

ASSESSMENT OF FARMERS ATTITUDE TOWARDS A SUSTAINABLE NATURAL ENVIRONMENT IN OMU-ARAN, KWARA STATE, NIGERIA.

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ABSTRACT

Natural environment, agriculture and forestry are interconnected; the state of the environment is a major factor to successful production in agriculture, this enhances the interest of the farmers since their livelihood depends on the maintenance of these natural resources. The state of the natural environment determines both the social and economic life of a farmer. This study was carried out to assess farmers' attitude towards a sustainable natural environment in Omu-Aran Kwara State Nigeria. The data was collected through the use of questionnaires using the simple random sampling method to select the respondents. Descriptive statistical and inferential statistical tools were used to analyze the data collected. The result of socioeconomic showed that majority (52.2%) of the respondents are male with most (57.8 %) of them married. It was observed that majority (75%) of the respondents agreed that activities they engaged in are not detrimental to the environment; 83.4% agreed that they are not concerned about the implication of their activities on the natural environment. 77.8%, 82.2%, and 78.95% of the respondents agreed that pasture tilling, grazing and mulching respectively affects the natural environment negatively. It is therefore recommended that continued public education and awareness on the changes in natural environment and its impact is necessary to avoid unhealthy environment for man and organisms.

Keyword: Natural environment, Sustainable, Attitude

INTRODUCTION

Interlinking systems that made up the environment are the atmosphere, the hydrosphere, the lithosphere and the biosphere which changes constantly and these changes are affected by activities mainly carried out by human (Kumarasamy 2004). There are connections between farming system and emissions into the environment, this also depend on climate variables such as rainfall and temperature.

Farmers are everywhere all over Nigeria, they are all involved with the natural environment either positively or negatively and their attitude to maintaining and coping with change in the natural environment varies. They are among the primary reapers of the ecological bounty of the land of nature's yielding human needs and wants. But, they are also among the first to feel the impacts of their environmental manipulation of nature's

fighting back to protect itself from harm.

Attitudes can be positive or negative, or we can simply have opinions about issues without any strong emotional commitment. Farmers' attitude and perception on the environment gives detailed information on whether farmers put environment in mind when accepting new technologies. understanding their perceptions and attitudes can shed light on why farmers adopt technologies beyond their economic benefits and which industry researchers should focus on to encourage the adoption of these technologies as submitted by Adrian (2005).

For a certain period human being had lived unaware about their damage on nature. As a result, the crucial role of farmers in shaping and preserving multifunctional agro-ecosystems, as well as natural resources, has been highlighted by agricultural scientists over the past decades (Kapfer *et al.*, 2015). This study aims at identifying the positive and negative attitude of farmers towards the natural environments,

.Methodology

The population of the study comprises of all farmers who reside in Omu-Aran, Irepodun local government area of Kwara state. Multistage sampling technique was used for the study.

First stage: Omu-Aran Irepodun local government area of Kwara state was purposively selected for this study due to the availability of farmers in the town.

Second stage: this stage involves the use of Simple random sampling method to select three wards out of eleven wards (Ifaja, Aran and Ajewo) in Omu-Aran.

Third stage: in each ward selected, 30 respondents were selected to give a total 90 respondents in the study area.

Data was collected using a well-constructed questionnaire. The independent variables such as age, sex and marital status were measured at nominal level while dependent variables (attitude) was measured at interval level where SA, A, U, D & SD were assigned with the values 5,4,3,2 & 1 respectively

Descriptive statistical and inferential statistical tools were used to analyze the data collected.

Results and Discussion

Table 1: Socioeconomic Characteristics of the Respondent

Variable	Frequency (n=90)	Percentage	Mean value
Sex			
Male	47	52.2	
Female	43	47.8	
Age			
			35.0
18-20	8	8.8	
21-30	31	34.4	
31-40	20	22.2	
41-50	29	32.4	
51-60	2	2.2	
Marital status			
Single	32	35.6	
Married	52	57.8	
Divorced	2	2.2	
Widowed	4	4.4	
Household size			
			5.0
1-5	53	59	
6-10	34	37.7	
11-15	2	2.2	
16-20	1	1.1	

Secondary occupation		
None	31	34.4
Artisan	26	28.9
Teaching	13	14.4
Trading	18	20.1
Fishing	1	1.1
Footballer	1	1.1
Years lived in community		10.2
Less than 1 year	1	1.1
1-5 years	40	44.4
6-10 years	18	20.0
Over 10 years	31	34.5
Level of education		
Primary	14	15.6
Secondary	37	41.0
A level	23	25.6
Bachelor's degree	14	15.6
Master's or higher	2	2.2
Farm size		5.2
1-10	81	90
11-20	9	10

Source: field survey 2019.

