed so. Given the views of overwhelming majority and the mean score of 4.1, it was concluded that, phone in programme is a public relations strategy that could be used by NESREA in her public relations efforts towards ensuring proper disposal of waste. Finding has shown that, media relations is critical to the success of public relations campaign. As such NESREA could employ this strategy in her public relations efforts. In Table 3 a huge percentage of the entire respondents ,48% and 43% strongly agreed and agreed respectively that, having a good rapport with the media could help NESREA to create more awareness on the need for proper disposal of waste.

Table 4 Respondents opinions on the negative effects of indiscriminate waste disposal

Indiscriminate Waste Disposal Can Lead to Air and Land Pollution								
State	**SA (5)**	**A (4)**	**U (3)**	**SD (2)**	**D (1)**	**TWV**	**MI**	**Decision**
Benue	15 (62.5%)	5 (21%)	3 (12.5%)	1 (4%)	—	106	4.4	Accepted
Jigawa	10 (43%)	8 (35%)	2 (9%)	2 (9%)	1 (4%)	93	4	Accepted
Gombe	12 (54.5%)	6 (27.2%)	2 (9%)	1 (4.5%)	1 (4.5%)	93	4.2	Accepted
Lagos	25 (49%)	18 (35%)	2 (4%)	3 (6%)	3 (6%)	212	4.1	Accepted
Anambra	85 (62.5%)	45 (33%)	2 (1.5%)	2 (1.5%)	2 (1.5%)	617	4.5	Accepted
Rivers	95 (49%)	85 (43.5%)	5 (2.5%)	5 (2.5%)	5 (2.5%)	845	4.3	Accepted
Total	242 (54%)	167 (37%)	16 (3.5%)	14 (3.1%)	12 (2.6%)	1966	4.3	Accepted
Disease and Death of Plants Are Some Negative Effects of Improper Waste Disposal								
State	**SA (5)**	**A (4)**	**U (3)**	**SD (2)**	**D (1)**	**TWV**	**MI**	**Decision**
Benue	7 (29.2%)	13 (54.2%)	1 (4.1%)	2 (8.3%)	1 (4.1%)	95	3.9	Accepted
Jigawa	11 (47.8%)	9 (39.1%)	2 (8.7%)	1 (4.3%)	—	99	4.3	Accepted
Gombe	6 (27.2%)	11 (50%)	3 (13.6%)	1 (4.5%)	1 (4.5%)	86	3.9	Accepted
Lagos	24 (47%)	19 (37%)	4 (8%)	1 (2%)	3 (6%)	213	4.1	Accepted
Anambra	40 (29.4%)	90 (66.2%)	3 (2.2%)	1 (0.7%)	2 (1.4%)	573	4.2	Accepted
Rivers	80 (41%)	100 (51.2%)	8 (4.1%)	2 (1%)	5 (2.6%)	833	4.2	Accepted
Total	168 (37.2%)	242 (53.6%)	21 (4.6%)	8 (1.8%)	12 (2.7%)	1899	4.2	Accepted
Loss of Habitat and Water Pollution Can Be Caused by Improper Disposal of Waste								
State	**SA (5)**	**A (4)**	**U (3)**	**SD (2)**	**D (1)**	**TWV**	**MI**	**Decision**
Benue	7 (29.2%)	13 (54.1%)	2 (8.3%)	1 (4.2%)	1 (4.2%)	96	4	Accepted
Jigawa	12 (52.2%)	6 (26.1%)	1 (4.3%)	3 (13%)	1 (4.3%)	94	4	Accepted
Gombe	6 (27.2%)	11 (50%)	1 (4.5%)	3 (13.6%)	1 (4.5%)	84	3.8	Accepted
Lagos	20 (39%)	26 (51%)	2 (4%)	1 (2%)	2 (4%)	214	4.2	Accepted
Anambra	44 (32%)	84 (62%)	3 (2.2%)	1 (0.7%)	4 (3%)	571	4.3	Accepted
Rivers	112 (57.4%)	75 (38.4%)	6 (3%)	1 (0.5%)	1 (0.5%)	881	4.5	Accepted
Total	201 (45%)	215 (48%)	15 (3%)	10 (2%)	10 (2%)	1940	4.3	

