



## SOCIO-ECONOMIC IMPACT OF NON-FARMING ACTIVITIES ON THE LIVELIHOOD OF THE RURAL DWELLERS AROUND ONIGAMBARI FOREST RESERVE, OLUYOLE LOCAL GOVERNMENT IBADAN, OYO STATE

\*Falana A. R<sup>1</sup>., Odeyale O. C<sup>1</sup>., Ademigbuji A. T<sup>1</sup>., Ojo-Fakuade F.F<sup>2</sup>., Ibode T. R<sup>2</sup>.,  
Abodunrin E. K<sup>1</sup>., and Bamigboye T.O.<sup>4</sup>

<sup>1</sup>Forestry Technology Department, Federal College of Forestry Jericho Hill, Ibadan

<sup>2</sup>Agricultural Extension and Management Department, Federal College of Forestry Jericho Hill, Ibadan

<sup>3</sup>Basic and General Studies Department, Federal College of Forestry Jericho Hill, Ibadan

<sup>4</sup>Crop Production Technology, Federal College of Forestry Jericho Hill, Ibadan

\*Corresponding author: [pejussmile@gmail.com](mailto:pejussmile@gmail.com); +234 803 855 2927

### ABSTRACT

*Socio-economic impact of non-farming activities and its contribution to the livelihood of the rural dwellers around Onigambari Forest Reserve area of Oluyole local government of Oyo state was carried out. The study examined the impact of non-farming activities on livelihood to Sustainable Forest Management. Five communities were randomly chosen for the study, and a document indicating the population size of the selected communities was obtained from the National Population Commission of the State (1996) from which the population of the selected communities was computed using the population projection formula:  $P_n = P_0e^{rt}$ . Primary data was used for this study with the aid of a well-structured questionnaire. One hundred and eighty-three (183) questionnaires were administered. Descriptive statistical analysis was used to analyze the data and Chi-square was used to compare observed result with expected result. The ages of the respondents were between 31 and 40 years, and this age bracket is composed of youth and few adults; this means that most respondents are energetic, gender sensitive with male dominated activities coupled with marital responsibility. Many (47.5%) of the respondents have a household size of 5-7, about 37.2% had primary education while 34.4% respondents have between 11-15 years of farming experience. There are 55.1% respondents that practiced non-farming to generate income. Non-farming activities help to reduce deforestation and other illegal activities thereby contributing to Sustainable Forest Management. Non-Farming activities could be combined with other jobs for livelihood sustenance as about 45.9% (highest) respondents trade and had their secondary occupation to be farming. Non-farming is an attractive business to the rural dwellers and there is great need for the adoption of non-farming activities to reduce poverty and unemployment rates and to conserve the forest in the study area.*

**Keywords:** Non-farming, Socio-economic, Livelihood and Impact.

### Correct Citation of this Publication

Falana A.R., Odeyale O.C., Ademigbuji A.T., Ojo-Fakuade F. F., Ibode T.R., Abodunrin E.K., and Bamigboye T.O. (2022). Socio-Economic Impact of Non-Farming Activities on the livelihood of the rural dwellers around Onigambari Forest Reserve, Oluyole Local Government Ibadan, Oyo State. *Journal of Research in Forestry, Wildlife & Environment*, 14(3): 150 – 160.

## INTRODUCTION

The present economic reality in Nigeria has created room for divergent sources of revenue to cope with, so it is essential to create more sources

of revenue as a means of reducing poverty in the rural areas. The creation of self-empowerment can narrow rural urban disparities, expand opportunities, and encourage the retention of

skilled people including the youth in the rural area (Ayetan, 2019). Non-farming activities are those activities that are not associated with farming (making use of farm implements). Non-farming are useful substances, materials and/or commodities obtained from forest which do not require harvesting (logging) trees. The non-farming activities in rural area play an important role in generating employment for people. They include Firewood, Tannings, Bee collection, Mushroom, Medicinal plants, Oils, Foliage, Fuelwood, Spices etc. Sustainable Forest Management is defined as a dynamic and evolving concept which aims to maintain and enhance the economic, social, and environmental values, of all types of forest, for the benefits of present and future generation. Non-farming when sustainably managed make vital contributions both to people and the planet, conserving and responding to Climate change.

