

African Multidisciplinary Journal of Development (AMJD)

Page 58-70

ENVIRONMENTAL AWARENESS CREATION THROUGH THE PUBLIC ENLIGHTENMENT CAMPAIGN AND SUSTAINABLE CROP FARMING AMONG FEMALE FARMERS IN CROSS RIVER STATE, NIGERIA

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Abstract

This study investigated the extent to which environmental awareness creation through public enlightenment campaign influences sustainable crop farming among female farmers in Cross River State, Nigeria. To achieve the purpose of this study one hypothesis was formulated to guide the study. Literature review was carried out accordingly. Survey research design was adopted for the study. This research design was used for study because it was considered appropriate. A sample of seven hundred and ninety-one (791) respondents was used for the study. The sample was selected through stratified and simple random sampling techniques. A four –point modified Likert Scale instrument entitled Environmental Awareness through Campaigns and Sustainable Crop Farming Questionnaire and Focus Group Discussion (EACTCSCFQFGD) was the main instrument used for data collection. The instrument was faced validated by the expert who vetted the items development. The reliability estimate of the instruments was established through Cronbach Alpha reliability method .077. Regression analysis was the statistical technique employed to test the hypotheses under study. The hypothesis was tested at .05 level of significance. The result of the analysis revealed that, public enlightenment campaign significantly influenced sustainable crop farming. Based on the findings of the study it was recommended that awareness through Public enlightenment should be recommended among others to increase farmers' awareness of the danger of involving on unsustainable crop farming and the use of Agro- chemicals they use. This should be done by educating female farmers through interactive radio discussion and training sessions on the field and incorporate safety use of Agro –chemicals in our educational curriculum.

Key words: Environmental Awareness, Public Enlightenment Campaign, Sustainable Crop Farming and Female Farmers.

1. Introduction

The practice of crop farming has been in existence since the inception of man on planet earth. Immediately after the hunting and gathering stage, man began to look for a better way of sustaining his family by providing food for them. People therefore started growing different types of food crops such as rice, wheat, sugar-cane, maize, soya beans, beans, potatoes, vegetables, palm oil, cassava, yam, coco-yam, water-yam, groundnuts, millets, melon, beneseeds, bananas, and others. Crop farming is very useful to man and the environment. It provides food for man's consumption. Food crops such as cassava, yam, beans, maize, wheat, rice, groundnuts and others are products of crop farming. Through crop farming different types of nuts and oil are produced.

Despite the importance of crop farming to man, most women farmers globally and in the area of study are yet to adopt strategies that will lead to sustainable crop farming. Sustainable crop farming is a way of growing or raising crops in an ecologically and ethically dependable method. This includes adhering to standard Agricultural practices that do not harm the environment, provide fair treatment to farmers, support and sustain local communities. Sustainable crop farming is in contrasts to industrial crop farming, which generally relies on monocropping, intensive application of fertilizers, heavy use of pesticides, and other inputs that are degrading the environment. Crop farming that is based on sustainable practices leads to higher yields over time, with less need for expensive and environmentally damaging inputs.

Unsustainable crop farming has contributed greatly to environmental degradation through Agricultural expansion and practices. Some of these problems are orchestrated by the type of farming activities adopted by individual farmers in carrying out their daily farming operations. Some practices include the opening up of new forestland for the purpose of Agricultural expansion, over grazing, indiscriminate bush burning, deforestation, slash and burn, farming methods, the use and application of obnoxious and poisonous Agro-chemicals for reducing weeds and herbs, for pests, insects and disease control and for preservation of Agricultural produce during storages. These and many other farming activities have contributed seriously to environmental pollution, erosion, flooding, and desertification leading to adverse environmental problems facing man today.

1.1 The Concept of Environmental Awareness

Environmental awareness has to do with the knowledge about environmental situation orchestrated by the farmers in the course of carrying out their farming activities and the knowledge of the extent to which environmental awareness and its resources including all the services provided by the environment can carry the type of crop farming done by the farmers. According to Ayoola (2008) this critical stage, of our environmental concern global climate regime change, resulting in high rainfall, high temperature, poor crop production, increased crop pest and sudden inversion of exotic grass species destroying our agricultural lands, it is necessary that sound environmental awareness creation through broadcast media and policies designed, adopted and transmitted to the rural female farmers to guide them on farming operations thereby guaranteeing continuous and sustainable crop farming activities.

