

Challenges in the Butchery Industry: Potential Opportunities for Business in Ghana

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ABSTRACT

The purpose of this study was to assess the working environment of butchers and identify potential business opportunities. Sensitization meetings, focus group discussions and semi-structured questionnaires were used to gather information from butchers in 8 markets in Accra. It was realized that butchery is a male and largely Muslim-dominated business. A little over 70% of respondents had some form of education, with 49.1% having basic level education. A number of issues were of concern to the butchers, with the most important being the use of the CFA francs for business transaction and the siting of slaughter facilities with over 85% of respondents indicating these as their utmost concerns. The potential business opportunities uncovered by the study included innovative meat transportation and storage, the huge opportunity for increased local production of animals, and the establishment of a butchery school, or a butchery module in one of the tertiary institutions or research centers.

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Introduction

Butchery is an ancient trade that dates back to the domestication of livestock. Butchery could either be primary or secondary. Primary butchery is the slaughter, evisceration and selection of carcass sides or quarters from which primal cuts can be produced while secondary butchery involves boning and trimming primal cuts in preparation for sale (Rixson, 1988). Butchers in Ghana engage in either one or both. Butchers play a very important role by ensuring that meat is available for the consumer to purchase irrespective of economic class and budget. Apart from butchery being a source of employment and income, the work of butchers is very important to public health since it plays a significant role in ensuring food (meat) safety (Soyiri *et al.*, 2008). A report by Robinson *et al.*, (2011) indicates that the demand for livestock products is expected to grow worldwide and at an even higher rate in Africa. To this end, livestock and butchery business has great

potential in the economy of African countries including Ghana.

Hygienic meat handling is critical to butchers' operations. Hygienic meat handling, according to Hassan *et al.*, (2010), consists of three major activities namely: post-mortem inspection, monitoring and surveillance of chemical, biological and physical hazards, and maintenance of good hygienic practices throughout all the stages between slaughter and consumption of meat. Warriss (2000) and Alvarez *et al.*, (2009) have both indicated that meat can be contaminated at various points during the pre- and post-slaughter stages. This gives credence to the important role of butchers in ensuring meat safety. In recent times, the challenges in meat handling have, thus, become important due to increased awareness of its effect on public health since most food-borne diseases result from poorly managed market environments (King *et al.*, 2000), and poor handling and insanitary practices (Haileselassie

et al., 2013). According to Pica-Ciamarra *et al.*, (2013), African meat and milk markets represent a major business opportunity for livestock producers, in terms of both volume and value and will more likely be a good investment opportunity in animal-sourced foods.

Though butchery in Ghana is confronted with a host of challenges (Soyiri *et al.*, 2008), the rapid increases in the demand for livestock products implies greater opportunities for business along the butchery value chain. This paper, therefore, identifies some existing challenges in butchery and suggests opportunities that can be derived thereof by looking at the demographics of butchers, and their conduct of business.

Material and methods

This case study was carried out in Accra between April and July 2014. The study began with a sensitization forum with the Executives of the National Butchers' Association in the Accra Metropolis. This was followed by three focus group discussions with the ten Executives and representatives from the selected markets. Information from these meetings were used to design semi-structured questionnaire which was pre-tested and validated prior to final usage. In consultation with the Executives, 8 major markets namely: 31st December Womens' at Makola, Agbogbloshie, Longdon, Kaneshie, Salaga, Mallam Atta, Nima and Madina markets were purposively chosen due to their prominence and high patronage by consumers.

Accra, the capital city, was purposively selected due to its cosmopolitan nature. It is the seat of the National Butchers' Association that legislates for the branches in other parts of the country. It was therefore anticipated that operational standards in Accra can be the basis for comparison. One hundred and fifty butchers, i.e. a third of the registered butchers in the selected markets were earmarked to receive semi-structured questionnaires for the study. However, only 105 butchers out of an anticipated 150 agreed to participate in the study. Personal observation of the butchery environ-

ment and activities were also used to ascertain the validity of some responses and to cure aberrant responses due to preconceived perceptions of respondents about the study.

