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THE EFFECTIVENESS AND RELEVANCE OF ENVIRONMENTAL IMPACT ASSESSMENT IN THE SUSTAINABILITY OF THE BUILT ENVIRONMENT IN NIGERIA: PERCEPTIONS OF THREE COMMUNITIES

Charles C. Anukwonke[1], Leonard N. Muoghalu[2]

[1,2]*Department of Environmental Management, Chukwuemeka Odumegwu Ojukwu University Uli, Nigeria*

email: charlesjohnbosco@gmail.com

Abstract

There is paucity of data on the awareness of Environmental Impact Assessment across communities where environmental assessments have been completed for different ranges of projects. This has raised concerns for stakeholders and policy makers for decision making as part of improving the sustainability initiatives in the built environment. The research examined the perception of the public in Anambra State after post environmental impact assessment tasks in communities have been completed. This was to ascertain the extent of public awareness on the implications of EIA in the built environment. The field survey employed techniques such as survey method, focused group discussion, interview and observation to elicit information from the 450 respondents of the three communities: Uruezi Egbema Village Ozubulu, Aboh Amawa Ogbunike and Umuofor Ubahu Village, Okija, where selected Environmental Impact Assessment projects are located. Purposive sampling technique was employed. The hypothesis that guided the study was: Reaction and perception of residents to EIA as an instrument of environmental sustainability and governance do not vary across communities studied. The results supported the hypothesis as the calculated X^2 was greater than the critical values at both 0.05 and 0.01 alpha levels. Awareness level and mitigation measures were shown to be poor. This raised serious concern on the implications of the level of awareness in environmental management issues in the study localities. It is therefore recommended that efforts must be made to improve EIA awareness through capacity building and enforcement of mitigation measures with available grants and incentives in environmental management. It is hoped that the findings will be useful to EIA practitioners and to ministries of Environment across the states of the Federation in Nigeria and thus provide a general guideline for other researchers in EIA quality evaluations.

Keywords: Environmental Impact Assessment, Evaluation, Mitigation, Perception

INTRODUCTION

El-Fadl and El-Fadel (2004) posit that Environmental Impact Assessment (EIA) is devised as a decision-making tool in response to the groundswell of ecocentric concerns, to mediate between the technocentric view of continued development and the ability to make economic progress and gain while overcoming environmental problems. According to them, the assimilation of the

philosophy and practice of EIA into a broad range of cultures and political systems reflects the desire and need to integrate environmental considerations into the decision-making process fed into Environmental Management Plan (EMP) within an existing Environmental Management System (EMS) (Palframan, 2010). Anukwonke (2019) opined that EIA could be seen as a deciding process, activity and documentation that provides an evaluation of direct and indirect consequences of proposed development by predicting, evaluating and mitigating the bio- geophysical, social and cultural effects of such action on man's health and environment in the short term, medium-term and long term, through the adoption of participatory and consultative principles in the generation of alternatives to projects and the communication of impacts in an environmental impact statement (EIS).

Despite over 25 years of conduct of EIA in Nigeria, there is still paucity of data documented in literature on the performance of Environmental Impact Assessment processes as viewed from the public perspective. In different scenarios, EIA performance transcends the public who play different roles in the entire EIA process. As such, their perception would be relevant to contemporary research and policy-making for driving the dictates of EIA in the sustainable development agenda championed by the United Nations. Similarly, the relevance in the built environment characterized by diverse anthropogenic influences is revealing. Sadler (1996) identified monitoring and post auditing as options for judging EIA effectiveness. Aside from the monitoring which could be chaired by a Federal or State environmental agency, the effectiveness of EIA administration can be judged from the residents' perception, as the people are the key informants and part of decision-makers in societal development. The need to ascertain the nature/ level of public participation during the entire project development is critical. Similarly, the satisfaction level of the project communities in response to the performance of any identifiable mitigation measures, corporate social responsibility, environmental management plan, system and strategy to counteract project negative impacts is revealing. These constitute the research gap that stimulated this research. Hence, it is aimed at examining the residents' perception level in the practice of EIA in Anambra State, Nigeria in such areas as governance, public participation, and mitigation measures for the projects whose EIA have been conducted, in order to enhance the application and effective use of EIA as a policy tool in promoting sustainable development.

