

Socio-Firmographics Analysis and Constraints to Meat-based Enterprise Operations in Kano Metropolis, Nigeria

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Abstract

The study analysed socio-firmographics and constraints to meat-based enterprise operations in Kano Metropolis, Nigeria. The research used quantitative primary data which was collected from a multistage randomly sampled 333 meat-based enterprises using structured questionnaire through schedule interviews. The data were analysed using descriptive statistics and Likert scale framework. The findings reveal that meat-based enterprises in the study area predominantly consist of micro (93.69%) and small (5.7%) enterprises, mainly operated by active age youth (28-37years) that possess formal education (54.35%). Sole proprietorships (61%) and partnerships (36%) formed the main structures of the meat-based enterprises in the study area. Households (55%) and food vendors (35%) represent the principal clientele of the meat-based enterprises in the state. An average daily income of approximately ₦10,000 is generated by more than half (53.44%) of the responding enterprises. Additionally, about three-quarters of these enterprises organized as cooperative groups; however, the enterprises faced significant limitations in access to training (26.43%) and credit facilities (55%). Furthermore, the meat-based enterprises was found to be severely hindered by the absence of cooling chambers (Mean: 3.041), seasonality of meat products demand (Mean: 3.093), and consumers' demands for high-quality meat (Mean: 3.25). Consequently, the study advocates for the government to establish strategies such as entrepreneurial trainings and financial supports that will ameliorate challenges of cooling system and the enterprises customer centricity shall focused on household consumers and food vendors.

Keywords: Meat, Enterprise, Constraints, Firmographic, Operations

Introduction: One of the rapid transitions that will have major implications for African agriculture is livestock as it will become one of the most important sectors of agriculture in value terms. Today, it accounts for 25 percent of agricultural value added in Africa, and to 55 percent and 67 percent in North America and Western Europe, respectively (FAOSTAT, 2018). Nigeria's livestock sector significantly contributes to the Nigerian economy. It accounts for 10% of the agriculture GDP, serves as a primary source of employment and contributes about 36.5% of the protein consumed in Nigerian households (NBS, 2022). Nigeria is by far the leading livestock producer in Central and West Africa. Based on October 2022 statistics from the Federal Ministry of Agriculture and Rural Development the current livestock population in Nigeria is estimated at 22.4 million cattle, 53 million sheep, 99.9 million goats, 9 million pigs, The share of Sahel countries is significant, however, representing over 50% of total cattle herds. Cattle raising in Nigeria is largely supplemented by short-cycle livestock operations, estimated at 33.8 million head of sheep and 175 million poultry birds (Nkechi, 2022).

The strong rise in demand for animal products is due not only to the high rate of urbanization (60% of Nigerians are city dwellers), but above all due to consumers' greater purchasing power and the emergence of a new middle class (Adenuga & Montowska, 2023). Meat consumption in Nigeria is still below the regional average (2 kg per person and per year in Nigeria, compared to 8 kg per person per year in ECOWAS (Nandita, Badaru. and Adekeye, 2015). The meat industry in Kano state is characterised to have production processes that are largely manual, with minimal automation. The state also has few institutes providing training in modern abattoir management; additionally, meat processing, or associated quality assurance, such as Ante/post-mortem animal disease inspection and hygienic slaughter protocols are rarely followed (Adenuga & Montowska, 2023). The industry in the State also generated employment across the downstream of the meat-based value chain; in a form of butchers, raw meat marketers (open air and shops), and processed meat marketers (Suya, dried meat, Kilishi & Shredded meat).

