

Indigenous Awareness Strategies and Farmers' Attitude towards Sustainable Management of Natural Resources in Ikot Ekpene, Nigeria

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Abstract

The purpose of this study was to examine the relationship between indigenous awareness strategies and farmers' attitude towards sustainable management of natural resources in Ikot Ekpene. A correlational design was adopted for the study, which was guided by two null hypotheses. Four communities in Ikot Ekpene Local Government Area (LGA) of Akwa Ibom State were selected for the study. Purposive sampling technique was used to select a sample of 260 registered farmers from 398,000 people; being the projected population estimate of the area of the study in 2021. A questionnaire was the instrument used to elicit information from the farmers. Pearson Product Moment Correlation analysis was used to test the hypotheses at .05 level of significance. The results obtained revealed that village square meetings and usage of town criers, have significant relationship with farmers' attitude towards sustainable management of natural resources. Based on the findings, it was recommended that village square meetings and usage of town criers should be encouraged as veritable sources of information for awareness purposes in Ikot Ekpene.

Keywords: indigenous, strategies, farmers, attitude, resources

Introduction

Natural resources are nature's endowments for the sustenance and support of peoples' livelihoods. Not only do the endowments serve to sustain and support livelihoods, they also perform exceptional ecological functions which are of immense value to the continuous existence of humans on earth (Efut & Arikpo, 2019). Natural resources could be categorized into terrestrial-, aquatic- and atmospheric-based. The terrestrial-based include land, soil, trees (forests), non-timber forest products (NTFPs) and terrestrial animals. The aquatic-based are water-bodies of all types and the various resources therein, while atmospheric-based are gases which both human beings and plants make use of. The importance of natural resources towards the sustenance and support of peoples' livelihoods is even more evident in its shaping of peoples' occupation types based on the type of natural resource which is more abundant in a given area. For areas near large water-bodies such as oceans, seas and rivers, the occupation types are mainly fishing and its allied businesses while areas where there are large tracts of fertile land will mainly have farmers and its allied businesses.

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Sustainable management of natural resources is the process whereby natural resources are exploited and utilized in a meticulous manner so as to ensure that they will be of continuous benefit to posterity (Eyo & Ogo, 2013). The process involves planning, executing and monitoring how natural resources are exploited and utilized with a focus on ensuring the perpetuity of the resources' capability towards not only the sustenance and support of peoples' livelihoods but also the distinctive ecological functions they perform. When there is no sustainable management of natural resources in a given area, the possibility of inconsistency in the perceptions and subsequent attitude of people towards the resources is very likely.

One of the most essential indicators which influences how an individual behaves or acts in an event, a given situation or circumstance is the person's attitude (Omoogun & Odok, 2013). Attitude is an individual's evaluation of developing a positive (favourable) or negative (unfavourable) disposition to perform a given behaviour. Thus, when someone has a positive attitude towards a given situation or circumstance which he or she faces, the person is more liable to acting positively. In the case where a negative attitude is developed, the person would be more prone to acting negatively and/or destructively. This is corroborated by Efut et al. (2018) who asserted that humans' inordinate desires/attitude to acquire wealth has caused the use of unsustainable methods in exploiting environmental resources.

Assessing farmers' attitudes towards sustainable management of natural resources is an essential requirement not only because of the influence which attitude has on an individual's behaviour but also, the environmental consequences of unsustainable management of natural resources. In their study on the vulnerability of Akwa Ibom State to climate change, Udoh and Nkan (2015) revealed the present study area as ranking second out of the State's 31 local government areas (LGAs) in terms of high level of vulnerability to climate change hazards. Assessing the peoples' attitudes is also necessary because inclusive in the reports concerning sustainable management of natural resources in the area of the study are cases which seemingly imply that the available natural resources within the area are being degraded and depleted in an unchecked and uncontrolled manner. Research studies have revealed that an assessment of attitudes is critical in predicting sustainable management of natural resource behaviours (Osunsina & Fagbeyiro, 2015; Digun-Aweto et al., 2016). It is against this backdrop that this study sought to ascertain the relationship between indigenous awareness strategies and farmers' attitude towards sustainable management of natural resources in Ikot Ekpene LGA of Akwa Ibom State.

