



ASSESSMENT OF DEMOGRAPHIC CHARACTERISTICS OF STAKEHOLDERS OF MARKETED WILDLIFE SPECIES ALONG FIVE HIGHWAYS IN SOUTH-WEST NIGERIA

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ABSTRACT

Wildlife is an important aspect of biodiversity but human civilization continues to impact negatively on it because hundreds of millions of animals are harvested from the wild and sold for man's use each year. Therefore, there is need to update the existing knowledge of wildlife stakeholders in marketed wildlife species especially in the Southwest Nigeria, has become imperative. A total of twenty-three (23) games markets along five Roads in South-west Nigeria (Road 1: Ibadan-Ife-Ado-Ekiti, Road 2: Ibadan-Ife-Akure, Road 3: Ibadan-Oyo-Ogbomoso, Road 4: Lagos-Ibadan-Shagamu Interchange and Road 5: Sagamu-Ore or IIA, IID, IIO, LSO and ISI respectively) were visited monthly for two seasons to document the wildlife stakeholders' details. Two hundred and fifty (250) copies of a structured questionnaire were administered using systematic random sampling (odd) method to obtain demographic information of the respondents including traders, hunters, herbalists, food vendors and artisans. Data generated were subjected to continuous statistics of bar charts for analysis and interpretation. Results revealed that all classes of people were represented in the trade but Road 5 (LSI) had the highest number of females with the people whose ages ranged between 16 and 25 years (6). Road 2 (Ibadan-Ife-Akure, IIA) had the highest number of people with age between 56 years and above. Generally, age-group in this study was ranked in years as 46-55 > 36-45 > 26-35 > 56 plus > 16-25. It was recommended that formulation of laws and Regulations to protect wildlife poaching be enacted. Government should also establish more reserves for wildlife conservation and protection of endangered species to stop them from going into extinction through different governmental programmes and policies.

Key words: Game markets, biodiversity, wildlife, conservation, endangered.

INTRODUCTION

Demography is the study of population size, geographic distribution, structure and composition as well as factors affecting these characteristics (Demographic Resources Research Centre, 2019). It is also the study of a population based on factors such as age, status, income levels, education, tribal race and sex; government and non-government organisations use demographics studies to learn more about a population for development and economic market research (Kenton, 2018). Wildlife trade deals with commerce of products that are derived from non-domesticated animals or plants usually extracted from their natural environment or raised under controlled conditions (Gideon, 2014).

Wildlife marketing makes favourite animals seem common as they slide towards extinction (Kilvert, 2018). Illegal trade in wildlife and products has caused decline of many species in Nigeria and it has affected the economy and ecosystem (NCF, 2016). Road transportation received a boost in Western Nigeria because the then Colonial Government pursued its objectives through road transportation to export agricultural products. This aided internal trade during the pre-Second World-war period when substantial quantities of *garri* and other agricultural products were transported from Ijebu towns to markets in Ibadan, Lagos, Ilorin and other towns in Western Nigeria (Okuseinde, 1988).

Also, people of Northern Nigeria consumed kola nut as a good substitute for alcoholic drinks and cigarette and this situation enhanced kolanut transportation from the West to the North (Olubomehin, 2012). He also reported that farmers of Western Nigeria also started replacing old cocoa trees with kola nut seedlings, the latter therefore became one of the most important commodities transported by road from Ijebu, Ekiti and Ondo Provinces to Northern Nigerian markets. These Lorries on return carried commodities such as onions and beans which were not only sold in Ekiti towns but also Oyo, Ile-Ife, Ilesha and Ibadan (Olubomehin, 2012). This study assesses the demographic characteristics of stakeholders of marketed wildlife species along five highways in south-west Nigeria.

