



Environmental Awareness Creation through the Mass Media: An Important Tool in Sustainable Forest Management in Ogoja Local Government Area of Cross River State, Nigeria

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Abstract

This study investigated the extent to which environmental awareness creation through the mass media influence sustainable forest management in Ogoja local government area of Cross River State, Nigeria. Two null hypotheses were formulated and tested at .05 level of significance. The population of the study comprised of all adult male and female in the area of the study. A sample size of four hundred and seventy (470) respondents was drawn from the population of four thousand seven hundred (4700) using the stratified and simple random sampling technique. A four point modified Likert scale questionnaire titled "Environmental Awareness Creation through the Mass Media and Sustainable Forest Management Questionnaire" (EACTMMSFMQ) was used for data collection. The instrument was validated by two experts in the Department of Test and Measurement in the University of Calabar. The instrument was administered personally by the researchers with the help of two trained research assistants in the area of the study. The data was analyzed using one-way analysis of variance (ANOVA) and a post hoc analysis using fishers' least significance difference (FLSD). The results of the analysis revealed that environmental awareness creation through the mass media (print and electronic media) significantly influence sustainable forest management in the area of the study. Based on the results of the study it was recommended that the government and environmental conservation agencies should make concerted effort to ensure that there is adequate awareness creation

on sustainable forest management through the mass media. More so, the media should ensure that information on sustainable forest management is far reaching and widely spread to the forest communities.

Keywords: Environmental Awareness Creation, Mass Media, Sustainable Forest Management, Ogoja, Cross River State, Nigeria

Introduction

The forest ecosystem, no doubt, performs vital functions to man and the environment. The forest perform economic and medical functions, aesthetic and recreational ecological educational and ethical functions. Man's craze for economic, political and rapid technological development is robbing the forest of life sustaining forces and creating a path to endangerment and extinction of its resources (Anthony, 2012). Today the world at large and the people of Ogoja in particular are facing unprecedented environmental crisis as different forest resources are in the brink of extinction. This ugly situation could be attributed to bush burning over grazing excessive timber extinction, urbanization poor farming practices, population expulsion, poverty, industrialization, civilization indiscriminate fuel wood collection and ignorance of the populace on the need to properly manage the forest.

The above situation has serious consequences to man and the environment both at the local and global levels such as: global warming and climate change, low food production, decrease in farming output, proliferation of diseases, reduction in soil fertility and crop yield, lost of primary forest, uncontrolled erosion/flooding desertification lost of timber and poverty. Anthony and Essien (2017) see awareness creation as a process of sensitizing or enlightening individuals, community and social groups on the impact of their action on the environment as well as sensitizing them on what the environment is and it allied problems. Thus, through awareness creation individuals and communities as well as social groups will

become sensitive and conscious of the problems associated with unsustainable utilization and management of the forest resources. A farmer whose livelihood is dependent on the forest for instance will become sensitive of the impact of bush burning on the forest ecosystem.

The government, non-governmental organization and concern citizens at all levels has made frantic effort to end this ugly trend but the issue remain unabated. This is due to the fact that the people in the study area have refused or are yet to change their behavioural pattern towards sustainable management of the forests. Some are not properly informed on the need to sustainably manage the forest. It is therefore hope that people could be easily informed through the mass media which is far reaching. It is to this end that this study is carried out to investigate the extent to which the mass media could be used as an instrument for creating awareness on sustainable forest management in Ogoja Local Government Area of Cross River State.

Definition of Concepts

The concept awareness creation: Awareness creation is the process of sensitizing the populace or community at large on something. Awareness creation denotes knowledge created through the interaction of an agent and its environment. Simply put it refers to knowing what is going own. It implies helping people to acquire knowledge about the state of the environment. It is a process of helping people to be conscious of something to know and perceive, to feel or to be cognizant of events. Awareness creation is meant to assist individuals monitor and perceive the information surrounding their colleagues and the environment in a cooperative setting (Wikipedia, 2018).

The concept mass media: The mass media according to Wikipedia (2018) is a diversified collection of media technologies that reach a large audience via mass communication. It is the primary means of communication used to reach a vast majority of the general public.

The most common platform for mass media are newspapers magazines, radio, television, film, recorded music and the digital media which comprises both the internet and mobile mass communication. Mass media is communication that reaches a large audience whether written, broadcast or spoken.