As an indigenous awareness strategy, village square meetings are gatherings of a given rural locality's ranking members at specified/designated meeting spots within the locality. Usually, such gatherings are held in order to resolve issues facing the locality. In present times, participatory forest conservation is the new trend of sustainably managing forests (Torri & Herrmann, 2010) as against the previous trend in which official policies and laws concerning sustainable management of forest hardly took into consideration the local communities' dependence on their immediate environment. The participatory forest conservation has many approaches viz community forestry, joint

forest management, community-based forest management and decentralized forest management (Balooni et al., 2010). They have been shown to have recorded diffident successes in some countries (Uprety et al., 2012; Blaikie, 2006) while for some others, it has been found to have recorded remarkable successes (Ojha et al., 2009). For those that have been recorded to have achieved remarkable successes, it is as a result of government formally and practically handing over powers to the communities in what is termed as “decentralization policy in forest resources” (Hussain et al., 2013; Ribot, 2004).

As another indigenous awareness strategy, town criers refer to human or material resources which a given rural locality formally employs to proclaim its announcements. The announcements could border on the rural locality’s need for information, education, social protest, entertainment, or any other issue which demands the announcements to be proclaimed (Chiovoloni, 2004). The mode of announcement (human/material) is based on the given rural locality’s indigenous culture so that the message produced would be consumed by members of the rural locality. The human resource which serves as a town crier is the village town crier/announcer who goes round the community ringing a bell/hitting a gong in order to draw attention before proclaiming the announcement(s) (Asemah et al., 2013) while the material resources include specialized drum beats, usage of various types of gongs, beating of cymbals/rattles, usage of fresh unfolding palm fronds, smoke signals, gunshots, or usage of decorated woven raffia. Town criers serve as a source of news and information to rural communities. Chukwurah (2010) asserts that town criers serve as a means of promoting and advertising farm products to the locales. In their study, Apata and Toluwase (2015) maintained that amongst other communication mediums at the rural level, town crier is the most commonly used. They also serve as a vital social and cultural facilitator towards formation of attitudes and values; they also develop a climate of change (Essien, 2014).

This study is anchored on the theory of planned behaviour by Icek Ajzen (1985). In 1985, Icek Ajzen submitted that a person’s action is a function of the following: (i) behavioural beliefs – beliefs concerned with likely consequences of a particular behaviour; (ii) normative beliefs – beliefs concerned with normative expectations of other people, and; (iii) control beliefs – beliefs concerned with relative factors which may either enhance or hinder behavioural performance (Ajzen, 1985). In their separate aggregates, behavioural beliefs result in the individual developing either a favourable or unfavourable attitude toward the given behaviour; normative beliefs result in the individual evolving perceived social pressure also known as subjective norms, while; control beliefs result in the individual evolving perceived behavioural control – a concept which refers to the perceived difficulty or ease of performing a given behaviour.

Jointly, the three pointers (attitude toward the behaviour, subjective norms and perceived behaviour control) result in the person’s formation of a behavioural intention. Generally, the tenet is that, the more favourable the person’s attitude and his or her subjective norm, coupled with a greater perceived behavioural control should result in the person developing a very strong intention to actually perform the given behaviour (Ajzen, 1991). Assuming a sufficient degree of actual control over the behaviour, an individual

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is expected to display his or her intentions (perform the given behaviour) when occasion demand.