MATERIALS AND METHODS

Study Area

The study area is the catchments of five highways within Southwest Nigeria: Ibadan-Ife-Ado Ekiti road named Road 1or (IIA) (264 km), Ibadan-Ife-Akure road tagged Road 2 or (IID) (204 km), Ibadan-Oyo-Ogbomoso road or Road 3 or (IOO)(120 km), Lagos-Benin road (from Sagamu Interchange to Ore Junction in Ondo State (153 km) or (LSO) labeled Road 4 and Lagos – Ibadan (from Sagamu Interchange to old Ibadan Toll Gate) or Road 5 or (LSI)that covers (62km) (Figure 1). Wildlife markets within 100 metres off the road on both sides of the expressways were demarcated /mapped and used for the study. Materials used were field notes, pens and pencils, structured questionnaires and Global Positioning System (GPS) equipment: Trimble Juno SD indicated the markets’ geographical locations. The markets are listed in Table 1.

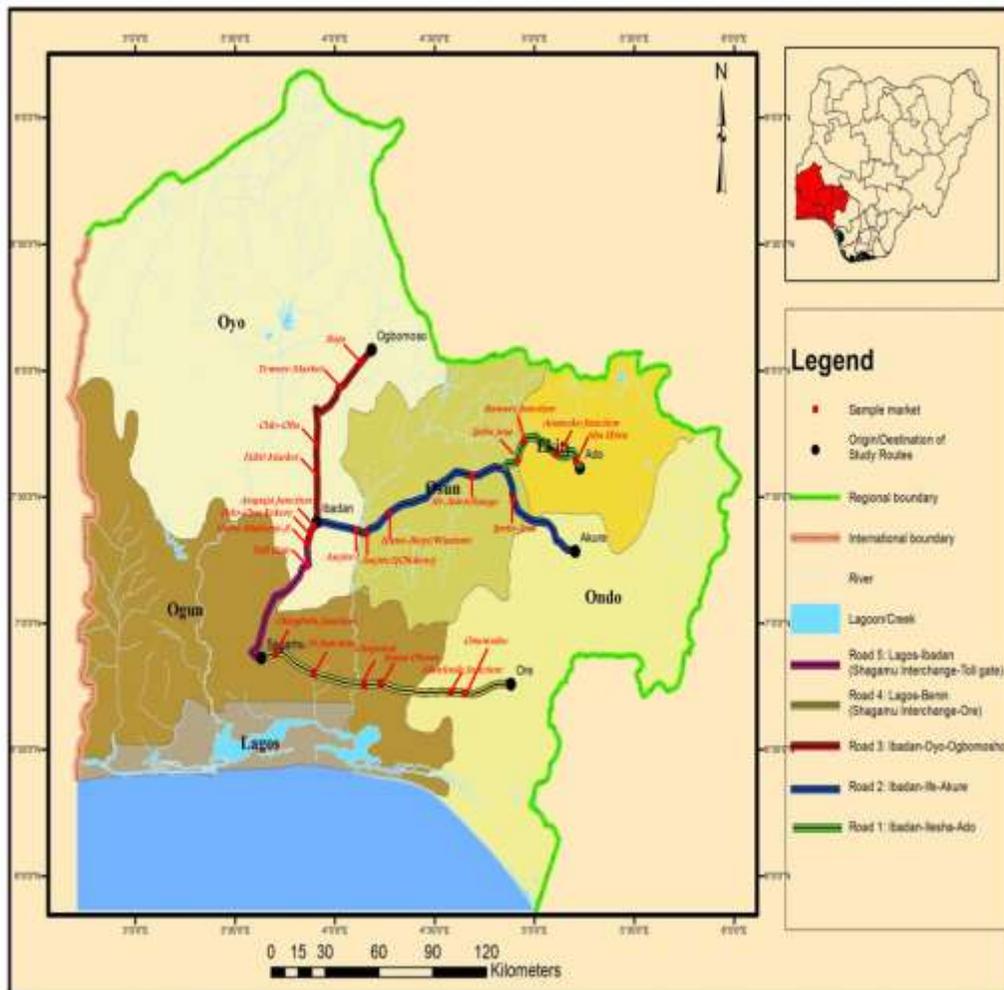


Figure 1: The Study area showing the roads and major neighbouring settlements

Table 1: Market Locations along the Study Roads

Market Roads	Locations	Km	Markets and the Coordinates of Latitude, Longitude and Altitude	States Covered
1	Ibadan-Ife-Ilesa-Ado-Ekiti Road	264	Ijebu Jesa, 7°41'N 4°49'E, +223m; Itawure Junction 7°44'N, 4°57'E, +265m; Aramoko Junction 7°43'N, 5°3'E, +300m; Aba Ebira (Ado-Iyin Road) 5°34'N, 4°12'E, +313m Total: 4 Markets	Oyo, Osun and Ekiti
2	Ibadan-Ife-Akure Road.	204	Asejire 1: 7°20'N, 5°3'E, +137m Asejire2(Olokere) 7°22'N, 4°7'E, +145m Iyana-Ikoyi/Wasinmi 7°24'N, 4°13'E, +213m Ife-Interchange: 7°30'N, 4°28'E, +275m. Ipetu-Jesa 7°41'E, 4°49'E +294m Total : 5 Markets	Oyo, Osun and Ondo
3	Ibadan-Oyo-Ogbomosho Road	120	Fiditi Market, 7°39'N, 4°41'E, +302m Odo-Oba: 7°27'N; 4°45'E, +306m Tewure Market 7°25'N; 4°34'E, +277m Iluju: 7°27'E; 4°46'E, +299m Total: 4 Markets	Oyo