LITERATURE REVIEW

Theoretical Framework

Pluralist Model

According to Bartlett and Kurian (1999), in spite of its manifest policy importance, EIA has been the focus of very few explicit attempts at theoretical understanding. This is because writing about EIA has been guided by assumptions and models that have been implicitly assumed rather than explicitly and systematically explored, formulated and articulated. To understand further how EIA works, how much policy significance is attributed to it and the meaning it has in the politics of the environment, it is necessary to appreciate that it is determined largely by some sets of implicit pluralistic models. One of such models which Culhane, Friesema and Beecher (1987) called the external reform model, assumes that EIA has a policy impact because of increased participation, involvement and leverage that it provides for the public and organized interest groups such as business organizations, professional associations, environmental groups, state and

local governments and other administrative agencies. The significance of the EIA process therefore lies in the way it works to open up a closed agency pattern of decision making to citizens, environmental groups and the rest of the governments (Andrew, 1976). The pluralist model of EIA is simply an interpretation of EIA in terms of Pluralist Theory, a popular conception of the nature of politics in industrialized capitalist democracies- a process of negotiation, bargaining and compromise among organized groups. Thus, the model seeks to achieve a higher degree of public participation in decision-making process. EIA is primarily then a tool for ensuring more democratic processes and practices through citizen involvement.

The study showed some levels of participation by residents of host communities as a system of democratic process up to an extent since they were consulted in the entire EIA process irrespective of their level of commitment afterwards. In so doing, the practice has brought together key stakeholders and interest groups in environmental management. These groups were the (business) project owners for the entire projects, village heads and community leaders, the host communities who participated in the scoping and screening exercises, consultants and the experts from the State Ministry of Environment, Awka.

Systems Theory

Scientific researches employ systems theory because it considers the complexity and relationships of factors in a functional interaction (Whee, Ngah, & Seng, 2012). The history of systems theory includes contributions from such seminal thinkers as Ludwig Von Bertalanffy a biologist. The general systems theory originated in the 1940's in the work of the biologist who initially sought to find a new approach to the study of life or living systems. Von Bertalanffy envisioned general systems theory as a way to address the increasing complexity of the world's problems. The theory emerged as an alternative to the dominant form of inquiry and way of thinking, reductionist analysis, criticized for being unable to address wholes, interdependence, and complexity. Central to this theory was the concept of 'system,' defined by Montuori, (2011) as a group of interacting, interdependent elements that form a complex whole existing in an environment. Systems theory is also defined as a complex entity created by the multiple interactions of components abstracting from certain details of structure and concentrating on the dynamics that define the characteristic functions, properties, and relationships that are internal or external to the system (Laszlo & Krippner, 1998). It posits that small changes in one part of an organisation will have multiple and potentially, on-going effects (Graetz, Rimmer, Lawrence and Smith, 2006). Open systems interact with their environment, exchanging matter, energy, and information.

In systems approach to understanding society, the individual is understood as a system, interacting with a number of other systems, such as family, workplace, neighbourhood, depending on the nature of the research and the context. An understanding of the various systems an individual is embedded in is necessary in order to understand how a creative idea in somebody's head becomes a product. In order to understand creativity in organizations, for instance, there is the need to look at a series of interacting complex systems: the individual, the group, the department, the organization as a whole, the wider business environment such as economic climate, trends and competition.

Environmental case studies are logically not treated as a single entity since a proper understanding of environmental interaction requires a consideration of complex factors which could be dependent or independent factors. Environmental Impact Assessment (EIA) as a process

is multi-disciplinary in nature where indicators on biophysical, chemical, social, economic, cultural and political dimensions are considered. A mix of experts such as biologists, chemists, geographers, engineers, laboratory scientists, urban and regional planners, social scientists, zoologists, botanists, archaeologists and environmental managers contribute to an ideal EIA process. Hence, the suitability of systems theory for a complex study of EIA system as a phenomenon cannot be over emphasized.

For this study, EIA system was defined with subsystems such as those related to processes and activities (the practical activities stated on minimum deliverables by EIA Decree no 86 of 1992); Project operation in host communities (ie. how viable the projects have fared alongside the available environmental management plans); environmental monitoring of projects to ensure compliance of environmental considerations and lastly, environmental advocacy initiatives to sensitize the communities on the relevance of EIA and its benefits in meeting the sustainable development goals in the built environment.

STUDY AREA

The three communities selected for the study include Ozubulu, Ogbunike and Okija. They are all located in Ekwusigo, Oyi and Ihiala Local Government Areas in Anambra State, Nigeria. Anambra State was created alongside eight other states, on 27th August 1991 from the old Anambra State. It derives its name from Anambra River (Omambala River), which is a tributary of the River Niger. Anambra State shares boundaries with Delta State to the west, Imo State and Rivers State to the south, Enugu State to the east and Kogi State to the north (See Figure 1).

