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Proclivity of Agricultural Science Teachers towards Bush meat Consumption in Rural Areas of Ogun State, Nigeria

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Abstract

The study examined the proclivity of agricultural science teachers towards bushmeat consumption in rural areas of Ogun State, Nigeria. A multistage sampling procedure was used to select 65 agricultural science teachers from selected rural local government areas of Ogun State. Primary data were collected through a structured questionnaire with reliability coefficients of 0.78 and 0.75 using the test-retest method. Data were analysed using percentages and weighted mean scores. The results revealed that the majority (61.5%) of the respondents were female. The most prominent factors influencing bushmeat consumption were taste and preference (WMS = 1.54), ethical consideration (WMS = 1.52), and availability/accessibility (WMS = 1.49). The least influential factors were lack of awareness (WMS = 0.71) and government policies (WMS = 0.92). Findings further showed that boiling (WMS = 1.92) was the most preferred mode of bushmeat consumption, followed by soup preparation (WMS = 1.51) and smoking (WMS = 1.23). The study concluded that bushmeat consumption among agricultural science teachers in rural Ogun State is largely influenced by taste preferences and accessibility. The study recommends increased awareness campaigns on wildlife conservation and the promotion of affordable alternative protein sources to reduce dependence on bushmeat consumption.

Keywords: *Bush meat, agricultural science teachers, rural areas*

Introduction

Bushmeat refers to meat obtained from wild animals hunted for human consumption, especially in tropical and subtropical forest regions. Despite increasing concerns about biodiversity loss, zoonotic diseases, and wildlife conservation, bushmeat remains an important source of protein and income for many rural households in sub-Saharan Africa (Fa et al., 2022; Layade et al., 2021; van Vliet et al., 2023). In many African communities, bushmeat consumption is closely tied to cultural traditions, food preferences, and socio-economic conditions. The relationship between forest resource use and rural livelihoods has become increasingly complex in Nigeria. Ayogu et al. (2025) observed that strict conservation policies often restrict rural communities' access to forest resources, including wildlife, thereby affecting traditional livelihood activities such as hunting and gathering. These restrictions, while aimed at biodiversity conservation, create tensions between environmental

protection goals and the subsistence needs of local populations. Similarly, Enwelu and Nwobodo (2022) noted that unregulated resource extraction and land use pressures complicate collaborative conservation efforts in rural Nigerian communities.

The demand for bushmeat continues to increase due to poverty, population growth, rising prices of alternative animal protein sources, and persistent cultural attachment to wildlife products (Iwajomo, 2024; van Vliet et al., 2023). This pattern is particularly evident in West Africa, where wildlife is widely traded and consumed in both rural and urban areas. Fa et al. (2022) observed that bushmeat remains a significant source of dietary protein for millions of people in the Congo Basin and West Africa. Similarly, Lindsey et al. (2020) noted that many rural households depend on wild resources because of the scarcity or high cost of domesticated meat and fish.

Rural households often adopt livelihood diversification strategies to cope with economic vulnerability and ensure food security. Akinwale and Olatunji (2023) found that agricultural households in rural Nigeria commonly engage in multiple income-generating activities, balancing primary farming with secondary occupations such as trading, artisan work, and natural resource extraction. This diversification pattern reflects the adaptive strategies employed by rural families to stabilize household income in the face of economic uncertainty and limited access to conventional protein sources.

Non-financial factors such as taste, aroma, and cultural customs have been identified as major drivers of bushmeat consumption in Nigeria (Iwajomo, 2024). Adebowale et al. (2021) found that consumers strongly believe that bushmeat is more delicious, a better source of protein, and possesses greater medicinal value compared to conventional meat types. Availability, affordability, household size, and proximity to forest resources are also important factors shaping bushmeat consumption patterns in rural communities (van Vliet et al., 2023). Cultural beliefs and long-standing food habits further sustain demand across many African societies. However, the continued exploitation of bushmeat has raised serious concerns about wildlife depletion, biodiversity conservation, and public health risks associated with the handling and consumption of wild animals (Ayogu et al., 2025; Fa et al., 2022; Layade et al., 2021). Iwajomo (2024) observed a high level of lack of knowledge regarding disease transmission through contact and the consumption of bushmeat among both sellers and buyers in Nigerian markets. Wildlife hunting activities, driven by financial gain, leisure, and family tradition, continue to threaten wildlife populations in south-western Nigeria (Layade et al., 2021).