Data analysis

Descriptive statistics was used to present demographic data, which was represented in tables and figures. This was analysed using frequencies. Challenges were identified and ranked using frequencies and percentages. The data was analysed using the Statistical Package for Social Scientists (SPSS) version 16.0.

Results

Demographics of actors in butchery

TABLE 1

Demographic characteristics of butchers in the Accra Metropolis

<i>Variable</i>	<i>Frequency</i>	<i>Percentage</i>
<i>Sex</i>		
Male	105	100.0
Female	0	0
<i>Age distribution (years)</i>		
18-30	14	13.6
31-40	24	23.3
41-50	37	35.9
>50	28	27.2
<i>Educational background</i>		
No formal education	29	28.4
Basic	50	49.0
Secondary	21	20.6
Tertiary	2	2.0
<i>Religious background</i>		
Muslim	94	91.3
Christian and other religious persuasion	9	8.7
<i>Experience (years of operation)</i>		
<10	19	18.3
11-20	20	19.2
21-30	43	41.3
31-40	17	16.3
41-50	3	2.9
>50	2	1.9

Table 1 indicates that the business of butchery in Accra was dominated by middle-aged men (41–50 years) with no women representation. A large percentage of actors were Muslims (91.3%), with the others being Christians and people of other religious persuasion. The actors tended to have low educational backgrounds

with more than 70 percent of them having less than Secondary/Senior High School level education. Forty-one per cent of respondents have had between 20 and 30 years working experience, 18 percent have had less than 10 years experience and 2 percent have had more than 50 years experience in butchery.

TABLE 2
Operators' practices

<i>Variable</i>	<i>Frequency</i>	<i>Percentage</i>
<i>Segmentation of operation</i>		
Slaughterers	10	9.5
Retailers	53	50.5
Both	42	40.0
<i>Position in business</i>		
Employer	77	73.0
Employee	28	27.0
<i>Motivation for entry into the business of butchery</i>		
Family	70	68.0
Self Interest	33	32.0
<i>Slaughter sites</i>		
Accra abattoir	41	75.9
James town	4	7.4
Jfamco	3	5.6
Avenor	2	3.7
Lighthouse circle	1	1.9
Amasaman	2	3.7
Amasaman and Accra abattoir	1	1.9
<i>Frequency of slaughter</i>		
Daily	46	90.2
Weekly	4	7.8
Once in two weeks	1	2.0
<i>Animals traded</i>		
Cattle only	77	74.8
Goat only	2	1.9
Sheep only	0	0
Sheep and goats	12	11.6
Cattle, Sheep and goats	11	10.7
Cattle and Goat	1	1

<i>In-service training</i>		
Yes	29	28.4
No	73	71.6
<i>Age distribution for those with in-service training</i>		
18-30	0	0
31-40	12	41.4
41-50	15	51.7
>50	2	6.9
<i>Frequency of medical check up</i>		
Annually	84	80
Occasionally	21	20

This included examination of their training, sources of animals and slaughter facility used, segmentation and conduct of activities as well as use and disposal of waste. Formal training opportunities for actors in the meat value chain were observed to be low. Only 28 percent of respondents (Table 2) have ever had some formal, post-apprenticeship training in meat handling. Only older actors, above 31 years of age, had ever had some form of training in butchery (Table 2).

Cattles slaughtered in Accra were mainly purchased from the animal markets particularly Ashaiman where cattle from within and outside Ghana were sold. Sheep and goats were also sold at the Ashaiman Livestock Market although they could be purchased readily at smaller livestock markets at Neoplan Station or Madina. According to respondents over 90 percent of the animals sold came in from Burkina Faso, Mali, Niger and other West African countries. Over 70 percent of the butchers traded in cattle only, 12 percent in sheep and goats, 11 percent traded in cattle sheep and goats while 2% dealt in goats alone. No one traded in sheep only. The reasons assigned included profitability, capital involved and rate of sales.