Non-farming activities have become an important component of livelihood strategies in the rural areas of developing countries (Ibekwe *et al.*, 2010). Rural small holder farmers suffer from disguised unemployment due to the seasonality of farm operations. Studies have shown that agriculture provide food, income, and employment for the population; however, it cannot adequately provide employment opportunities for the growing population. This is not unconnected with the declining farm size, environmental degradation, agricultural risks, and other challenges facing the sector thus leading to unemployment. Reddy *et al.*, (2009) reported that small holder farmers only worked between 100 and 200 days per annum and become idle and helpless for the rest of the year. Smallholder farmers suffer from disguised unemployment which leads to low economic position; hence diversification of income sources and employment is important. The relevance of the non-farm sector to rural development, poverty alleviation and household income share cannot be over emphasized in developing countries (Jonasson, 2005; Lanjouw, 2007).

Non farming activities provide employment opportunities for labour in rural and urban areas of developing countries. That is, it helps to absorb the growing labour population, slows down rural-

urban migration, promotes equitable distribution of income, and contributes to poverty alleviation among households. According to Islam (1997), non-farming activities help to reduce poverty and inequality through the provision of employment and income for the marginal farmers who cannot obtain enough income and subsistence from agriculture. Moreover, during agricultural slack seasons, non-farm employment, however low the wages may be supplement to the income of farmers. The behavior of rural household in diversifying their sources of income and employment is important in determining the contributions of non-farm sector in rural development (Keija, 2008; Adepoju and Oyewole, 2014). The rural sector of Nigeria is very vital to the socio-economic development of the nation, giving the contribution of the rural sector to the national economy. Enhancement of the livelihood of the people living in the rural area is of great importance. Non-farming activities such as fuelwood marketing, leaves collection, tanning, snails, bush meat, mushroom, bee collection, herbs collection, etc. have not only fostered hope but also have potentials for poverty reduction in the rural area of Nigeria. Different non-farm activities demand different level of investment Bezu *et al.*, (2012) Rural households often combine member of livelihood activities such as: agricultural crop production, wage labour and forest product collection to meet subsistence needs (Ayetan, 2017).

The present economic reality in Nigeria has made the value of money reduce drastically based on exchange rate and high cost of goods and services. It has made individuals both in urban and rural area specially to look for other source of revenue to meet their needs. Hence the needs for rural dwellers to look beyond farming activities to generate revenue to supplement the revenue generated from farm production, thereby contributing to the sustaining of the forest management without being affected. Therefore, non-farming activities carried out by rural dwellers in the communities around Onigambari Forest Reserve when thoroughly harnessed have the potential of boosting the economy of Nigeria through thorough research on the impact on the livelihood of the rural dwellers.