The theory explains how different sets of beliefs result in human behavioural intentions being influenced by attitude, subjective norms and perceived behavioural control (Floress et al., 2015). This suggests that an individual's behavioural intention is essentially dependent on the three pointers. Of all the three pointers, attitude has the strongest effect on behavioural intention as a result of its being premeditated on beliefs concerned with likely consequences of the behaviour (Hrubes et al., 2001).

The importance of this theory to the present study is that it influences attitude on behavioural intention. Attitude is premeditated on a set of beliefs directly related to a person's assessment of probable consequences of behavioural intention. Negative attitudes are produced when an individual develops a negative belief while positive attitudes are produced when a positive belief is developed. An insight why negative attitudes is exhibited towards sustainable management of natural resources in the area of the study could give rise to an understanding of how to influence the peoples' attitudes to be positive in terms of managing the natural resources sustainably. A change of attitude in turn could go a long way in stopping further devastation of the natural resources, thus ensuring their continuous provision of exceptional services to the environment and human.

Research questions

The following research questions were posed to guide the study;

1. How would village square meetings relate with farmers' attitude towards sustainable management of natural resources?
2. How would the usage of town criers relate with farmers' attitude towards sustainable management of natural resources?

Hypotheses

The following hypotheses were formulated for the study:

Ho1: Village square meetings have no significant relationship with farmers' attitude towards sustainable management of natural resources.

Ho2: Usage of town criers has no significant relationship with farmers' attitude towards sustainable management of natural resources.

Methodology

The study adopted a correlational design. The design is suitable for studies whose focus is to determine how a given set of variables are correlated (positive, negative, or no correlation at all). It is a design which is adopted when a study is designed to indicate the magnitude and direction of the relationship between a given set of variables (Idaka & Anagbogu, 2012). The design was adopted due to the perceived relationship between the study's variables. To be specific, the design was adopted due to the perceived relationship between indigenous awareness strategies and farmers' attitude towards sustainable management of natural resources.

The study was carried out in Ikot Ekpene LGA of Akwa Ibom State, Nigeria. It lies between latitudes $5^{\circ}10^{\prime}$ and $5^{\circ}30^{\prime}$ N and longitudes $7^{\circ}30^{\prime}$ and $7^{\circ}45^{\prime}$ E (Oladele et al., 2017). It is bounded to the north by Obot Akara and Ikono LGAs, to the south by Essien Udim LGA, to the east by Ikono LGA and to the west by Obot Akara LGA (Ekpenyong, 2015). The landmass of Ikot Ekpene LGA is 125km^2 . The major waterways in the area are the Obot Aya, Inyang Atamini and Okara rivers. The 2021 projected population for the area is 398,000 (NPC, 2021). The area has 11 political wards with Ikot Ekpene town serving as the administrative headquarters. The indigenous language spoken in the area is called Annang. Their main occupation is farming, weaving and carving as the area is blessed with fertile land, an abundance of raffia trees and wood for carving. Worthy of note is that the headquarters, Ikot Ekpene, is known as the “Raffia City”. Christianity is the major religion in the area. There are four higher institutions in the area namely; School of Nursing, The Akwa Ibom State Polytechnic, St. Joseph Major Theological Seminary and Ritman University. There are secondary and primary schools in the area. The culture is expressed in the following traditional plays – Asian Akananwan, Ekpo, Abiakpo, Uta, Asian Uboikpa, Mbopo, Ikon, and Abang.

The population of the study is 398,000. This is the projected estimate for the year 2021 (NPC, 2021). Purposive sampling technique was employed for the study. This is a sampling technique which affords the researcher the opportunity to intentionally include in his or her sample elements adjudged to satisfy certain pre-determined criteria based on the study’s purpose (Idaka & Anagbogu, 2012). Based on the above sampling technique, four communities in the LGA where there were some remaining pockets of forest were selected and 2% each of their population based on their projected population for 2021 was sampled. The sample consisted of 260 respondents. A breakdown is shown in Table 1.

