

## VIEWS AND GAINS OF WOMEN ON BUSH MEAT TRADE IN BUFFER ZONE RANGES OF OLD OYO NATIONAL PARK, NIGERIA

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### ABSTRACT

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The study examined the views and gains of women on bush meat trade in Buffer Zone Ranges of Old Oyo National Park, Nigeria. Multi-stage random sampling technique was used to select 270 women living in the study area. Data were collected through a well-structured interview schedule and analysed using descriptive statistics and linear regression. Results showed that majority of the respondents were within the age bracket of more than 40 years (57.78%), married (72.96%), had formal education (61.85%) and earned an average of less than 40000 Naira monthly (51.48%). The respondents indicated a high view that unregulated hunting and business of wild animal species as a factor that can destroy the environment ( $\bar{x} = 6.54$ ) and on hunting and business of bush meat as not being a good livelihood activity ( $\bar{x} = 5.14$ ). The gains of women on bush meat trade in the study area are that it guarantees them cheap access to animal protein ( $\bar{x} = 6.86$ ) and the business in bush meat gives them a high return ( $\bar{x} = 6.17$ ). The linear regression results showed that age ( $\beta_1 = +0.467$ ), household size ( $\beta_2 = +0.621$ ), education ( $\beta_3 = +0.652$ ) and average monthly income ( $\beta_4 = +0.803$ ) of the respondents significantly influenced their view on bush meat trade in the study area. Based on the findings, the study recommended that massive enlightenment campaigns need to be embarked upon by both governmental and non-governmental organizations to change their mind-set of women on the implication of bush meat trade in the study area.

**Keywords:** Old Oyo National Park, Buffer Zone Range, Communities, bush meat, women, wildlife business

## INTRODUCTION

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People travel from far and nearby communities to buy fresh and smoked bush meat on designated market days which varies from community to community. Rural women's children are found by the roadside, displaying bush meat to the attention of the passers-by who may be interested in buying the product. Some of these meat items are eventually taken into places like hotels, restaurants and homes, where they are served as special meat. In other to avoid detection, much of the business in bush meat, take place early in the morning, at weekends and holidays when forestry officials presumed to be off duty (Adebayo et al, 2017).

The bush meat trade refers to the non-traditional hunting of non-game animals for meat (Dell et al., 2020). Bush meats are from non-domesticated, free-ranging and farm-raised wild animals and birds that either are legally hunted for personal consumption or reared, slaughtered, and commercially sold for food (Meduna et al. 2009). Bush meats are forest resources that are believed to be easily accessed by the resource-poor rural dwellers. Women's involvement in bush meat trade appear to be greater than that of men and is believed to be a popular scenario in the rural communities of Nigeria. Rural women play prominent role in the business of bush meat and its products at community level and in supplying urban markets.

Bush meat trade is attractive to poor-rural households because it provides high returns to labour with low risk and minimal capital outlay. Bush meat also serve as cheap protein source to the rural people who may not be able to afford meats from domestic animals (Branch, 2000). However, the situation is different in the urban areas where bush meat command very high prices in the city restaurants and is only an exclusive reserve for the highly privileged individuals who regard eating the meat as a way of linking up with their rural ancestors and an attribute of high degree of affluence.

Studies have found that income from bush meat sales was particularly important for the poor rural households and was given higher priority by them than other livelihood activities (Leroy et al (2004). Women have a prominent role in the business of bush meat commodities. The hunting for bush meat is predominantly done by men who incidentally are family members of the rural women. The processing, storage, business and cooking of the meat is essentially carried out by women otherwise known as producers in isolated areas (Brown, 2003). Bush meat serves as safety-net for the rural women in times of hardship when the resources can be relied upon for improved food security.

Bush meat makes a considerable contribution to rural tropical forest economic livelihood and human nutrition. Due to its informal often illegal nature, the bush meat traders' contribution to these rural economic is hidden from official statistics. Bush meat trade are

important drivers of wild life hunting as they provide steady market for these all important products and may even have a number of local professional hunters who are paid in advance to supply them with bush meat on a full time basis (Fimbel et al, 2000).

In spite of the numerous benefits derivable from business in bush meat and its products by rural women, it is important to understand the danger inherent in having too much contact with these wild species. Women are particularly predisposed to zoonotic diseases due to their frequent involvement in cutting, processing and cooking of bush meat. Leroy et al (2004) noted that contact with fresh meat during hunting and butchering, is a potential pathway for interspecies transmission of viruses. Besides, the steady market opportunity provided by rural women in the business of bush meat could drive even wild animals regarded as threatened species to the endangered status. This concern was supported by Fimbel et al (2000) in a study where they asserted that, in certain areas, these changes have even resulted in subsistence hunting becoming locally unsustainable.

### Objectives of the Study

The general objective of this study is to assess the view of women on bush meat trade in Buffer Zone Ranges of Old Oyo National Park, Nigeria.

