DYNAMICS OF THE POULTRY MARKET IN GHANA

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Abstract

This paper examines the dynamics of poultry-market in Ghana using secondary data and field survey from Greater Accra, Ashanti, Northern, and Western regions. It considers trend and content analysis to highlighting specific products imported, source, drivers, and potential for domestic poultry to substitute for imports. The paper finds that Ghana imports 80% of poultry meat mostly in the form of branded cut-parts from high-income-countries. Despite 35% increase in tariffs, imported poultry meat tend to be 27-30% cheaper than locally produced chicken. The paper recommends prioritization of policies to boost local production through investment in processing (cut-parts), packaging, and marketing facilities.

Key Word: Poultry meat, cut parts, imports, trade, Ghana

1. Introduction

Food demand in less developed countries is rapidly changing toward the consumption of more high-value products such as meat (Pingali, 2015). In Africa, a similar transition toward meat products is emerging (Tschirley *et. al.*, 2015) as recent reports revealed that poultry meat accounts for a larger part of additional meat consumption in the region (FAO, 2018). The growth of poultry meat consumption, especially in Sub-Sahara Africa is mainly because of its relatively cheap, and good source of high-quality proteins, minerals, and vitamins (Asante-Addo, 2020). According to Hollinger & Staatz (2015), poultry consumption in West Africa has been stimulated by the availability of low-cost alternatives for consumers through import. The influx of imported poultry meat products, mainly frozen parts such as leg quarters, wings, drumsticks, and backs have become popular with urban consumers. These products are often sold below production cost because producers in exporting countries make their profits from the sale of high-value parts such as breasts, which are demanded by consumers in those countries (Johnson, 2011; Hollinger & Staatz, 2015; Rudloff & Schmieg, 2016).

Similar to global trends, poultry meat is increasingly becoming an important source of animal protein in Ghana (MoFA, 2020, Asante-Addo, 2020). The higher demand for imported poultry meat is attributed to increasing income growth, rapid population growth, and high urbanization rates (Sumberg *et al.* 2016). Additionally, consumers in urban areas prefer imported frozen chicken products because they are cheaper than domestic ones and are already processed into cut parts (Ashitey, 2017). Local poultry processors in Ghana lack the infrastructure and equipment to produce chicken cuts that are preferred by most consumers. In Ghana, poultry meat consumption is dominated by chicken meat, but other poultry products consumed are guinea fowls, ducks, turkeys, and ostrich. It is estimated that the growth in consumer demand for poultry meat in Ghana is expected to increase further in the future (MOFA, 2020).

The rising consumer demand for poultry meat provides new market opportunities for growth and investment in the value chain of the sector in Ghana. However, local production lacks the capacity to meet this growth in consumer demand, resulting in the country currently depending on imports (Ashitey, 2017; Asante-Addo, 2020). The high import is attributed to the high cost of production (feed and drugs), production technology inefficiencies, lack of adequate processing facilities, as well as cheap import products resulting in low productivity of the poultry sector in Ghana (MOFA, 2020). Other operational constraints include high energy prices which continue to increase production costs by over 60 percent (MOFA, 2020). This leads to a higher price of domestic broiler meat, making them uncompetitive. The situation has compelled local farmers to call for policy interventions to support domestic production (Sumberg et al., 2016).

In response, the Ghanaian government implemented measures to protect local producers by introducing import tariffs of about 35%, reduction of tariffs on inputs (additives, feed, medicines, and vaccination drugs), providing efficient veterinary services, and delivering subsidized inputs through the rearing for food and job program (Andam et al., 2017). However, these strategies do not seem to yield the required results as the volume of poultry imports keeps increasing astronomically. For instance, in 2017, poultry meat import was estimated at 158,000 tons, an increase of 10 percent from 144,000 tons in 2016, due to increasing demand for less expensive frozen poultry products. Competition from imported chicken meat has depressed broiler bird production in Ghana because imports are priced 30-40% lower than locally produced chicken (Ashitey, 2017). These led to a producer shift from broiler (meat) production towards the production of layer birds for table eggs (Ashitey, 2017).