Mabe & Danso Abbeam (2017) further investigated the concept of environmental awareness strategy and sustainable agricultural practices in Kenya. To him environmental awareness refers to the inculcation of enlightenment about general environmental aspects related to pollution (air, water, soil, and land), biosphere, and energy conservation, conservation of natural resources including wild life population, and environmental issues. Ecological behavior is the actions or activities which contribute towards environmental preservation and conservation. Environmental education is an important tool through which

the goal for awareness among the masses particularly among female farmers in order to adopt more environmentally friendly agricultural practices in the rural areas.

1.2 The Concept of Sustainable crop farming

A crop is a plant that can be grown and harvested extensively for profit or subsistence. Crop may refer either to the harvested parts or to the harvest in a more refined state. Most crops are cultivated in agriculture or aquaculture. Sustainable crop farming refers to agricultural production in such a way that does not impose harm to environment, biodiversity and quality of agricultural crops. Producing crops sustainably increases the ability of the system (Pretty, Toulmin & Williams, 2011). Sustainable crop farming seeks to optimize skills and technology to reduce environmental degrading thus enhancing sustainable environmental practices. Sustainable crop farming is considered to be the methods of farming which is based on principles of ecology. It is an integrated system in which plant production practices have a site-specific application which has long term benefits. Sustainable crop farming not only satisfies human food and fiber need but also enhances quality of environment and quality of natural resources (Gold, 2009).

Ameh (2009) "sustainable crop farming is the management and utilization of the agricultural ecosystem in such a way that maintains its biological diversity, productivity, regeneration capacity, vitality and ability to function well without devastating the environment.

The grace communication foundation (2017) states that sustainability preserves the environment: examples are good practices such as crop rotation to improve soil health and reduce plant diseases. Pasture based grazing and livestock integrated into crop rotation system to improve the land.

Information on crop farming importance is transmitted to farmers on better farming system because of the diverse issues associated with unsustainable farming practices; there is urgent need to ascertain the best medium to create environmental awareness among female farmers. To be able to create the needed awareness to enable female farmers adopt more environmentally friendly practices for crop farming, the public campaigns is a necessary tool in creating that needed awareness. the broadcast media is to inform and educate the People, because it can play an important role in awareness creation bringing about change in attitude. Scientists and policy makers have been communicating issues of environmental problems to the Public through the broadcast media which have been a subject of major interest because of its implication for creating national public understanding of global environmental issues. The use of Agro-chemicals that have been banned in other countries, the ecological impacts of these agro-chemicals, the new technologies available to farmers, the replacement of improved varieties of crops in place of traditional crop species, the patronage of genetically modified organism which are fast yielding to lower producing traditional crops by local fanners among others (Zhen & Zoebisch, 2006; Wright, 2009; Arfini & Donati, 2013).

Reimer, Thompson and Prokopy (2012) observed that awareness creation through public enlightenment campaign carried out in their study have identified methods for effective awareness creation using a sample of 450 farmers in Punjab District of India, chi square analysis was used to analyze data, the result shows a positive relationship between Mass media and Environmental awareness creation. In another multi-dimensional study, the Authors observed that series of attempts to understand farmer conservation behavior based on quantitative socio-demographic, attitude, and awareness variables have been largely

inconclusive. Therefore in order to understand fully how farmers are making conservation decisions during their agricultural practices, 32 in-depth interviews were conducted in the Eagle Creek watershed in central Indiana. Through effective awareness creation, coding for environmental attitudes and practice adoption revealed several dominant themes, representing multi-dimensional aspects of environmental attitude .Reimer (2012).