Several policies and programs that were implemented in the 21st century in Nigeria; specifically with respect to livestock sub-sector have been to tackle the challenges and raise the low level of supply of animal protein, in order to improve and stabilize rural income emanating from livestock production and processing (FMARD, 2021). This can be affirmed with the recent establishment of ministry for livestock by the president of Nigeria (Daily Trust, 2024). The successive governments have made significant investments in livestock production; established research institutes dedicated to the advancement of livestock production and

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promoted modern abattoir practices in the sector (Nwankwo, Ikehi, Ejiofor & Ifeanyieze, 2024). However, existing primary meat supplier (modern slaughter houses) established in the various states of the country are abandoned or dilapidated rendering them none operational for several years (FMARD, 2021). As a result, these policies were largely rendered ineffective towards expanding the livestock output in Nigeria (FMARD, 2021) there by affecting the performance of meat-based enterprises operations in the state and the country in general. There is also paucity of existing empirical literatures that profiles the meat-based enterprises and their attributed challenges in Nigeria, particularly in Kano State (Adenuga & Montowska, 2023). This study is therefore carried out to analysed socio-firmographics and constraints to meat-based enterprise operations in Kano Metropolis with the aim of profiling and highlighting primary challenges of the enterprises operations towards policy implementation. The study specifically addressed the following objectives Describe the socio-firmographic features of meat-based enterprise; and identify the primary constraints faced by meat-based enterprises in the study area.

Methodology: Study area: The study was conducted in Kano State, It's one of the central commercial hub of north-western, Nigeria. In 2022 the population was projected to be 15,462,734 covering an area of 20,230 Km² and a population density of 764.3/km² (Kano State Government [KNSG], 2022; National Population Commission [NPC], 2023). It is situated in the Sudan savannah zone within latitude of 10025°N and 13053°N, and longitude of 7040°E and 10053°E. The maximum temperature ranges between 21oC to 42oC with annual rainfall range between 787mm and 960mm (Kano Agricultural and Rural Development Authority [KNARDA], 2010). It has 1,754,200 hectares of agricultural land and 75,000 hectares of forest vegetation and grazing land (Abaje, Ndabula, & Garba, 2014). Kano State shares border to the West and North-west by Katsina state, to the East and North-East by Jigawa State to the South by Bauchi and to the South-west by Kaduna, (KNSG, 2022). The production, distribution and marketing of good quality raw and processed meat and meat products is one of the pre-occupation of the meat industry in the state (KNARDA, 2010). The state have primary meat supply (Kano abattoir) from which raw meat products are processed and supplied across the states as well as neighbouring states and countries; which has been on existence since the year 1963 (KMANR, 2022).

Sampling Procedure: Multistage stage sampling procedure was employed. The initial stage involved purposive selection of metropolitan LGAs of Kano state due to the concentration of meat-based enterprises and consumers of meat products. Second stage was stratified sampling of the meat-based enterprises clusters in to butchers, fresh meat marketers (open air and shops) and processed meat marketers (Suya, dried meat, & shredded meat) strata across the metropolitan LGAs in accordance to the meat-based enterprises classification by Rekwo, Abdulsalam, Sani, & Dung (2022). Subsequently the sample frame of each strata was generated through a pre-survey from state department of livestock and meat marketers' association of the state; a raosoft sample size calculator was then used at 95% confidence level to obtain a requisite sample size of respondents from the sample frame of meat-based enterprises. Third stage was random selection of the requisite sample size of respondents from each stratum there by making a total of 333 respondents for the study as shown in Table 1. This makes a total of 333 meat-based enterprises as respondents for the study.

Data Collection and Analysis: Primary data was used for the study; which was collected using structured questionnaire that contain information's on profile characteristics and primary challenges faced by meat-based enterprises. The data collection was conducted by the researcher and trained enumerators that have better understanding of local language of the respondents. The collected data was analysed using descriptive statistics to achieve the study objectives. The Descriptive statistic involves the use of measures of central tendency such as, histogram, pie charts, arithmetical mean, frequency and percentages to describe profile characteristics, and constraints to meat-based enterprises in the study area.

Result and Discussion: The result for the demographic, firmographic and institutional profile of the respondents participating in a meat-based enterprise in the study area was presented in Table 2,3,4 & 5 and Figure 1 & 2.