4	(Sagamu– Ore road)	153	Odogbolu Junction 6°51'N; 4°33'E, +63m J4 Junction 6°44'N; 4°19'E, +72m Onipetesi 6°44'N; 4°33'E, +98m IyanaOluwa: 6°44'N; 4°33'E, +99m Akinfosile Junction: 6°52'N; 3°59'E, +101m Omotosho: 6°53'N; 4°7'E. +259m Total: 6 Markets	Ogun, Ondo
5	Lagos-Ibadan-Sagamu Interchange	62	Toll Gate 7°20'N; 3°56'E, +233m Guru-Maharaj-Ji: 7°22'N; 3°56'E, +189m Odo-Ona Kekere: 7°14'N; 3°52'E, +165m Arapaja Junction: 7°18'N, 3°52'E, +183m. Total: 4 Markets	Oyo, Ogun

Experimental Design

Reconnaissance Survey was conducted along the five highways to locate wildlife markets. This aided the work in documenting the communities within the catchments of the five highways. A pre-test of 50 (retrieved) structured questionnaires administration was carried out for one month using systematic random sampling (odd numbers) method in all the 23 markets to collate the list of animals found in the surrounding forests and markets from time immemorial through farmers, traders and hunters around the markets.

Market Survey

Visits to all the 23 wildlife markets identified (Table 1) viz: Ijebu-Jesa, Itawure Junction, Aramoko Junction and Aba-Ebira (4 markets); along Market Road . Asejire 1, Asejire 2, IyanaIkoyi/Wasinmi, Ife Interchange, and Ipetu-Ijesa (5 markets) for Market Road 2; Fiditi, Odo-Oba, Tewure and Iluju (3 markets) for Market Road 3; Odogbolu, J4, Onipetesi, IyanaOluwa, Akinfosile and Omotosho (6 markets) for Market Road 4 with Toll-Gate, Guru Maharaji, Odo-OnaKekere and Arapaja Junction (4

markets for Market Road) were done monthly for two years.

RESULTS

The socio economic and demographic characteristics of the respondents encountered during the data collection exercise were assessed.

On the basis of sex distribution of respondents, the order of female population was Road 5 > Road 4 > Road 1 > Road 3 > Road 2. Male respondents were arranged as Road 2 > Road 3 > Road 1 > Road 4 > Road 5 (18%). On the overall consideration, more females (141 or 56.4%) were encountered in this trade (Fig.2).