More so unsustainable crop farming in areas such as monocropping, crop rotation, shifting cultivation, and others causes deforestation, erosion, flooding, biodiversity depletion, global warming and exposure of soil to harsh climatic conditions and even loss of soil fertility. Unsustainable crop farming is in contrast to mechanized crop farming which generally relies on monocropping, application of fertilizers, heavy use of pesticide or herbicide and other inputs that degrade the environment. Also socio-economic and environmental degradation of human race is associated with unsustainable crop farming there is a shortage of domestic fuel wood and industrial timber, loss of genetic resources, destruction of wildlife habitats, decline of watershed and desert encroachment.

Environmental awareness on the other hand has to do with the knowledge about environmental situation orchestrated by the farmers in the course of carrying out their farming activities and the knowledge of the extent to which environmental awareness and its resources including all the services provided by the environment can carry the type of Agricultural practices as done by the farmers. At this critical stage of our environmental concern, global climate regime change, resulting in high rainfall, high temperature, poor crop production, increased crop pest and the sudden inversion of exotic grass species destroying our Agricultural lands, it is necessary that sound environmental awareness creation strategies and policies be designed, adopted and transmitted to the rural female farmers to guide them on farming operations thereby guaranteeing continuous and sustainable agricultural production.

These could be used to communicate new ideas to farmers, especially the rural female farmers who need this information most on environmentally friendly systems of Agriculture like using organic manure or fertilizer on farming activities instead of synthetic manure which has a debilitating influence on the environment and humans. To practice rotational crop production instead of opening up new forest land exposes the soil and forests to species extinction and carbon accumulation. It could also be to advise and discourage obnoxious Agricultural practices like deforestation, opening up of new forest land for Agriculture with species destroyed and facing extinction, the use of Agrochemicals without making reference to the environmental standards set and the manufacturer's instruction on the use and application of Agrochemical.

1.3 The role of public enlightenment campaign in sustainable crop farming

The role of public enlightenment campaign in sustainable crop farming among female farmers in Cross River State cannot be overemphasized. Public enlightenment campaign is critical in promoting and controlling crop farming among female farmers. It raises not only public enlightenment campaign awareness about Agricultural practices, its causes, consequences and possible remedies but also investigates and reports new development in Agriculture

Mattah and Fitagbi (2015) stated that public enlightenment can be the most effective method to plant a love of sustainable Agriculture in the heart of women programmes employed can be essential in giving

women an appreciation to Agriculture as well as making stakeholders join hands to ensure sustainable Agriculture is being practiced. While, Wright (2009) has shown that intention to practice sustainable crop production among female farmers is an important indicator to adopt sustainable Agriculture. Similarly, Herath (2010) and Hanna (2011) indicate that in order to motivate farmers to change their attitude to sustainable agriculture it is important to understand their intention.

For farmers to adopt more sustainable crop farming they need to be properly informed about current trends in Agricultural operations, such as who supplies this information, where and how can these farmers be reached to get the information needed to influence their adoption of more Environmentally friendly Agricultural practices within their farming settings. There is the global growth in the cultivation and consumption of genetically modified organisms, with its attendant problems. There is also the effect of the usage of obnoxious Agrochemicals which has been banned in other climes, but these chemicals finds their way surreptitiously to Nigeria and Cross River where farmers are using them indiscriminately for their Agricultural operations in most Rural Communities without understanding their effects and how these can be curbed. Some farming practices are detrimental to both humans and the environment, it is, therefore, necessary for these farmers to be informed about the effects of type of Agricultural practices and activities which they carry out in their daily Agricultural operations. This can be done only through Environmental awareness creation. How this information can be passed to these farmers demands functional strategies for effective Environmental information dissemination.

Environmental awareness can be given to the farmers through two major ways, either through traditional methods of information dissemination or through Modern methods of information dissemination. Traditional information dissemination methods include wooden gong, town criers, gunshot, whistle blowing, mouth to mouth through age grade, blowing of trumpet among others. While modern strategies for Environmental awareness creation include through Formal and Informal Education, through the Mass media, (newspaper, television, radio, internet etc), symposium, seminar, workshop, short courses and experiential/outdoor Education among others (Ulayi 2019). Generally speaking, for effective communication to take place, the information sharing process must be done using appropriate communication channels.