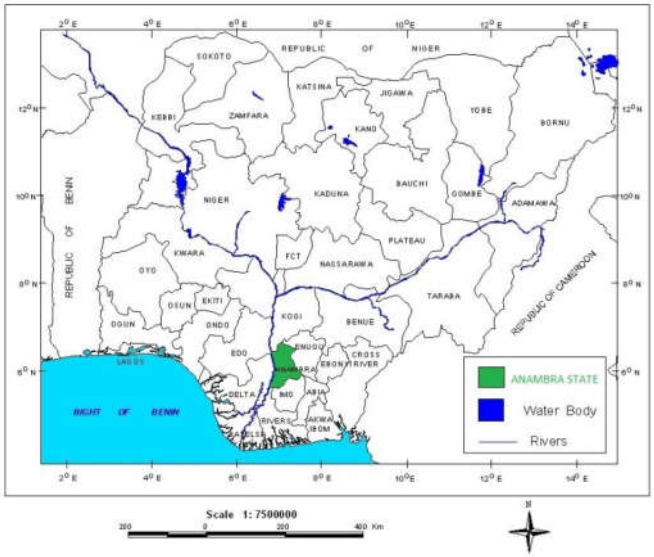

Figure 1: Location of Anambra State within the Map of Nigeria
Source: Ezeomedo (2019)

Ozubulu

Ozubulu is the headquarters of Ekwusigo Local Government Area (Figure 2). The mining site is Uruezi Egbema and falls within the evergreen rain forest region. Human activities have given rise to high-level of deforestation within the area. The thick forests, typical of rainforest belts, are now found along the river courses. In moderately flat areas, oil palm, cashew and other economic trees thrive. Uruezi soils are friable; grey, brown and predominantly reddish in colour. The drainage within Uruezi Egbema is the Eze River which is a tributary of Orashi River system. All approaches to the mine site are characterized by rolling landscapes with features of rapidly encroaching urban characteristics. Land uses within one-kilometre radius of the area vary from residential buildings, private businesses and farming activities. The community harbours some useful biotic life and vegetation due to the availability of sensitive environmental features and climate.

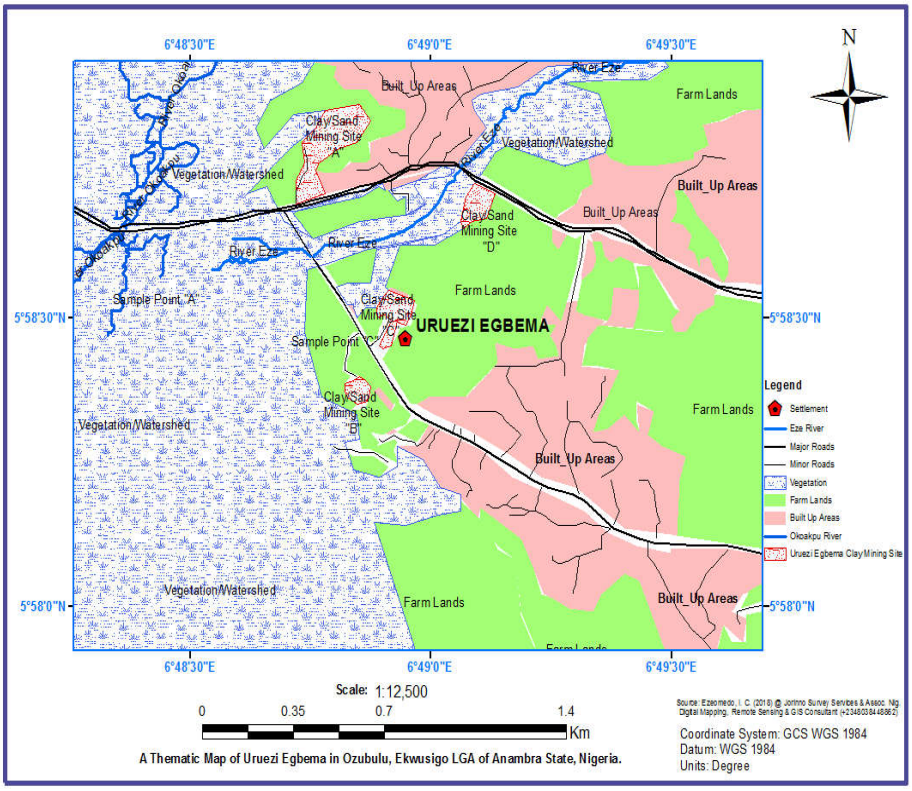

Figure 2: Location of the Project Site Uruezi Egbema on the Map of Ozubulu, Ekwusigo LGA.Anambra State
Source: Ezeomedo (2019)

Ogbunike

Ogbunke is located about 15 kilometres east of Onitsha. The Onitsha-Enugu expressway cuts through its northern border (See Figure 3). The town is bordered on the east by Umudioka in Dunukofia local government area, on the north-east by Umunya and the north by Nkwelle-Ezunaka (both in Oyi Local Government Area). Topographically, Ogbunike is dominated by an undulating topography with considerable flat land and free from flooding or swamp propensity. Ogbunike is underlain by very permeable shale and sandstones. The formations allow for much

filtration of water into greater depths. It makes the supply of water from hand-dug wells and boreholes very easy. Land uses in the area include residential, agricultural, religious, tourism, industrial and commercial purposes. Ogbunike is identified by the international community with the famous Ogbunike cave which has some tourist potentials.