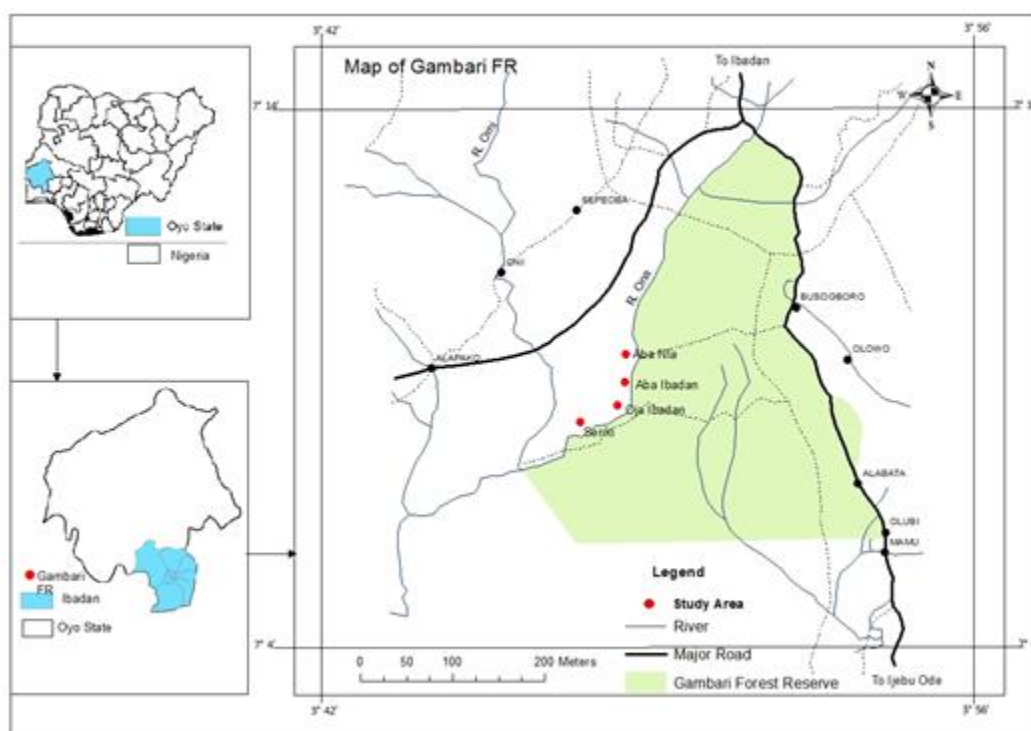
## MATERIALS AND METHODS

### Study Area

Onigambari Forest Reserve is situated along Ibadan Ijebu ode express way and Ibadan old Lagos Road. It is one of the largest Forest Reserve in Oyo State covering about nine thousand hectares of land, the reserve consists of state-owned forest plantation, private forest plantation and Federal experimental plots (Ayetan, 2017). Onigambari Forest Reserve is located between Latitude 7°25'61"N and 7°055'N, Longitude 3°53'51E and 3°09'E. The plot lies within Gambari Forest Reserve about 17km south-east of Ibadan on the Idi-Ayunre-ijebu-ode

road, Oyo State. It was laid about 2km away from the nearest road well obscured by some forest fallows in the neighborhood.

The forest reserve took its name from a community called Onigambari, 26 kilometers from Ibadan along Ibadan ijebu ode road. Communities around Onigambari Forest reserve are Adebayo, Onipe, Longe, Busogboro, Onigambari, Darley and Olubi along Ibadan ijebu ode axis. Others are Olubadan, Idi-ayunre, Abanla, Aba ibadan, Oja ibadan and Seriki along Ibadan old Lagos Road axis.



**Figure 1: Map of Onigambari Forest Reserve, Oyo State**

Source: Field survey, 2021

### Sampling intensity, Data collection and Analysis

Simple random sampling was used to select five from the ten communities around Onigambari forest reserve. They are: Ibusogboro, Dalley, Onipe, Onigambari and Seriki. Meanwhile, a document indicating the population size of the selected communities was obtained from the National Population Commission of the State (1996): Ibusogboro (614), Dalley (405), Onipe (473), Onigambari (693) and Seriki (118) and

from these, the population of the selected communities was computed using the population projection formula  $P_n = P_o e^{rt}$  where  $P_n$  = final population,  $P_o$  = initial population,  $e$  = exponential,  $r$  = growth rate at 3.5%, and  $t$  = time i.e. (X-1996), where X is the projection year. From the calculation projection, population of the communities are: Ibusogboro (1285), Dalley (837), Onipe (977), Onigambari (1432), Seriki (244). Sampling intensity adopted by Diaw *et al.*, 2002 was used to select respondents for this

study. For population above 1000, 2.5% sampling intensity was used, for population between 500-1000, 5% sampling intensity was used and for population less than 500, 10% sampling intensity was adopted. In view of this, 32 copies of questionnaire were administered in Ibusogboro, 42 in Dalley, 49 in Onipe, 36 in Onigambari, and 24 copies of questionnaire were administered in Seriki. The total copies of questionnaire administered for this research were 183.

Primary data was used for this study, collected with the aid of a well-structured questionnaire, and supported by oral in-depth interview (IDI) to collect data as most of the rural dwellers are unlearned but are good in verbal explanation. The questionnaire was divided into three sections. Section A sought information on the socio-economic characteristics, Section B investigated non-farming activities carried out around Onigambari forest reserve, while Section C assessed the impact of the non-farming activities around Onigambari Forest Reserve.

#### **Data Analysis**

Descriptive statistical analysis was used to analyze the data and Chi-square was used to compare observed result with expected result.

#### **RESULTS**

Table 1 revealed the Socio-demographic characteristics. Age distribution showed that 10.4% of the respondents are between the ages of 20-30, 39.3% of the respondents are of ages between 31-40, 27.3% are between the ages 41-50, while 23% are above age 50. Majority (77.6%) of the respondents are males, while majority (73.2%) were married. Respondents 31.1% has family size of 2-4, 47.5% of respondents have the family size 5-7, 19.7% respondents have 8-10 family size, while 1.6% are above 10 family size. Majority (77.6%) of the respondents are males, while majority (73.2%) were married. Respondents 31.1% has family size of 2-4, 47.5% of respondents have the family size 5-7, 19.7% respondents have 8-10 family size, while 1.6% are above 10 family size. Fifty-one