According to Bora, 2012, Owusu-Boateing and Amuzu, 2013, Oman, 2014 Awareness creation through Public Enlightenment is delivered through radio, television and public awareness campaign. They also added that the number of children in school, ownership of television, radio, and those who have knowledge on the use of Agro chemicals are few. This has shown that awareness creation of health implication on the use of Agrochemicals and proper planting materials like seeds, stems and others should be intensified. Boateng and Amuzu (2012) opined that awareness through Public enlightenment should be recommended to increase farmers' awareness of the Health implications of Agro-chemicals they use. This should be done by educating farmers through interactive radio discussion and training sessions on the field and incorporate safety use of Agro-chemicals in our educational curriculum.

Hang and Jonathan (2016) suggested that public support for carrying out environmental awareness about farming activities and their mitigation policy is a key to solving the issue of farmer's unsustainable farming systems. Effective Public Enlightenment Campaign on changes in farming systems if introduced into the environment will reduce pressure on forest land and planning from the onset in order to ensure

homogenous Public understanding regarding the challenge and inspiring the issues that has become public concern. Higgins and Hart (2012), de Boer (2015) observed that effective model for the implementation of this initiative should be one that will enable the information establishment and the public gain easy access to each other to achieve easy dissemination of information by the authorities and collection of feedback data from the Public.

Environmental awareness campaigns play a crucial role to address groups of farmers in a region who adopted specific crop farming activities that have affected a particular people and the environment. The ultimate aim of such campaigns is to achieve long-term lasting behavioral changes. Awareness campaigns address the knowledge of Individuals and Organizations. It aims to ensure that all relevant regional and sub-regional bodies comprehend impacts of their Agricultural practices and take action to respond to certain environmental impacts. Large scale Agricultural practice awareness campaigns are often a mixture of initiation, energy efficiency, and sustainability measures rather than adaptation measures, for example the campaign 'to inform individuals about environmentally friendly farming practices, and initiate pro-active dialogues, and aims for small behavioral change without affecting individuals' everyday life by giving them a sense of empowerment and personal responsibility (Gaber & Abdel-Latif, 2012; Ajah & Nmadu, 2012).

Public enlightenment campaign is very important to increase enthusiasm and to support stimulate/self-mobilization action to mobilize local knowledge and resources (Viega, 2016). Accordingly, the adoption of new farming technologies requires the cooperation of individuals, business, industries, government and other actors that are confronted by impacts of faulty Agricultural practices. Public enlightenment campaigns are more effective if relevant stakeholders of environmental NGOs are involved in development.

Ulayi & Edinyany (2019) also added that through environmental awareness creation has changed many farmers their perception toward sustainable crop farming.

In the related, Adua (2016) carried out a study in Okpe region of Delta State investigating the role of Public Enlightenment campaign in the creation of sustainable Agricultural system to achieve the purpose of this study, one null hypotheses were formulated and tested at 0.05 level of significance. The ex-post facto research design was considered most appropriate for the study. The simple random sampling technique was adopted in selecting the six communities while the quota non –probability sampling technique was used for the study. A thirty items modified four point Likert scale questionnaire was the instrument used for data collection. Pearson product moment correlation analysis was employed to test hypotheses, the result revealed that there is significant relationship between face to face communication, written communication, individual communication, group enlightenment and sustainable Agricultural system. Based on these, awareness campaign through Public enlightenment was strong indicators, which bring about impact on sustainable Agricultural productivity among individual farmers in Okpe region of Delta State of Nigeria.

A similar study was carried out by Abraham (2009) on perceived awareness creation through Public Enlightenment campaigns about climate change and its impact on Agricultural productivity among individual farmers of 12 European Union (EU) Countries. The study examined the impact of climate change on Agricultural productivity. The study used the quantitative survey methods and 250 respondents from 24 communities of European Union countries were used. A simple random sampling was used in the selection

of the 250 respondents, while stratified random sampling technique was applied to the selection of the 250 communities in European Union countries. Questionnaire was used as tool for data collection and statistical analysis applied regression analysis using SPSS. The result of the statistical analysis reveal that average of 49% of the farmers felt informed about causes of climate change and their impacts on crop farming productivity, less than half of the respondents (46%) felt informed about ways to deal with climate change and other respondents also claimed that climate change affects farmers productivity. On the average, 96% of the farmers were aware about climate change and its impacts on agricultural productivity. The study concludes that in general one can observe a decrease in level of self-perceived awareness about climate change and farmer's productivity among respondents of the 12 member states. The report suggested and recommended strategies for mitigating effects of climate change on farmers productivity within these studied states.

