

## COMMUNITY CONSERVATION COMMUNICATION STRATEGIES AND ENVIRONMENTAL PROTECTION IN CENTRAL SENATORIAL DISTRICT OF CROSS RIVER STATE, NIGERIA

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### Abstract

*This research work investigated the community conservation communication strategies and environmental protection in central senatorial district of Cross River State, Nigeria. Five research questions were formulated to guide the study and further converted to five hypotheses. The population of the study comprised one million two hundred and sixty-one thousand rural dwellers. Survey research design was utilized in the study. Stratified random sampling technique was used in the 38 communities and the 400 respondents used for the study. 70 items rating scale questionnaire was the instrument used for data collection. The reliability estimates of the instrument was 0.74 and it was established using Cronbach Alpha Reliability method. The statistical tool for data analysis was simple linear regression at 0.05 level of significant. The result of data analysis revealed that there was a significant influence of traditional media, village mass media, village meetings, folk media community brainstorming on environmental protection. Based on the result of the study, it was recommended that vigorous campaigns or community education about unhealthy agricultural practices and community communication media, should be carried out to discourage high level of deforestation, unsustainable practices of environment and to increase awareness about environmental issues, which will enhance the campaign of sustainable development by protecting and preservation of sensitive ecosystems.*

**Keywords:** Community, Conservation, Communication strategies, and Environmental protection

### Introduction

Community conservation communication is a group of individuals and families living in a geographical location that are educated, trained and information passed to them to be committed on saving large parcels of land from ecological degradation and conservation of environment. Community conservation and communication is an essential tool for protection of our biodiversity through passing information to the society about the relevance of our environmental resources. Ress (2022), maintained that conservation of environmental resources is important for preserving biodiversity, regulating our climate and ensuring a continued provision of vital ecosystem services. By understanding threats of

ecosystem and implementing effective conservation strategy. Which also help our community to protect their valuable environmental resources for future generations. The land can be forested land, agricultural land, ranch land, or any other type of land and its resources that need protection from high impact development. The people are trained and educated on how to protect the ecological health of watersheds (which are damaged by increased development), maintain long term access to natural resources and associated value-added opportunities, protect native plants and animal species, and prevent climate change impacts of intense development practices. Community's focus on maintaining and enhancing the ecological integrity of the land, it is now generally recognized that knowledge is the first step towards protection of the environment and so attempts are made to explore ways to sensitize community's member about our environment. The basic aim of conservation communication strategies is to succeed in making individuals and communities understand the complex nature of the natural and the built environments resulting from the interaction of their biological, physical, social, economic and cultural aspects and acquire the knowledge, values, attitudes and practical skills to participate in a responsible and effective way in anticipating and solving social problems, and in the management of the quality of the environment (Oduntan, Soaga, Akinyemi & Ojo, 2014).

Nigeria Conservation Foundation (2017) established environmental literacy programmes which involve the learned ability to create situations that enhance the maintenance of essential ecological process through formal and informal rural dwellers for the preservation of genetic diversity, ensuring sustainable utilization of species and 'the ecosystem and sustainable development. All these lead to environmental preservation. It is observed that without the environment, there can be no development. Rural dwellers need very urgently adequate dosage of environmental literacy to reduce the risks and hazards of various development efforts in the country. Nigerian Conservation Foundation (NCF 20018). Noted that all environmentally sound development requires an environmentally sound literate persons to be engaged in production, consumption and policy formulation. And further emphasized the need for participatory adult education based on production activities of the adult, and on helping them to restructure needs, goals and in forming policies for the future.

Adekoia, Mbalisi, and Festus (2015) identified community education as a practical community-based approach to environmental adult education which is required to raise the consciousness of the rural dwellers over the consequences of the degradation of the forest ecosystem on them as well as develop in them a sense of responsibility and which also motivate them to take actions to forestall activities whether internal or external that will lead to the degradation of the forest ecosystem. It examines the roles community education can play in preserving and conserving forest and forest resources in Nigeria. The paper established that the relevance of community education with bias on the environment is embedded on the need to protect our forests and their resources to ensure the continuity of the benefits and services provided by the forests to human beings as well as forestalls the phenomenon of deforestation and its excruciating effects on human beings. The Paper therefore concludes that community education of the rural dwellers for forest conservation and

preservation is significant whether or not their (rural dwellers) activities contribute to the degradation of the forest ecosystem.