Agricultural science teachers in rural areas often maintain close links with farming communities and forest environments where bushmeat hunting and consumption are common. Their familiarity with rural livelihoods, indigenous knowledge, and local food practices may shape their attitudes towards bushmeat consumption (Akinwale & Olatunji, 2023). As teachers and community opinion leaders, they may also influence students and residents through their views and everyday practices. However, there is limited empirical information on the proclivity of agricultural science teachers towards bushmeat consumption in rural areas of Ogun State. This study was therefore designed to fill this gap.
Specifically, the study:

1. described the demographic characteristics of agricultural science teachers in the study area;
2. identified the factors influencing bushmeat consumption among agricultural science teachers in the study area; and
3. determined the preferred modes of bushmeat consumption among agricultural science teachers in the study area.

Methodology

The study was conducted in Ogun State, located in the South-West geopolitical zone of Nigeria. Ogun State lies approximately between latitudes 6°12′N and 7°59′N and longitudes 2°45′E and 4°45′E. The state is bounded by Oyo and Osun States to the north, Lagos State to the south, Ondo State to the east, and the Republic of Benin to the west. Ogun State covers a land area of about 16,980 square kilometres and is predominantly agrarian, with farming serving as a major occupation among rural residents.

The study was carried out in selected rural local government areas of Ogun State. The target population comprised all agricultural science teachers in the rural local government areas of the state. A multistage sampling procedure was employed. In the first stage, rural local government areas in Ogun State were purposively selected. In the second stage, five rural local government areas, Yewa North, Ijebu North East, Ijebu East, Odogbolu, and Ogun Waterside, were randomly selected. In the third stage, agricultural science teachers in the selected local government areas were identified, after which systematic sampling was used to select respondents. A total of 65 agricultural science teachers constituted the sample for the study.

Data were collected using a structured questionnaire designed to elicit information on respondents' socio-economic characteristics, factors influencing bushmeat consumption, and preferred modes of bushmeat consumption. The instrument was validated by experts in Agricultural Extension and Education. Reliability was established using the test-retest method, yielding reliability coefficients of 0.78 and 0.75. Data were analysed using descriptive statistics, including percentages and weighted mean scores.

Results and Discussion

Demographic Characteristics of Respondents

Table I shows that 38.5% of the respondents were male, while 61.5% were female, indicating that female teachers constituted the larger proportion of the sample. This finding is consistent with Adebowale et al. (2021), who reported that the majority of bushmeat sellers in south-western Nigeria were females (55.9%).

Regarding age distribution, 20.0% of the respondents were between 25 and 30 years, 27.7% were between 31 and 35 years, 38.5% were between 36 and 40 years, while 13.8% were 41 years and above. This indicates that most respondents were within the economically active age group. This finding aligns with Adebowale et al. (2021), who found a mean age of 41 years among bushmeat traders in Osun State.

In terms of religion, 49.3% were Christians, 43.1% were Muslims, and 7.7% practiced traditional religion. On educational qualification, 92.3% of the respondents held B.Sc. (Ed.) degrees, while 7.7% held M.Sc. degrees. None of the respondents

had the N.C.E. qualification. With respect to grade level, 46.2% were on grade levels 7–10, 47.7% were on grade levels 11–13, and 6.1% were on grade level 14 and above.

Concerning other sources of income, 47.7% of the respondents engaged in farming, 36.9% in trading, and 15.4% in artisan-related occupations. The predominance of farming as a secondary occupation may be linked to the respondents' professional background and familiarity with agricultural activities. This finding reflects the livelihood diversification patterns commonly observed in rural Nigerian households. Akinwale and Olatunji (2023) reported that agricultural households in rural Nigeria frequently engage in multiple income-generating activities to mitigate economic vulnerability and ensure household food security. This suggests that many agricultural science teachers complement their salaries with farming and other activities, thereby maintaining close interaction with rural environments where bushmeat hunting and consumption are prevalent. This finding is also consistent with Layade et al. (2021), who noted that hunting and bushmeat trade serve as important sources of livelihood for rural residents in south-western Nigeria.

Table I: Demographic Characteristics of Agricultural Science Teachers

Variable	Percentage (n = 65)
Sex	
Male	38.5
Female	61.5
Age (Years)	
25–30	20.0
31–35	27.7
36–40	38.5
41 and above	13.8
Religion	
Christianity	49.3
Islam	43.1
Traditional religion	7.7
Educational Qualification	
B.Sc. (Ed.)	92.3
M.Sc.	7.7
N.C.E.	0.0
Grade Level	
7–10	46.2
11–13	47.7
14 and above	6.1
Other Source of Income	
Trading	36.9
Farming	47.7
Artisan work	15.4

Source: Field Survey, 2025.