Demographic Profile of the Respondent: The result for demographic profile of the respondent was shown in Table 2 & 3 and figure 1. The result for the gender of the entrepreneurs showed that majority (96.7%) of the respondents are males while the remaining (3.30%) are females. This implies that meat-based enterprises is male dominated in the study area, thereby making an insignificant participation of females in the meat based enterprise. However the result contradict the findings of Adedipe, Aderemi, Kareem, Afolabi, Oyewole & Ekaun (2021) who reported female domination in chicken sales enterprise in Ibadan South-West local government, Oyo State Nigeria. With respect to the marital status of the respondents most (75.38%) of them were found to be married, only (24.62%) are not married; Implying that majority of the meat enterprises owners are household heads with responsibility, therefore having an obligation to generate income through business activity in order to sustain household members. Education status result in table 2 revealed that most (54.35%) of the respondents have formal education, however the remaining about 45.65% have an informal level of education (religious). This implies that all of the respondents had accessed an education, with most of them having formal education. With respect to their level of formal education as shown in Figure 1 most (69.6%) of the respondents have secondary level of formal education followed by those with primary level of education (16.02%) with the remaining respondents (about 15%) having post-secondary school education such as NCE/Diploma, HND/degree and post-graduate studies. The result implies that meat-based enterprise owners in the study area have educational skills that will enable them to make an informed decision on entrepreneurial strategies which will ensures sustainable performance of their business. Educated business owners can allocate limited resources, maximize the profit of the enterprises, and has the trust of the creditors to access a loan

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(Alemu & Dame, 2017). In general, education has a positive influence on micro and small enterprise growth performance (Meresa, 2018). The result for age of the respondents was shown in Table 2. The result showed that most (about 61%) of the respondents are between the range of 18 to 37 years with an average age of 36 years. This implies that meat-based enterprises are among active youth in the study area. In line with study by Yonis et al. (2018) who supported report of active age youth domination of SMEs in developing countries. Household result was also revealed in table 9. The result showed that majority (81.99%) of the households have 1 to 7 persons in their household and few (about 4%) have household size of above 15 persons. Result further showed an average of 5 persons per household among meat-based enterprises owners in the study area. This connotes the finding of James et al. (2021) who reported majority of the households having 4-7 person among poultry enterprise owners in Borno metropolis, Nigeria.

Meat-based Enterprise Profile Characteristics: Meat-based enterprise profile characteristics result was presented in Table 3 & 4 and figure 2. The result for primary activity in meat based enterprises among respondents in table 3 showed that about 43.84% of the respondents engaged in processing meats products and marketing followed by 29.13% engaging in fresh meat processing and marketing and 27.03% of them engaged in butchering as their primary activities. Meanwhile due to the nature of the meat based enterprise, they respondents revealed that they forwardly or backwardly integrated to other meat based enterprise activities. The result in the table 10 showed that most of the respondents sequentially integrated in to processed meat marketing (68.28%), butchering (48.64%) and fresh meat marketing by 42.30% of the respondents. this supported the findings of Rekwot *et al.*, (2022) who reported integration of meat value chain activities among actors in Kano State, Nigeria. the result implies that raw meat processing in to several products and its marketing is the most actively engaged activity among meat-based enterprise owners in the study area; meanwhile butchering (flaying and dressing) was also revealed as an important enterprise activity among the respondents in the study area.

The result in the table 3 also revealed households (91.57%), food vendors (76.81%) restaurants (72.72%) and travellers (70.48%) as the majority of primary customers to meat based enterprises owners in the study area. Business partners (47.89%) was also shown to be a least significant primary customers, however events centres were the leased recognized primary customers of the respondents in the study area. This connotes that households, food vendors and restaurants are the most important customers to meat-based enterprise in the study area. Therefore customer centricity efforts of the business shall be targeted to them for an improved enterprise performance. Results further showed that majority of the respondents have awareness on business registration, however the study result revealed only (38%) of the meat based enterprises that registered their business in the study area and they mostly (65.89%) register with SMEDAN. This implies that there is lack of concern or difficulty in the registration process for the enterprise in the study area. In addition, the result findings with respect to ownership structure in the study area in figure 2 showed that most (61%) of the enterprises were owned as a sole proprietorship with 36% of them having it as partnership business. They result further shows that only 2% of the respondents owned their meat-based enterprise as private limited liability, contract services and cooperative businesses. This implies that meat based enterprises in the study area is majorly owned through sole ownership and partnership. The finding is consistent with findings of Muhammad, Andow & Gaddafi (2025) who reported dominance of sole and partnership ownership among SMEs in Kano State.