Samah and Aref (2011) noted that with the awareness about their responsibility for changes to the social environment, the empowered individuals help to promote variety of action in order to enhance the group's function and other community members by informing, inviting, encouraging and organizing them to participate in identifying the problem, prioritizing the needs, deciding (making decisions), and taking part in conducting the group activity project or even action. He also added that, increasingly, with the designed in more intensive and deeply involved people, the active participation is achieved when the problems are identified and shared in a group and the participants are able to define the boundaries of its actions and activities in order to change the environment or situation.

The protection and preservation of the environment is one of the most important thing to be addressed today. The centrality of this issue was demonstrated by the environment conservation, society (ESS) which maintained that its efforts are to build up and disseminate greater knowledge about man-made climate change. There is also natural movement today, cutting across the north to south and east to west to protect and preserve the environment. National laws form a major part of this development. Within this body of national law, dealing with protection of the environment, there exist current concern about the right to a clean, maintain healthy, satisfactory and good environment which will from the status of a human right. The logical corollary fellows those human right mechanism can be used to prevent the degradation of the environment. Conservation activities has its major goal and the goal is environment protection to improve the standard of human lives, there could be established human right to environment which would have its cornerstone to the betterment Oof human lives. This view is anthropocentric. If conflict arose in connection to this goal as human right like the right to development or right to livelihood, environmental protection would get priority as right to environment, right to protect its environment to the good of human lives (Olaniyi, Ogunjemete & Dansu, 2014).

As the concern about environment grows, efforts have been made by environmental conservators to include environmental protection as a mandatory duty of the states, local government and other private organizations towards protection and improvement of environment, safeguarding of forests and wildlife. In addition to aforementioned conservation activities in communities a constitution mandate our society to protect and improve our environment, there are also many post-Independence registrations on the subject to the most important being, the prevention and control of pollution of water, air, land, and the environment. Environmental Act of 2009 (Lauren, 2016).

In another development, Gabriel, Omang & George (2023) investigate women's participation in environmental management in the Central Senatorial District of Cross River State, Nigeria. Empirical, conceptual, and theoretical literature was reviewed in line with the sub-variables of the study. Four research questions and four hypotheses were formulated to guide the study. The survey research design was used for the study. The population of the study comprises 15,000 women in

Central Senatorial District of Cross River State and 150 sample respondents were drawn from the population. The accidental sampling technique was used to select women for the study. The instrument for data collection was a modified four-point likert scale of questionnaires of 30 items constructed by the researcher. Data collected were analyzed using Pearson product-moment correlation. The findings reveal that women's participation in waste disposal, forest management, and tree planting, all put together has a lot to do with environmental management. It was recommended that women should be given more opportunities to participate in the environmental management in their communities; women should be educated on the impact they can create in the management of the environment and more women should be encouraged to participate in tree planting.

Bisong (2015) research project examined cultural practices and conservation of natural resources. The purpose of his study was to investigate the impact of cultural practices on the conservation of natural resources in Yakurr Local Government Area of Cross River State, Nigeria. The study had three null hypotheses which were tested at 0.05 level of significance using Pearson moment correlation analysis. Twenty item questionnaires were designed by the researcher using a four point likert scale model. It was validated by the supervisor and some lecturers in test and measurement and a sample size of two hundred (200) respondents drawn from five (5) major communities in the study area. Findings from analysis of data revealed that there was a significant relationship between cultural practices and conservation of natural resources in Yakurr. Based on these findings appropriate recommendation were proffered among which were that, traditional religious practices should be strengthened to protect sustainable utilization of natural resources and that conservation agencies should work with community based organization on natural resources conservation.