The six slaughter facilities identified in the study had qualified veterinary and public health personnel who perform both ante- and post-mortem examinations before meat is transported to the market for sale. Some slaughter

houses had facilities for holding animals prior to slaughter. It was also observed that slaughterers used specific slaughter facility. Of the six facilities identified, that is, the Accra abattoir, which is the closest to the Ashaiman Livestock Market, enjoyed the highest patronage (Table 2). Only 1.8 percent used multiple slaughter facilities (i.e. Amasaman and Accra abattoir). Eighty-nine percent (89%) of the actors, mostly cattle dealers, indicated that they purchased animals left in the lairage overnight for slaughter the following morning. Other actors, such as small ruminant dealers do not use the lairages as animals are slaughtered immediately after purchase. Generally slaughterers used slaughter facilities closest to the livestock markets where the animal is purchased for convenience, and also cut down on the cost of transportation. Butchers who dealt in only small ruminants and slaughtered small numbers used slaughter facilities at Avenor and James Town. However, these places were observed to have sub-standard facilities such as absence of potable water and hoists.

90.2% of the animals were slaughtered daily with about 8 percent being slaughtered weekly and 2 percent slaughtered twice in a week (Table 2). Meat was conveyed mainly in pickup trucks, taxis and even on motor bikes. Two major categories of actors were identified in the butchery business namely: 'slaughterers' and meat sellers. A 9.50 percent of the actors constituted the slaughterers. They slaughtered the

animals whole 50.5% were made up of those who only sold the meat. Forty percent of the adores operated as both slaughters and seller. (68%) of the actors entered butchery as a family business whilst the remainder entered the business out of personal interest (Table 2).

The butchery enterprise is an employment avenue where the employer – employee relationship exist. It was observed that about 73 percent of respondents (Table 2) were employers paying a number of people to perform various functions in the meat supply chain. The employers were basically the business owners who invested capital into the business. They mostly dealt with the selection, bargaining and purchase of animals. However, some took part in the slaughter and sale of the meat. It was also observed that operators beyond 30 years of age tended to become employers. A high proportion of older people entered the meat supply chain enterprise motivated by their own interest (Table 2).

Butchers maintained some level of hygiene to ensure meat safety. Working benches and tools were cleaned before and after the day's activities. Beef was the most popular meat sold in all the markets visited. Butchers used simple cutting tools, such as axes, cutlasses and knives, and simple weighing scales for their operations. Actors mostly sold fresh meat as animals were slaughtered daily. Most markets did not have adequate storage facilities for unsold meat except for the Longdon Market, where there was a cold storage facility. Slaughtering and butchering is dominated by adults while the younger ones are limited to processing of skin, hide, shanks and intestines.

Butchers at the market were in unions and had leaders with bye-laws to regulate the conduct of activities and to ensure discipline. The respondents also indicated that there is a strong bond and respect for elders among the operators. The study revealed that about 80% of the respondents go through annual medical check-ups (Table 2). This was usually during medical outreach programs carried out in the

various markets. The Executives of the Butchers Association took a serious view of this exercise and ensured that their members complied since it had public health implications. There was no specialized method of disposing of butchery waste. Waste was disposed off and collected in a similar manner as the regular market waste. Blood drained from the butchery tables joined the market drains. Some respondents indicated that private individuals also collected some of the waste such as pieces of meat and bones to feed to their pets.

Challenges in the butchery industry in Ghana

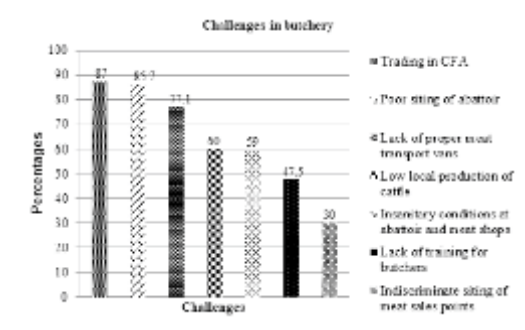


Fig. 1. Challenges faced by butchers in the Accra Metropolis

Fig.1 shows that the greatest challenges of the butchers were the fact that trading was done in the CFA francs, followed closely by the poor siting of abattoirs. As high as 86 percent of butchers complained about the distance from the Accra abattoir to the meat shops whilst the other slaughter facilities were indicated as not being conducive for the slaughter of cattle. Trading in CFA francs due to the fact that animals were mainly purchased from the neighboring French-speaking countries was also indicated to have had serious implications for their business as a result of instability of the Ghanaian currency. Respondents indicated that over 90 percent of cattle and sheep and goats are imported. Indiscriminate siting of meat sales points at street corners and lorry stations was, however,

the least concern to the butchers (only 30.5% of respondents indicated this to be of concern to them).