Employees, capital income and Experience of Meat-based enterprise Owners: The result in table 5 for the number of employees among the respondents showed that majority (93.69%) have 1 to 8 persons employed. The maximum number of employees was 22 persons while the average employment was 3 persons among the meat-based enterprises owners in the study area. In a consistence with SMEDAN (2020) classification, majority of meat-based enterprises are micro and small business in the study area. The result also implies that the business is multi-persons in nature making it a job creation venture that will reduce unemployment. Regarding the capital investment, result showed that majority (90.38) of the respondents have an investment capital of ₦100,000 to ₦1,000,000, only insignificant (below) number of them have investment capital of above ₦1,000,000. The average investment capital investment capital was revealed to be ₦705,255. Although the result findings contradict that of Muhammad *et al.*, (2025) who reported above ₦2million among SMEs in Kano state. This study result however, implies that meat-based enterprise in the study area is less capital intensive, making it a suitable small business for a start-up investment.

Result in table 5 further shows that most (53.44%) of the respondents have income of about ₦10,000 and about 44% of them had a daily income of between ₦10,000 to ₦50,000. All the respondents were found to have an average daily income of ₦11,474.5. This similar to what was found by Abdullahi *et al.*, (2024) among poultry egg producers in Jigawa state. This implies that meat-based enterprise is a promising income generating activities worth of investment and support interventions. Table 5 also revealed that majority (About 80%) of the respondents have an experience of 1 to 20 years of participation in meat-based enterprise, the study revealed even though least (3.9%) of the respondents having 31 to 40 years of participation in meat-based enterprise. The average of 15 years' experience in meat-based enterprise was observed among respondents in the study area. This implies that meat-based enterprise owners in the study area as experience of operational activity experience and will be able to make decision in adopting an improve strategies that will enhance sustainable performance of their business. The experience of the owner/manager can have a significant effect on the success of a business venture in terms of both the survival and growth of the business (Alemu & Dame, 2017; Meresa, 2018).

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Institutional Profile of Meat-based Enterprises: The result for Institutional Profile of meat based enterprise owners in the study area was shown in table 6. The result showed that majority (75.08%) of the respondents are members of cooperative group, implying the organized nature of meat-based enterprise in the study area. This result was supported by Tafida et al (2022) who reported cooperative group participation among soybean producers in Kano state. Result further shows only few (26.43%) of the respondents have access to training in relation to their enterprise which was revealed to be mostly organized by Government (53.41%), cooperatives (25%) and NGOs (12.5%). Access to credit result was also revealed in table 6. The result shows that most (51.65%) of the respondents have access to credit to finance their business. Figure 2 further revealed sources of credit result accessed by the respondents, which had shown that most (55%) of the respondents sourced their credit through family and friends followed by 35% that sources the credit from customers, the remaining few sources (10%) were from cooperative groups, commercial bank, microfinance bank and local money lenders. The result implies that most important credit source among meat-based enterprise owners in the study area is from family and friend and customers, the implication of customers as source of credit showcase the mutual relationship between customers and business owners in meat-based enterprise. Evidence from the literature also confirmed that lack of access to finance affect the performance of SMEs (Mbuva & Wachira, 2019; Onyiego, Namusonge & Waiganjo, 2017). However in Nigeria access to finance through credit can play a vital role in improving the performance of SMEs (Anthony et al, 2023).