Source: Field Survey 2025

Table 4 revealed issues that are related to indiscriminate disposal of waste.242 respondents (54%) who strongly agreed held this view. 167 respondents (37%) also held this view. This means that, 91% of the entire respondents across the six geo political zones were of the opinion that, air and land pollution were consequences of indiscriminate disposal of waste. This opinion was considered a significant factor because it had a mean score of 4.3. This means that indiscriminate disposal of waste actually resulted in air and land pollution. Data has also revealed that, indiscriminate disposal of waste could also result to disease and death of plants. This is true in that, while 37.2% strongly agreed so another 53.6% agreed so respectively. Based on the views of 90.8% of the entire respondents who strongly agreed and agreed so respectively coupled with the mean score of 4.2 it was concluded that, improper disposal of waste is harmful to human health and the environment. It was further

revealed that, when wastes were not properly disposed of, it could lead to loss of habitat and or water pollution. This was the submission of 201 respondents (45%) and 215 respondents (48%)) who strongly agreed and agreed so, respectively.

Test of Hypotheses

Table 5: Chi-Square Results

Null Hypothesis (H0)		**Value**	**df**	**Asymp. Sig. (2-sided)**
The views of Nigerian on whether indiscriminate waste disposal leads to air and land pollution is independent of the geopolitical zones	Pearson Chi-Square	30.428[a]	20	.063
	Likelihood Ratio	27.579	20	.120
	Linear-by-Linear Association	.709	1	.400
	N of Valid Cases	445		
The views of Nigerian on whether disease and death of plants are some negative effects of improper waste disposal are independent of geopolitical zones	Pearson Chi-Square	52.056[a]	20	.000
	Likelihood Ratio	39.237	20	.006
	Linear-by-Linear Association	3.889	1	.049
	N of Valid Cases	451		
The views of Nigerian on whether loss of habitat and water pollution can be caused by improper disposal of waste are independent of the geopolitical zones	Pearson Chi-Square	63.889[a]	20	.000
	Likelihood Ratio	52.565	20	.000
	Linear-by-Linear Association	20.431	1	.000
	N of Valid Cases	451		
P-value evaluated at 5% and 10% respectively.				

Source: Authors, 2025

Table 5 showed the result of Chi-Square test showing whether the views of Nigerian on whether: indiscriminate waste disposal led to air and land pollution; disease and death of plants were some negative effects of improper waste disposal; and loss of habitat and water pollution could be caused by improper disposal of waste, were independent of geopolitical zones.

The null hypothesis for each of these items were stated thus;

i. H0: Nigerians view on whether indiscriminate waste disposal led to air and land pollution was independent of geopolitical zones.

From the result of Chi-Square test in Table 5, it could be observed that the probability value (0.06) of Pearson Chi-Square was greater than 0.05. This showed that the null hypothesis of no relationship between Nigerian view on whether indiscriminate waste disposal led to air and land pollution could not be rejected at 5 percent.

ii. H0: Nigerians view on whether disease and death of plants were some negative effects of improper waste disposal was independent of geopolitical zones.

Table 5 showed that the probability value (0.00) of Pearson Chi-Square was less than 0.05. This showed that the null hypothesis of no relationship between Nigerian view on whether disease and death of plants were some negative effects of improper waste disposal could be rejected at 5 percent.

iii. H0: Nigerians view on whether loss of habitat and water pollution could be caused by improper disposal of waste was independent of geopolitical zones.

Table 5 showed that the probability value (0.00) of Pearson Chi-Square was less than 0.05. This showed that the null hypothesis of no relationship between Nigerian view on whether loss of habitat and water pollution could be caused by improper disposal of waste could be rejected at 5 percent.