Discussion

The male dominance in the business of butchery in Accra, as observed in this study corroborates reports by Adzitey *et al.*, (2011) and Awuni *et al.*, (2012) who indicated that butchery in Northern Ghana is a male dominated enterprise. The dominance of middle-aged people (41-50 years old) in the enterprise (36%) (Table 1) in the current study is also corroborated by Adzitey *et al.*, (2011) who reported that majority (45%) of the butchers in the Bawku Municipality were within the ages of 41–50 years. The dominance of Muslims in the butchery business (Adzitey *et al.*, 2011) was not surprising. The role of Muslims in the slaughter of animals is to ensure acceptance of the meat by people of the Islamic faith (most Christians and people of other religious persuasion are usually not particular about who slaughtered an animal whose meat is on sale).

Though butchers in this study had low level of education with about 30 percent having no formal education, and as high as 49 per cent having basic level of education, the situation in the Accra Metropolis is better than what was reported by Adzitey *et al.*, (2011) to the effect that as high as 64 percent of butchers in the Bawku Municipality had had no formal education. This could be attributed to the cosmopolitan nature of Accra that motivates butchers to have some basic level of education in order to interact with a much elite clientele. It could also be as a result of migration of school leavers from northern Ghana to Accra in search of greener pastures, and finding no jobs, resort to butchery.

The results obtained in the current study was, however, worse than the situation in Ethiopia, where a survey of butchers in the Mekelle Market reported an illiteracy rate of 8 percent with about 80 percent of respondents having some level of basic to secondary education

(Hailesellasiye *et al.*, 2013). The educational level of operators in the butchery business is a critical factor in public health. A good educational background will be required to appreciate the use of technology for the modernization of meat processing in Ghana as it has implications for technology modeling, acceptance and adoption. Hence a lower level of education among butchers should be a source of concern to public health authorities.

The stratification in the industry indicates that actors could be trained to specialize in particular operations. This could introduce some level of professionalism into the business with implications for modernizing the industry. The frequency of slaughter is indicative of sales rate and this is influenced by market location, patronage and prevailing economic conditions.

Entry into the meat handling business in Ghana seemed to be traditional, passed on from one family relation to the other, i.e. butchery was run as a family business. This is corroborated by Teye *et al.*, (2010) who reported that butchers in the Sissala East and West districts regarded butchery as a business passed on from one relative to another. Butchery in Ghana could therefore be said to have cultural/traditional undertones. In fact 68 percent of the respondents in the current study were introduced into the business by relatives with only 32% entering the enterprise motivated by their personal interest in a bid to making a living. From interactions with butchers, it was inferred that conditions such as insanitary slaughter and handling methods, minimal support from relevant stakeholders and bad press are likely contributory factors to having fewer people becoming butchers out of interest.

Although the butchers attempted to maintain some level of hygiene by cleaning their working benches before and after the day's activities to ensure meat safety it could not be ascertained from this study as to the adequacy of this practice. (No swabs were taken to investigate microbial contamination or otherwise of their working environments). However, judging from

the fact that the working benches were made of just porcelain tiles or wood covered with cardboard and not stainless steel, the likelihood of microbial contamination of meat sold from their facilities could not be ruled out. The use of simple cutting tools, such as axes, cutlasses and knives, and simple weighing scales is an indication of the low level of professionalism in the industry. The butchery industry in Ghana is therefore waiting for the deployment of state of the art technology for its modernization.

The health status of butchers is paramount to public health hence the need to have regular medical check-ups cannot be overemphasized. The public health regulations in Ghana require communal food vendors to be medically certified before and during operations. Since the respondents in this study indicated that they took advantage of national medical outreach programs carried out in their operational areas, it is advised that such programs be intensified to ensure the continuous compliance of operators in the butchery industry in Ghana. The existence of a strong Butchers' Association can be explored for advocacy, technology modeling, capacity building and training for practitioners. Rose *et al.*, (2002) and Vaz *et al.*, (2005) both reported that supervision, improved process control and training was important to improve behavioral changes among butchers.

