



## ASSESSING PREFERENCE AND PERCEPTION OF BUSHMEAT CONSUMERS AMONG HOUSEHOLDS IN IBADAN, OYO STATE

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### ABSTRACT

Bushmeat often serves as the primary and substantial protein source, significantly contributing to food security. The decision on which species to consume is influenced by factors such as personal preferences, public appeal, and demand. This study assessed the preference and perception of bushmeat consumers among households in Ibadan, Oyo State. A purposive sampling technique was employed in selecting the two (2) local governments namely Akinyele and Oluyole based on the predominance of bushmeat consumers. The questionnaire survey used was a structured questionnaire and involved interviews of 150 respondents from randomly selected households from the selected Local Government areas (LGAs). The obtained data were analyzed by descriptive statistics. The results show that most of the respondents are of working age (16-30 years), married (50%) and averagely educated (41.3%). Many of the respondents (34.7%) are high-income earners (₦41,000 - ₦70,000). The result further revealed that 97.3% of the respondents consumed bushmeat and prefer bushmeat to other meat types (82.7%). The majority of the respondents agreed to the fact that bushmeat is more accessible (40%), delicious (34%), and medicinal value to man (38.7%) than conventional meat type. Bushmeat consumption is hurting the biodiversity protection of the area and if the trend should continue in this manner, the extinction of most of the species may be inevitable. It is therefore recommended wildlife domestication should be encouraged to meet the increasing demand for bushmeat.

**Keywords:** Perception, Consumers, Demand, Extinction, Biodiversity

### INTRODUCTION

Worldwide, the utilization of wildlife has significant livelihood implications and fulfills a variety of functions. According to some definitions, bushmeat is the carcass of any non-domesticated terrestrial mammal, bird, reptile, or amphibian that has been collected for nourishment (Ebewore *et al.*, 2015). For centuries, forest-dwelling people have eaten primarily wild animal meat (Arobaya *et al.*, 2002). The majority of forest dwellers continue to depend on bushmeat as their major animal protein source (Cawthorn *et al.*, 2015), and it can be a considerable source of income in some cases (Van Vliet and Mbazza, 2011), particularly when the trade is fueled by rising urban bushmeat consumption. Due to its widespread use as a source of protein and income for hunters, transporters, and vendors, bush meat consumption is a significant contributor to the overexploitation of wild animals (Kouassi *et al.*, 2023). Many individuals are noted to be more concerned with what to consume than what to conserve, placing pressure on bush meat while the situation is made worse by poverty in the majority of developing countries (Soaga *et al.*, 2014). Wildlife and habitats are suffering greatly as a result of the increased extraction of natural resources. Yet, the demand for hunting frequently outpaces the supply of animals, endangering the existence of several target species (Kouassi *et al.*, 2019).

The wildlife trade has long been acknowledged as posing a danger to fauna and flora species in West and Central African forests (Lindsey *et al.*, 2013). The trade in bushmeat plays a vital role in the national and even local economies of those areas. In remote populations, bushmeat is frequently the only significant source of protein, making a considerable contribution to food security. Over the next 50 years, bushmeat protein supplies in African forest biomes are projected to decline by 81% (Nasi and Fa, 2015). The trade in bushmeat thus represents a catastrophe both in terms of

human development and conservation. The extent and impact of the bushmeat trade have received less consideration in savannah biomes (Parr *et al.*, 2014). This lack of attention may be due to the misconception that wildlife hunting is mostly for sustenance and is practiced on a small scale (Parlee *et al.*, 2018). For example, Ibitoye *et al.* (2023) reported that wildlife consumption by rural people in the rainforests of Nigeria accounted for 20% of their total animal protein consumption, compared with 13% globally. Wild animals are consumed, sold locally, or transported to urban markets where they are sold at higher prices, and factors determine which species are sold or consumed cultural inhibitions as well as personal or public appeal and demand (Babalola, 2023). Even though the bushmeat trade is a multi-million dollar industry in West and Central Africa, most policymakers turn a blind eye to these positive attributes (Staley, 2009). However, as several case studies have been published recently, the importance of the problem is gradually being recognized. Therefore, this study was conducted to find out the preferences and perceptions of bushmeat consumers among households in Ibadan, Oyo State.