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DISCUSSION OF FINDINGS

The first objective of this study was to ascertain the public relation strategies that National Environmental Standard and Regulatory and Enforcement Agency (NESREA) could use in the promotion of waste management in Nigeria. Finding revealed that press release is a public relations strategy that NESREA could use in the promotion of proper waste disposal. This is evident in Table 2 where a huge percentage of the entire respondents 88% agreed that, press release could be used to encourage proper disposal of waste. Press release will give free publicity to the public relations efforts of NESREA. It was also revealed that, two-way communication is a public relations strategy that NESREA could use to create more awareness about the dangers of indiscriminate disposal of waste. Two-way communication ensures exchange of information between the organisation and its publics. This is in line with the submission of Black cited in Omula (2021) who opines that, public relations is a practice aimed at establishing a two-way communication seeking common ground or areas of mutual interest, and to establish understanding based on truth, knowledge and full information. One-way NESREA could achieve two-way communication is through phone in programmes on radio and television. This was the opinion of 90% of the entire respondents in Table 2 who agreed that NESREA could encourage proper disposal of waste through the use of phone in programmes.

It is important to point out here that, implementing these strategies will require commitment and funding. By commitment we mean that,NESREA staff members should be will and able to discharge their responsibilities with sincerity. This connotes that, NESREA staff members should try as much as possible to steer clear of corruption that is common place in government institutions.Equally important is the fact that government needs support NESREA financially. We are advocating that government should no limit funding to budgetary allocation to NESREA. There are studies that have shown that funding and corruption are problems associated with waste management in Nigeria. This assertion holds true in that,Ichipi and Senekane (2023) argue that In countries like Nigeria the challenges associated with solid waste management is compounded by rapid population growth and increased urbanisation, poverty and inadequate government support. Similarly Ebikapade and Jim (2017), cited in Nmere, Okolo, Abugu, Alio,and Anetoh,(2020).note that this issue is exacerbated by a multitude of factors, including insufficient environmental policies, limited awareness, technological deficiencies, funding gaps, urban planning oversights, and corruption.

The second objective of this study was to investigate the negative effects of indiscriminate waste disposal on health and the environment. There is no gainsaying the fact that, improper disposal of waste has negative effects on human health and the environment. Both primary and secondary data of this study have shown the negative consequences of indiscriminate disposal of waste. In Table 3, 91% of the respondents across the six geo political zones agreed that, improper disposal of waste could lead to air and land pollution. Giving credence to the preceding point Clean management (nd) states that, land pollution occurs when content of indiscriminately disposed garbage decompose and trickle into the area -the surrounding area then absorbs the decomposed waste, which then pollutes the area, thereby making the area dangerous for people and animals in the affected area. It was again discovered that, loss of habitat and water pollution were also caused by indiscriminate disposal of waste. This was the position of 93% of the total respondents in Table 3.This assertion holds true in that, Clean management (nd) states that, water pollution happens when wastes were not put in landfills, and that, wastes that were not in landfills usually found their ways into rivers, oceans and other bodies of water.

More so, the study showed that there was no relationship between the views of Nigeria on whether indiscriminate waste disposal led to air and land pollution across geopolitical zones. This means that NASREA needs to adopt different public relation strategies to educate Nigerians across different geopolitical zones on how indiscriminate waste disposal could lead to air and land pollution. Adopting different public relation strategies suitable for each region would help to bridge the knowledge gap created by differences in culture, education level and land pollution. However, most Nigerians across the geopolitical zones have common view that disease, death of animals and plant, loss of habitats and water pollution were problems associated with indiscriminate waste disposal.

CONCLUSION

Waste management is a sine qua non to healthy living and people at various levels should be educated on the danger of indiscriminate waste disposal. This study examined public relations and waste management in Nigeria

with emphasis on how the National Environmental Standard Regulatory and Enforcement Agency (NESREA) could help to improve waste disposal. Survey research design was used and data was analysed using cross tabulation and Chi-square test. The findings showed that there was need to create enough awareness on the dangers of indiscriminate waste disposal and the need to ensure that Nigerians embrace the culture of proper disposal of waste in villages, communities and cities. Also, in creating awareness on how indiscriminate waste disposal could lead to air and land pollution, NASREA should endeavour to use public relation strategy that are akin to each geopolitical zone.