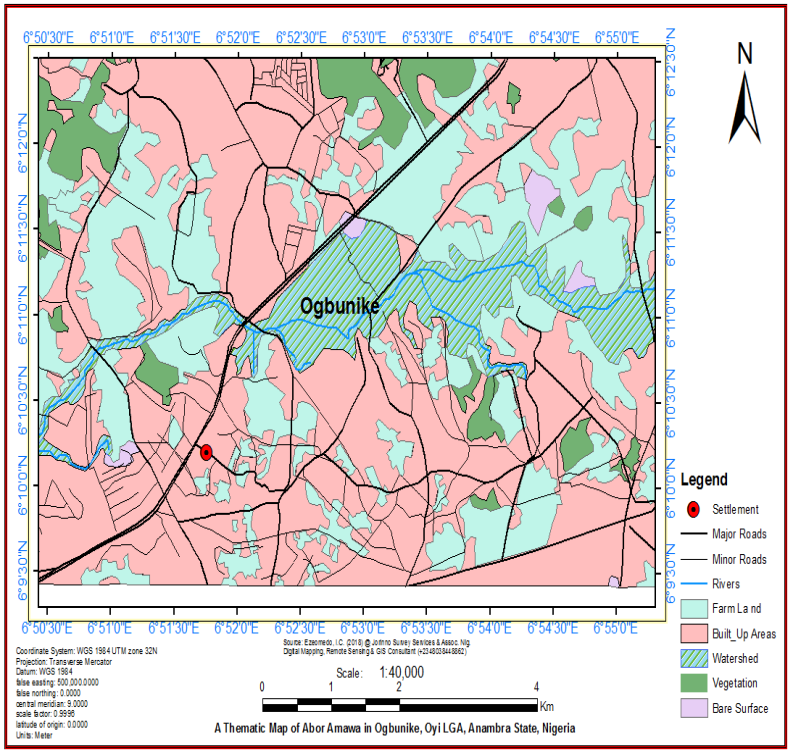

Figure 3: Location of Abor Amawa on the Map of Ogbunike, Oyi LGA, Anambra State
Source: Ezeomedo (2019)

Okija

Okija is a town in Ihiala local government area (Figure 4). The typical humid climate of the town has considerable influence resulting from the apparent movement of the sun across the tropics, the relative stability of the Inter-Tropical Convergence Zone (ITCZ) and prevailing (seasonal) wind. The town has relative flat topography for the entire localities.

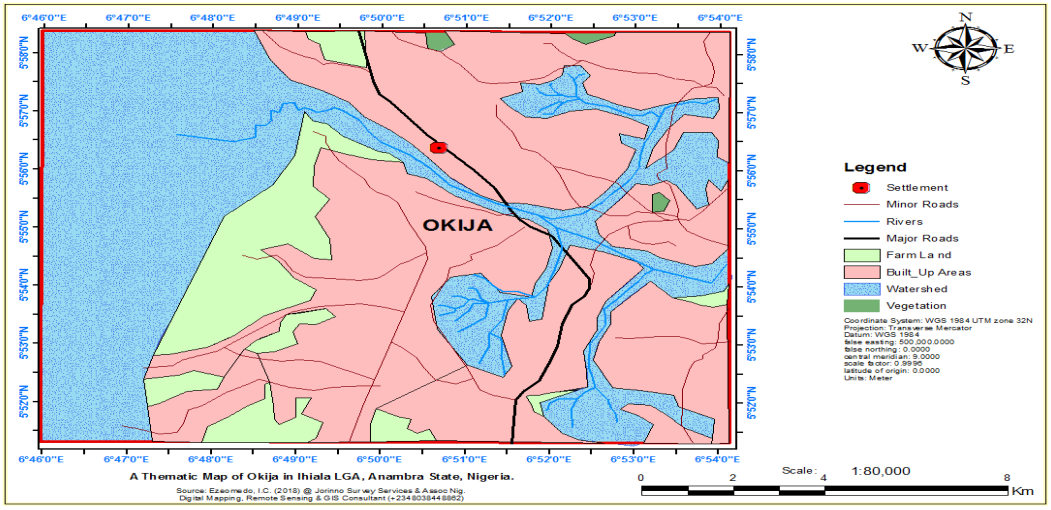

Figure 4: Location of Umuofor Okija in the Map of Okija, Ihiala LGA. Anambra State
Source: Ezeomedo (2019)

METHODOLOGY

A mixed method of research design was adopted for the study in the three study locations namely Ozubulu, Okija, and Ogbunike. Data were collected with the use of survey method of administration of structured questionnaire, interview, observations and focused group discussions. The study adopted both quantitative and qualitative research designs. Data was elicited from respondents in locations where environmental impact assessment had been completed concerning the projects in the locations. Structured questionnaires were distributed to residents in the project communities eliciting information on their perception of and awareness about projects, EIA awareness, consciousness about public participation as part of the EIA process, whether it was duly conducted, and the progress of corresponding mitigation measures, if available. The selected projects were summarized on Table 1.