The concept sustainable forest management: By sustainable forest management we refer to the process of promoting conservation practices which are environmentally, socially and economically sustainable and which generate and maintain benefits for both present and future generations (Wikipedia, 2018). Sustainable forest management ensures that forest resources are preserved to meet the need of the future generations. It is the practice of regulating forest resources to meet the needs of the society and industry while preserving the forest health. It therefore aim at striking a balance between the demand for the forest and natural resources and the vitality of the forest. It entails making use of forest resources to satisfy the requirements of humanity and business and at the same time protecting it wellbeing. It seeks to maintain equilibrium between the requirements for the forest resources and the health of the forest.

Awareness creation through the mass media and sustainable forest management

The mass media is a major channel of sending messages across to a large number of the public. It is a means through which messages can be sent to a large audience. The role of the mass media in awareness creation on forest management cannot be overemphasized. Keefer and Khemani (2014) stressed that media access can be used to enlighten and convince the populace on sustainable forest management. According to them, reiterated contact to media can create behavioural change about the environment in various dimensions of the society.

Generally all mass media organs in all established societies are expected to fulfill certain responsibilities and these obviously would include creating awareness and mobilizing the public toward

governmental or public oriented programmes. It is therefore evidence that the mass media plays a significant role in enlightening people on the need to safeguard their surroundings. It is in the light of the above that Kitchin (2010) decried the low level of information transmission on environmental issues.

Ogunijimi, Onadeko and Ogunjunmi (2013) maintain that massive support and vigorous participation in sustainable use of resources would only be achieved by educating and informing the general public. Consequently, the mass media has an enormous role to fulfill in the worldwide effort to conserve biodiversity. This is through its function of boosting consciousness on issues that impede efforts to sustainably use forest resources and facilitate modification of human outlook concerning their environment. They further opined that the mass media have grown as an associate in the global management and protection of biological diversity. According to them the role played by the mass media is not only to increase consciousness of the public about the opposition of sustainable use of the environment but helps to modify the views, conducts and attitudes of the public toward forest resources utilization.

UNEP (2006) stressed that the mass media ensure that environmental information is widely distributed to the target population to enable them take action toward the environment. Both the print and electronic media are very instrumental in creating awareness in environmental issues such as the forest utilization and its management. Kiplime and Obiri (2015) observed that the newspaper and television could be used to change people attitudes toward the environment. They are of the opinion that while the newspaper and television could be used to transmit information concerning environmental preservation in the urban areas. The radio on the other hand could be used to reach people in the rural areas. Setyawati and Shaw (2015) are of the opinion that the media is responsible for the widespread environmental awareness. To them the media is undoubtedly the major instrument for generating consciousness concerning the protection of the environment on a large scale.

Anatsui and Adekanye (2013) maintain that the mass media help the populace to develop better perception, familiarity, instruction and information on issues that border on the environment. Roba (2002) maintain that the dilemma of environmental management in any country is attributed to lack of consciousness of the populace. He said that unsustainable consumption of resources could be as a result of lack of consciousness of the masses on the need to preserve such resources for the benefit of the generation yet unborn. He therefore suggested the need of increasing environmental consciousness as a means of realizing the goals of preserving the environment from total decay or degradation.

It is however observed that the major problem facing humanity especially in the aspect of environmental management is lack of consciousness even among the policy formulators. The role of the media in public enlightenment cannot be over emphasized. The media remain the major source through which information on issues of forest utilization and management is disseminated to people in both the urban and rural sector. Through various media strategies, the mass media could be seen as a potent tool that tears off the shroud that veils the dilemma facing environmental management.

Statement of the problem

About 200 years ago the forest ecosystem in Ogoja local government area covered million of hectares. Today the forest is not properly utilized, thus it is facing unprecedented crisis as most forests are in the brink of extinction. This ugly situation could be attributed to excessive timber extraction, ranching, logging, farming, mining, overgrazing, bush burning, indiscriminate fuel wood extraction over population industrialization/civilization and ignorance of the populace on the need to properly manage the forest in the area of the study.