(51.4%) of the respondents are Christians, 40.4% of Islam, while 8.2% are Traditional. Yoruba tribal respondents are 60.7%, there were 27.3% who are Igbo, while 12% of the respondents are Hausa. Most (37.2%) of the respondent's educational status is primary education. 15.3% of the respondents recorded the least percentage in the years of Farming Experience between 1-5years, 27.9% of the respondents had 6-10 years of Farming Experience, 34.4% of the respondents had the highest percentage of 11-15years Farming Experience, while 22.4% are above 16 years of Farming Experience. 60.1% of the respondents recorded the highest percentage of Farming has their major occupation, followed by 26.2% of the respondents who has Trading has their major occupation, while 13.7% of the respondents recorded the least percentage of Artisans has their major occupation. 45.9% of the respondent recorded the highest percentage of Farming as their secondary occupation, 45.9% of the respondents also recorded the highest percentage in Trading as their secondary occupation, 2.2% of the respondents recorded the least percentage of public servant as their secondary occupation while 6% of the respondent's secondary occupation are Artisans.

Figure 1 shows non-Farming activities in the study area. Seriki recorded the highest number of respondents (23) involved in Firewood as their non-farming activities. Onipe community had the highest number of respondents (15) involved in Tannings as their non-farming activities. Onigambari community recorded the highest (13) number of respondents involved in Leaves collection as their non-farming.

Table 2 revealed the Socio-economic impact of non-farming activities of the respondents in the study area. Fifty-four respondents stated that non-farming has effect on the livelihood, 123 of the respondents stated that non-farming activities does not have effect on the livelihood of Onigambari Forest Reserve while 6 respondents had no positive response.

**Table 1. Socio-demographic Characteristics of the Respondents**

<b>Socio-Demographic</b>	<b>Frequency N = 183</b>	<b>Percentage (%)</b>
<b>Age</b>		
20-30	19	10.4
31-40	72	39.3
41-50	50	27.3
50 Above	42	23
<b>Gender</b>		
Female	41	22.4
Male	142	77.6
<b>Marital Status</b>		
Single	22	12
Married	134	73.2
Divorced	18	9.8
Widow	9	4.9
<b>Family Size</b>		
2-4	57	31.1
5-7	87	47.5
8-10	36	19.7
10 Above	3	1.6
<b>Religion</b>		
Christianity	94	51.4
Islam	74	40.4
Traditional	15	8.2
<b>Ethnic Background</b>		
Yoruba	111	60.7
Igbo	50	27.3
Hausa	22	12
<b>Educational Status</b>		
No Formal Education	65	35.5
Primary Education	68	37.2
Secondary Education	47	25.7
ND/NCE	3	1.6
<b>Years of Farming Experience</b>		
1-5	28	15.3
6-10	51	27.9
11-15	63	34.4
Above 16	41	22.4
<b>Major Occupation</b>		
Farming	110	60.1
Trading	48	26.2
Artisans	25	13.7
<b>Secondary Occupation</b>		
Farming	84	45.9
Trading	84	45.9
Public Servant	4	2.2
Artisans	11	6