The specific objectives are to:

- (i) describe the socio- economic characteristics of women in the study area;
- (ii) assess the views of women on bush meat trade in the study area; and (iii) examine the gains of women on bush meat trade in the study area.

### Hypothesis of the Study

H01: There is no significant relationship between socio-economic characteristics of women and their views on bush meat trade.

### METHODOLOGY

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This study was conducted in the Buffer Zone Ranges of Old Oyo National Park, Nigeria. It was created to focus on conservation and development assistance to those communities who bear the brunt of impacts arising from creation of National Park close to them and whose income and livelihood have been adversely affected by the creation of the park.

The Old Oyo National Park is one of the hoariest conservation space in Nigeria. It is the fourth biggest national park in Nigeria and is located in the South-Western part of Nigeria, specifically Northern part of Oyo State. Its total land area is approximately 2,512 sq. kilometre and an average rainfall of 1,100mm per annum (Orimaye, 2019). The park lies between latitudes 8°15'N and 9°00'N of the equator and longitudes 3°35'E and 4°42'E of the Greenwich meridian (Adedoyin et al., 2018). There are many wild pisces, avian, reptiles, amphibians, mammals, woody, plants and grass species in the park.

The Old Oyo National Park got its forename from the wrecks of Oyo-Ile, (Old Oyo) which was the primordial administrative centre of the Yoruba Realm. The profusion of cultural structures within and outside the Park with the blend of environmental and biodiversity locations puts the Park in a very distinctive and expedient locus as a possible tourism destination. The park is well-thought-out as a diverse legacy site with exceptional natural and cultural values that when reconnoitred, it would function as a base for its mobilization on the UNESCO world heritage list as the first diverse heritage site in Nigeria (Oladeji et al., 2012).

The objective of the Buffer Zone Range is to protect and maintain the biological diversity and other natural values of the area in the long-term, promote sound management practices for sustainable production purposes and protect the natural resource base from other land-use purposes that will be detrimental to the areas biological diversity, and also to contribute to local development of the Buffer Zone Ranges.

Structured questionnaire with open and closed ended questions were administered in selected settlements in the Old Oyo National Park, Oyo State. A multi - stage sampling procedure was used for the purpose of selecting the women participants for the study. Firstly, three communities out of the six neighbouring communities were randomly selected. The second stage involved the random selection of three women associations from each of the selected communities and finally a random selection of thirty respondents were made from each of the selected women associations, making a total sample size of two hundred and seventy (270) women participants. Data were collected using interview schedule which was personally conducted to elicit information from the respondents.

Respondents were requested to agree on a 7-point Likert-type scale the extent to which they agreed with the comments. Queries in the research instrument used (questionnaire) were worded to tap the level of respondents' agreement to determine their views and gains on bush meat trade in the study area. A little statements were undesirably worded and later reverse-scored to check response predisposition. The views and gains of the women were each measured on a 7-item scale.

Linear Regression Model was used to analyse the collected data on the relationship between socio-economic characteristics of women and their view on bush meat trade in the study area. The linear model is thus specified as:

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + e \quad \dots\text{Eq. 1}$$

Y = View of women on bush meat trade

X1 = Age (Years)

X2 = Household Size (Household Members)

X3 = Education (Years)

X4 = Average Monthly Income (Naira)

## RESULTS AND DISCUSSION

Table 1 showed that majority (57.787%) of the respondents were within the age bracket of more than 40 years. This implied that majority of the respondents were no longer in their youthful age which may place them at a disadvantage over the younger ones in shuttling around the community to make effective transactions. Also, majority (72.96%) of the respondents were married and as such the extra marital responsibilities conferred on them may necessitate their participation in businesses in order to meet up with family and other needs. A proportion of 61.85% of the respondents had formal education. This showed that most of the respondents were educated. This implied that the high literacy level among the respondents may enhanced easy transmission and acceptance of awareness message on wildlife conservation. Majority (58.89%) of the respondents had a household size of less than 6 members while 41.11% have a household size of more than 6 members. The smaller household size may increase the cost of labour required in the business activities. The average monthly income of the respondents showed that majority (51.48%) earned more than 40000 Naira while 48.52% earned less than 40000 Naira.

**Table 1: Socioeconomic characteristics of respondents**

Characteristics		Frequency	Percentage
<b>Age (Years)</b>	≤ 40	114	42.22
	> 40	156	57.78
<b>Level of Education</b>	No-formal Education	103	38.15
	Formal Education	167	61.85
<b>Household size</b>	≤ 6	159	58.89
	> 6	111	41.11
<b>Marital Status</b>	Married	197	72.96
	Not Married	73	27.04
<b>Occupation</b>	Farming	193	71.48
	Not farming	77	28.52
<b>Average Monthly Income (Naira)</b>	≤ 40000	139	51.48
	> 40000	131	48.52

Source: Field Survey, 2021

Table 2 showed that respondents had a high view on unregulated hunting and business of wild species can destroy the environment and bio-system ( $\bar{x} = 6.54$ ), hunting and business of bush meat is not a good livelihood activity ( $\bar{x} = 5.14$ ) and that wild animals are special gifts from God ( $\bar{x} = 4.44$ ).