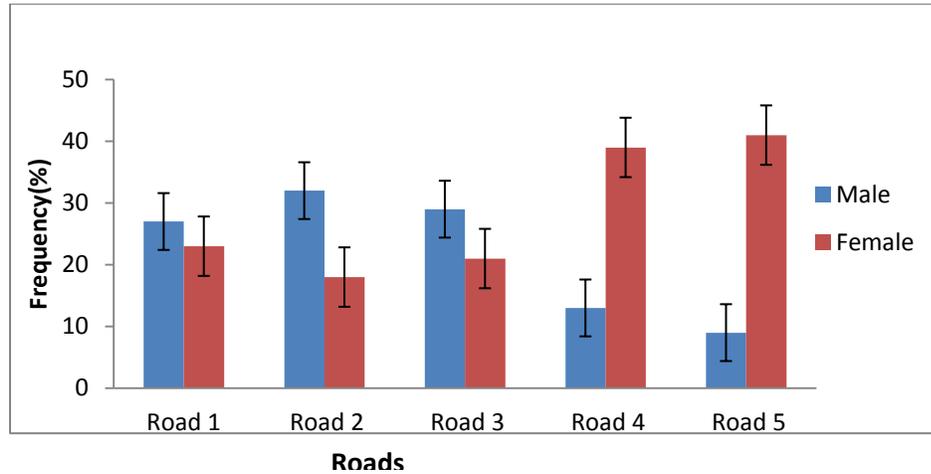


Figure 2: Sex Distribution of Respondents

Assessment of age distribution of respondents showed age group 16 – 25 years as highest on Road 5 (12%) and absent on Road 3. Respondents belonging to 26 – 35 years of age were arranged as Road 4 > Road 5 > Road 1 > Road 2 > Road 3 (8.0%). 36 to 45 years of age respondents were in this order:

Road 1 > Road 2 > Road 5 > Road 4 > Road 3. 46 to 55 years of age were in the order: Road 3 > Road 2 > Road 4 > Road 1 > Road 5. Old people (56 years and above) were most arranged as Road 2 > Road 3 > Road 5 > Road 1 > Road 4 (Figure 3).