Purposive sampling was adopted for this study. First, respondents were purposively selected from communities where the projects were located. This was done to ensure that respondents who are knowledgeable about EIA processes in the communities and those who perceive the effects of the projects were chosen These respondents must have lived in that vicinity from the time the EIA process commenced and must have participated in the process, attested of by the village heads/ community leaders, and also have participated in the aspects of public participation for both scoping, screening and mitigation measures in the stated EIA process. Thus for the three villages, 450 questionnaires were distributed with the help of 9 field assistants who were picked from these villages.

Table 1: Project Selection, Consultants and Location Details for the Survey studies

S/N	Project Name	Consultant	Project Location
1.	Hammakopp Consortium Ltd Excavation site Uruezi Egbema, Ozubulu Ekwusigo LGA	Xploits Consulting Ltd.	Egbema Ozubulu
2.	Century Power Generation Limited; 495MW Independent Power Plant, Okija	Masodak Associates & F.M. Chidez Nig Ltd	Okija
4.	Minl Limited (Aluminium Coated Coil/ ROPP) Marketing Outfit	VMGE Projects Nig. Ltd.	Abor Amawa, Ogbunike

Source: Fieldwork, 2019

There was no baseline data for the population of the sampled communities, thus it was quite complex to define the sample size for the study. However, Sudman (1976) suggests that a minimum of 100 elements are needed for every major group or sub-group during a sample. Similarly, Kish (1965) opined that 30 to 200 elements are sufficient when the attribute is present 30 to 80 percent of the time (that is, the distribution approaches normality). Furthermore, Yamane (1967) showed that at 90% confidence level (CL), a small population size of 100 elements will require a minimum sample size of 51 elements and a population larger than 100,000 will require a minimum sample size of 100 elements. Concerning the aforementioned views and on the notion that the larger the sample size, the more normal a distribution becomes, the current study chose a sample size of 150 respondents from each of the three communities which were Ozubulu, Ogbunike and Okija.

RESULTS AND DISCUSSION

Demographic Data of the Respondents

Sex

The respondents consisted of 52.7% males, 47.3% of females in Ozubulu; 58.7% males and 41.3% females in Ogbunike and 54.7% males and 45.3% females in Okija as represented on Figure 5.

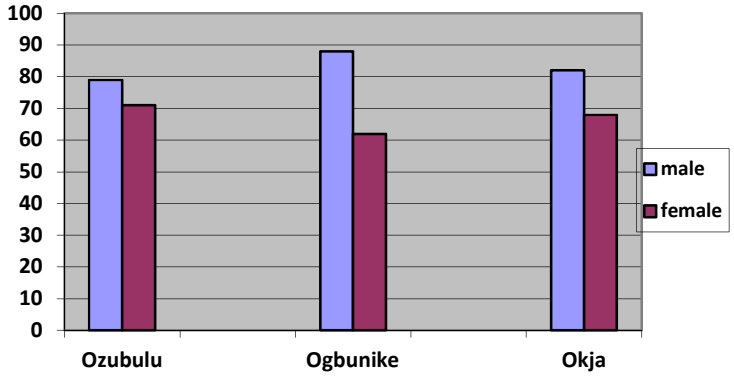

Figure 5: Sex of Respondents
Source: Fieldwork, 2017

Age of the Respondents
The ages of the respondents were presented in a bar chart (Figure 6). It shows that a greater percentage of respondents (50-55%) were between the age categories of 40-49, followed by the age bracket 50 and above. The age brackets 30-39 and 20 – 29 accounted for 5-12%.

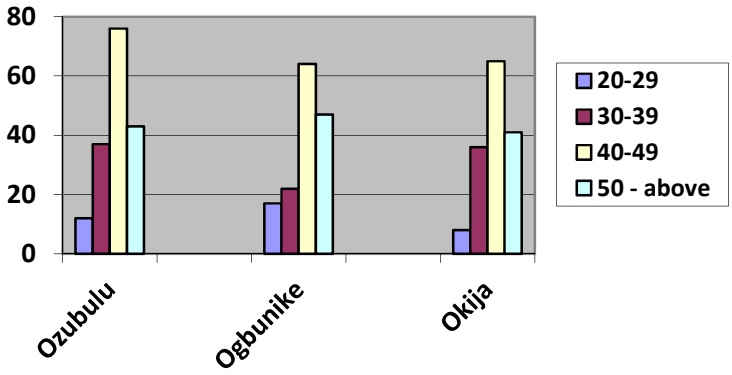

Figure 6: Age of the Respondents
Source: (Fieldwork, 2017)

Educational Qualification
Roughly, over 50% of respondents in all three communities had First School Leaving Certificate. A greater proportion about two-third of the respondents in Ogbunike had SSCE more than the other communities. Also, 33% of the respondents in Okija had first degrees, while only 18 respondents had post graduate degrees. This is summarized in Figure 7.

