

ASSESSMENT OF PUBLIC PREVENTIVE ATTITUDES, BEHAVIOURS AND KNOWLEDGE ON ENVIRONMENTAL SAFETY IN OSUN AND ONDO STATE, NIGERIA

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Abstract: Environmental degradation has been attributed to human actions, thus, necessitated this study. The study population comprised, people in the communities of Osun and Ondo States. The sample size was Eight Hundred (800) respondents, selected through a snowballing sampling technique. Forty (40) respondents from ten (10) communities in Osun and Ondo States, Nigeria. A self-structured research instrument, titled “Questionnaire on Assessment of Public Preventive Attitudes on Behaviours and Knowledge on Environmental Safety in Osun and Ondo States, Nigeria”. The research instrument was validated by an expert in Test and Measurement. The reliability of the research instrument was determined through test-retest method, 0.66 coefficient reliability was obtained. Data generated was analysed, using descriptive statistics (frequency counts, simple percentages and mean). Based on the result of the study, conclusions were made that; people’s attitude to the environment is not friendly and do not know the usefulness of natural resources in the environment. Also, public is fully aware of their actions or activities that are treating the environment. Based on the conclusions, recommendations were made that; people in Osun and Ondo State, Nigeria should be advised to protect the environment, develop friendly attitudes towards the environment etc.

Keywords: Assessment, Public, Preventive attitudes, Behaviours, Knowledge, Safety, Environment.

1. INTRODUCTION

Background to the Study

Environmental mismanagement is one of the critical challenges, which the world is contending with, especially in the 21st Century. It arises from the interaction and human activities (Matson, 2001). Human actions and inactions have negative consequential effects on the environment such as, deforestation, depletion of ozone layer, water and air pollution, and so on. Earth Org (2020), identified the following; as the biggest environmental problems of 2020; poor governance, food waste, biodiversity loss, plastic pollution, deforestation, air pollution, agriculture, global warming from fossil fuels, food

and water insecurity, melting ice caps. All these constitute environmental mismanagement which is a lingering ongoing problems, globally, today.

Anderson (1990), stated that human damage to the environment constitutes its mismanagement. As said earlier, that environmental mismanagement is a global issue and concern, Nigeria, inclusive. According to Omofonwa and Osa-Edoh (2017);

Nigeria has a total land area of 983.213Km³ occupied by about 120 million people the interaction of these millions of people with their environment has left indelible mark on the landscape, urbanization, deforestation, desertification, over population and all kinds of pollution are some of the resultant effects of man's interaction with his environment. These changes occur as the people attempt to acquire their seemingly endless desire for food, shelter, recreation and infrastructure facilities. Though these wants and desires contribute to the development of the country, the unwise use of the land and its resources produce negative impact on the environment.

The extract above explains some of the factors that result into environmental mismanagement by people in Nigeria. Olokebusi (1987), attributed environmental problems in Nigeria to a rapidly urbanizing and industrializing society. Further, Solaja, Omobowale and Kalejaiye (2014), that solid waste materials and unethical discharged a fallow land around residential, houses, public space and under the bridge constitute threats to, the environment in form of air pollutions.

The realization of effects of environmental hazards orchestrated by its mismanagement has informed several strategies (sectoral policies, environmental law, environmental education etc) to halt the unsavory trend, most especially considering its effects on the hygiene and living condition of the Nigerian and economic growth and development of the country. Environmental challenges are giving increasing concern to individuals, government and non-government organisations. Environmental problems results into poverty, decline in soil fertility and causes population displacement aesthetic pollution of the environment by flood, farmlands destruction, destruction of socio-economic activities etc. poverty in the country has also be linked environmental degradation.

Towards managing the environment in Nigeria, there is also enactment of Environmental Law in response to the public perception of human health and environmental protection. In Nigeria, Environmental Law is a branch of public law which contains rules and regulations on the protection of the environment. The law influenced by the principles of environmentalism, including; ecology, conservation, stewardship, responsibility and sustainability (Lawrence, 2003).

