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Education For Sustainable Forest Management Practices and Forest Conservation among Farmers in Obudu Local Government Area, Cross River State, Nigeria

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Abstract

The main purpose of this study was to investigate education for sustainable forest management practices and forest conservation among farmers in Obudu Local Government Area, Cross River State, Nigeria. To give direction to this study, two research questions were raised and transformed into two null hypotheses based on the variables under study. The review of related literature was carried out accordingly in line with the specific objectives raised. Survey research design is adopted for the study. The targeted population was all the farmers in Obudu Local Government Area, Cross River State. Multiple sampling techniques were adopted in selecting the wards and six hundred and sixty-seven (667) respondents used for the study. A twenty (20) items modified four point Likert scale questionnaire titled "education for sustainable forest management practices and forest conservation Questionnaire" (ESFMRFCQ) was used for data gathering. To test the hypotheses formulated for the study, simple linear

	regression statistical tool was used for data analysis. The hypotheses formulated were tested at .05 level of significance. The result of the analyses revealed that afforestation and selective exploitation significantly influence forest conservation in the research area. Based on the findings it was recommended among other that forest afforestation should be expanded and intensified in the study area in order to enable farmers developed better and improved forest conservation.

Introducation

Today's education is crucial to the ability of present, future leaders and citizens to create solutions and find new paths to a better future. Education for sustainable management (ESM) is not a particular programme or project, but is rather an umbrella for many forms of education that already exist, and new ones that remain to be created. ESM promotes efforts to rethink educational programmes and systems (both methods and contents) that currently support unsustainable societies.

Forests are an important part of our state and local government's environment and economy. When forests are well managed, through new educational leads, they provide clean air and water, homes for wildlife, beautiful scenery, places for recreation and more than 5,000 products we all use every day. When they are not well managed, forests are often unhealthy and unproductive because of overcrowding, disease, insects, and competition for light, water and nutrients. To maintain or improve the health and productivity of a forest and to achieve the objectives for forest conservation, foresters and policies makers use a number of management techniques, including afforestation (reforestation), forest regulation, selective exploitation and awareness creation.

Even with the energy channelled by foresters, the government of Obudu, Cross River State and None Governmental Organization's (NGO's) to encouraged education for sustainable forest management practices and forest conservation, the rate of deforestation and forest degradation are still growing in geometric rate. Forest degradation is the disintegration of the earth or deterioration of the forest environment through consumption of assets, for example, air, water and soil; the destruction of forest environments and the eradication of wildlife. It is characterized as any change or aggravation to forest's turf seen to be pernicious or undesirable.

Education for sustainable forest management practice is the management of the interaction and impact of human societies on the forest. It is not, as the phrase might suggest, the management of the forest itself. Sustainable forests management aims to ensure that ecosystem services are protected and maintained for future human generations, and also maintain ecosystem integrity

through considering ethical, economic, and scientific (ecological) variables. Sustainable forest management tries to identify factors affected by conflicts that rise between meeting needs and protecting resources. It is thus linked to forest protection and sustainability (Ministry of Lands and Environment, 2002).

FAO (2020) noted that trees are a renewable resource. This means that they can be grown, harvested, replanted (afforestation) and harvested again and again in a never-ending cycle to provide clean air and water, habitat for wildlife, beautiful views and thousands of products both today and in the future. The process of growing trees on an area that previously has been harvested or cleared is called afforestation.

A variety of policies have been adopted following international standards to increase local control and promote community-based management in forests. Despite the lack of implementation and enforcement of the proposed policies, forest conservation activities (e.g., enhancing tree planting and natural regeneration, forest protection at a catchment scale to conserve biological and cultural diversity, forest resources extraction regulation, promotion of beekeeping) indicate that rural communities have the potential to take over the management of customary and public forest lands (Coutts, Holmes & Jackson, 2019).

UNDP (2017), also pointed out that there is need to make citizens sensitive (awareness creation) towards nature through a strong programme of forest conservation. Forest conservation awareness strategies involves creating knowledge, understanding and values, attitude, skills and abilities through seminars, agricultural extension services, mass media, government policies, community based organizations, textbooks, journals, newspapers, and more among individuals and social groups towards the issues of forest conservation for attaining a better quality forest. It on the background of curiosity the researcher investigates education for sustainable forest management practice and forest conservation among farmers' in Obudu Local Government Area, Cross River State.