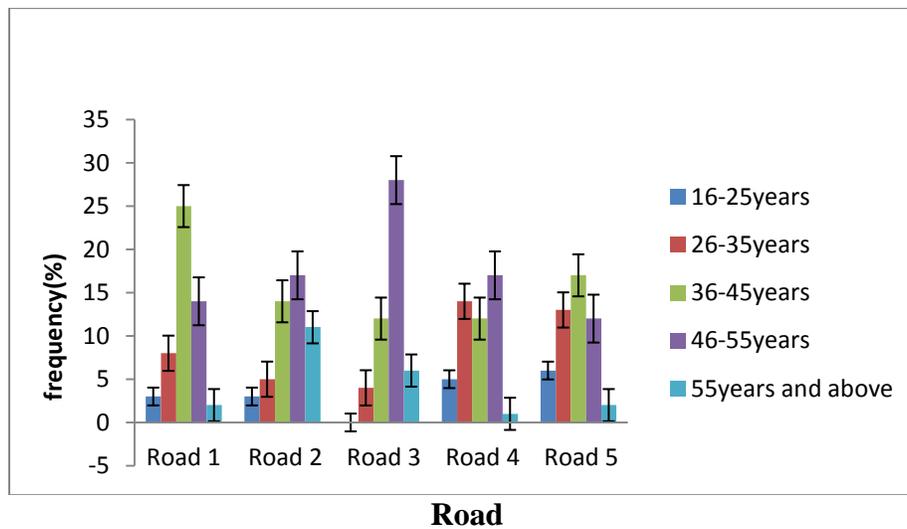


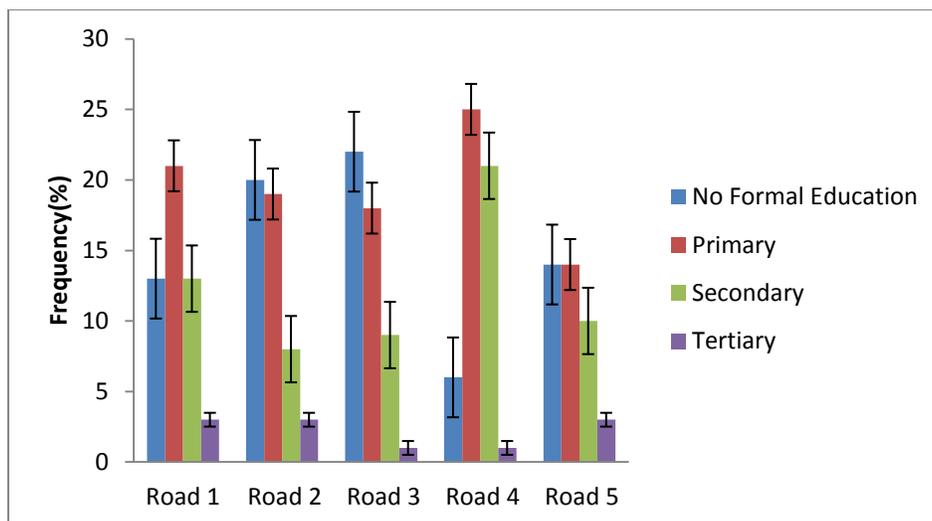
Figure 3: Age Distribution of Respondents

Considering the educational profile of respondents, non-formally educated ones was ranked as Road 3 (44%) > Road 2 > Road 5 > Road 1 > Road 4.

Primary school certificate holders were in the order: Road 4 > Road 1 > Road 2 > Road 3 > Road 5. Secondary school leavers were distributed as

follows: Road 4 > Road 5 > Road 3 > Road 1. Tertiary education certificates holders were distributed as

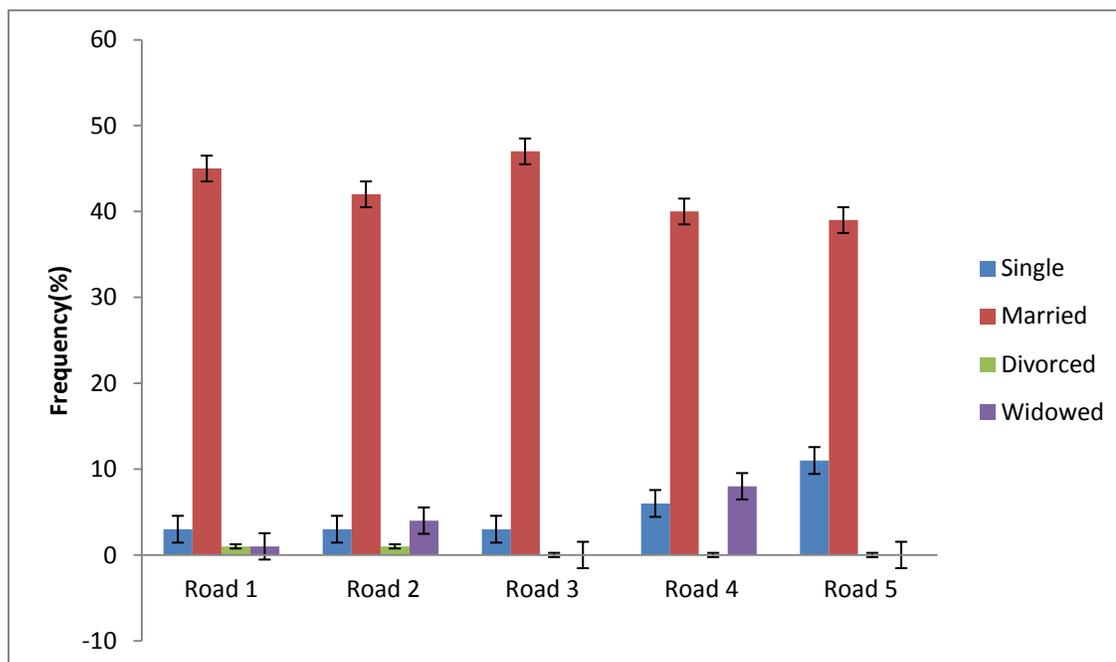
follows: Road 1 = Road 2 > Road 5 > Road 4 > Road 3 (Figure 4).