Several researches have been conducted on environmental degradation, depletion and management, but much have not been done, specifically on preventive attitudes, behaviours and knowledge towards environmental safety. This observed gap, therefore, necessitated carrying out this study by the researchers.

Statement of the Problem

Without environmental protection and safety, globally remains a focus of the world, especially in developing countries, Nigeria, inclusive. In recent time, several interventional policies, programmes and Acts have been devised to halt human's negative interaction and contact with the environment. Observable, most of these approaches have not been fully achieved desired and expected result, this, portending that environment is still under threat in Nigeria. Therefore, the researchers of this study were motivated to conduct this study on assessing level of public preventive attitude, behaviours and knowledge on environmental safety in both Osun and Ondo State, Nigeria.

Objectives of the Study

The main objective of the study was on assessment of level of public preventive attitude, behaviours and knowledge on environmental safety in Osun and Ondo, States, Nigeria. The specific objectives are to:

1. ascertain whether public are of awareness of behaviours that can put environment under treat;
2. examine whether public know how to protect the environment ;
3. determine public awareness on the need to manage the environment safety ;and
4. ascertain the level of public disposition on the usefulness of natural resources for national development etc

Research Questions

Three research questions were raised to guide the study.

1. Does public aware human actions that are of threat to environment?
2. Does public attitudes protect the environment?
3. Does public know the usefulness of environmental resources?

Significance of the Study

The findings of the research will be significant to the stakeholders in environmental management in the following ways;

Firstly, the result of the study will serve as government guide on how to work on human beings or public attitudes towards the environment.

Besides, the findings of the study will enable the environmentalists to know factors responsible for human negative actions or interaction with the environment.

Furthermore, the result of the study will assist government to embark on programme that will assist the public on positive environmental maintenance culture.

Finally, the study will add to extant literature on environmental issue and serve as a good source of reference to researchers in future.

Conceptual Framework

Environment and Human Factors

The term environment has several meanings and explanations. The term is derived from French Language i.e. “Environner” which means to “encircle or surround”. It is a circumstances and conditions that surrounds on organism or group of organism or the social and cultural conditions that affect an individual and community.

Jagran (2015), explains environment as habitat where human beings and animals are living and operating. Lan (1997), states that environment is a relatively enduring and stable set of circumstances that surrounds some given individuals. Globally, today the physical environment has been subjected to depletion, degradation and mismanagement. Erinsakin (2016), links this to human behaviours and interactions with the environment. Also, that millions of Nigerians do not know the aware of their actions that are inimical to their environment. Further, it stated environmental mismanagement, partially resulted into poverty and economic backwardness of many nations. Many scholars have stated, that the rate at which human beings are treating the environment is at an alarming rate.

National Geographical Socceity (2021), states humans impact on the physical environment in diverse ways: overpopulation, population, burning fossil, fuels and deforestation. Human beings are affecting the environment, mostly in the following ways; over-population, pollution, global warming, climate change, genetic modification, ocean acidification, water pollution and deforestation.

Ogunbodede and Arnold (2011) note that biodiversity and the natural environment have suffered a huge negative impact around the world as a result of excessive exploitation by human and the often short-sighted economic policies of federal government, in Nigeria. This has been attributed to lack of understanding of human knowledge and attitudes towards the environment. This bores down to the fact that human beings do not have positive attitudes rather than negative behaviours towards the environment. Further, it was stated that many people are not knowledgeable about environmental issues. Human factors, such as; knowledge and attitudes have monumental effects on the achievement of a safe environment (Ibrahim and Bababayemi, 2010). Isife (2012), states that unwise use of the natural environment is due to ignorance, poverty, overpopulations and greed, among others which has resulted into environmental degradation or abuse of the environment. It was further noted that the interactions of millions of Nigerian with the environment has left an indelible mark on the landscape.