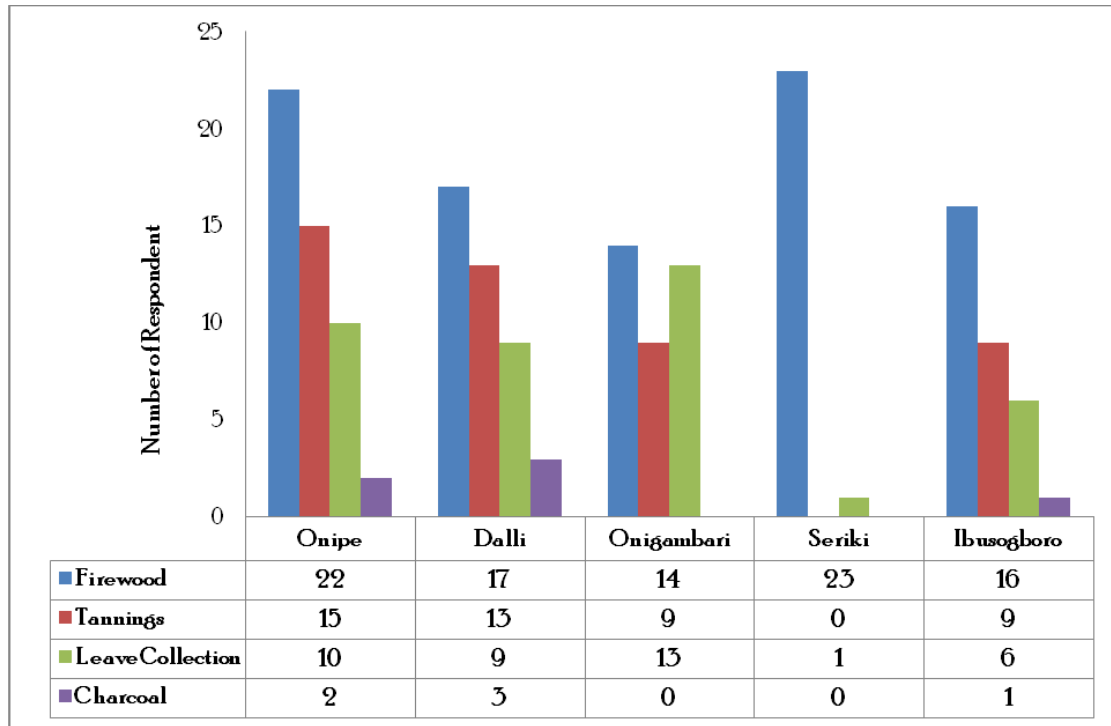


Figure 1: Non-Farming Activities in The Study Area

Table 2: Effect of Non-farming Activities on Livelihood around Onigambari Forest Reserve

Effect of non-farming	How does non-farm activities affect the livelihood	Villages					Total
		Onipe	Dalley	Onigambari	Seriki	Ibusogboro	
Yes	Poverty Reduction	8	2	1	1	2	14
	Generation of Income	9	8	2	2	9	30
	Positive Gain in Per Capital						
	Food Consumption	6	2	1	0	1	10
	<b>Total</b>	<b>23</b>	<b>12</b>	<b>4</b>	<b>3</b>	<b>12</b>	<b>54</b>
No	Poverty Reduction	13	9	12	2	7	43
	Generation of Income	10	11	15	17	8	61
	Positive Gain in Per Capital						
	Food Consumption	2	8	3	2	4	19
	<b>Total</b>	<b>25</b>	<b>28</b>	<b>30</b>	<b>21</b>	<b>19</b>	<b>123</b>
No Response	Generation of Income	0	1	2	0	0	3
	Positive Gain in Per Capital						
	Food Consumption	1	1	0	0	1	3
	<b>Total</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>1</b>	<b>6</b>

Table 3 shows Chi Square analysis at 5% confidence limit, the result revealed that generation of income ( $\chi^2=18.71$ ,  $df=8$ ,  $p=0.01$ ) were dependent on the non-farming activities on livelihood in the study area and this is highly significant at 5% confidence level.

Table 4 shows the Socio-Economic Impact of Non-farming Activities around Onigambari

Forest Reserve, 79.8% of the respondents has heard of non-farming, 20.2% of the respondents has not heard of non-farming, 76.5% of the respondents are into non-farming activities, 23.5% of the respondents are not into any of the non-farming activities. 55.1% of the respondents practiced non-farming for Generation of income while 44.8% of the respondents practiced non-farming for Poverty reduction.

**Table 3: Chi Square of Non-farming Activities on Livelihood around Onigambari Forest Reserve**

How does non-farm activities affect the livelihood	Chi-Square	Df	Sig.
Poverty Reduction	4.46	4	0.34 ns
Generation of Income	18.71	8	0.01*
Positive Gain in Per Capital Food Consumption	9.42	8	0.30ns

\*Significant ( $P \leq 0.05$ ); Not Significant ( $P > 0.05$ )

**Table 4: Socio Economic Impact of Non-farming Activities around Onigambari Forest Reserve**

Non-Farming	Frequency N = 183	Percentage
<b>Have you ever heard of non-farming?</b>		
Yes	146	79.8
No	37	20.2
<b>Are you into any of the non-farming activities?</b>		
Yes	140	76.5
No	43	23.5
<b>Why do people practice non-farming?</b>		
Generation of Income	101	55.1
Poverty Reduction	82	44.8
<b>Do you think that non-farming activities can affect the livelihood of Onigambari residents?</b>		
Yes	60	32.8
No	123	67.2
<b>How does non-farm activities affect the livelihood of Onigambari Forest Reserve?</b>		
Poverty Reduction	57	31.1
Generation of Income	94	51.4
Positive Gain in Per Capital Food Consumption	32	17.5
<b>What effect does non-farming activities have on Onigambari Forest Reserve?</b>		
Soil Pollution	46	25.1
Loss Soil Nutrient	81	44.3
Soil Erosion	48	26.2
No Response	8	4.4

Table 5 shows the result on the assessment of the impact of non-farming activities. Twenty respondents' states that non-farming is highly profitable, 45 respondents stated that non-farming is Profitable, 68 respondents recorded non-farming to be averagely profitable while 13 recorded the least number of respondents of non-farming to be Non profitable.