The government through the ministry of environment and forestry commission as well as non-governmental organization has made frantic effort to put an end to this ugly trend. In 2008 to 2015 the

state government came up with a policy to stop excessive extraction of timber in the area. The forest guards were sent to scout for the power chain operators to avoid excessive timber harvesting. It however seems that all these measures put in place to curb the ugly trend has failed to produce the desire result as fuel wood extraction, timber extraction, overgrazing bush burning, ranching and farming activities still continues in the area. It seems most people in the area of the study are ignorant of the need to sustainably preserve the forest. It is based on the above that this study is carried out to empirically investigate the extent to which awareness creation through the mass media could be used as an important tool to sustainably manage the forest in Ogoja Local Government Area of Cross River State, Nigeria.

Purpose of the study

The purpose of this study is to find out the extent to which awareness creation through the mass media influence sustainable forest management in Ogoja Local Government Area of Cross River State Nigeria. Specifically the study seeks to;

1. Examine the extent to which awareness creation through the print media influence sustainable forest management in Ogoja Local Government Area of Cross River State, Nigeria.
2. To find out the extent to which awareness creation through electronic media influence sustainable forest management in Ogoja Local Government Area of Cross River State, Nigeria.

Hypotheses

1. Awareness creation through the print media does not significantly influence sustainable forest management
2. Awareness creation through the electronic media does not significantly influence sustainable forest management.

Methodology

The research design adopted in this study was the survey research design. This design was most preferred because the study drew a representative sample from a large population in order to describe the existing phenomena in the population. Ogoja Local government Area located in the Northern Senatorial district of Cross River State was used for the study. Ogoja Local Government Area is bounded in the North by Bakwerra Local Government Area, in the West by Yala, in the east by Obudu, in the South East by Boki and in the west by Ikom Local Government Area of Cross River State. The local government area has ten political wards. The major occupation in the area of the study is farming. The major languages spoken in the area are “Bakor” and “Mbe”.

A sample of 470 respondents was drawn from the population of 4,700 using the stratified and simple random sampling techniques. The populations of the study consist of adult male and female from the ages of 30 years and above. The questionnaire titled “Awareness Creation through the Mass Media and Sustainable Forest Management Questionnaire” (ACTMMSFMQ) was used for data collection. Expert in the area of test and measurement, Faculty of education university of Calabar validated the instrument. Split half reliability method was adopted to ascertain the reliability estimate of the variables. Thirty adults male and females who were not part of the study sample were used for the reliability test and the reliability coefficient obtained range from 0.74 to 0.87 which was considered high enough for the test instrument. The data obtained was analyzed using one way analysis of variance (ANOVA).

Results

Hypothesis one

Awareness creation through the print media does not significantly influence sustainable forest management. Awareness creation through the print media is the independent variable in this hypotheses and it was categorized as low, moderate and high.

Sustainable forest management is the dependent variables. In testing this hypothesis, one- way analysis of variance (ANOVA) was used.

The result of the analysis is presented in table 1.

TABLE 1
Summary of data and one- way analysis of variance (ANOVA) of the influence of awareness creation through the print media on sustainable forest management (N=470)

Awareness creation through the print media	N		\bar{X}	SD	
Low-1	140		21.82	2.06	
Moderate -2	188		22.20	2.14	
High -3	142		24.60	2.21	
Total	470		25.21	1.90	
Source of variable	Ss	df	Ms	F	p-val
Between group	42.607	2	21.304	6.021	.000
Within group	1652.374	467	3.538		
Total	1694.981	469			

The results on Table 1 revealed that the mean value for responses with high awareness creation through the print media ($X=24.60$) is greater than the mean value of those with moderate level of awareness ($X = 21.82$) through the print media. This implies that people with high level of awareness through the print media manage the forest resources more sustainably than those in other categories. When the differences in these means underwent testing by means of one way analysis of variance the outcome showed that ($F=6.02$, $p<.05$). The implication of this result was that the null hypothesis was rejected while the alternate hypothesis upheld. Fishers' Least significance difference (LSD) multiple comparison analysis was used to carry out a post hoc analysis. Table 2 below shows the result of the analysis.