Primary Constraints Faced By Meat-Based Enterprises: The challenges faced by meat-based enterprises was examined using Likert scale base on severity from not-severe (1) to very severe (5). Result in Table 7 showed that most of the challenges faced by the meat-based enterprise owners have slightly severe constraint implication to their operational activities these slightly severe challenges were Lack of appropriate infrastructure (2.916), Poor Storage (2.799), Lack of clear marketing channel (2.96), Absence of market oriented production system (2.718), Formal enterprise certification (2.66), Food control and safety compliance (2.52) as well as market saturation during festivities and competition within the industry. Meanwhile, the result also revealed poor veterinary inspection of slaughtered animals (2.288) and socio-cultural taboos (2.408) as not severe constraints to meat-based enterprises operations in the study area. This implies that there is adequate veterinary service and only culturally acceptable animals were slaughtered for consumption in the study area. Furthermore, the study finding identified lack of cooling chamber (3.041), meat products demand seasonality (3.252) and demand for high quality meat of consumers (3.093) as the severe constraints to meat-based enterprise operations in the study area. Usman *et al.*, (2015, Oluwole & Oni-Ojo, (2014) and Nazifi *et al.*, (2023) reported poor cooling system infrastructure as impediment to meat-based industry development in Nigeria and also increased in consumer demand for quality produce meat products, due to the changing habits of meat consumers in Nigeria.

Conclusion: The study findings revealed that meat-based enterprises in the study area predominantly consist of micro and small enterprise businesses, which are mainly operated by active age youth. Sole proprietorships and partnerships are the main structures of the meat enterprises found in the study area. Households and food vendors represent the principal clientele of the meat-based enterprises in the state. The enterprises are principally organized as cooperative groups; however, the enterprises have limited access to training and credit facilities. Despite the modest daily income generated from the enterprises, it is severely constrained by the absence of cooling chamber systems, seasonality in meat products demand, and consumer expectations for high-quality meat.

Recommendations: Based on the findings of this study, the following recommendations are proposed: Given the limited access to training, meat enterprise operators should receive training on innovative business practices from the government to enhance the sustainable performance of their businesses. Financial institutions should provide access to credit facilities for enterprises, enabling them to expand their operations and utilize modern meat enterprise facilities to address challenges such as the lack of cooling chambers and meet consumer demand for high-quality meat. Meat-based enterprises customer centricities shall focused on household consumers and food vendors given the fact that they are the main consumers of meat products in the study area. The government should consider training unemployed youth in meat-based enterprise operations, as it has been identified as a promising and attractive agribusiness sector among youths in the study area.

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Table 1: Sampling Summary

S/N	Strata	Sample Frame	Selected sample size
1	Butchers	139	90
2	Fresh meat marketers (open air and shops)	153	97
3	Processed meat marketers (Suya, dried meat & shredded meat)	470	146
Total	3	762	333

Source: Field Survey, 2025

Table 2: Gender, Marital and Education status of the respondent.

Variable	Freq.	Percent
Gender		
Female	11	3.30
Male	322	96.70
Marital status		
Not Married	82	24.62
Married	251	75.38
Education Status		
Formal Education	181	54.35
Informal Education(Religious)	152	45.65
Total	333	100.00

Source: Field Survey, 2025.

Table 3: Age and Household size of the respondents

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Variable	Freq.	Percent	Mean	Std. Dev.	Min	Max
Age (years)						
18-27	67	20.11	35.77	9.81	18	65
28-37	135	40.52				
38-47	90	27.01				
48-57	33	9.90				
58-67	8	2.40				
Total	333	100.00				
Household size (Members)						
1-7	273	81.99	4.63	4.34	1	28
8-14	45	13.50				
15-21	13	3.90				
22-28	2	0.60				
Total	333	100.00				

Source: Field Survey, 2025

Table 4: Meat-based enterprise profile characteristics

Variable	Freq.	Percent
Primary meat based enterprises		
Butchers (dressing and Flaying)	90	27.03
Fresh meat sellers	97	29.13
Processed meat sellers(<i>Balangu</i> , <i>Kilishi</i> , <i>Tsire</i> , and bucket meat)	146	43.84
Total	333	100.00
Vertically integrated meat-based enterprises		
Butchers (dressing and Flaying)	161	48.64
Fresh meat sellers	140	42.30
Processed meat sellers(<i>Balangu</i> , <i>Kilishi</i> , <i>Tsire</i> , and bucket meat)	226	68.28
Primary Consumers		
Households	304	91.57
Food vendors	255	76.81
Business partners	205	61.75
Travelers	234	70.48
Event Centers	159	47.89
Restaurants	240	72.72
Awareness on business registration/certification		
Aware	240	72.07
Not Aware	93	27.93
Business Registration		
Registered	129	38.97
Not Registered	202	61.03