Table 6 shows the Chi Square analysis at 5% confidence limit. The result revealed profit ( $\chi^2=9.71$ ,  $df=4$ ,  $p=0.05^*$ ), averagely profitable ( $\chi^2=17.72$ ,  $df=4$ ,  $p=0.00^*$ ) were dependent on the profitability of non-farming activities on the livelihood and was highly significant at 5% confidence level.

**Table 5: Impact of Non-farming Activities on the Livelihood around Onigambari Forest Reserve**

Have you ever heard of non-farming?	How profitable is the non-farming activities?	Villages					Total
		Onipe	Dalli	Onigambari	Seriki	Ibusogboro	
Yes	Highly Profitable	10	3	2	4	1	20
	Profitable	13	6	11	7	8	45
	Average Profitable	15	12	20	9	12	68
	Non-Profitable	5	1	0	4	3	13
	<b>Total</b>	<b>43</b>	<b>22</b>	<b>33</b>	<b>24</b>	<b>24</b>	<b>146</b>
No	Highly Profitable	1	1	0	0	1	3
	Profitable	3	8	3	0	3	17
	Average Profitable	2	10	0	0	4	16
	Non-Profitable	0	1	0	0	0	1
	<b>Total</b>	<b>6</b>	<b>20</b>	<b>3</b>	<b>0</b>	<b>8</b>	<b>37</b>

**Table 6: Chi-square of Non-farming Profitability**

How profitable is the non-farming activities?	Value	Df	Sig.
Highly Profitable	3.96	4	0.41ns
Profitable	9.71	4	0.05*
Average Profitable	17.72	4	0.00*
Non-Profitable	6.46	3	0.09ns

\*Significant ( $P \leq 0.05$ ); Not Significant ( $P > 0.05$ )

Table 7 shows the impact of non-farming; 12.6% of the respondents recorded high profitability of non-farming activities, 33.9% of the respondents recorded profitable, 45.9% recorded the highest percentage of non-farming has averagely profitable while 7.7% of the respondents recorded the least percentage of non-farming has Non profitable. 35.5% of the respondents stated that non-farming activities is more Profitable compared to farming while 64.5% of the respondents stated that Farming is more Profitable than non-farming. 83.6% of the respondents stated that the benefits they get per year from the practice of non-farming activities is Cocoa, followed by 9.8% of the respondents who stated that the benefit they realized per year from the practice of non-farming activities is Kolanut while 6.6% recorded the least in percentage of Oil palm has their benefit per year. 20.2% of the respondents stated that the money realized per month is between ₦20,000 - ₦ 30,000, followed by 43.2% recorded the highest percentage of money realized per month between ₦ 31,000 - ₦ 40,000. 23.5% of the respondents recorded the money realized per month to be between ₦ 41,000 - ₦ 50,000 while 13.1%

recorded the least percentage in the money realized per month to be Above #50,000.

Table 8 shows the Contribution of non-farming activities to Sustainable Forest Management, 55.7% of the respondents has heard of Sustainable Forest Management while 44.3% of the respondents have not heard of Sustainable Forest Management. 84.1% of the respondents stated that their non-farming activities reduce deforestation in Sustainable Forest Management while 15.8% of the respondents stated that their non-farming activities reduce competition (nutrient) in Sustainable Forest Management. 46.4% of the respondents stated that the benefit of non-farming in Sustainable Forest Management to the rural livelihood is that there is Reduction in poverty, 43.2% of the respondents stated that the benefit of non-farming in Sustainable Forest Management to the rural livelihood is that there is Generation of income while 10.4% of the respondents stated that the benefit of non-farming in Sustainable Forest Management to the rural livelihood is Climate amelioration. 30.6% of the respondents stated that non-farming activities should be engaged in than farming while 69.4% stated that farming should be engaged in than non-farming activities. 43.2% of the respondents stated the foreseen challenges that could affect people from practicing or carrying out non-farming activities is that it is not recognized (lack of awareness) while 56.8% of the respondents stated that the foreseen challenges that could affect people from practicing non-farming activities is that it does not yield much income.