Research questions

The following research questions were raised to guide the study:

1. How does afforestation influences farmers' forest conservation practice?
2. How does selective exploitation influence farmers' forest conservation practice

Statement of hypotheses

The following hypotheses were formulated to guide the study:

1. Afforestation has no significant influence on farmers' forest conservation practice.
2. Selective exploitation has no significant influence on farmers' forest conservation practice.

Literature Review

Education for sustainable forest management practice: is the management of the interaction and impact of human societies on the forest. It is not, as the phrase might suggest, the management of the forest itself. Sustainable forests management aims to ensure that ecosystem services are protected and maintained for future human generations, and also maintain ecosystem integrity through considering ethical, economic, and scientific (ecological) variables.

Afforestation practices and forest conservation

Deforestation is the cutting down of trees to make way for more homes and industries. Rapid growth in population and urban sprawl are two of the major causes of deforestation. Apart from that, use of forest land for agriculture, animal grazing, harvests for fuel wood and logging are some of the other causes of deforestation. Deforestation contributes to global warming as decreased forest size puts carbon back into the environment. Deforestation is a major promoter of forest degradation and hinders forest conservation (FAO, 2020).

Forest degradation and deforestation are the major causes of environmental diversity lost. Cross River State is experiencing adverse climate conditions with negative impacts on the welfare of millions of people. Farmers are complaining of Persistent droughts and flooding, off season rains and dry spells have sent growing seasons out of orbit, on a country dependent on a rain fed agriculture. Climate change is an unprecedented phenomenon and poses threats to food security in Nigeria as the rain forest regions of Nigeria including that of Cross River State are changing with regards to crops planting seasons.

The two basic methods of afforestation are natural regeneration and artificial regeneration. Natural regeneration relies on nature to return an area to forestland after trees are harvested. Through natural regeneration, new trees grow from seeds that are carried by the wind, transported or buried by animals, or that are simply dropped on site by mature trees. In addition to producing seedlings from seeds, hardwood trees regenerate naturally by sprouting new growth from the stumps of cut trees. Artificial regeneration involves human intervention in sowing seeds or planting seedlings. This method of forest renewal has several advantages over natural regeneration. It provides better control over tree spacing, more control over the species present in the new forest, the opportunity to plant genetically improved seeds or seedlings, and a higher rate of tree survival. Although artificial regeneration is more expensive than natural regeneration, the result is usually a more productive stand in a shorter period of time (FAO, 2020).

The annual rate of deforestation in Nigeria is of major concern and a viable option to mitigating this is through implementation and enforcement of sound Forest Policy. Towards this goal, the country is in the process of reviewing her 1988 Forest Policy. Also being prepared is Forestal

Guidelines on Logging and Fuelwood Extraction. It is hoped that when these two instruments are enforced Nigeria would attain sustainable development and utilization of her forest resources (Dudley & Phillips, 2006).

It is well acknowledged that Non Timber Forest Products (NTFPs) contributed substantially to the rural economy and hence strategies are being developed for the propagation of high potential NTFPs in each ecological zone of the country. No compensation is provided for forest owners who market forestal benefits to the society. Incentives are provided to enable them to manage their forest sustainably in addition to facilitating their access to improved tree seeds/seedlings in their communities (Dudley & Phillips, 2006).

In order to successfully combat the myriad environmental problems that currently bedevil our nation, government at the three tiers must rise to the occasion and ensure that certain critical issues are tackled immediately that include: the urgent need for a reviewing, updating, re-enacting and vigorous enforcement of enabling laws on environmental compliance, although Nigeria cooperates actively with International Agencies and is a signatory to several Environmental Conventions, very little effort is usually made to activate, domesticate and apply the articles of the Conventions for sustainable environmental development in Nigeria. For instance, it is necessary to vigorously pursue the implementation of afforestation programmes in order to meet the 25% forest cover of total land area as recommended by the Food and Agriculture Organisation (FAO, 2020, Onnoghen, Unimtiang & Ogbaj, 2023).

In order to address the problem of deforestation in Nigeria several on-going programmes and projects on reforestation and afforestation have been initiated. The ADB assisted Forestry Project started in 1987 and it continued with a loan of US $100 million. Before the Forestry II Programme of 1987, a World Bank Forestry I Programme was earlier concluded in 1986 (World Bank, 2020).