Road
Figure 4: Educational Profile of Respondents

Assessment of marital status revealed singles as Road 3 > Road 5 > Road 4 > Road 2 = Road 1. Married people were distributed as Road 3 > Road 1 > Road 2 > Road 4 > Road 5 (78%). Divorced people were

only found along Road 4 (8%) and Road 2 (2%). Widowed were found along Road 1 = Road 2 = Road 1 but absent along Road 3 and Road 5 (Figure 5).



Road
Figure 5: Marital Status of Respondents

DISCUSSION

The Stakeholders of marketed wildlife and the products within the study area are predominately females. This agrees with Lameed and Sanni(2011) that grasscutter sellers in Asejire were mainly married females (probably due to the tedious nature of roasting and hawking/selling). The trade cuts across all working class ages along all roads in the study area. Road 2 had the highest number of people with age 56 years and above, while Road 5 had the highest number of people between 16 and 25 years. On overall account, age-group in this study was ranked as 46-55 >36-45 > 26-35 > 56 plus > 16-25. It also agrees with Dedeke *et al.* (2006) that respondents in ethnozoological trade in southwest Nigeria were mostly females, Primary School leavers and between the ages of 36-45 years. This situation implies that the trade is more convenient for matured people. The business cuts across all categories of literacy levels because Primary and secondary school certificate holders were the highest, while tertiary education recipients were the least. This observation suggests that education can be used to assess the stake holders although it is not a pre-requisite for the job because some respondents are not formally educated while all categories of educational attainments were represented. On the marital status, 85.2% among the total respondents were married people, to suggest that the business is highly sustaining because these people are able to take care of their families conveniently through the trade. This assertion was similar to observations of Soewu (2008) that the wildlife trading cuts across all age groups, but the majority fell between ages of 36 and 55. It also agrees with the findings of Soewu *et al.*(2012) that female folk dominated the trade (90%), and that majority of the dealers (64%) were aged between 40 and 60 years. Also that most of the dealers (53%) had post primary education. This work also agreed with the observations of Lameed and Sanni (2011) that grasscutter marketers were ranked on this basis of age in years as 30-39>40-49>20-29>below 20

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years >50 years and above. Furthermore, those females were more than males, and the Primary School leavers were the most abundant, while married people were more than singles in the business.

CONCLUSION

Marketed wildlife business and the allied jobs/hobbies/vocations are not only common in Nigeria but also sustaining jobs because the substantial proportions are married people who hail from almost all parts of the Western and many parts of Eastern Nigeria. Also division of labour exists in the business as men were involved in the farming and hunting aspect. This is probably due to the tedium attached to it and women on the other hand are predominantly found among the sellers probably due to their nature of cooking. Furthermore, observations indicated that the jobs attached to wild animals are passed down along generations of people, implying that there is strong attachment between wildlife resources and rural people's income; income pattern of people play significant roles in the distribution and diversity of marketed wildlife This was observed along Ekiti and Oyo-Ogbomoso axis of the study area where villages outnumbered urban areas and where people depended on peasant and farming for livelihood.

Recommendations

It is recommended that:

1. Formulation of laws and Regulations to protect wildlife poaching be enacted.
2. Government to establish more reserves for wildlife conservation and protection of endangered species from going into extinction through different governmental programmes and policies.
3. Traditional medical practitioners and hunters should be educated from time to time about wild animals and their population problems in a bid to discouraging them from indiscriminate harvesting of wildlife.

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