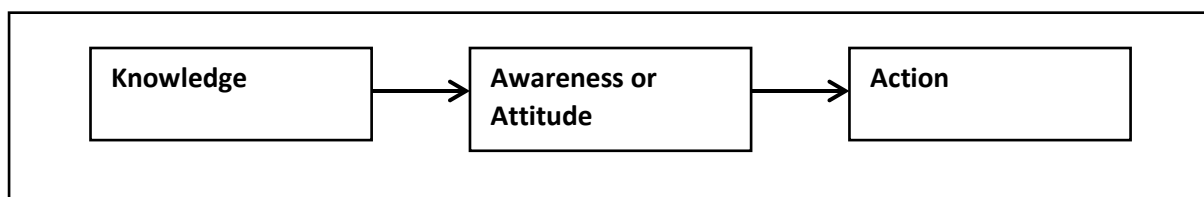
Also, poor environmental management practices has also been attributed to unwise, unsafe and abuse of the environment (Isife, 2002). This resulted into pollutant of the law and natural condition of the water. Waste materials and chemical substances are often thrown into water, especially in industrial areas.

“It would appear that the growth of urbanization and industrial development coupled with improper waste management control have added a great dimension to land area pollution in Nigeria”.

In conclusion, the physical environment in Nigeria has suffered greatly due to human factors and very saddened that the myriad of government policies, sectoral, strategies and communities, initiatives to halt the trend are yet to produce the expected result. Thus, worsening development and also subjecting millions of people in Nigeria to untold hardship, poverty and poor standard of living.

Theoretical Framework

A theory presents a systematic way of understanding behaviours, events and/or situation. It is a set of interrelated definitions, concepts and propositions that predicts or explains events or situations by specifying among the variables (National Institute of Health, 2015). This study is therefore anchored on Behavioural Change Model (BCM) which states that if people were better informed, they would become more aware and knowledgeable about the environment, consequently, their behaviours towards the environment will change. Also, peoples' interaction with the environment will be a responsible manner.



Source: Hungerford, H.R. & Bolt T.L (1990)

Fig. 1: Adopted Behavioural Change Model

The figure 1 above shows that when people have adequate knowledge on the environment, their awareness or attitudes towards it will change, consequently, they will develop positive interaction with the environment. The choice of the theory is very appropriate to the study hence the research focus on public preventive attitude behaviours and knowledge on environmental safety. It has a contention of several scholars and stakeholders in environmental issue that environmental degradation orchestrated by human factors is orchestrating majorly by lack of knowledge about the environments which resulting into negative behaviours and interaction with the environment.

2. METHODOLOGY

Descriptive survey research design was used to the study. The population of the study comprised ,people in the communities of Ondo and Osun states was Eight hundred (800) respondents, selected through a snowballing sampling technique from twenty communities in Osun and Ondo States, Nigeria. The research instrument adopted was self-structured questionnaire by the researchers, entitled, “Rating Scale on Assessment of Public Preventive Attitudes, Behaviours and Knowledge on Environmental Safety on Osun and Ondo States, Nigeria”. It was fashioned on four likert rating scale; Strongly Agreed (SA), Agreed (A), Disagreed (D) and Strongly Disagreed (SD). The research instrument was validated by an expert in test and measurement . The reliability of the research instrument was determined through test-retest method 0.66 coefficient reliability was obtained. Generated data was analysed using descriptive statistics (frequency counts and simple percentage).

Presentation of Findings and Discussion of Results

Research Question One: Does public aware human actions that of treat to environment?

Table 1: Showing frequency counts, simple percentages and mean on does public aware human actions that are of treat to environment?