NCF (2014) uphold that part of an extensive community development strategy of building the capacity of people to work collectively in addressing their common interest is another good example for how to provide community participation by education, poor participation in protecting the forest is still one reason for inefficiency of forest management and conservation. Many efforts have been made in order to figure out the most suitable educational approaches and promotion for participation in forest conservation, especially with the great supports from non-governmental organizations (NGOs) and institutions in protection.

Eneji (2005) in his contribution identifies rural and urban dwellers consumption pattern of wildlife resource impact on biodiversity conservation. Calabar was chosen for the urban area while Bekwarra was taken for the rural area. A total of 530 respondents were sampled for the study using questionnaire. The data was subjected to chi-square, correlation and t-test analysis and one way ANOVA. The result from the analysis showed that the rural dwellers consumption pattern impact more seriously on biodiversity conservation than the urban dwellers. The research identified some factors which encourage the consumption of wildlife to include taste, cost and willingness to pay, accessibility and presence of alternatives and so on, and validate this factor as how its influence wildlife conservation. The researcher designed seven research hypotheses. Based on the findings, the researcher made some recommendation' on wildlife consumption suggested what should be done about the consumption pattern as it affects biodiversity conservation in environment.

Ibinna (2016) conducted a study on assessing the influence of community awareness and attitude to forest resource conservation in Cross River State. Over the years community activities on the environment has drastically affected the forest ecosystem without any effort in providing an alternative to ensure the sustainability of the natural ecosystem. The study attempts to examine the influence of community awareness and to forest resource conservation. Ten communities were used in this study and of which six hundred questionnaires were administered using random sampling technique. Finding indicate that the indigenous community's attitude and awareness to forest conservation and protection was very poor as affirmed in the data collected for the study in the area. Therefore, adequate measures must be put in place to ensure effective conservation of the forest ecosystem.

Edoh (2016) research on the attitude of women towards forest resources conservation and community development in Abi local government area of Cross River State. To achieve the purpose of his study, four null hypotheses were formulated and tested at 0.05 level of significance. The ex-post fact research design was considered most suitable for the study. The simple random sampling was adopted in selecting the communities while quota sampling technique was adopted in selecting the two hundred and twenty-one (221) respondents used for the study. A validated twenty five item four point likert scale questionnaire was the instrument used for data collection. To test the hypotheses formulated for the study, Pearson product moment correlation statistical tool was used for data analysis. The result obtained from analysis of data and testing of hypotheses in the study revealed that there is a significant relationship between sustainable forest management, sustainable water management, sustainable land management and community development. Based on these findings it was recommended among others that community leaders should ensure that forest conservation efforts in their areas are sustained and expanded so as to maximize the benefits associated with sustainable forest management.

### **Statement of Problem**

The high level of environmental degradation and loss of variety of species of plant, animal and climate changes existing in this area remains one of the most challenging environmental problems of the communities or nation. It is clearly observed in research reports that about 75% of the people living in this research area are involved in activities such as agriculture, fish farming, and industrial activities and felling of trees, activities that generate air, water and land pollution, erosion and deforestation.

Declining soil fertility and productivity resulting from these human activities in both rural and urban areas are known to pose serious threat to life, security on man, faunas and floras. A close observation shows that the various human activities like commercial, industrial, transportation, urbanization and agricultural activities in Central Senatorial District of Cross River State has negative impact on the overall environment. In the process of carrying out these economic activities natural vegetation is removed by man and replaced by ecologically permanent bare areas as often covered by artificial things. Deforestation carried out in the study area expose the environment to direct and

intensives sun radiation. Carbon monoxide is released into the atmosphere which leads to the depletion of the Ozone layer. In addition to these activities, individuals uproot and cut down trees for building, clear forest for farming, use herbicide for killing of grasses and chemical for killing of fishes which has resulted to environment pollution and degradation.