RECOMMENDATION

NESREA needs to intensify her public relations efforts so as to be able to create enough sensitization on the dangers of indiscriminate waste disposal and the need for proper disposal of waste.

NESREA should endeavour to employ the use of press release, because is a public relations strategy that could be used to create free publicity on the need for proper disposal of waste.

Media relations and two-way communication are public relations strategies that organisations like NESREA should not relegate to the oblivion in any public relations campaign.

NASREA should adopt public relation strategy that are akin to each geopolitical zone.

REFERENCES

1. Amujiri, B.A. (2009). Local government community participation in execution and management of development projects. International journal of research in art and social sciences. 364-377. Retrieved from: https.academicexellencesociety.com/local_government_community_participation_inexecution.pdf
2. Asadu, A. C. (2012). Anatomy of communication for development. Port Harcourt: University Press.
3. Chile, C. T. & Chiakaan, J. G. (2015). Marketing foundations for advertising and public relations. Richson Global Resources.
4. City population (2024). Population of Dutse. www.citypopulation.de
5. City population (2019). Population of Ikeja LGA in metro Lagos. www.citypopulation.de
6. Clean Management (n.d). How improper waste disposal affects the environment. www.cleanmanagement.com
7. Ecobarter (2024).3 things you should know about indiscriminate waste disposal. www.ecobarter.africa.
8. Elijah, F. A. (2021). Contemporary corporate communication. DonAfrique Publishers.
9. Esera, E., Gwandzang, I. C., Emmanuel, Z., and Chinanuife, E. (2025). Disaggregated effects of infant and adult mortality on Economic growth in Nigeria. Journal of Economic and Allied Research, 10(1), 171-184.
10. Gisclard-Biondi, H. (2021). What is effective business communication? Retrieved from www.appvizer.com
11. Grunig, J. E. & Hunt, T. (1984). Managing public relations. Fortworth: Harcourt Brace Jevanovich College Publishers.
12. Grunig, J. E. (2001). Two-way symmetrical public relations past, present and future. Retrieved from https://www.researchgate.net.
13. Ichipi,E.B & Senekane,M.F.(2023).An evaluation of the impact of illegal dumping of solid waste on public health in Nigeria: A study of Lagos State. International Journal of Environmental Research and Public Health. https://doi.org/10.3390/ijerph20227069
14. Macrotrends (2024). Makurdi Nigeria metro area population 1950-2024. www.macrotrends.net
15. Macrotrends (2024). Population of Port Harcourt. www.macotrends.net
16. Macrotrends (2022). Gombe LGA population. www.macotrends.net
17. Nmere O. N, Okolo, V.O, Abugu, JO, Alio, FC and Anetoh, J. C. (2020). Influence of public relations' media public enlightenment campaign and community participation strategies on waste management. Problems and Perspectives in Management, 18(1), 82-96.

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18. Ogunniran, B. (2022). Harmful effects and management of indiscriminate solid waste disposal on human and Its environment in Nigeria. (A review). International Journal of Humanities and Social Sciences. Retrieved from www.researchgate.net
19. Omula, E. (2021). Uses of social media as public relations tools by banks in Nasarawa, Benue &Abuja. A Thesis (Department of Mass Communication) submitted to the postgraduate school, Benue State University.
20. Omula, E., Chinanuife, E., Agu, C. S., and Chiobi, C. J. (2025). Internet-Based Communication and Commercial Banks Activities in Benue State Nigeria: An Evaluation of the Extent of Social Media Usage. International Journal of Research and Scientific Innovation (IJRSI).
21. Otuekere -Ubani, C.O. (1996). Modern public relations theories: Principles and practice. Ibadan: Pelcas Reprographic and Printing Press.