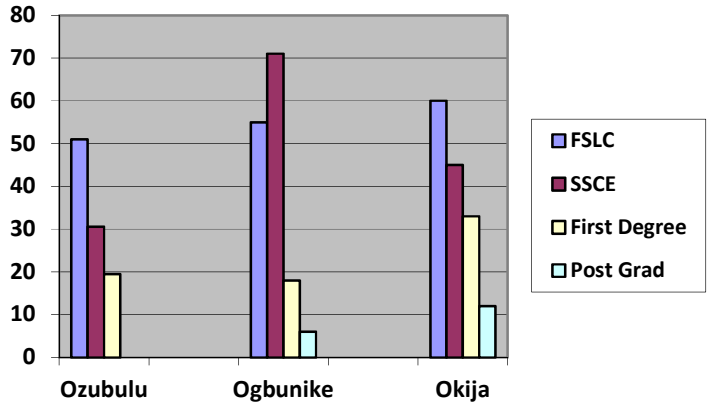

Figure 7: Highest Qualification
Source: (Fieldwork, 2017)

The study objective was to examine the residents' perception level in the practice of EIA in Nigeria in such areas as governance, public participation and mitigation with respect to the projects in their locality. The respondents' data on these were culled from the questionnaire and focus group discussion as follows:

Question 1: Are you aware of Environmental Impact Assessment (EIA)?

Based on the answers of the respondents on their awareness of EIA shown on Table 3.0, it is evident that the awareness of majority of the residents is satisfactory as 65.3% of respondents from Ozubulu, 41.3% from Ogbunike and 74.7% of those from Okija were aware. 18%, 20.7% and 12% of the respondents respectively were not fully aware, while 16.7%, 38% and 13.3% of corresponding respondents were indifferent to the question. This follows the satisfaction regions generated as follows:

a. 0- 40% (very low satisfaction);
b. 41 – 65% (satisfactory);
c. (66-70)% (highly satisfactory); and
d. 71- 100) % (extremely satisfactory)

It could be deduced that except for the respondents at Ogbunike, all were within the high satisfactory region. This awareness is tied to the EIA process already executed in these communities. Efforts must therefore, be made to improve the environmental impact assessment process by awareness creation aimed at capacity building in different communities.
The results of the focused group discussion complement some of the information from the questionnaire for the three locations. The discussion revealed the general status of the communities and their awareness of EIA processes as it relates to scoping, screening and public participation.

For study locations, the perception level of the participants was generally poor on EIA. This was made clear in the course of interaction with the participants. The participants had only faint idea of the meaning of Environmental Impact Assessment though environmental assessments were

recorded to have been completed. On this note, greater effort must be made to build up the capacity level of the stakeholders on EIA governance to improve its practice and define the relevant roles which different stakeholders will play in improving the practice in real situations.

Table 3: Awareness of EIA by the Residents

	Ozubulu		Ogbunike		Okija	
	Freq	%	Freq	%	Freq	%
Yes	98	**65.3**	62	**41.3**	112	**74.7**
No	27	**18**	31	**20.7**	18	**12**
Neutral	25	**16.7**	57	**38**	20	**13.3**

Source: Fieldwork, 2017

Question 2: Are You Aware of EIA as a Strong Instrument of Environmental Governance?

Figure 8 indicates the respondents' opinions on their perception of EIA as a strong instrument of environmental governance. A high proportion (71.3%), of them, responded positively from Okija followed by Ozubulu (62%) and then (54%) in Ogbunike.

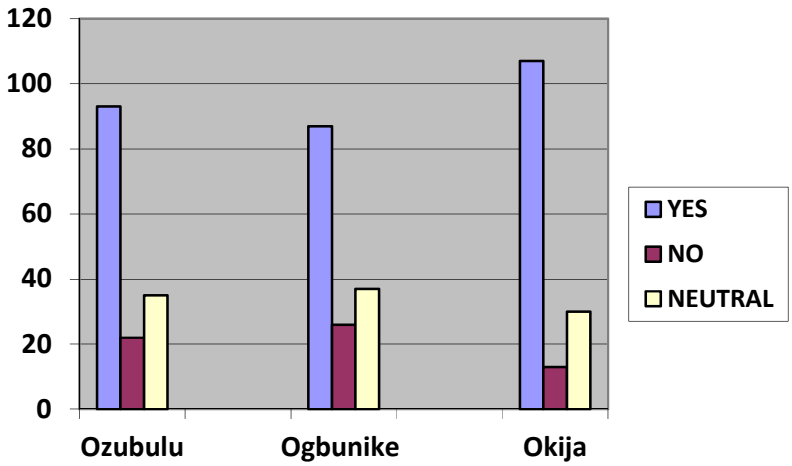

Figure 8: Awareness of EIA
Source: Fieldwork, 2017

Question 3: Did the Proponent consult your community during the EIA process of the selected projects?