These results came about because specific strategies were not really identified for the creation of the needed awareness to these farmers. A lot of studies have shown different target audience need different strategies and medium for creating the needed awareness. Farmers, especially farmers need strategies that are easily accessible and adoptable to bring about attitudinal change and adopting environmentally friendly Agricultural practices that will bring about improved Agricultural produce and at the same time conserving the environment for sustainability (McCarthy, O'Reilly, O'Sullivan & Guerin, 2007, Iita, 2008, Lichtfouse, 2009; Shih & Fan, 2013). To do justice the issue of strategies, some are discussed hereunder.

Due to environmental considerations and farmer's Agricultural practices, there has been some global concern about activities of farmers and their impact on the environment, effort must be made to reduce these impacts on the environment and its resources. It is an established fact that the main Agent of Environmental change is as a result of anthropogenic activities which contribute to the global increase in concentration of Green House Gases (GHG) leading to drought, increased temperature, soil fertility loss, pollution from Agro-chemicals among others. There is therefore the urgent need for effective sensitization and Public enlightenment campaign regarding our actions and how they contribute immensely to the issue of reduced farmer's productivity experienced globally. Through Public enlightenment campaign, stakeholders gain easy access to each other to achieve efficient dissemination of environmentally friendly information, take into consideration the geo-political and socio-economic nature of the region in concern.

An effective model for the implementation of information sharing should be one that will enable the Information establishment and Public gain easy access to each other to achieve easy dissemination of environmental information by the Agencies with the information and collection of feedback and data from the Public (Higgins & Hart, 2012, de Boer 2015; Veigs, 2016). Where a large audience is to be reached through face to face media, Public enlightenment strategy can be most effective. This is done through the use of Public address system, open air messaging and the use of group discussion to disseminate environmental information to the target audience. For Public enlightenment to be effective, the model must take into consideration the location and venue where they can be reached (Adua, 2016). The model should be sustained and should allow for degree of flexibility and adaptability to cope with issues and changes that might occur during the model on the long run (Hartley, 2015).

Ulayi & Edinyang (2019) added that public enlightenment campaign play a crucial role in educating and appeal to emotions of people creating awareness of their actions and how the earth suffers as a result of this, prompting them to positively change their behaviors. Public enlightenment should also be homogenous and carefully coordinated to ensure harmonious understanding of the issue and avoid conflict of opinions which could cause confusion in the midst of the Public. This is supported by Hang and Jonathon

(2016) who also expressed in their report that public support for mitigation policy is a key to solving the issue of unsustainable crop activities. Despite the effectiveness of using Public enlightenment for awareness creation, there are some factors which have been identified as influencing the effectiveness of Public enlightenment. Some factors have been identified that can negatively impact on achieving effective Public enlightenment. Some of these factors include: Political polarization; unavailability of alternative resources; high cost of alternative resources; unavailability and infancy of alternative technologies (Kuhne & Schemer, 2015; Hang & Jonathon, 2016). The Issue of Political polarization has been widely felt during discussions on Agricultural practices with right-wing supporters denying its existence opposing Policies aimed at mitigation with economic reasons being the main rationale behind their stand in this regard (Hoffart & Hodson, 2016).

2. Statement of the problem

Farming is the economic mainstay of most state in Nigeria. Most communities in Cross River State have been depending on agriculture as the bedrock of their Community. This is because food and most of the raw materials required to manufacture most finished products are agriculture-oriented. Crop fanning system has poses serious challenges on environmental sustainability, yet it has attracted less attention in many developing countries particularly in Nigeria. Crop farming has a significant effect on both human health and environment. This farming system threatens environmental sustainability and need to be altered. Besides, degrading the soil, water, air and biodiversity as well as posing health risks to both farmers and consumers, the practices also contribute to high carbon-emissions into the atmosphere facilitating climate change. These agricultural practices are not sustainable; as they degrade the environment and reduce the effective functioning of the essential ecosystem services; and ultimately, undermine the nutritional and health value of foods.