Registered Agency		
CAC	29	22.48
SMEDAN	85	65.89
SON	0	0
NAFDAC	5	3.87
Both (CAC & SMEDAN)	10	7.75
Both	0	0

Source: Field Survey, 2025

Table 5: Employees, capital income and Experience of Meat-based enterprise Owners

Variables	Freq.	Percent	Mean	Std. Dev.	Min	Max
Enterprise type						
Micro (1 – 8)	312	93.69	3.243243	3.245617	1	22
Small (9 – 16)	19	5.70				
Medium (16 – 24)	2	0.60				
Investment Capital (₦)						
100,000 to 1,000,000	301	90.38	705,255	965196.3	10000	1.00E+07
1,000,000 – 5,000,00	31	9.30				
5,000,000 – 10,000,000	1	0.30				
Daily income (₦)						
Below 10,000	178	53.44	11474.5	17948.6	1000	150000
10,000 – 50,000	145	43.53				
50,000 - 100,000	7	2.10				
Above 100,000	3	0.90				
Business experience						
1 – 10	131	39.33	14.8378	8.6053	1	40
11 - 20	127	38.12				
21 – 30	62	18.61				
31- 40	13	3.9				
Total	333	100.00				

Source: Field Survey, 2025

Table 6: Institutional profile of meat based enterprise

Variable	Freq.	Percent
Cooperative membership		
Members	250.00	75.08
None Members	83.00	24.92
Access to Training		
Access	88	26.43
No Access	245	73.57
Training Institutions		
Government	47	53.41
NGOs	11	12.50

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Private organization	8	9.09
Cooperatives	22	25.00
Total	88	100.00
Credit Use		
Access	172	51.65
No Access	161	48.35
Total	333	100

Source: Field Survey, 2025

Table 7: Challenges Faced by Meat-based Enterprises in the Study Area

Challenges	Very not severe	Not severe	Neutral	Severe	Very severe	Mean	Std. Dev.	Remark
Lack of appropriate infrastructure	17.12	22.22	21.62	30.03	9.01	2.916	1.251	Slightly severe
Poor Storage	13.51	30.93	23.12	27.03	5.41	2.799	1.14	Slightly severe
lack of cooling chambers	17.91	17.91	25.37	19.78	19.03	3.041	1.363	Severe
Lack of clear marketing channel	10.81	25.23	26.73	31.53	5.71	2.961	1.109	Slightly severe
High Quality meat demand of consumers	15.02	15.32	21.92	40.84	6.91	3.093	1.197	Severe
Meat products demand seasonality	13.81	12.31	22.22	38.14	13.51	3.252	1.24	Severe
Absence of market oriented production system	19.22	20.42	32.73	24.62	3	2.718	1.124	Slightly severe
poor veterinary inspection of slaughtered animals	27.33	36.64	18.32	15.32	2.4	2.288	1.098	Not Severe
Formal enterprise certification	22.82	20.12	30.33	21.32	5.41	2.664	1.197	Slightly severe
Food control and safety compliance	25.3	26.51	20.48	25.9	1.81	2.524	1.177	Slightly severe
Socio-cultural taboos	24.92	38.44	13.81	16.52	6.31	2.408	1.205	Not Severe
Reduced consumer spending on meat products	18.92	26.73	24.32	24.32	5.71	2.712	1.19	Slightly severe
Market competition in the industry	17.47	19.28	29.22	25	9.04	2.889	1.222	Slightly severe
Market saturation during festivities	36.34	6.91	12.91	17.12	26.73	2.91	1.662	Slightly severe