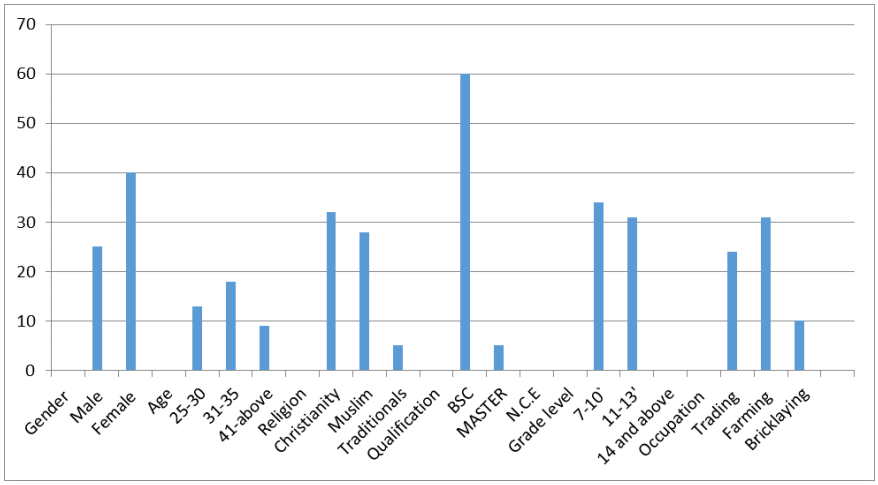

Figure 1: Demographic Characteristics of Respondents

Factors Influencing Bushmeat Consumption

Table II shows that taste and preference (WMS = 1.54), ethical consideration (WMS = 1.52), and availability/accessibility (WMS = 1.49) were the leading factors influencing bushmeat consumption among the respondents. This suggests that respondents' consumption behaviour was shaped more by food preference and access than by regulatory or awareness-related issues.

The finding is consistent with Iwajomo (2024), who reported that non-financial factors such as taste, aroma, and cultural customs were the main drivers of bushmeat consumption in Nigerian markets. Adebowale et al. (2021) similarly found that consumers strongly agreed that bushmeat is more delicious (5.00±0.0) and a better source of protein (4.82±0.13) compared to conventional meat types. Bushmeat is often readily available in rural communities where hunting remains common, and this accessibility may encourage continued consumption. In addition, where alternative animal protein sources are scarce or expensive, bushmeat may serve as a practical dietary option (Akinwale & Olatunji, 2023).

Ethical considerations also emerged as an important factor, reflecting the tension between dependence on bushmeat for food and concerns about wildlife conservation. This aligns with the findings of Ayogu et al. (2025), who observed that rural communities in Enugu and Cross River States face difficult choices between conservation imperatives and livelihood needs. The researchers noted that strict conservation policies often restrict access to forest resources, creating socio-economic hardships for communities that traditionally depend on wildlife for protein and income. This ethical dimension is further complicated by cultural traditions and the limited availability of affordable protein alternatives in rural areas.

Taste and preference ranked highest in this study, indicating that the sensory appeal and cultural familiarity of bushmeat remain central to its consumption. On the other hand, lack of awareness (WMS = 0.71) and government policies (WMS = 0.92) were the least influential factors. This may suggest that awareness campaigns and policy measures have not significantly shaped respondents' behaviour regarding bushmeat consumption in the study area. This finding resonates with the observations of Enwelu and Nwobodo (2022), who noted that collaborative conservation efforts in

rural Nigerian communities often fail to achieve their objectives due to inadequate community participation and weak enforcement of resource management policies.

Table II: Factors Influencing Bushmeat Consumption Among Agricultural Science Teachers