Nigeria was once covered by extensive vegetation varying from humid tropical forests in the south to savanna grasslands in the north. A great percentage of this luxurious vegetation has been removed in the course of various human activities. Presently, forest reserves cover about 10% of the National territory, mostly of the savanna woodland type. The southern rain forest, the source of the country's timber resources, covers only 2% of the total land area of Nigeria. It is being depleted at an annual rate of 3.5% per year. This implies deforestation on a large scale. The persistent decline in the National forest has been a source of concern to the Federal Government. In order to arrest this situation, the Government has embarked on several programmes and projects on reforestation and afforestation (FAO, 2020, Onnoghen, Unimtiang & Ogbaj, 2023).

Nigeria has the objective to increase the forest reserve from the present 10% to 25% of the total land area by the 2010. Worldwide forest reserves are intended to secure and retain land under forest. This is a prerequisite for effective and prudent forest estate development. In many

developed and developing countries, the forest estate covers at least 25% of the total land area, the minimum level required by international standards. The first indicative forest inventory project completed in Nigeria in 1977 put reserved forest at approximately 10% of the total land area. Between 1976 and 1990, deforestation proceeded at an average rate of 400,000 ha per annum, in 2001-2015 at 3.48%, while in 2016-2020 it was 3.57%, including the loss of some forest reserves (World Bank, 2020).

FAO (2020) has concluded that if this rate is maintained, the remaining forest area in Nigeria will disappear by the year 2030. The value of lost forest cover has been estimated at US $750 million annually at 1989 prices. The degradation and depletion of the forest reserve base has major effects on other sectors of the economy. The disappearance of forest cover leads to erosion, soil Degradation, and unfavourable hydrological changes.

The World Bank has estimated that the value (in terms of avoided costs) of forest cover which protects and regulates soil, water, wildlife, biodiversity, and carbon fixation at over US$5 billion annually (World Bank, 2020). There is need to address this enormous loss to ensure sustainable provision of goods and services including wood, protection of soil and water reservoir areas, stabilization of the hydrological regime, carbon sequestration, and provision of habitat for numerous fauna and flora. Forest Management in Nigeria today is mostly limited to government programmes. All the forest reserves, which form the bulk of the nation's productive forest, are under the management of the States or Local Governments. The forest outside forest reserves (free areas), where most of the wood products in the market comes from, are not put under any form of systematic management.

The forest reserves have for sometime been seriously neglected and have received little or no improvement in terms of investment and management. However, after the UNCED, a number of positive developments have taken place to help the country achieve sustainable forest management.

Selective exploitation and forest conservation

There are 1,900 hectares of forests and woodlands in Obudu Local Government Area, which cover 44% of the land area (Ministry of Lands and Environment, 2002). The majority (39%) of the forest area is woodland, 60% is tropical high forest and less than 1% is plantation (Ministry of Forestry and Wildlife, 2017). In addition, there are substantial forest resources in the form of scattered trees and agro-forestry crops within farming systems. The existing natural forests on private land and in government reserves are the major source of timber and non-timber forest products. The volume of timber used for construction, furniture making and manufacture of other products is estimated at 800,000 m^3 per year (NEMA, 2011, Onnoghen, Unimtiang & Ogbaj, 2023).

A further 75,000 m^3 per year is harvested in form of construction poles. Kayang forest is one of the natural forest reserves where selective logging has been practiced since the 1960's after the colonial Forest Department identified and documented different species. The timber trees in the forest reserves were categorised as desirable species when the tree had diameter at breast height (DBH) exceeding 50cm above buttresses and with good form (NEMA, 2011).

There are very few places where sustainable management of tropical forests has been attempted for long enough to measure the impact of logging operations on the fauna and flora. This is particularly so where monocyclic or uniform harvesting systems are used, because of the long-term rotation periods between felling cycles which are of the order of 60-80 years. In the 1970s, it was reported that selective logging at a rotation of 40 years caused damage to Kayang forest (Plumptre, 2016).

Later, the rotation was increased to 80 years (Paterson, 2019). By the 1990s use of arboricides was stopped mostly due to the cost of the chemicals as well as the realization of the growing markets for some of the species that were previously considered less valuable(Paterson, 2019).