Efforts have been made by government to strongly address the issue of environmental degradation and encourage the protection of the environment. Among these efforts is the reservation of tracts of forest areas and their biotic components, the enactment and implementation of environment laws etc. Nigeria has participated in all major international initiatives and is signatory to a good number of international treaties, protocols and conventions. Among these conventions is the framework convention on climate change and the Biodiversity Conservation Convention signed at Rio in 2020, the Convention on Drought and Desertification of 2022, the Convention on international Trade in Endangered Species of Wild Flora and Fauna (CITIES) etc. All these efforts of government have yielded no desired result because of the vast employment opportunities which the environment provides cannot be undermined especially in country whose unemployment rate is high; exploiting the environment for survival has become the last resort. It is based on this problem; the researcher posed a question; “Does Conservation activities influence environmental protection in Central Senatorial District of Cross River State?”

### **Purpose of the Study**

The purpose of the study was to examine the influence of Conservation activities on environmental protection in Central Senatorial District of Cross River State, Nigeria. Specially, the study sought to:

1. Examine the influence of traditional media on environmental protection.
2. Assess the influence of village meetings on environmental protection.
3. Determine the influence of folk media on environmental protection.
4. Ascertain whether community brainstorming influence environmental protection.

### **Test of Hypotheses**

The following hypotheses were tested at 0.05 level of significant.

Ho1: There is no significant influence of traditional media on environmental protection

Ho2: There is no significant influence of village meetings on environmental protection.

Ho3: There is no significant influence of folk media on environmental protection.

Ho4: There is no significant influence of Community brainstorming on environmental protection.

### **Methodology**

The research design adopted in this study was descriptive survey design. The approach was utilized due to the focus of the study which is to obtain data about the study’s population. Specifically, the approach was used to obtain data in order to describe the present trend of the influence of community conservation communication strategies and environmental protection in central senatorial district of Cross River State, Nigeria. The total population of the study area is 1,261,000 drawn from the six

LGAs of central senatorial district. Stratified random sampling techniques was used to select the sample for the study. Stratified sampling is a form of probability sampling characterized by the used of sub-groups in the study area is subdivided into strata and members were selected based on that ground. The sample for the study was 400 respondents which is 0.5% of the total population proportionally selected from 1,261,000 rural dwellers and 38 communities out of 129 communities in central senatorial district of Cross River State. However, of the 400 administered copies of questionnaire for this study, only 398 properly filled and returned copies were used for data analysis. The instruments used for the study was titled “Community Conservation Communication Strategies and Environmental Protection Questionnaire (CCCSEPQ)”. To ensure content validity of the instrument, draft copies of the instrument were given to the experts in test and measurement. This was to ensure that the items measure what they are meant to measure and to ascertain the extent to which the items of the instrument were related to the content of the variables under study. The reliability of the instrument was established through trial test. The trial testing was used to determine whether the instruments measure consistently what is supposed to measure. Thirty (30) copies of the questionnaire were administered to thirty (30) persons from the five communities in the two local government areas purposively selected which were not included in the study sample. This was to find out if there were discrepancies in the items of the instrument for the study. Data from the respondents were coded, scored, and analyzed using the Cronbach Alpha Coefficient method to determine the consistency of the instrument. The reliability coefficient value of 0.74. Validated questionnaires were administered by the researcher to the sample communities and schools by the researcher assistants of the community leaders. Items in the questionnaire were constructed on a four-point Likert scale and the statistical tool used was One Way Analysis of Variance (ANOVA)

### Result of the Findings

Ho1: There is no significant influence of traditional media on environmental protection.

Table 1: Simple linear regression analysis of the influence of traditional media on environmental protection (N=398)

	R=.456	R <sup>2</sup> =.208	Adj. R <sup>2</sup> =.206	St=3.64065	
	SS	Df	MS	F	Sig
Source of variance					
Regression	1375.753	1	1375.753	103.796	.000
Residual	5248.721	396	13.254		
Total	6624.475	397			

Furthermore, the regression ANOVA revealed there was a significant positive influence of traditional media on environmental protection  $F(1,397) = 103.796$ ;  $p < .05$ . Based on this result, it was revealed that traditional media is an effective means of environmental protection in the study area.

HO2: There is no significant influence of village meeting on environmental protection.