Their responses are shown in Table 4. More than half of the respondents in the study locations agreed they were consulted and informed. They opined that they were informed through their village head.

Table 4: Proponent Consultation

	Ozubulu		Ogbunike		Okija	
	Freq	%	Freq	%	Freq	%
Yes	101	**67.3**	94	**62.7**	127	**84.7**
No	25	**16.7**	29	**19.3**	16	**10.7**
Neutral	24	**16**	27	**18**	7	**4.7**

Source: Fieldwork, 2017

With regard to the nature of participation by the stakeholders during the consultation process, focused group discussion identified the following:

At Ozubulu, the participants led by the acting Community Head Obibeze Sunday Odo submitted that *they were adequately informed of the project and they participated in the entire process of scoping and screening as they submitted their concerns relating to the project impacts which were reflected in the final EIS report*. According to him, *they were informed through their son who is a member of the State House of Assembly- Hon. Polycarp Onyeka. He informed the Community Head, who then informed the entire members of the community through the local town crier*. The participants reported that "*...they have had similar processes and consultations during a proposed irrigation project for the community. These were very successful, but the project was not executed because no one released land for it"*. They stated that "*…the former consultation process was better attended than the latter because the project contractor of the excavation site (of Ozubulu project) was a member of their community".*

For the Ogbunike Study location, the Village Head's representatives met on the site identified for the project. There, they were informed of the impact assessment process which would be headed by the officials of the Anambra State Ministry of Environment and the consulting firm. The respondent further stated that "*…required men, women and youth from the Aboh Amawa community were fully represented during the process"*.

The respondents from the Okija community spoke positively about their engagement in the EIA process for the development project in their community. They affirmed that "*…they were consulted, starting from pre-entry consultations which were held with the Executive Councils, Elders and Youths of the host Ubahu Community between 10th and 12th September 2011*; *... during the periods, discussions and consultations enabled the stakeholders to be informed of the intent of the proponent and a collection of the views of the people about the proposed project*".

By the assumptions of the Pluralist model, the policy impact of EIA reflected in the EIA processes in these communities due to the reason that the communities were consulted. These are the public and organised interests groups in the communities, whose involvement brings about closed agency pattern of decision making to citizens, the agency, the State Ministry of Environment and the Government of Anambra State.

Question 4: Are the negative impacts of the project in your community currently avoided?

The respondents were asked whether the negative impacts of the three projects in the communities are mitigable or minimizable. For the first study location of Ozubulu, 67% of respondents as shown in Table 5 submitted that the impacts generated as a result of the project

are not minimizable, 8.7% of the respondents were indifferent, while only a small proportion of the respondents accepted that the impacts are managed. It was gathered through a focused group discussion that the occurrences of impacts unmitigated are as a result of sheer negligence and neglect of environmental management. For the study location at Ogbunike, a fair proportion (72%) responded positively to the mitigation of impacts and management of all waste sources, while 12.7% of the respondents were indifferent to the question. A fair proportion (74.7%) at Okija study location attested that project impacts are being mitigated and have not been felt in the study area.

Table 5: If Negative Impacts are mitigated

	Ozubulu		Ogbunike		Okija	
	Freq	%	Freq	%	Freq	%
Yes	35	**23.3**	108	**72**	112	**74.7**
No	102	**67**	23	**15.3**	18	**12**
Neutral	13	**8.7**	19	**12.7**	20	**13.3**

Source: Fieldwork, 2017

Question 5: Concerning the defined project whose EIA process has been shown to have been completed in your community, would you say that EIA is a strong instrument of environmental governance?

From Table 6, a greater percentage of the respondents affirmed on that where 50%, 54% and 72% of respondents from the three study locations accepted that EIA is a strong instrument of environmental governance, while 22.7%, 12.3%, and 6.7% of them ticked otherwise with "a no-reply" accounting for 27.3%, 34% and 20.7% respectively.

Table 6: EIA as a strong instrument of environmental governance

	Ozubulu		Ogbunike		Okija	
	Freq	%	Freq	%	Freq	%
Yes	75	**50**	81	**54**	108	**72**
No	34	**22.7**	18	**12.3**	10	**6.7**
Neutral	41	**27.3**	51	**34**	32	**20.7**

Source: Fieldwork, 2017

Question 6: The public has the right to know and to be involved in information exchange and decision making that affect their resources and livelihood. When this is strictly applied, project development should be relatively trouble-free. On a five-point Likert scale, tick one of the following: Strongly Disagree, Disagree, Neutral, Agree, and Strongly Agree.