Table1 shows the socio-economic characteristics of farmers in Omu-Aran. The result shows that 52.2% of the farmers were male while 47.8% were female. This indicates that more male farmers were involved in agricultural activities in the study area compared to female farmers this agrees with FAO 2011 that about an aggregate data of 43% of the

agricultural labour force globally is comprised of women. 35.6% of the respondents were single 57.8% married, 2.2%, divorced and 4.4%; widow/widower. This shows that majority of the respondents are married. This high percent of married respondent is a good indicator that those married farmers have access to family members for labour (wives and children) who could supply free labour thus making more hands available for production. The results further show that most (56.6 %) of the respondents were between 21 and 40 year old, 32.4 %; 41-50 while 2.2% were in the age range of 51-60 years old. These indicate that most of the respondents are in their productive age. Katchova and Ahearn (2015) found that younger farmers accepts the adoption of new innovations and practices which tends to increase productivity with age. This will contribute to the factor that makes the population of those in the productive age of men more than the older farmers. Although most (41.0 %) of the respondents had maximum of secondary school certificate, about 26% had A level with 15.6% having Bachelor's degree. The ability to read and write could allow the farmers to easily adopt new innovation and new information about the natural environment which could lead to efficient farming activities as well as sustaining the natural environment. It was observed that 34.5% of the respondents have stayed in the community for Over 10 years. The more the number of years stayed in the community the more knowledge a resident will have about the changing environmental condition of the area. Majority (90%) of the farmers in the study area have a farm size that falls between 1-2 hectares while only 10% of the respondents have a farm size that falls between 2-3 hectares of land; this implies that farmers in the study area practice subsistence farming as a result of the size of the farm land. Farm size one of the main factors in agricultural sustainability which has consequences on the environmental performance of agricultural production and that farm size is also associated with clear benefit for environmental protection. (Ren *et al.* 2019).

Table 2: Attitudinal statements on improved agricultural Practices and traditional practices among the respondents

s/n	Statements	strongly agree	Agreed	Undecided	Disagree	strongly disagree	Decision (Mean)
1	The activities I engaged in are not detrimental to the environment	51(56.7)	24(26.7)	10(11.1)	1(1.1)	4(4.4)	4.30
2	I am not concerned about the alterations in my environment	10(11.1)	23(25.6)	26(28.9)	14(15.6)	17(18.9)	2.94
3	my activities modify the environment	27(30.0)	44(48.9)	11(12.2)	6(6.7)	2(2.2)	3.98

4	I need to change some of my activities to protect future ecological structure	34(37.8)	30(33.3)	18(20.0)	5(5.6)	3 (3.3)	3.97
5	I am responsible for sustainability of my environment	29(32.2)	35(38.9)	14 (15.6)	10 (11.1)	2 (2.2)	3.88
6	I enjoy every of my activities on the farm.	2 (2.2)	6 (6.7)	15 (16.7)	41(45.6)	26(28.9)	3.92
7	my activities help to preserve nature	15(16.7)	46(51.1)	19(21.1)	7(7.8)	3(3.3)	3.70
8	I am willing to stop any of my activities that affect the environment.	23(25.6)	40(44.4)	13 (14.4)	11(12.2)	3 (3.3)	3.77
9	I am informed about the change in the environment	12(13.3)	40(44.4)	25 (27.8)	6 (6.7)	7 (7.8)	3.49
10	I am informed about the implication of every of my activities on the environment	17(18.9)	31(34.4)	16(17.8)	19(21.1)	7(7.8)	3.36
11	I am been encouraged to look after my environment	15(16.7)	49(54.4)	14 (15.6)	10(11.1)	2 (2.2)	3.72

Source: Field survey 2019

NB: Percentages in the parenthesis

34.5% of the respondents are not concerned about the alterations in the environment as a result of environmental changes while majority of the respondent (65.5%) confirmed their concern on the changes going on in the environment. Sabah and Jamil (2010) observed that young males and more educated respondent tended to be more knowledgeable and concerned about the environment than older and less respondent

This agrees with this research work that majority of the respondent's (which are males, young and educated) are concerned about their activities in respect to their environmental alterations as a result of environmental changes and this could be attributed to their level of knowledge on about environmental issues.

Majority of respondents agreed that their activities modify the environment this agrees with IPPC (2007); there are strong indicators that human activities are mainly responsible for the increase in global temperature (environmental modification) which is likely to lead to disturbance of the planet's climatic cycle. This implies that majority of the respondents knows that the activities they carry out determines the modification of their environment either positively and negatively. 65.5% of the respondents strongly believe that the balance

of nature is enough to cope with the impact of their activity to the natural environment while about 13.3% disagreed with this; hence they believed that their activities have no impact on the natural environment because of the sustainability of the environment. The consequences of some human activities can be devastating on the environment while some activities improves and restores the environment. (Derrick, 2016).