Factors that influence the consumption of Bush Meat	High factor (N=65)	%	Low factor (N=65)	%	Not a factor (N=65)	%	WMS	Ranks
Cultural practice	32	49.2	23	35.3	10	15.4	1.35	6th
Economic condition	28	43.1	29	44.6	8	12.3	1.31	10th
Availability & Accessibility	41	63.1	15	23.1	9	13.8	1.49	3rd
Perceived health benefits	39	60	11	16.9	15	23.1	1.36	5th
Lack of awareness	7	10.8	32	49.2	26	40	0.71	15th
Lack of sustainable Alternatives	33	50.8	27	41.5	5	7.7	1.43	4th
Government policies	26	40	8	12.3	31	47.7	0.92	14th
Cost	31	47.7	24	36.9	10	15.38	1.32	8th
Religion beliefs	26	40	30	46.2	9	13.8	1.26	11th
Ethical consideration	39	60	21	32.3	5	7.7	1.52	2nd
Taste and preference	36	55.4	28	43.1	1	1.5	1.54	1st
Community perceptions	20	30.8	35	53.8	10	15.4	1.15	13th
Livelihood dependence	28	43.1	26	40	11	16.9	1.26	11th
Food security	32	49.2	24	36.9	9	13.8	1.35	6th
Crisis situation	30	46.2	26	40	9	13.8	1.32	8th

Source: Field Survey, 2025

Preferred Modes of Bushmeat Consumption among Agricultural Science Teachers

Table III shows the respondents' preferred modes of bushmeat consumption. Boiling was the most preferred mode (WMS = 1.92), followed by soup preparation (WMS = 1.51) and smoking (WMS = 1.23). This indicates that respondents preferred preparation methods that are common in local cuisine and suitable for enhancing taste, texture, and preservation.

The preference for boiling may be attributed to its simplicity and its suitability for preparing meat in a hygienic and acceptable form. Soup preparation also ranked highly, suggesting that bushmeat is commonly incorporated into traditional soups and stews. This finding is consistent with the cultural dietary practices reported in

south-western Nigeria (Adebowale et al., 2021). Smoking ranked third, which may reflect its usefulness both as a cooking and preservation method.
In contrast, raw consumption had the lowest ranking (WMS = 0.07), indicating that respondents generally avoid consuming bushmeat without proper preparation. This is encouraging from a public health perspective, given the zoonotic disease risks associated with bushmeat consumption identified by Iwajomo (2024).

Table III: Preferred Modes of Bushmeat Consumption among Agricultural Science Teachers

Mode of Consumption	Regularly Percentage (n = 65)	Occasionally Percentage (n = 65)	Never Percentage (n = 65)	WMS	Rank
Roasting	24.6	66.2	9.2	1.19	4th
Stewing	10.8	76.9	12.3	0.99	7th
Smoking	32.3	58.5	9.2	1.23	3rd
Sun-drying	15.4	23.1	61.5	0.54	9th
Grilling	26.2	38.5	35.4	0.91	8th
Boiling	92.3	7.7	0.0	1.92	1st
Frying	43.1	29.2	27.7	1.15	5th
Raw consumption	0.0	7.7	92.3	0.07	10th
Salting	0.0	100.0	0.0	1.00	6th
Soup preparation	50.8	49.2	0.0	1.51	2nd

Source: Field Survey, 2025.

Conclusion and Recommendations

The study examined the proclivity of agricultural science teachers towards bushmeat consumption in rural areas of Ogun State, Nigeria. It assessed the demographic characteristics of the respondents, the factors influencing bushmeat consumption, and the preferred modes of bushmeat consumption among agricultural science teachers.
The findings revealed that most respondents were female (61.5%) and within the economically active age group. Many engaged in livelihood diversification strategies, combining teaching with farming and other income-generating activities. Taste and preference emerged as the most important factor influencing bushmeat consumption, followed by ethical consideration and availability/accessibility. Boiling was the most preferred mode of consumption among the respondents, followed by soup preparation and smoking.
Based on the findings, the study recommends that:

1. Government agencies, conservation organisations, and extension service providers should intensify awareness programmes on wildlife conservation and the potential health risks associated with bushmeat consumption, particularly focusing on zoonotic disease transmission. Such programmes should adopt participatory approaches that recognize the livelihood needs of rural communities while promoting sustainable resource use practices;
2. Affordable and nutritious alternative sources of animal protein should be promoted in rural areas to reduce dependence on bushmeat while ensuring household food security. Extension services should support rural households

in developing sustainable protein production systems such as grasscutter farming, poultry keeping, and aquaculture;

3. Agricultural science teachers should be encouraged through in-service training to promote conservation education and sustainable environmental practices among students and community members. As opinion leaders in their communities, they can play a crucial role in raising awareness about the balance between livelihood needs and wildlife conservation; and
4. Forest governance policies should be reviewed to ensure they balance conservation objectives with the socio-economic realities of rural communities. Policies should be designed through participatory processes that involve local stakeholders and provide viable livelihood alternatives to communities affected by conservation restrictions.

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