Table 2: Simple linear regression analysis of the influence village meeting on environmental protection (N=398)

	R=.402	R <sup>2</sup> =.162	Adj. R <sup>2</sup> =.159	St=3.74505	
	SS	Df	MS	F	Sig
Source of variance					
Regression	1070.415	1	1070.415	76.320	.000
Residual	55554.060	396	14.025		
Total	6624.475	397			

The regression ANOVA revealed that there was a significant influence of village meeting on environmental protection  $F(1, 398) = 77.185$ ;  $p < .05$ . This implied that as communication strategies increases, environmental protection increases. On the other hand, as the village meeting decreases, environmental protection will continue to decrease in the study area

The result of analysis presented in Table 2 showed that the predictor or independent variable (village meeting) significantly influences the predicted variable (environmental protection) in Central Senatorial District of Cross River State. The predictor variable accounted for only 16.3 % of the variance in environmental protection.

HO3: There is no significant influence of folk media on environmental protection.

Table 3: Simple linear regression analysis of the influence of folk media on environmental protection (N=398).

	R=.404	R <sup>2</sup> =.163	Adj. R <sup>2</sup> =.161	St=3.44152	
	SS	Df	MS	F	Sig
Source of variance					
Regression	914.177	1	914.177	77.185	.000
Residual	4690.239	396	11.844		
Total	5604.417	397			



The regression ANOVA revealed that there was a significant influence of folk media on environmental protection  $F(1, 397) = 127.034$ ;  $p < .05$ . This implied that as folk media increases, environmental protection increases. On the other hand, as folk media decreases, environmental protection will continue to decrease in the study area. The result of analysis presented in Table 3 showed that the predictor or independent variable (folk media) significantly influences the predicted variable (environmental protection) in Central Senatorial District of Cross River State. The predictor variable accounted for only 24.3 % of the variance in environmental protection.

Ho4: There is no significant influence of Community brainstorming on environmental protection.

Table 4: Simple linear regression analysis of the influence of brainstorming on environmental protection (N=398)

	R=.493	R <sup>2</sup> =.243	Adj. R <sup>2</sup> =.241	St=3.55886	
Source of variance	SS	Df	MS	F	Sig
Regression	1608.950	1	1608.950	127.034	.000
Residual	5015.524	396	12.665		
Total	6624.475	397			

The regression ANOVA revealed that there was a significant influence of Community brainstorming on environmental protection  $F(1, 628) = 248.037$ ;  $p < .05$ . This implied that as community brainstorming increases, environmental protection activities increase. On the other hand, as Community brainstorming decreases, environmental protection activities will continue to decrease in the study area. The result of analysis presented in Table 4 showed that the predictor or independent variable (Community brainstorming) significantly influences the predicted variable (environmental protection activities) in Central Senatorial District of Cross River State. The predictor variable accounted for only 28.3 % of the variance in environmental protection.

### Discussion of Findings:

It was revealed in the study that traditional media is an effective means of environmental protection in the study area. This finding tallies with the finding of NCF (2017) which established environmental literacy program which involved the learned ability to create situations that enhance the maintenance of essential ecological process through formal and informal rural dwellers for the preservation of genetic diversity, ensuring sustainable utilization of species and the ecosystem and sustainable development. All these lead to environment preservation. It was observed that without the environment, there can be no development. Rural dwellers need very urgent adequate dosages of environmental literacy to reduce the risk and hazards of various development efforts in the country.

NCF (2018) noted that all environmental sound development requires an environmental sound literate person to be engaged in production, consumption and policy formulation.

The result showed that there was no significant influence of village meeting on environmental protection. This finding correlates with the findings of Gabriel, Omang and George (2023) investigate women's participation in environmental management in the Central Senatorial District of Cross River State, Nigeria. The findings revealed that womens' participation in waste disposal, forest management, and tree planting, all put together has a lot to do with environmental management It was recommended that women should be given more opportunities to participate in the environmental management in their communities; women should be educated on the impact they can create in the management of the environment and more women should be encouraged to participate in tree planting.