It was also observed that majority (70.1%) of the respondents agreed that there is need to change some activities to protect future ecological structure this agrees with the findings of Arovuori, (2011) that some practices like deforestation, wrong method of waste disposal, removal of vegetation cover, bush burning and others have negative impact on the nature in other to protect future ecological structure.

Majority (71.1%) of the respondents agreed that they are responsible for the sustainability of their environment this may however be as a result of the years of experience in farming or as a result of level of their education, this environmental responsibility ensures a high level of environmental safety by both the farmers and dwellers it serves as an avenue to control their attitude and hence actions on the environment a way to be conscious and take adequate care of it since environmental sustainability is one of the challenges faced by human at present (Arora, 2018).

About 70.0% of the respondents are willing to stop any of their activities that affect the environment, , 15.5% disagreed on stopping any activities that affect the environment, those who are willing to stop have the knowledge of the future implication of their activities which will definitely affect them. This agrees with Shende (2015) that biodiversity loss is due to lack of education, environmental consciousness and fragility of environmental organizations

Majority of the respondents (47.7%) agree that they are informed about the change in the natural environment in the study area. 53.3% agreed that they are informed about the implications their activities brings on the environment this shows that majority of the farmers in the study area know that some of their activities like deforestation, removal of vegetation cover, bush burning, use of insecticides and so on implicates the environment. Not fewer than half (52.2%) of the respondents agreed that they have noticed some changes in the environment since they started farming as a result of their activities like migrating of some ecosystem, reduction or loss of soil viability.

It was observed from the result that majority of the respondents (farmers) at Omu-Aran Irepodun local government area were aware of the environmental changes and implications of some of their activities in the ecosystem.

Conclusion and Recommendations

From the study, majority of the respondents agree that their activities modify the environment, agreed that they need to change some of their activities to protect the ecological structure also agreed that they are been encouraged to look after their environment because the implications of changes in the environment will be felt most by farmers because they solely depend on ecological factors and environmental implications for their source of livelihood.

Hence, even though it was observed that the farmers in the study area were well informed about the changes in the environment and are conscious about their attitude it is recommended that there should be continuous and increased public awareness and education on the impact of our activities on the environment, management strategies and environmental consciousness.

Reference

Adrian (2005): One Last Chance: Tapping Indigenous Knowledge to Produce Sustainable Conservation Policies. *Futures* 35:989-998.

Arora, N. K. (2018): Environmental Sustainability – Necessary for Survival. *Environmental Sustainability*, 1, 1-2. <https://doi.org/10.1007/s42398-018-0013-3>

Arovuori, K. (2011): Explaining Finnish Farmers' Policy Responses with Environmental Attitudes, *International Congress*, Zurich, Switzerland (No. 114216).

Birmer T.(2006): Fine Scale Structure of the Extratropical Tropopause Region. *Journal of Geophysical Research: Atmospheres*. Vol.111, Issue D4.

Derrick, A. (2016): Our Ecosystem . That's LIFE SCIENCE. <https://thatlifesc.com..> culled 2020

FAO (2011): The Role of Women in agriculture, *ESA working paper* No 11-02 March 2011 prepared by the SOFA team and Cheryl Doss

IPPC (2007): Climate Change 2007: *Synthesis Report. Contribution of working groups I, II and III to the Fourth Assessment Report of the Intergovernmental Panel on Climate change*. (Core writing Team, Pachauri, R.K and Reisinger, A (eds.). IPCC, Geneva, Switzerland, 104pp. Full Report

Kapfer ,M., Ziesel, S., and Kartelhardt J., (2015): Modelling Individual Farm Behaviour and Landscape Appearance. *Landscape Resources* 1- 25.

- Katchova A.L., and Ahearn M. C. (2015:) Dynamics of Armland Ownership and Leasing Implications for Young and Beginning Farmer. *Applied Economics Prospective and Policy*. Published online. September 17, 2015. doi:10.1093/acpp/ppv024
- Kumarasamy,T. (2004):*Introduction to social psychology*. (Graham Michael), 1934-Frenchs Forest, N.S.W. : Pearson Education, (2004) English Book; Illustrated 440 pages.
- Ren, C.; Liu, S.;Grinsven, H., Reis, S.; Jin, S.; Liu, H.; Gu, B.; (2019): The Impact of Farm Size on Agricultural Sustainability. *Journal of cleaner production*. 220.10.1016/j.jclepro.2019.02.151
- Sabah A. A. and Jamil A. (2010): The effects of Demographic Factors on The Environmental Awareness of Omani Citizen. *An International Journal Of Human and Ecological Risk Assessment: Vol 16., Issue 2 p 380-401*
- Shende V., Janbandhu, k., Patil, k. (2015): Impact of Human Beings on Environment. *International Journal of Researches in Biosciences, Agriculture and Technology* Special Issue 3