### MATERIALS AND METHODS

#### Study area

The study was conducted in the Akinyele and Oluyoye Local Government Areas in Oyo State, Nigeria. Akinyele local government has latitudes 7° 28' and 7° 31' N and longitude 3° 53' and 3° 57' E. Headquarters at Moniya in Ibadan. It covers an area of 414,892 square kilometers. It is located in the rainforest and grassland area of southwestern Nigeria. The region has a tropical climate with two distinct seasons; the dry season and the rainy season. The rainy season starting April and lasts until October, and the dry season starts in November and lasts until March. Agriculture is the main occupation of the people in the area. The crops grown include maize,

potatoes, cassava, and vegetables among others (Yekinni and Oyetade, 2014). Oluyole Local Government Area of Ibadan Oyo State has an area of 62.9 square kilometers and a population of 202,725 according to the 2006 census. The seat of local government is at Idi Ayunre. Oluyole Local Government Area has latitude 3°50'18"N and 3°50'69"N and longitudes 7°18'02"E and 7°18'99"E. It is bordered by four local government areas i.e. Ibadan, Southwest, Ibadan, Egbeda-Obafemi, Odeda and Ijebu-North Local Government Area, Ogun State, Ibadan Metropolitan Area, Ogun State (Babatunde *et al.*, 2020).

#### Sampling procedure and Data Collection

A purposive sampling technique was employed in selecting the two (2) local governments namely Akinyele and Oluyole LGAs based on the predominance of bushmeat consumers. The questionnaire survey used was a structured questionnaire and involved interviews of 150 respondents from randomly selected households from the selected Local Government areas (LGAs). Respondents include the head of the household, his wife, or other adults representing the household. The household questionnaire was used to elicit information on the demographic characteristics of the respondents, the patterns of bushmeat consumption, and the perception of consumers of bushmeat consumption.

#### Data Analysis

The data collected were subjected to descriptive statistical analysis, involving the use of percentages, tables, mean values, and standard deviation to present and summarize the information.

## RESULTS AND DISCUSSION

### Demographic Characteristics of Respondents

Table 1 presents the demographic characteristics of the households. The result shows that male (56%) respondents consumed bushmeat more than their female counterparts (44%). This indicates that gender has an important role when it comes to meat allocation in the African family context, where the male head of the household are been given special preferences. This is in line with Alarape *et al.* (2017), who stated that bushmeat is predominantly enjoyed by affluent individuals with high incomes, particularly males, who seek to demonstrate their high status within society. This demand is expected to increase depending on economic growth. The result also shows that the majority of bushmeat consumers were between the ages of 16-30 years (36.7%). This indicated that the majority of bushmeat consumers were within the working and productive age. In terms of educational level, the majority had tertiary education (42.3%) while 7.3% had other forms of education. Furthermore, the result shows that the bushmeat consumers were married (50.0%) and self-employed (38.0%). The distribution of the bushmeat consumers according to family size shows that most of the respondents had a household size of 3 – 4 persons (63.3%) while 5.3% had above 6. Household size is significant in terms of the level and quantity of game meat consumed in a household because the larger the household size, the greater the quantity and level of demand and consumption of bushmeat and vice versa. The result from the household income revealed that a reasonable amount of the respondents (34.7%) earned monthly income ranging from ₦41,000 - ₦70,000. This reveals that most of the respondents have high incomes and live above the national minimum wage of ₦18,000 monthly. This is similar to the study carried out in Owo, Ondo State (Alarape *et al.*, 2017).

**Table 1: Demographic Characteristics of Respondents**

Variable		Frequency	Percentage (%)
Gender	Male	84	56.0
	Female	66	44.0
Age	1 – 15	19	12.7
	16 – 30	55	36.7
	31 – 45	31	20.7
	46 – 60	34	22.7
	Above 60	11	7.3
Marital status	Married	75	50.0
	Single	59	39.3
	Divorced	7	4.7
	Separated	9	6.0
Tribe	Yoruba	120	80.0
	Igbo	24	16.0
	Hausa	4	2.7
	Fulani	2	1.3
Education	Primary School	18	12.0
	Secondary School	47	31.3
	Tertiary Education	62	41.3
	No formal education	23	15.3
Occupation	Artisan	31	20.7
	Trading	32	21.3
	Civil Servants	30	20.0
	Self-employed	57	38.0
Size of your household	1 -2	15	10.0
	3 – 4	95	63.3
	5– 6	32	21.3
	Above 6	8	5.3