TABLE 2

Result of multiple comparison analysis using fishers' least significance difference (LSD) on the influence of awareness creation through the print media on sustainable forest management

sub variable	Low (n=140)	Moderate (n=188)	High (n=142)
Low	21.82 ^a	-0.18 ^b	-2.78
Low	1.11 ^c	22.20	-2.48
High	2.67*	3.12	24.60
Ms within = 353			

- a = group means along the principal diagonal
- b = group means difference above the principal diagonal
- c = critical values below the principal diagonal
- * = significance at .05 level of significance

The result of the analysis in Table 2 shows that people who had low awareness creation through the print media on sustainable forest management were significantly different from those whose awareness creation was either moderate or high. The result also shows that people who had moderate level of awareness creation through the print media on sustainable management of the forest resources were significantly different from those whose awareness was high. However, those with high and moderate level of awareness through the print media who sustainably manage the forest were significantly higher.

Hypothesis two

Awareness creation through the electronic media does not significantly influence sustainable forest management. Awareness creation through the electronic media is the independent variables in this hypothesis and it was categorized as low, moderate and high while sustainable forest management is the dependent variables. In testing this hypothesis one- way – analysis of variance (ANOVA) was used. The result of the analysis is presented in Table 3

Table 3
Summary of data and one- way analysis of variance (ANOVA) of the influence of awareness creation through the electronic media on sustainable forest management (N= 470)

Awareness creation through the electronic media	N	\bar{X}	SD		
Low	137	21.82	2.04		
Moderate	206	22.23	2.10		
High	127	23.60	2.21		
Total	470	22.21	1.90		
Source of variance	Ss	Df	Ms	F	p-val
Between group	39.496	2	19.748	5.571*	.000
Within group	1655.485	467	3.545		
Total	1694.981	469			

The result on Table 3 revealed that the mean value for responses with high awareness creation through the electronic media ($X=23.60$) is greater than the mean value of these with moderate level of awareness ($X=22.23$) and those with moderate level of awareness through the electronic media ($X= 22.21$). This result implies that those with high level of awareness through the electronic media manage the forest resources more sustainably than those of other categories. When the differences of this means underwent testing by means of one- way analysis of variance, the result showed that $f= 5.57 < .05$. The implication of this result was a rejection of the null hypothesis while the alternate hypothesis was upheld. This result therefore implies that awareness creation through the electronic media significantly influence sustainable forest management. Fishers' Least significant difference (LSD) multiple comparison analysis was used to carry out a post hoc analysis. Table 4 shows the result of the analysis.

TABLE 4

Result of multiple comparison analysis using fishers’ least significant difference (LSD) on the influence of awareness creation through the electronic media on sustainable forest management

sub variable	Low (n=137)	Moderate (n=206)	High (n=127)
Low	21.82 ^a	-0.41 ^b	-1.78
Low	1.11 ^c	22.23	-1.37
High	2.32 [*]	2.02 [*]	23.60
Ms within = 5.57			

- a = group means along the principal diagonal
- b = group means differences above the principal diagonal
- c = critical values below the principal diagonal
- * = significance at .05 level of significance

The result of the analysis in table 4 shows that people who had low awareness creation through the electronic media on sustainable forest management were significantly different from those whose awareness was high.

Discussion of results

The result of hypothesis 1 and 2 revealed that awareness creation through the print media and electronic media significantly influence sustainable management of the forest. This result is supported by the views of Kiplimo and Obiri (2015) who observed that the newspaper and television could be used to change people attitude towards the environment. Their maintained that while the newspaper and television could be used to disseminate information concerning environmental preservation in the urban areas the radio on the other hand could be used to transmit information to people in the rural areas. More so Setyawati and Shaw (2015) maintained that the media is responsible for wide spread environmental awareness. In a similar manner Anastui and Adekanye (2013) stressed that the mass media

(print and electronic media) help the populace to develop better perception, familiarity, instruction and information on issues that border on the environment.

Conclusion and recommendations

Awareness creation through the mass media (print and electronic media) no doubt is a potent tool of disseminating information on forest resource management. Although it is difficult to obtain this goal, it is however hope that through the mass media which is far reaching people could change their attitude and behavioural pattern towards sustainable management of forest resources. To achieve or record a heart warnings success in tackling the human induced problem, conscious effort must be taken by the government and environmental conservation agencies to ensure that there is adequate awareness creation through the mass media on sustainable forest management. More so the media should do everything at it disposal to ensure that information on environmental preservation especially on the issue of sustainable forest management is far reaching and widely spread to the forest communities.

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