**Table 7: Impact of Non-farming Activities**

<b>Impact of Non-farming Activities</b>	<b>Frequency N = 183</b>	<b>Percentage</b>
<b>How profitable is the non-farming activities?</b>		
Highly Profitable	23	12.6
Profitable	62	33.9
Average Profitable	84	45.9
Non-Profitable	14	7.7
<b>Are non-farming activities more profitable? compared to farming?</b>		
Yes	65	35.5
No	118	64.5
<b>What other benefits do you get from the practice of non-farming activities per year?</b>		
Cocoa	153	83.6
Kolanut	18	9.8
Oil Palm	12	6.6
<b>How much do you realize per month from? Non-farming activities?</b>		
₦ 20,00 - ₦ 30,000	37	20.2
₦ 31,000 - ₦ 40,000	79	43.2
₦ 41,000 - ₦ 50,000	43	23.5
₦ 50,000 Above	24	13.1

**Table 8: Contribution of Non-farm Activities to Sustainable Forest Management**

<b>Contribution of non-farming activities</b>	<b>Frequency N = 183</b>	<b>Percentage</b>
<b>Have you ever heard of Sustainable Forest Management?</b>		
Yes	102	55.7
No	81	44.3
<b>How has your non-farming activities contributed to Sustainable Forest Management?</b>		
It reduces deforestation	154	84.1
It reduces competition (nutrient)	29	15.8
<b>What is the benefit of non-farming in? sustainable forest management to the rural livelihood?</b>		
Poverty Reduction	85	46.4
Generation of Income	79	43.2
Climate Amelioration	19	10.4
<b>Do you agree that non-farming activities? should be engaged in than farming?</b>		
Yes	56	30.6
No	127	69.4
<b>What are the foreseen challenges that can affect people from practicing or carrying? out non-farming activities?</b>		
It is not recognized	79	43.2
It does not yield much income	104	56.8

## DISCUSSIONS

Age distribution showed that many people who practices non-farming activities are between the ages of 31 and 50. This implies that, non-farming activities is practiced by energetic people in the middle age and corroborates Chukwuezi (2001), Bryceson (2002) and Maegher (2001) that there is tendency for younger people to pursue multiple livelihood activities. Majority (77.6%) of the respondents are males, while majority (73.2%) were married. Respondents 31.1% has family size of 2-4, 47.5% of respondents have the family size 5-7, 19.7% respondents have 8-10 family size, while 1.6% are above 10 family size, this implies that the larger the household size the higher the likelihood of adopting non-farm activities, this is not in line with Haggblade *et al.*, (2007), which says that increase in household size increases the likelihood of adopting non-farm activities. This reveals that non-farming business activities can be combined with other jobs to sustain the livelihood.

The result from this study revealed the Socio-economic impact of non-farming activities of the respondents in the study area is great. Fifty-four respondents (29.5%) stated that non-farming has effect on the livelihood, and 123 of the respondents (67.2%) stated that non-farming activities does not have effect on the livelihood of Onigambari Forest Reserve. Chi Square analysis at 5% confidence limit was used to determine the non-farming activities on livelihood in the study area. The generation of income  $\chi^2=18.71$ ,  $df=8$ ,  $p=0.01$  were dependent on the non-farming activities on livelihood in the study area and is highly significant at 5% confidence level. This interprets that non-farming activities plays an important role in generation of income for the rural households in the study area. This is in line with the findings of Ellis and Freeman, (2004) that non-farm economic activities can reduce poverty in rural communities. Non-farming activities is playing an important role in generation of income and poverty reduction of the rural households in the study area. This is in line with the findings of Ellis and Freeman, (2004) that non-farm economic activities can reduce poverty in rural communities. Many respondents felt non-farming activities can affect the livelihood of Onigambari residents.

Respondents have heard about non-farming in the overall Communities and recorded non-farming to be highly profitable. This is in corroboration with Ibekwe *et al.*, 2010 which states that non-farming activities have become an important component of livelihood strategies in the rural areas of developing countries.