Income per month	Less than ₦10,000	24	16.0
	₦11,000 – ₦40,000	31	20.7
	₦41,000 - ₦70,000	52	34.7
	₦71,000 - ₦100,000	36	24.0
	Above ₦100,000	7	4.7

### Pattern of bushmeat consumption and preference among consumers

The result of the response to the pattern of bush meat consumption is shown in Table 2. A large percentage (97.30%) consumed bushmeat and preferred bushmeat to other meat types (82.7%). It was evident from the result that a higher percentage of consumers preferred bushmeat because of its taste. Hence, it is reasonable to conclude that the respondents mainly consumed bushmeat because of its taste, nutritional value, and low-fat content. This can be supported by the findings of Dresden (2004) who reported that Africans also find in bushmeat certain properties that are not found in domesticated animals. This is corroborated by the findings of Nguyen, (2021) who found a strong preference for game meat in urban centers in Cameroon compared with herding participants, who considered game meat to be a tasty, healthy, nutritious product and a luxury product that meets cultural needs. It was also observed that grasscutter is the most prominent bushmeat consumed (48.7%) as shown in Table 2. The implication is that hunters will probably hunt grasscutters more aggressively to meet the ever-growing market demand

for bushmeat. The result revealed that most of the respondents agreed with the fact that they consume bushmeat every week (28.7%). This may pose a severe threat to the already threatened species of wildlife available by providing suitable justification for hunters to intensify their level of hunting more species frequently to be able to meet the increasing demand of bushmeat consumers constantly. This is in line with the findings of Ijose, (2018) that stated that constant demands for bushmeat as a commodity have resulted in hunting efforts that go far beyond household needs alone. A considerable number of the respondents did take two pieces of bushmeat per meal 41.3% while 3.3 % indicated that they consumed more than three pieces of bushmeat per meal. This could be attributed to the financial status and capability of the consumer. More than half of the consumers indicated that they can do without consuming bushmeat. This is not good news for conservation because a reasonable amount of consumers still depend so much on bushmeat as their major source of protein, not minding the fact that bushmeat is not gotten from domestication farms.

**Table 2: Pattern of bushmeat consumption and preference among consumers**

Variable		Frequency (n= 150)	Percentage (%)
Do you eat bush meat	Yes	146	97.3
	No	4	2.7
Do you prefer bushmeat to other meat types	Yes	124	82.7
	No	26	17.3
Why do you prefer bushmeat to other meat types	Cheaper	8	5.3
	Healthier	29	19.3
	Taste	63	42.0
	Nutritious	50	33.3
Preferred bushmeat	Grasscutter	73	48.7
	Duiker	9	6.0
	Monkey	17	11.3
	Snake	32	21.3
	Rabbit	19	12.7
In what form do you like purchasing your bush meat	Alive	34	22.7
	Dead	47	31.3
	Prepared	69	46.0
How do you prepare your bush meat	Fried	26	17.3
	Smoked	82	54.7
	boiled	42	28.0
Where do you get your bush meat	Forest	51	34.0
	Hunter	26	17.3
	Market	73	48.7
Can you do without eating bush meat	Yes	77	51.3
	No	73	48.7
How often do you consume	Daily	38	25.3
	Weekly	43	28.7
	Monthly	36	24.0
	Occasionally	33	22.0
Which time of the day do you consume bush meat	Morning	13	8.7
	Afternoon	23	15.3
	Night	69	46.0

How many pieces do you consume per meal	Any	45	30.0
	One	52	34.7
	Two	62	41.3
	Three	31	20.7
	Above three	5	3.3