Thus, as Kityo and Plumplre (2017) in Onnoghen, Unimtiang and Ogbaj (2023) noted, high demands for the limited supplies of timber species resulted in over exploitation, while those species that were considered to be of poor timber quality were under-utilised. For instance, Celtis species that occurred in large quantities provided good timber, while Cynometra alexandri, which is five times more abundant than any other preferred species is under-utilised.

Non-timber forest products (NTFI') can be defined as all intangible and tangible forest products other than timber. However, definitions vary according to different forest resource stakeholders. NTFP include medicines, craft materials and rood, whose value is significant to the communities neighbouring the forest (Banana, 2003).

Research Methodology

The research deign that was adopted for this study is the survey research design. Ndiyo (2005) defined a survey research as a scientific experiment conducted on a large scale on a defined population to determine some desirable characteristic of a population. Survey research is a research that is directed towards determining the nature of the situation that exits at the time of investigation. He describes that it is a type of research that studies large and small population by selecting and studying sample chosen from the population to discuss the relative incidence distribution, interrelation of sociological variables. Survey research deigns is therefore useful for opinion and attitude studies.

The research area for this study was the entire Obudu Local Government Area of Cross River State. Obudu Local Government Area on the north is bounded with Obudu Local Government Area, on the South with Etung Local Government Area, on the East by Ikom/Ogoja Local Government Area.

The local government lies between longitude 8º22'E and 9º12'E of the Greenwich meridian and latitudes 5o5'N to 6º15w of the equator. The local government area is known for promotion of cultural festival and tourist attraction that sustains the local government policy for peaceful co-existence among members of the society, talents discovery and arts exhibition.

Educationally, primary, post primary schools abounds in Obudu Local Government Area. Obudu Local Government Area land and forest are fertile for the cultivation of crops such as yams, cassava, groundnut, palm oil and palm wine. Travelling across the local government area, most communities display the stereotype of crops produced as a heritage that must be presented which encourages individuals to be productive citizens.

The population of the study comprises all the farmers in Obudu Local Government Area, Cross River State. There are sixteen thousand, seven hundred and thirty (16730) registered farmers in Obudu Local Government Area, Cross River State. Female farmers dominate the population in the research area with 9030 while the males are 7700.

The researcher adopted multiple sampling techniques to select the sample for this study. Simple random sampling again will be used to select wards used while accidental sampling technique will be used to administer the instruments to the number of subjects used as sample. To do this, names of Wards in Obudu Local Government (stratum) will be written each in piece of paper, folded and put in a container and properly shuffle together. Those that picked yes will be used as respondents in the study while those that picked no will be dropped.

The sample for this study was 667 male and female farmers from six (6) wards in Obudu Local Government, Cross River State. The number of farmers selected was to obtain adequate representative samples of farmers from the Local Government Areas. All the selected wards in the LGA were used to ensure equal representation in the study. Out of the respondents selected for the study, 343 are female while 324 are male respectively.

The instruments used for data collection was a set of survey questionnaire called "Climate Change Awareness Strategies and Farmers Climate Change Mitigation Measures Questionnaire" (CCASFCCMMQ). The questionnaire was divided into three sections A, B and C. Section A focused on the personal data of the farmers such as sex, age, local government area of farmer, educational qualification. Section B elicited information on the various climate change awareness strategies under studies while section C measure mitigation measures among farmers.

The researcher with the help of research assistant carryout the administration of the questionnaire in all the wards that were selected to participate in the study. There was prior

notice given to all the heads of the villages selected notifying them about the researcher's intention to visit their village.

The instrument was administered on the sample group under the closed supervision of the researcher and research assistants. The research assistants were trained of the techniques involved in the administration of the instruments. There are therefore asked to ensure individual farmers' concentration and also prevent exchange of information and discussion of any form among the subjects. Six hundred and sixty seven (667) copies of questionnaire were administered, but six hundred and fifty two (652) were properly filled and returned.

The researcher developed a key, which served as a guide for coding the data collected for, analysis. The items on the questionnaire were sorted based on the variables measured.

The total number of the responses ticked (√) in each of the section covering all the variables under the study was added. The total scores for each section were recorded against these variables. Linear regression statistical technique will be use in the analysis. These scores will be recorded on the blank column as indicated by the researcher.

The items was scored on a four point likert scale ranging from Strongly agree (SA), Agree (A), Disagree (D) and Strongly disagree (SD) for each worded items. The scores were in this order:

(for positive worded items). `	(for negative worded items)
SA----- 4	SA------- 1
A-------3	A--------- 2
D--------2	D-------- 3
SD-------1	SD------- 4

But the reverse is the case for negatively worded items. The questionnaires were presented in order to remove ambiguity and misinterpretation before administrating them to the actual samples.