The perception of the residents on the place of public participation in the EIA process was sought. The results are reflected in Table 7. A total of 60.7% of Ozubulu respondents; 58% of Ogbunike respondents and 61% of Okija respondents strongly agreed on the need for involvement of the public for better environmental governance, as opposed to 8%, 10% and 5.3% for Ozubulu, Ogbunike and Okija respectively who strongly disagreed on the involvement of the public in enhancing decision-making process in EIA. The implication is that the public are stakeholders in all project development. Simply put, the members of the public are stakeholders in environmental governance. Their involvement in the EIA process, either at the scoping or

screening level will lead to a more dynamic EIA process, as they would be involved in information exchange and decision making that affects their resources and livelihood.

Table 7: Perception of Public Participation in Decision Making in EIA

	Ozubulu		Ogbunike		Okija	
	Freq	%	Freq	%	Freq	%
Strongly Disagree	12	**8**	15	**10**	8	**5.3**
Disagree	20	**13.3**	17	**11.3**	21	**14**
Neutral	6	**4**	8	**5.3**	8	**5.3**
Agree	21	**14**	23	**15.3**	21	**14**
Strongly Agree	91	**60.7**	87	**58**	92	**61**
Total	150		150		150	

Source: Fieldwork, 2017

It can be inferred further that as far as residents are conscious of/ knowledgeable about EIA practice as an environmental management concept, they will tend to understand the application more as it relates to them especially as they respond to the reality of the project's development processes.

Hypotheses Testing:
The guiding hypothesis for this study was that there is no significant relationship between location and the perception of EIA as an instrument of environmental governance. Chi-Square analysis tool was used in analysis because the two variables in question are nominal variables. From the data generated from the perception of EIA as an instrument of environmental governance on Table 6, the hypothesis was computed with summary as follows;

$X^2 = 25.8$ (Calculated)
df = 4
X^2 $\infty 0.05 = 9.5$ (Critical value)
X^2 $\infty 0.01 = 13.3$ (Critical value)

Decision Rule: Reject H_o because 25.8 is greater than both 13.3 and 9.5 at alpha levels 0.05 and 0.01 respectively. Hence, the null hypothesis that the reaction and perception of residents to EIA as an instrument of environmental governance does not vary across towns was rejected.

In essence, it implies that reaction and perception of residents to EIA as an instrument of environmental governance did vary across towns. That is to say, the manner of involvement of the public in the scoping and screening processes and eventual adoption of their concerns in the EIA and possibly, the performance of projects in different locations will influence the perception of residents of EIA practice and its eventual success. The relevance of EIA in the sustainable agenda would be realised fully when a project operates with minimal pollution costs with improved public consultation and involvement in both the conceptual, operation and decommissioning stages of all project life cycles.

SUMMARY AND CONCLUSION

From this study, it was shown that reactions to and perception of residents of EIA as an instrument of environmental governance varies across towns; whereas, awareness of EIA by the three localities was 65.3%, 61.3% and 74.7% for Ozubulu, Ogbunike and Okija respondents respectively. The perception of the respondents on public participation as part of EIA governance is significant. It is noteworthy that 60.7%, 58% and 61% of the respondents in these localities strongly agreed that the public has the right to know and to be involved in information exchange and decision making that affect their resources and livelihood, and that when this is strictly applied, project development should be relatively trouble-free. Perception studies on residents of project localities have revealed that perception of EIA is influenced by the extent of sincere involvement of the public and the incorporation of their ideas, the performance of projects and the operation of a viable mitigation plan. As EIA is a widely accepted instrument of environmental management and sustainability of projects, there is a need to explore all aspects of impact assessment, more especially those that relate to the public. This would lead to ensuring sustained improvement in environmental assessment and progress in its practice, for efficiency and effectiveness.

RECOMMENDATIONS

Efforts must be made to improve the practice of Environmental Impact Assessment in Anambra State. Sequel to the findings of the research, the following areas need attention:

i. Awareness of EIA

Efforts must be made to organize awareness campaigns on the importance of EIA and environmental management for future project proponents and members of the public. More annual environmental management conferences and seminars should be conducted to improve the positive perception of the public of the practice of EIA, as a global tool of sustainable development and also produce proper guidelines to ensure better public engagement. School children should be taught the preliminaries of environmental assessments in their project curriculum to inculcate in them the nitty-gritty of environmental impacts of human actions.

ii. Provision for Monitoring of Projects in Communities and Enforcement

Efforts must also be made to enforce the contents of EIA reports which have been submitted at different phases of the project life cycle such as commissioning, operational and decommissioning stages. Mitigation plan, monitoring and audit for each project should be enforced adequately such that by doing that, the dictates of the EIA content vis-a-vis Environmental Management Plan (EMP), improving the platform for all stakeholders enshrined in legislation is met. It is submitted that improving the performance of projects whose EIA has been conducted, will improve the satisfaction of the populace and thus improve the response to environmental management and awareness across all stakeholders. In this way, the practice of EIA can be improved.

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