Source: Field Survey, 2025,

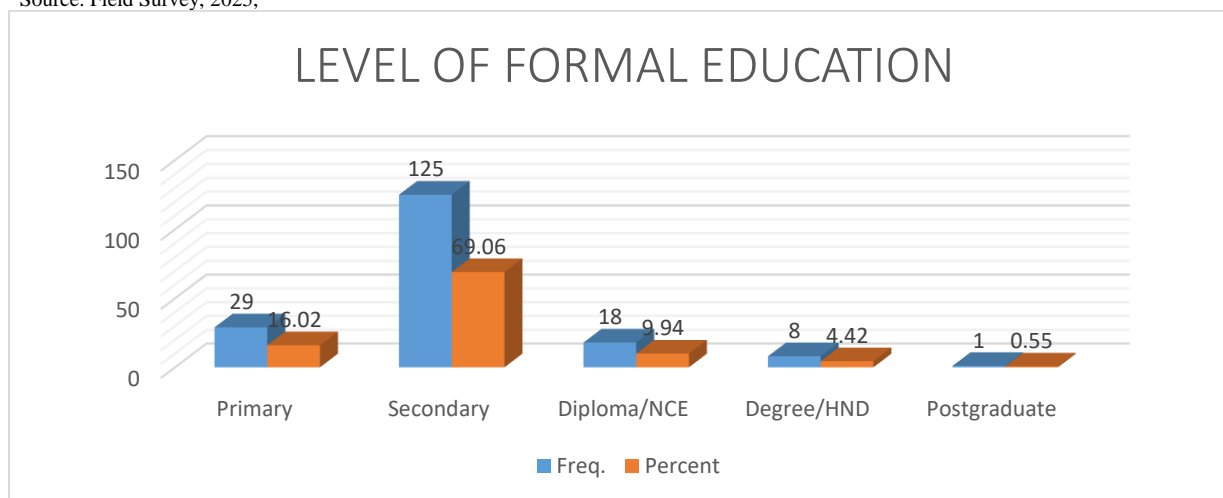


Figure 1: Level of Formal Education

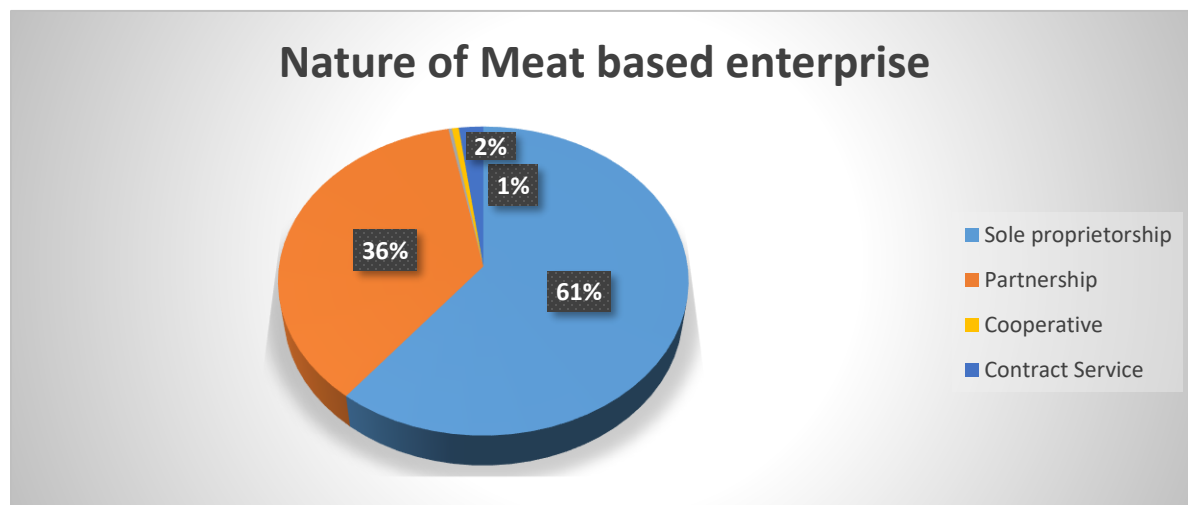


Figure 2: Nature of meat-based enterprise ownership