Policymakers seeking to intervene in Ghana’s poultry sector face a dearth of policy-relevant research to guide their decision process. Unfortunately, reliable, up-to-date information on trends in domestic poultry production and trade is hard to find (Sumberg et al. 2016). Existing research consists mostly of assessments at the production levels (Killebrew and Plotnick, 2010), and qualitative assessments of the impacts of disease outbreak e.g., avian flu on production (Birol and Asare-Marfo, 2008; Diao, 2009; Mensah-Bonsu & Rich, 2010). The ability of local producers to remain competitive requires an in-depth understanding of the dynamics of the poultry market in Ghana.

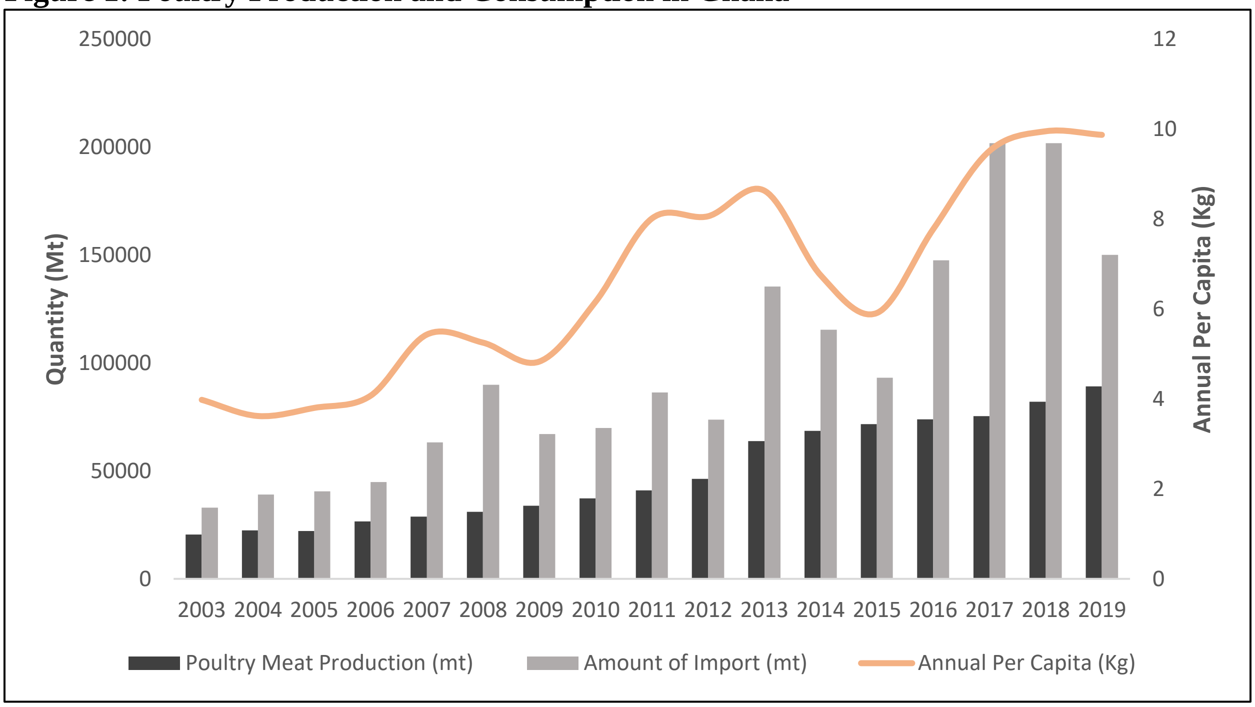
In this paper, we explore evidence for the growing demand for poultry meat in Ghana, by analyzing the dynamics of poultry production, consumption, trade and how local poultry can substitute for import. We provide a comprehensive review of poultry trade flows from major importing countries

(EU, US, Brazil, and other parts of the world). The analysis also included the volume of trade over twenty years and trends in domestic production, consumption trends, and export.