### Perception of Consumers to Bushmeat Consumption

The results show that the majority of the respondents agreed to the fact that bushmeat is more accessible (40.0%), delicious (50.0%), and has medicinal value (38.7%) to man than conventional meat type. This is similar to the findings of Adebowale *et al.* (2021) who found that consumers strongly agreed that bushmeat is more delicious (100%) and is of more medicinal value (91.2%) to man compared to other conventional meat types. This also corroborates with the findings of Sarti *et al.* (2015), who observed that increased access to forests and the commercial wildlife trade have increased hunting and consumption of bushmeat in urban and rural communities in recent decades. In the same vein, the likelihood of consuming bushmeat in the future (34.0%), bushmeat carried more diseases (27.3%) and low in fat (40.7%) were agreed upon by the respondents. Hoffman and

Cawthorn, (2012) noted that bushmeat affords an equivalent and in a few instances extra great meals than domestic meat of high protein and low fats. Also, most of the respondents strongly agreed with the statement bushmeat is a better source of protein (56.0%) than conventional meat type. This is in agreement with the findings of Adelakun *et al.* (2020) who concluded that bushmeat has a potential for meat production and serves as a good source of protein for rural and poor people in Africa. Furthermore, it was disagreed upon by most of the respondents that bushmeat is cheaper (31.3%), bushmeat consumption gives me a higher status (30.0%), and culture forbids you from eating certain types of bush meat (38.7%). This disagrees with the findings of Van Vliet *et al.* (2006) who stated that for the poorest urban households, bushmeat is an important source of meat and the cheapest source of protein.

**Table 3: Perception of Consumers to Bushmeat Consumption**

PERCEPTION QUESTION	SD	D	U	A	SA	M	STD
Bushmeat is more accessible than a conventional meat type	5 (3.3)	28 (18.7)	13 (8.7)	60 (40)	44 (29.3)	2.27	1.17
Bushmeat is a better source of protein than other conventional meat types	3 (2.0)	1 (0.7)	12 (8.0)	50 (33.3)	84 (56.0)	1.59	0.82
Bushmeat is delicious compared to other meat types	19 (12.7)	11 (7.3)	33 (22.0)	51 (34.0)	36 (24.0)	2.51	1.28
Bushmeat is of medicinal value to man	5 (3.3%)	18 (12.0)	26 (17.3)	58 (38.7)	43 (28.7)	2.23	1.09
Bushmeat is cheaper than other conventional meat types	24 (16.0)	47 (31.3)	17 (11.3)	30 (20.0)	32 (21.3)	3.01	1.42
Bushmeat consumption gives me a higher status than other conventional meat types	24 (16.0)	45 (30.0)	29 (19.3)	37 (24.7)	15 (10.0)	3.17	1.25
Likelihood of consuming bushmeat in the future	8 (5.3)	39 (26.0)	35 (23.3)	51 (34.0)	17 (11.3)	2.80	1.11
Bushmeat carries more diseases than a conventional meat type	19 (12.7)	30 (20.0)	32 (21.3)	41 (27.3)	28 (18.7)	2.81	1.30
Bushmeat is low in fat therefore very good for human consumption	5 (3.3)	6 (4.0)	25 (16.7)	61 (40.7)	53 (35.3)	1.99	0.99
Culture forbids you from eating certain types of bush meat	33 (22.0)	58 (38.7)	16 (10.7)	21 (14.0)	22 (14.7)	3.39	1.36

SD-Strongly disagreed, D-Disagreed, U-Undecided, A-Agreed, SA-Strongly Agreed, M-Mean, SD-Standard deviation. The values in parentheses are percentage

### CONCLUSION

According to the study, majority of the bushmeat consumers are still in their productive age, although males are more involved in the consumption than females. The categories of people involved in bushmeat consumption are mostly self-employed. It was established that there was too much pressure on the hunting of grasscutters and snakes as a result of the high demand for these species in the study area. The consequence is that much of this wildlife which serves as an important stabilizer, bioindicator, and biological control with other ecological functions in the ecosystem may be lost to local extinction. In addition, people consume bushmeat because of its accessibility, delicious taste, and better protein source. It is concluded that bushmeat consumption is hurting the biodiversity protection of the area and if the trend should continue in this manner, the extinction of most of the species

may be inevitable. It is therefore recommended that intense campaigns on wildlife demand should be made to protect the fast-diminishing population of wildlife due to uncensored and uncontrolled hunting and consumption. Also, wildlife domestication should be encouraged to meet the increasing demand for bushmeat. This will reduce hunting pressure on wild species thereby maintaining the stability of the ecosystem.

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