In the course of attempting to improve their yields of agricultural products and increase their income, farmers have gone extra miles in using all unfriendly methods of farming activities that are harmful to the environment. Farmers have resorted to the use of obnoxious agrochemicals like herbicides, insecticides, pesticides, inorganic fertilizers and preservatives and where these chemicals fail to produce the desired yields. Female farmers also open new farmlands and destroy soil microorganisms that regulate soil fertility, watersheds that had led to environmental problems such as desertification, erosion, shrinking of water bodies, loss of wildlife species, drought, bush burning, communal clashes and others.

In spites of the government efforts in curbing the malaise, observation shows that most female farmers in Cross River State still lack this awareness and consciousness for sustainable crop farming. Proper environmental awareness creation through campaign seems to be the only solution out of these situations.

2.1 Purpose of the study

The purpose of this study is to investigate how awareness creation through public enlightenment campaign influence sustainable crop farming among female farmers in Cross River state, Nigeria The study specifically intended to;

1. examine the extent to which television media influences sustainable crop farming in Cross River State, Nigeria
2. find out the extent to which radio media influences sustainable crop farming in Cross River State, Nigeria

3. Methodology

The study adopted the survey research design. Isangedighi, Joshua, Asim and Ekuri (2004) described survey research design as a design that samples a representation of a population for an in-depth study, where findings can be generalized to the entire population. The population of the study was 102,882 female farmers across the 18 Local Government Areas of Cross River State Ministry of Agriculture, 2017.

The stratified sampling technique was adopted for this study. The stratification was based on three senatorial districts in the state. In each of the senatorial districts, 40 percent of the local government areas were selected given seven local government areas. To select the sample of the female farmers from senatorial districts three local government areas were selected from southern senatorial district and two communities from each local government making six communities and two local government each from North and Central senatorial districts and two communities were selected making total of eight communities using random sampling technique making a total of fourteen communities, all female farmers of age 20 and above, there were adequately represented in the study. The sample for this study would comprise 804 female farmers drawn from 14 communities via convenience sampling technique.

A structured questionnaire entitled: Environmental Awareness Creation Through Public Enlightenment Campaign and Sustainable crop farming Questionnaire and Focus Group Discussion (EACTPECSCFQ A FGD) were used to obtain information from the respondents. It was divided into two parts, the first part of the questionnaire focused of gathering information about the demographic characteristics of respondents. The second part of the questionnaire was a four point liker scale; respondents were expected to indicate their choice by ticking one of these options. The validity of this instrument was faced validated by statistians who vetted the items developed and objectives of the study and the hypothesis stated and comprehensibility of each item in relation to the cognitive level of the respondents. The cronbach alpha reliability method was used to determine the reliability method of the instrument. The reliability was found to be 0.87. The questionnaires and focused group discussions were the major instrument used for data collection. Copies of the questionnaire were administered in each of the sample area in Cross River State. The respondents were informed of the exercise and the essence of giving objective response to the items, the items of the information will be treated with confidentiality and be used as data for the research only. At the end of the exercise 791 copies of the questionnaire were successfully completed and retrieved of sample area.

4 Results

Hypothesis one: Public enlightenment campaign do not significantly influence sustainable crop farming in Cross River State

Public enlightenment campaign does not significantly predict sustainable crop farming. The independent variable in this hypothesis is public enlightenment campaign; while the dependent variable is sustainable crop farming. Simple regression analysis was the employed to test this hypothesis. The result of the analysis is presented in Table 1.