Table 1: Sample distribution for the study

Sampled community	Projected population of sampled community	Sample
Ikot Inyang	3105	62
Mbiaso	3065	61
Abiaokpo Ikot Essien	3516	70
Amayam	3341	67
Total		260

The instrument for data collection was an 18-item questionnaire designed by the researchers. The questionnaire consists of two sections: A and B. Section A was meant to elicit demographic information of farmers while section B was grouped into three clusters, A, B and C. Cluster A was to elicit information on village square meetings; Cluster B was to elicit information on usage of town criers while cluster C was to elicit information on farmers’ attitude towards sustainable management of natural resources. The instrument was structured on a four-point rating scale with the following response options: Strongly Agree which attracted 4 points, Agree which attracted 3 points, Disagree which attracted 2 points and Strongly Disagree which attracted 1 point for all the positively worded items. For worded item that were negative, the researchers reversed the scoring.

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The validity of the instruments was established as the initial draft of the questionnaire was given to three experts for validation. In order to estimate the internal consistency of the questionnaire, the Cronbach's Alpha was used to test the internal consistency of the instrument. This is because the instrument was in clusters, and the items were not dichotomously scored. The internal consistency indices are .78 and .84 for village square meetings and usage of town criers respectively. Based on the indices obtained, the questionnaire was adjudged adequate to be used for this study.

The data collected from the respondents through the questionnaire were collated and analyzed using mean and standard deviation and Pearson Product Moment Correlation analysis.

Presentation of results

Table 2: Descriptive statistics of the research variables (N=260)

SN	Variables	Mean	SD
1.	Village square meetings	16.27	2.16
2.	Usage of town criers	15.59	2.12
3.	Farmers' attitude towards sustainable management of natural resources	15.21	2.45

The result as presented in table 2 revealed that the mean scores obtained as regard village square meetings and usage of town crier were 16.27 and 15.59 respectively. The result also revealed that a mean score of 15.21 was obtained as regard farmers' attitude towards sustainable management of natural resources in Ikot Ekpene LGA of Akwa Ibom State.

Ho1: Village square meetings have no significant relationship with farmers' attitude towards sustainable management of natural resources.

To test this hypothesis, village square meetings and farmers' attitude towards sustainable management of natural resources were correlated using Pearson Product Moment Correlation. The result of the analysis is presented on table 3.

Table 3: Pearson Product Moment Correlation analysis of village square meetings and farmers' attitude towards sustainable management of natural resources in Ikot Ekpene LGA of Akwa Ibom State (N=260)

Variables	\bar{x}	SD	R	p-level
Village square meetings (X)	16.27	2.16	.153*	.014
Farmers' attitude towards sustainable management of natural resources (Y)	15.21	2.45		

*Significant at .05. $p < .05$; critical r-value=.098.

The result of the analysis in table 3 revealed that village square meetings had a mean score of 16.27 with a standard deviation of 2.16 while farmers' attitude towards

sustainable management of natural resources had a mean score of 15.21 with a standard deviation of 2.45. The result further revealed that the calculated r-ratio of .153 obtained with a p-value of .014 is greater than the critical value of .098; this met the condition required for significance at the .05 level. Hence, the null hypothesis which states that village square meetings have no significant relationship with farmers' attitude towards sustainable management of natural resources was rejected. With the obtained value of .153, it indicated that village square meetings had a significant positive relationship with farmers' attitude towards sustainable management of natural resources in Ikot Ekpene LGA of Akwa Ibom State.

Ho2: Usage of town crier has no significant relationship with farmers' attitude towards sustainable management of natural resources.

To test this hypothesis, usage of town crier and farmers' attitudes towards sustainable management of natural resources were correlated using Pearson Product Moment Correlation. The result of the analysis is presented in table 4.