S/N	Items	SD	D	A	SA	Mean	Remarks
1.	I am aware of the risky actions on the environment	365 45.6%	201 25.1%	123 15.3%	111 13.8%	1.9	Rejected
2	I am not aware that my actions on environment is risky	46 5.75%	62 7.75%	236 29.5%	456 57%	3.3	Accepted
3.	Pouring acid on water is very dangerous to water	9 1.12%	15 1.87%	321 40.1%	455 56.8%	3.5	Accepted
4.	Acid and sewages have no negative effects on water	46 5.75%	60 7.5%	325 40.6%	369 46.1%	3.2	Accepted
5.	Setting fire on forest is harmful to the natural resources in the bush	47 5.87%	142 17.7%	222 27.7%	389 48.6%	3.1	Accepted
6.	Setting fire cannot put natural resources in the forest under treat	542 67.75%	125 15.62%	100 12.5%	33 4.12%	1.5	Rejected
	Total	1,055 21.97%	605 12.60%	1,327 27.64%	1,813 37.77%	2.7	Accepted

Table 1 shows the findings on research question one that states does public aware human actions that of treat to the environment? On item (1), the following responses were obtained; 111 (13.8%), 123 (15.3%), 201 (25.1%) and 365 (45.6%) for strongly agreed, agreed, disagreed and strongly disagreed, respectively. On item (2), 456 (57%), 236 (29.5%), 62 (7.75%) and 46 (5.75%) for strongly agreed, agreed, disagreed and strongly disagreed.

On item (3), 455 (56.8) responses were obtained for strongly agreed, while 321 (40.1%) for agreed, 15 (1.87%) for disagreed and 9 (1.12%) for strongly agreed. On item (4), 369 (46.1%), 325 (40.6%); 60 (7.5%) and 46 (5.7%) responses were for strongly agreed, agreed, disagreed and strongly disagreed, respectively. On item (5), 389 (48.6%), 222 (27.7%), 142 (17.7%) and 47 (5.87%) responses were obtained for strongly agreed, agreed, disagreed and strongly disagreed. Finally, 33 (4.12%); 100 (12.5%); 125 (15.62%) and 542 (67.75%) responses, obtained for strongly agreed, agreed, disagreed and strongly disagreed.

Generally speaking, the findings of the study show that public is aware of human actions that are of treat to the environment, since the average rating scale of four ($X = 2.5$) is lesser than the average mean of rating scale of four ($X = 2.7$). The result negates the view of several scholars, such as; Erinsakin (2016), that states that most human actions on the environment that are harmful or injurious are as a result of lack of awareness on facilities that can cause environmental degradation.

Research Question Two: Does public attitudes protect the environment?

Table 2: Showing frequency counts, simple percentages and mean on does public attitudes protect the environment?

S/N	Items	SD	D	A	SA	Mean	Remarks
7.	I am protecting the environment	562 70.25%	144 18%	54 6.75%	40 5%	1.4	Rejected
8.	I have never protected the environment	22 2.75%	32 4%	123 15.37%	623 77.87%	3.6	Accepted
9.	I often pollute the air	60 7.5%	104 13%	125 15.62%	511 63.87%	3.3	Accepted
10.	I have never polluted the air	458 57.25%	254 31.75%	69 8.62%	19 2.37%	1.5	Accepted
11.	My interaction with the environment is not harmful to the environment	442 55.25%	201 25.12%	89 11.12%	68 8.5%	1.7	Rejected
12.	My actions with the environment constitute environmental degradation	410 51.25%	236 29.5%	102 24%	52 6.5%	1.7	Rejected
	Total	1,954 40.7%	971 20.22%	562 11.70%	1,313 27.35%	2.2	Rejected

Table 2 reveals the result on research question two which states that does public attitudes protect the environment? On item (7), 40 (5%); 54 (6.75%); 144 (18%) and 562 (70.25%) responses were obtained for strongly agreed, agreed, disagreed and strongly disagreed. On item (8), 623 (77.87%), 123 (15.37%); 32 (4%) and 22 (2.75%) responses were obtained for strongly agreed, agreed, disagreed and strongly disagreed.