The low level of formal training among actors (28%) in the current study (Table 2) is corroborated by Haileselassie *et al.*, (2013) who reported a similar situation in Ethiopia where only 38.5% of butchers in Mekelle Market had received formal training in butchery. The current situation where only older actors, above 31 years of age, have ever had some form of training in butchery (Table 2) may indicate that training packages would need to be fashioned to target especially the youth. The training could include some aspects of business management and record keeping in order to improve upon the conduct of the business.

The high patronage enjoyed by the Accra abattoir (Table 2) was mainly due to its proximity

to the biggest livestock market in the metropolis, the Ashaiman Livestock Market. Generally, slaughterers used slaughter facilities closest to the livestock market for convenience and to cut down on the cost of transportation. This explains why butchers who dealt in only small ruminants and slaughtered small numbers used the Avenor and James Town slaughter facilities though these places had sub-standard facilities. Among the reasons given was the fact that it was not economical to travel a distance of 18 km from the Central Business Districts to the Accra abattoir just to slaughter one or two sheep/goats. Similar conditions exist in places like Nigeria where, particularly in the rural communities and small towns slaughtering of animals usually takes place under very unhygienic conditions (Nnachi & Ukaegbu, 2014).

Other reasons for the high patronage of the Accra abattoir included the superior and more modern facilities at the Accra abattoir. The poor meat transport system observed in this study is not different from what pertains in the northern part of the country (Teye *et al.*, 2010; Teye & Bortir, 2012). Having well-equipped and hygienic slaughter and meat transport facilities around livestock markets are therefore important to ensure that slaughtering is carried out under appropriate conditions.

Challenges and potential business opportunities in butchery

The challenges enumerated in Fig. 1 present business opportunities entrepreneurs can take advantage of as they reflect on problems people will be willing to pay monies for their solution (there were some attempts at offering some of these services such as slaughter and cold storage, although at the rudimentary levels). Johnny's Food and Meat Complex (J'FAMCO) for example has set up a state-of-the-art abattoir and storage facilities to help address the challenge of unhygienic slaughtering in Accra (www.jfamco.com). Thus the current situation where abattoirs are sited far away from meat markets presents an opportunity for investors to

set up smaller but state-of-the-art slaughter facilities to create niche meat markets in and around the city. The absence of meat vans also creates business opportunities for district assemblies and individuals to exploit. The youth could also be trained and equipped with mobile singeing machines to create a lot of business around these slaughter facilities.

Low domestic livestock numbers which results in high imports of livestock and livestock products, sometimes from neighboring countries, is a drain on the country's foreign exchange. A depreciation of the Ghanaian currency, the cedi against the CFA francs, therefore puts the butchers in very difficult situations for business. Improved production methods and implementation of the right policies for the livestock sector are critical to addressing the shortfalls in supply. However, a good linkage between farmers, research institutions and butchers can lead to the establishment of satellite production centers supported with technology and funds to stimulate production to fill the gap.

Designing and operationalizing functional training modules for butchers or even the establishment of a butchery school either as a stand-alone or as a module in one of the tertiary institutions in Ghana could improve the practices of butchers thereby generating more business for them. This could also generate business for the trainers or training institution(s).

Private waste management companies could also generate income through the harvesting and use of abattoir and butchery wastes. All meat sellers should be registered and regulated in terms of stall siting and monitoring so as to create a highly sanitized butchery environment which would have significant impact on public health.

Conclusion

The greatest challenge faced by industry players was that trading was done in CFA francs in the purchase of animals imported from neighbouring West African countries such as Burkina

Faso, Mali and Niger. This puts a lot of constraints on their business, particularly when the Ghanaian currency depreciates. The Accra abattoir, which is a more modern slaughter facility, is sited far away from the meat market and there are no meat vans to transport meat to the market centres.

The low local production of animals presents a huge opportunity for investment into local production. Meat transport services also offer an immediate business opportunity for entrepreneurs. The provision of cold storage facilities to cater for unsold meat is another avenue for business. The establishment of a butchery school, or a butchery module in one of the tertiary institutions or research centres could, apart from its business appeal, help in the modernization of the industry in Ghana.

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