Table 1: Simple regression result of the prediction of Public enlightenment campaign on sustainable crop farming (N=791)

	Sum of Squares	df	Mean Square	F-ratio	p-value
Regression	2672.586	1	2672.586	421.587*	.000(a)
Residual	5001.740	789	6.339		
Total	7674.326	790			

R= .590; R² = .348; AdjR² = .347

a. Dependent Variable: sustainable crop farming

b. Predictors: (Constant), Public enlightenment campaign

The simple regression analysis of the prediction of Public enlightenment campaign on the sustainable crop farming produced an adjusted R² of .347. This indicated that the Public enlightenment campaign accounted for 34.7% of the determinant sustainable crop farming in the study area. This finding is a critical indication that Public enlightenment campaign is relatively high in the area of the study. The F-value of the Analysis of Variance (ANOVA) obtained from the regression table was F = 421.587 and the sig. value of .000 (or p<.05) at the degree of freedom (df) 1 and 789. The implication of this result is that Public enlightenment campaign is a significant predictor of sustainable crop farming.

5. Discussion of the Findings

The result of the hypothesis study indicated that, Public enlightenment campaign significantly influenced sustainable crop farming. The finding is in line with Mattah and Fitagbi (2015) who stated that public enlightenment can be the most effective method to plant a love of sustainable Agriculture in the heart of women programmes employed can be essential in giving women an appreciation to Agriculture as well as making stakeholders join hands to ensure sustainable Agriculture is being practiced. Intention to practice sustainable crop production among farmers is an important indicator to adopt sustainable Agriculture. In order to motivate farmers to change their attitude to sustainable agriculture it is important to understand their intention.

Ogar (2017) also noted that environmental awareness can be given to the farmers through two major ways, either through the traditional methods of information dissemination or through Modern methods of information dissemination. Traditional information dissemination methods include wooden gong, town criers, gunshot, whistle blowing, mouth to mouth through age grade, blowing of trumpet among others. While modern strategies for Environmental awareness creation include through Formal and Informal Education, through the Mass media, (newspaper, television, radio, internet etc), symposium, seminar,

workshop, short courses and experiential/outdoor Education among others. Generally speaking, for effective communication to take place, the information sharing process must be done using appropriate communication channels.

Boateng and Amuze (2012) opined that awareness through Public enlightenment should be recommended to increase farmers' awareness of the Health implications of Agro-chemicals they use. This should be done by educating Female farmers through interactive radio discussion and training sessions on the field and incorporate safety use of Agro-chemicals in our educational curriculum.

On focus group discussion, members interviewed agreed that they need to keep abreast of necessary information that will enhance crop farming and also they are aware of strategies of reducing crop spoilage and increase food production. The findings were relevant to the study as the people are of the opinion that for more sustainable crop farming to be adopted, farmers need to be properly informed about current trends in Agricultural operations, such as who supplies these information, where and how can these farmers be reached to get the information needed to influence their adoption of more Environmentally friendly Agricultural practices within their farm settings. There is the global growth in the cultivation and consumption of genetically modified organisms, with its attendant problems. There is also the effect of the usage of obnoxious Agrochemicals which has been banned in other climes, but these chemicals finds their way surreptitiously to Nigeria and Cross River where farmers are using them indiscriminately for their Agricultural operations in most Rural Communities without understanding their effects and how these can be curbed. Some farming practices are detrimental to both humans and the environment, it is therefore necessary for these farmers to be informed about the effects of the type of Agricultural practices and activities which they carry out in their daily Agricultural operations. This can be done only through Environmental awareness creation. How this information can be passed to these farmers demands functional strategies for effective Environmental information dissemination.

6. Conclusion

Based on the results of the study it was concluded that public enlightenment campaign significantly influenced sustainable crop farming in Africa. Above all is an indispensable tool in creating that needed awareness, is to inform and educate the people. The result also shown that environmental awareness creation through campaigns play a vital role in educating and enlightening female farmers and government to protect and preserve nature and its resources in interest of future generations with enough food to eat.

7. Recommendations

Base on the findings of this study, the following recommendation were made;

1. Campaigns should be intensified most especially in rural areas where farmers should have information on sustainable crop farming and danger of using obnoxious and poisonous agro-chemical.
2. Through awareness creation proper information on danger of over- grazing, indiscriminate bush burning, deforestation and many others should be discouraged.

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