On item (9), 511 (63.87%); 125 (15.62%); 104 (13%); 60 (7.5%) responses were obtained for strongly agreed, agreed, disagreed and strongly disagreed, respectively. On item (10), 19(2.37%) response obtained for strongly agreed, while 69(8.62%); 254(31.75%) and 458 (57.25%) responses obtained for strongly agreed, agreed, disagreed and strongly disagreed. On item (11), 68(18.5%); 89(11.12%); 201(25.12%) and 442 (55.25%) responses were obtained for strongly agreed, agreed, disagreed and strongly disagreed.

The result generally, indicates that public attitudes is not friendly, the people do not protect the environment. Since, the average mean of four ($X = 2.5$) is greater than the average mean of rating scale of four ($X = 2.2$). The result is in consonance with the submission of Ogunbodede and Arnold (2011); that the biodiversity and the natural environment have suffered a huge negative impact, due to excessive exploitation by human beings.

Research Question Three: Does public knows the usefulness of environmental resources?

Table 3: Showing frequency counts, simple percentages and mean on does public know the usefulness of environmental resources.

S/N	Items	SD	D	A	SA	Mean	Remarks
13.	Water provides man food	15 1.87%	43 5.37%	200 25%	542 67.75%	3.5	Accepted
14.	Water does not provide main food	416 52%	256 32%	123 15.37%	5 0.62%	1.6	Accepted
15.	Environment is a source of incomes for men	36 4.5%	62 7.7%	236 29.5%	466 58.25%	3.4	Accepted
16.	Men does not earns income from the environment	448 56%	258 32.25%	70 8.75%	24 3%	1.5	Rejected
17.	Nation can be developed economically through the resources in the development	75 9.37%	100 12.5%	236 29.5%	389 48.62%	3.1	Accepted
18.	Environment resources have nothing with economic development of the country	411 51.37%	269 33.62%	84 10.5%	36 4.5%	1.6	Rejected
	Total	1,401 29.18%	988 20.58%	949 19.77%	1462 30.45%	2.4	Rejected

Table (3) show the result on does public know the usefulness of environmental resources? On item (13), the following responses were obtained; 542 (67.75%); 200 (25%); 43 (5.37%) and 15 (1.87%) for strongly agreed, agreed, disagreed and strongly disagreed. On item (14), 5 (0.62%); 123 (15.3%); 256 (32%) and 416 (52%) responses, obtained for strongly agreed, agreed, disagreed and strongly disagreed. On (15), 466 (58.25%); 236 (29.5%); 62 (7.75%) and 36 (4.5%) responses were obtained for strongly agreed, agreed, disagreed and strongly disagreed. On item (16), 24 (3%); 70 (8.75%); 258 (32.25%) and 448 (56%) responses for strongly agreed, agreed, disagreed and strongly disagreed.

On item (17), 389 (48.62%); 236 (29.5%); 100 (12.5%) and 75 (9.37%) responses for strongly agreed, agreed, disagreed and strongly disagreed, respectively. Finally on item (18), 36 (4.5%); 84 (10.5%); 269 (33.6%) and 411 (51.37%) responses obtained for strongly agreed, agreed, disagreed and strongly disagreed.

Generally, the result shows that public people do not know the usefulness of resources in the environment. Since, the average mean of four ($X = 2.5$) is greater than the average mean of rating scale of four ($X = 2.4$). The result buttresses the opinion of Erinsakin (2016) that millions of Nigerians and people around the globe are subjecting the environmental resources with treat e.g. deforestation, water pollution, excessive application of fertilizer into land, due to their ignorance of the benefits of the environmental resources to individuals' economic and development of the nation.

3. CONCLUSION

Based on the findings of the research the following conclusions were made; public does not know the usefulness of resources in the environment. Also, that attitudes of people are very dangerous to the environment. However, people is fully aware of their actions that are infringing on the environment, negatively.

4. RECOMMENDATIONS

1. Government should make legislation on enact more laws to defer infringement negatively on the environment.
2. Public should be made know the usefulness of the environment to economic enhancement of individual and the nation.
3. Public should be enlightened on human activities that can put environment under treat
4. Actions should be intensified by government to punish people who are degrading the environment.
5. People should be advised to be more environmentally, friendly.

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