Result of the Chi Square analysis at 5% confidence limit which was used to determine the non-farming activities on livelihood in the study area revealed profit ( $\chi^2=9.71$ ,  $df=4$ ,  $p=0.05^*$ ), averagely profitable ( $\chi^2=17.72$ ,  $df=4$ ,  $p=0.00^*$ ) were dependent on the profitability of non-farming activities on the livelihood and was highly significant at 5% confidence level. This finding agreed with Ibekwe *et al.*, 2010 which states that non-farming activities have become an important component of livelihood strategies in the rural areas of developing countries. Non-farming activities is very profitable in the study area. Although if compared to farming activities, it is not as profitable to the latter. Some of the benefits gotten per year from the practice of non-farming activities are Cocoa, Kolanut, and Oil palm. Many people generate income which ranges from between N31,000 to N40,000 monthly.

Non-farming activities has greatly contributed to Sustainable Forest Management. It reduces deforestation, competition for soil nutrient, poverty reduction, Generation of income, and Climate amelioration. Non-farming activities should as well be engaged in as farming. The foreseen challenges that could affect people from practicing or carrying out non-farming activities is that it is not recognized by many (lack of awareness) and that as profitable as it is, it does not yield much income.

## CONCLUSION

The contribution of non-farming activities to Sustainable Forest Management has led to great impact in terms of reduction in deforestation, reduction in competition (nutrient) and Climate amelioration. The study also revealed that the impact of non-farming activities to the livelihood of the rural dwellers are poverty reduction, generation of income, positive gains in per capital food consumption.

## RECOMMENDATION

Awareness and enlightenment programmes should be organized by the forest workers/Extension agents to educate the rural dwellers on the importance and gains derivable from practicing non-farming activities for sustenance of forest products

## REFERENCES

- Adepoju, A.O. and Oyewole, O.O. (2014). Rural Livelihood Diversification and Income Inequality in Akinyele Local Government Area, Ibadan, Oyo State, Nigeria *Journal of Agricultural Sciences*, 59(2): 175-186.
- Alimi, W.A and Abiodun, A.A. (2014). Assessment of the climatic and socio-economic impacts of illegal logging in a rainforest in Onigambari forest reserve Ibadan.
- Ayetan, G (2017). Socio-economic benefits of forest reserve, a case study of Onigambari forest reserve paper presented at Tai-Solarin university of education, Ijagun, Oyo state.
- Ayetan, G. (2019). Assessment of the impact of fuelwood marketing on the livelihood of rural dwellers around Onigambari forest reserve of Oyo State. Unpublished Master degree thesis submitted to Tai-Solarin university of education Ijagun Ijebu-ode Ogun State, Pg 12-15.
- Bezu, S.C.B. Barrett and Holden, S. (2012). Does non-farm economy offer pathways for upward mobility? Evidence from a panel data study in Ethiopia. *World development* 40 (8): 1634-1646.
- Ellis, F. and Freeman, H.A. (2004). Rural livelihoods and poverty reduction strategies in four African countries. *Journal of Development Studies*, 40(4): 1-30.
- Haggblade, S., Hazell, P. and Reardon, T. (2007). Transforming the rural non-farm

## Acknowledgements

The authors appreciate Forestry Research Institute of Nigeria (FRIN) and Federal College of Forestry, Ibadan for the opportunity given to the authors to conduct this study.

- economy. John Hopkins University Press Baltimore.
- Ibekwe, U.C., Eze C.C., Ohajianya, D.O., Orebiyi, J.S., Onyemauwa, C.S. and Korie, O.C. (2010). Determinants of non-farm income among farm households in South East Nigeria. *Researcher, Academia Arena*, 2(7), 1-4.
- Islam, N. (1997). The Non-farm Sector and Rural Development Food, Agriculture and Environment Discussion Paper, No. 22 Washington, DC: International Food Policy Research Institute.
- Jonasson 2005; Awoyemi (2004). Rural non-farm incomes and poverty reduction in Nigeria.
- Keija. (2008). Employment and Income Diversification in Rural Uganda: Evidence from the 1999/2000 National Household Survey. Thesis Presented for the Award of the Degree of Doctor of Philosophy in the School of Economics University of Cape Town.
- Lanjouw, P. (2007). Does the rural non-farm economy contribute to poverty reduction, in T. Haggblade, S., Hazell, P.B.R., (Reardon E.D), Transforming the rural non-farm economy; opportunities and threats in the developing world international food policy research institute. Baltimore Johns Hopkins University press, USA.
- Reddy, S. S., Ram, P. R., Sastry, T. V. N. and Devi, I. B. (2009). Agricultural Economics Oxford and IBH Publishing Co. PVT Ltd.,