Table 4: Pearson Product Moment Correlation analysis of usage of town crier and attitude towards sustainable management of natural resources in Ikot Ekpene LGA of Akwa Ibom State (N=260)

Variables	\bar{x}	SD	R	p-level
Usage of town crier (X)	15.59	2.12		
Farmers' attitude towards sustainable management of natural resources(Y)	15.21	2.45	.186*	.003

*Significant at .05. $p < .05$; critical r-value=.098.

The result of the analysis in table 4 revealed that usage of town crier had a mean score of 15.59 with a standard deviation of 2.12 while farmers' attitude towards sustainable management of natural resources had a mean score of 15.21 with a standard deviation of 2.45. The result further revealed that the calculated r-ratio of .186 obtained with a p-value of .003 is greater than the critical value of .098, and this met the condition required for significance at the .05 level. Hence, the null hypothesis which states that usage of town crier has no significant relationship with farmers' attitude towards sustainable management of natural resources was rejected. With the obtained value of .186, it indicated that usage of town crier had a significant positive relationship with farmers' attitude towards sustainable management of natural resources in Ikot Ekpene LGA of Akwa Ibom State.

Discussion of the findings

Village square meetings were revealed to have a significant relationship with farmers' attitude towards sustainable management of natural resources. The result was expected based on the premise that gatherings of ranking members of a given community over issues concerning the area usually lead to decision taking which could serve to influence how developmental strides would be carried out within the community. In addition,

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being that ranking members in any given community are so designated as a result of the responsibilities entrusted to them, adherence to whatever community development decisions they make is usually accompanied by legal prosecution in the event of non-compliance by an individual or group of individuals. The implication here is that village square meetings held in line with sustainable management of natural resources could enable rural dwellers see the need to be favourably disposed towards sustainable management of the resources.

The finding is in consonance with Balooni et al. (2010) who revealed that there exists a disparity in terms of benefits from Joint Forest Management outcomes between a community whose leadership structure was stable and another community whose leadership structure was unstable. In their own contribution Uprety et al. (2012) reported that communities where communal decision-making was fraught with inadequacies and insincere leadership selection processes served to ensure a non-inclusive participation of locals in carrying out such decisions. Similarly, Hussain et al. (2013) found out that locals reported that their leaders needed to be given more authority in order to make them more effective in ensuring that their decisions were being carried out.

The result of the second hypothesis revealed that usage of town criers was significantly related to farmers' attitude towards sustainable management of natural resources. The finding is not considered surprising and could be as a result of the sense of responsiveness to indigenous needs which the farmers attach to announcements made through their town criers. In addition, and closely related to the premise stated above, the finding could also be due to the penalties or fines attached to non-compliance to such announcements in the event of the announcement(s) bordering on action being required to be carried out by the locals. The implication of this finding could possibly be that town criers could serve to make farmers adopt favourable attitudes towards announcements proclaimed within their localities concerning issues such as sustainable management of their natural resources.

The finding is in consonance with that of Chukwurah (2010) who revealed that the indigenous communication strategy of using town criers was being used to promote marketing strategies amongst rural farmers concerning their products. The finding is also in agreement with that of Essien (2014) who found out that information dissemination for rural development was done using town criers. Apata and Toluwase (2015) also reported that utilization of town criers not only served as a vital communication medium amongst farmers but also served as the most utilized communication medium.

Conclusion

This study investigated indigenous awareness strategies and farmers' attitude towards sustainable management of natural resources in Ikot Ekpene LGA of Akwa Ibom State, Nigeria. The variables involved in this study were village square meetings, usage of town criers and farmers' attitude towards sustainable management of natural resources. Village square meetings and usage of town criers had a significant positive relationship with farmers' attitude towards sustainable management of natural resources in the area of the study.

Recommendations

1. Village square meetings and usage of town criers should be encouraged as veritable sources of information for awareness purposes in Ikot Ekpene.
2. Other indigenous awareness strategies in Ikot Ekpene should incorporate the modalities used by village square meetings and usage of town criers in their awareness creation programmes since information from these sources are considered genuine.

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