Results and Discussion

Presentation of results

In this section, each of the study hypotheses is restated in the null form. The results of data analyzed and their interpretation are presented. The presentation is done hypothesis by hypothesis followed by interpretation of results obtained from the analysis of data. Each hypothesis is tested at 0.05 level of significance.

Ho:1

Afforestation does not significantly influence forest conservation among farmers. The independent variable in this hypothesis is afforestation while the dependent variable is forest

conservation among farmers. Simple linear regression statistical tool was used for data analysis. The result of this analysis is presented in Table 1.

The result of analysis presented in Table 1 showed that the predictor or independent variable (afforestation) does not significantly influence the predicted variable (forest conservation among farmers). The predictor variable accounted for only 0.7% of the variance in forest conservation among farmers in Obudu Local Government Area, Cross River State. This showed a very insignificant relationship between the predictor and predicted variables.

Furthermore, the regression ANOVA revealed there was a weak significant positive influence of afforestation on forest conservation among farmers F (1, 650) = 4.786; p>.05. Based on this result, it was revealed that if more intensive afforestation is carried out in the study area, more farmers will adopt more and improved conservation practices that would enable them cope with the negative effects of climate change.

Table 1
Simple linear regression analysis of the influence of afforestation on forest conservation among farmers in Obudu Local Government Area, Cross River State (N = 652)

Model	R	R^2	Adj.R^2	Std error of estimate
1	.085	.007	.006	4.21956

Source of variance	SS	Df	MS	F	Sig
Regression	85.211	1	85.211	4.786	.029
Residual	11573.065	650	17.805		
Total	11658.276	651			

Ho:2
Selective exploitation does not significantly influence forest conservation among farmers. The independent variable in this hypothesis is selective exploitation while the dependent variable is forest conservation among farmers. Simple linear regression statistical tool was used for data analysis. The result of this analysis is presented in Table 2.

The result of analysis presented in Table 2 showed that the predictor or independent variable (selective exploitation) significantly influence the predicted variable (forest conservation among farmers). The predictor variable accounted for 27.5% of the variance in forest conservation among farmers in Obudu Local Government Area, Cross River State. This showed a significant positive relationship between the predictor and predicted variables.

Furthermore, the regression ANOVA revealed there was a significant positive influence of selective exploitation on forest conservation among farmers F (1, 650) = 246.235; p<.05. Based on this result, it can be deduced that an increase rate in the use of selective exploitation, the more the conservation practices that would be adopted, which will enable the farmers to cope more positively with the negative effects of climate change. Again, a reduction in the use the use of selective exploitation will lead to reduction in conservative practices that would be adopted by farmers in the study area.

Discussion of findings

The finding from analysis and testing of hypothesis one showed that the null hypothesis was rejected. This implied a significantly weak positive influence of afforestation on forest conservation among farmers in Obudu Local Government Area, Cross River State. This could be because the level of afforestation as a strategy for sustainable forest management practices is low and the weak positive influence observed in the study is as a result of the few farmers that are involved in afforestation practices. It is believed that the greater the practice of afforestation, the more positive conservation measures farmers in the study area will adopt. The finding of this study agrees with the finding of Millar (2012) which reported that afforestation are useful outlets for the promotion of sustainable forest management practices. It is noted that both urban and rural people were not well informed about the mode of destruction and protection of the environment.

Table 2

Simple linear regression analysis of the influence of selective exploitation on forest conservation among farmers in Obudu Local Government Area, Cross River State (N = 652)

Model	R	R^2	Adj.R^2	Std error of estimate
1	.524	.275	.274	3.60667

Source of variance	SS	Df	MS	F	Sig
Regression	3203.041	1	3203.041	246.235	.000
Residual	8455.235	650	13.008		
Total	11658.276	651			

The finding from analysis and testing of hypothesis three showed that the null hypothesis was rejected. This implied that there was a significantly positive influence of selective exploitation on forest conservation among farmers in Obudu Local Government Area, Cross River State. This can be due to the fact that selective exploitation is the most commonly used awareness strategy for disseminating environmental information among inhabitants of the study area. It is assumed that the more selective exploitation is utilized to disseminate forest management practices related information the more improved and sustainable forest conservation practices would be adopted by farmers in coping with contemporary climate. On the other hand, once

there is a reduction in the utilization of selective exploitation, there lesser the conservation measures adopted by the farmers.