Other views of the respondents are that wild species are inexhaustible in the forest ( $\bar{x} = 4.20$ ), wild species can never go into extinction ( $\bar{x} = 3.96$ ), extinction of wild species cannot lead to disequilibrium in eco-system ( $\bar{x} = 3.74$ ) and that trade in bush meat enhances the replacement (reproductive) rate of the wild species in the forest ( $\bar{x} = 3.50$ ).

The implication of this result is that respondents have the tendency to participate in bush meat trade considering the level of view on the dangers the game business constitutes to biodiversity.

**Table 2: View of women on bush meat trade**

View of women on bush meat trade	Mean
Unregulated hunting and business of wild species can destroy the environment and bio-system	6.54
Hunting and business of bush meat is not a good livelihood activity	5.14
Wild animals are special gifts from God	4.44
Wild species are inexhaustible in the forest	4.20
Wild species can never go into extinction	3.96
Extinction of wild species cannot lead to disequilibrium in eco-system	3.74
Trade in bush meat enhances the replacement (reproductive) rate of the wild species in the forest	3.50

Source: Field Survey, 2021

The result in Table 3 showed the gains of women on bush meat trade in the study area. The result showed that business guarantees cheap access to animal protein ( $\bar{x} = 6.86$ ) and business in bush meat gives high return ( $\bar{x} = 6.61$ ).

Other gains of the respondents are that participation in business help to raise their social status ( $\bar{x} = 6.19$ ), it is a continuity of family tradition ( $\bar{x} = 6.17$ ), the income from trade is used to pay children school fees ( $\bar{x} = 3.92$ ), there is access to a wide variety of animal meat ( $\bar{x} = 3.82$ ), it gives sense of belongingness to the traders ( $\bar{x} = 3.58$ ), the proceeds from bush meat trade is used to assist their husbands at home ( $\bar{x} = 3.43$ ), it gives free access to metaphysical power ( $\bar{x} = 3.39$ ) and it helps to sustain leadership positions in the bush meat traders association ( $\bar{x} = 3.35$ ).

From this result, it could be deduced that respondents viewed the bush meat trade as being highly beneficial and may be adduced points of attraction to the business.

**Table 3: Gains of women on bush meat trade**

Gains of women on bush meat trade	Mean
Business guarantees cheap access to animal protein	6.86

<b>Business in bush meat gives high return</b>	6.61
<b>Participation in business help to raise our social status</b>	6.19
<b>Continuity of family tradition</b>	6.17
<b>Income from trade is used to pay children school fees</b>	3.92
<b>Access to wide variety of animal meat</b>	3.82
<b>It gives sense of belongingness to traders</b>	3.58
<b>Proceeds from bush meat trade is used to assist our husbands</b>	3.43
<b>Free access to metaphysical power</b>	3.39
<b>It helps to sustain leadership positions in the bush meat traders association</b>	3.35

Source: Field Survey, 2021

The linear equation presents the multiple regression analysis showing the relationship between socio-economic characteristics of women and their view on bush meat trade in the study area. The age, household size, education and average monthly income are factors influencing the view of women on bush meat trade in the study area.

The regression result is presented below:

$$Y = 0.719 + 0.467X_1^{**} + 0.621X_2^{**} + 0.652X_3^{**} + 0.803X_4^{**} + e$$

R = 0.855; R Square = 0.904; Adjusted R Square = 0.881; F = 60.08\*\*\*; Note: \*\* = ( $\alpha_{0.05}$ )

The results in the specified model presented showed that age ( $\beta_1 = +0.467$ ), household size ( $\beta_2 = +0.621$ ), education ( $\beta_3 = +0.652$ ) and average monthly income ( $\beta_4 = +0.803$ ) of the respondents significantly influenced their view on bush meat trade in the study area.

This implied that age, household size, education and average monthly income are positive contributory factors to better view of the women in the study area about the threats inherent in bush meat trade.

## CONCLUSIONS

The study concluded that the respondents were of age, educated and earn substantial income from bush meat trading. The respondents' view on bush meat trade was believed to be highly beneficial as a result of their generally low view which encouraged more women participation in the business and posed a great danger on the biodiversity of the Old Oyo National Park, Nigeria. However, given the result of test of hypothesis, age, household size, education and average monthly income were concluded to be main contributory factors to a better view of women on bush meat trade.

Based on the findings, massive enlightenment campaign need to be embarked upon by both governmental and non-governmental organizations to change the mind-set on the implication of bush meat trade on animals in the wild (threatened and endangered species). Thus, coupled with this, law enforcement agency in the forestry sector, in this

regard, needs to intensify efforts in curbing the menace of business in threatened and endangered species.

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