NCF (2014) uphold that part of an extensive community development strategy of building the capacity of people to work collectively in addressing their common interest is another good example for how to provide community participation by education, poor participation in protecting the forest is still one reason for inefficiency of forest management and conservation. Many efforts have being made in order to figure out the most suitable educational approaches and promotion for participation in forest conservation, especially with the great supports from non-governmental organizations (NGOs) and institutions in protection.

There is no significant influence of folk media on environmental protection. The independent variable in this hypothesis is folk media while the dependent variable is environmental protection. The result of analysis presented in Table 3 above shows that the predictor or independent variable (folk media) significantly influenced the predicted variable (environmental protection) in Central Senatorial District of Cross River State. The predictor variable accounted for only 24.3 % of the variance in environmental protection. The result obtained from the data analysis and the testing of hypothesis three agree with Eneji (2005) in his contribution identifies rural and urban dwellers consumption pattern of wildlife resource impact on biodiversity conservation. Calabar was chosen for the urban area while Bekwarra was taken for the rural area. A total of 530 respondents were sampled for the study using questionnaire. The data was subjected to chi-square, correlation and t-test analysis and one way ANOVA. The result from the analysis showed that the rural dwellers consumption pattern impact more seriously on biodiversity conservation that the urban dwellers.

The research identified some factors which encourage the consumption of wildlife to include taste, cost and willingness to pay, accessibility and presence of alternatives and so on, and validate this factor as how its influence wildlife conservation. The researcher designed seven research hypotheses. Based on the findings, the researcher made some recommendation' on wildlife consumption suggested what should be done about the consumption pattern as it affects biodiversity conservation in environment.

The result obtained from data analysis and testing of hypothesis four lead to the rejection of null hypothesis while the alternative was accepted and retained. This implies that community brainstorming has significant influence on environmental protection in Central Senatorial District of

Cross River State. The finding of this study also supports the finding of Samah and Aref (2011) which noted that with the awareness about their responsibility for changes to the social environment, the empowered individuals help to promote variety of action in order to enhance the group's function and other community members by informing, inviting, encouraging and organizing them to participate in identifying the problem, prioritizing the needs, deciding (making decision), and taking part in conducting the group activity project or even action. He also added that, increasingly, with the designed in more intensive and deeply involved people, the active participation is achieved when the problems are identified and shared in a group and the participants are able to define the boundaries of its actions and activities in order to change the environment or situation.

### **Conclusion**

Based on the results of the study, it was concluded that there is a significance relationship between community conservation communication strategies and environmental protection in Central Senatorial District of Cross River State. The findings from the study showed that there is a significant influence of traditional media, village mass media, village meetings, folk media, community brainstorming on environmental protection in the study area. Several aspects of tropical rainforest and savanna environment are increasingly being polluted, and if allowed to continue unchecked would destroy the life of animals, human lives, plants and resources in the years ahead. The level to which humans put their environmental resources and the way they extract or make use of these resources sometime interface with the ecological balance and influence the environment negatively. The protection and preservation of the environment is one of the most important issues facing mankind today. The centrality of this issue was demonstrated by the Nigeria conservation foundation, which maintained that its efforts are to build up and disseminate greater knowledge about man-made climate change and management of forest resources.

### **Recommendation**

The researcher made the following recommendations based on the findings of this study;

- i. Government at all level should demonstrate strong political will by training and empowering young entrepreneurs as this will lead to creation of self-employment and reliance that will diversity the attention of residents from utilizing environmental resources unsustainably.
- ii. Vigorous campaign or community education about unhealthy agricultural practices should be carried out to discourage high level of deforestation, unsustainable practices of fish harvesting and to increase awareness about environmental issues, which will enhance the campaign of sustainable development by protecting and preservation of sensitive ecosystems.
- iii. Conservation clubs should be formed in villages at regular intervals in order to mobilize people towards developing positive attitude towards environmental resources management.
- iv. Traditional religious practices should be strengthened to encourage sustainable utilization of natural resources and that conservation agencies should work with community-based

- organizations on environmental resources conservation.
- v. Policies that will help in prioritizing strategies in protected areas and management should be adopted.

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