This finding is in agreement with the finding of Plumptre (2016) which revealed that there are very few places where sustainable management of tropical forests has been attempted for long enough to measure the impact of logging operations on the fauna and flora. This is particularly so where monocyclic or uniform harvesting systems are used, because of the long-term rotation periods between felling cycles which are of the order of 60-80 years. In the 1970s, it was reported that selective logging at a rotation of 40 years caused damage to Kayang forest.

Implication to Social Studies and Environmental Education

This study can be useful to teachers in Social Studies Education and other departments who may want to know the level at which sustainable forest management practice aid forest conservation among farmer's in Ikom Education Zone of Cross River State. It can enable Social Studies/Environmental education teachers work on how to improve on the various forest conservation skills. It would also enable teachers apply the various modules that aids cutting down of green house effects.

This study can be useful to students at all levels especially those in Social Studies and Environmental Education who may want to know the level at which afforestation and selective exploitation affects forest conservation. The study can enable Social Studies students work individually and collaboratively on how to improve on the various available forest conservation skills.

Also it can be of great importance to Science/Social Science researchers in Cross River State, Nigeria and the world in general who are interested in carrying out research on sustainable forest management practice, it effects, adaptations and mitigation. It would enable researchers who intend to carryout research on climate change on the research area, understand the level of awareness the farmers in the area. This research can pave way for other researchers who intend to take up a research on climate change in this zone and Nigeria as a whole.

It can be of help Social Studies/Environmental Educators in Universities and Collages who are in charge of transmitting information as it concerns environmental issues. It can enable Social Studies educators to make available useful information, regarding forest conservation, which can aid all stakeholders tackle climate change with the application of all the necessary adaptation and mitigation measures.

Summary, Conclusion and Recommendations

Summary of the study

The main purpose of this study was to investigate sustainable forest management practices and forest conservation in Obudu Local Government Area, Cross River State, Nigeria. To achieve the purpose of this study, four research questions were posed and transformed into four null hypotheses to guide the study.

A review of related literature was carried out to examine what has already been documented on the variables of this study by various relevant scholars and researchers. The survey research design was considered useful for the study. The simple random sampling technique was adopted in selecting the wards in the local government areas used for the study. The proportionate simple random sampling technique was adopted in selecting the wards and six hundred and fifty two (652) respondents used for the study.

A structured thirty-item four point Likert scale questionnaire was the instrument used for gathering data for the study. To test the hypotheses formulated for the study, simple linear regression and multiple regression statistical tools were used for data analysis. The hypotheses formulated were tested at 0.05 level of significance. The results from data analysis and hypotheses testing indicated that;

3. There is a weak but significant positive influence of afforestation on forest conservation among farmers in the study area.
4. There is a significant positive influence of selective exploitation on forest conservation among farmers in the study area.

Conclusion

The study aimed at assessing education for sustainable forest management practices and forest conservation among farmers in Obudu Local Government Area, Cross River State. The findings of the study revealed that there is a significant influence of afforestation, forest regulation, selective exploitation and awareness creation on forest conservation among farmers in the study area.

Forest management practices have become increasingly obvious especially in the area of this study. The need for people especially the rural inhabitants to develop forest conservation practices has become paramount in order to cushion the harsh effects associated with such changes. Environmental awareness has been identified as a viable tool that can be utilized to sensitize and build capacity for forest management.

It has therefore become an issue of utmost consideration among various stakeholders to brace up and empower the vulnerable with requisite support that would enable them cope with the effects experienced as a result of climate change. This is because an uninformed or poorly informed individual lives in uncertainty and cannot save the environment from further degradation and damage. Hence, the need to raise a citizenry that is aware of and capable of

participating actively in solving environmental problem and preventing the occurrence of new ones at all times.

Recommendations

Based on the findings obtained in this study, the following recommendations were made:

1. Relevant stakeholders should ensure that afforestation does form a core environmental awareness strategy that would be relied on to promote forest conservation among farmers in the study area.
2. The use of selective exploitation in disseminating forest management information in the study area should be widely encouraged and utilized in helping farmers understand and continue to adopt useful and sustainable forest conservation among farmers.

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