2.0 Literature Review

The market for poultry meat in Ghana is segmented into imported and domestically produced chicken meats. The latter is sold typically in live bird markets where the consumers purchase the birds for slaughter at home, or in urban areas. Retailers also provide slaughtering and primary processing services and sell them on the local markets. The imported meat is sold frozen and cut into parts, usually consisting of halves or quarters (Asante-Addo, 2020). The popularity of frozen chicken parts in the market suggests that there is less preference for live birds. Domestic producers can be competitive if they produced at a lower cost and have access to adequate processing and refrigeration facilities to process the domestic birds (Andam et al., 2017).

Figure 1: Poultry Production and Consumption in Ghana



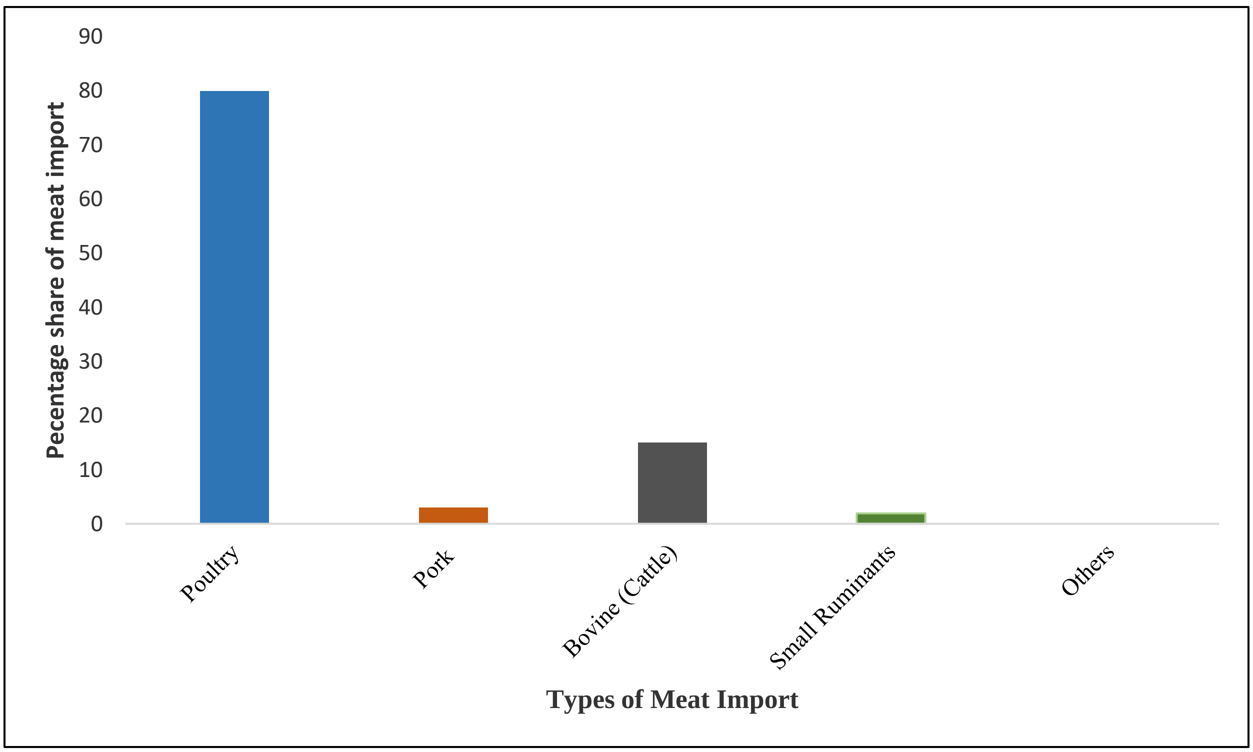
Source: MoFA, 2020

As poultry imports surge ahead of production in Ghana, increasing domestic production becomes a priority. Per capita consumption of chicken meat in Ghana has considerably increased from 3.98 to 9.87kg annually between 2003 and 2019 (Figure1). Ghana's per capita consumption of poultry meat is relatively higher than the average in Africa (6.76) and West Africa (8.0) (FAO, 2020).

Additionally, data from FAO (2020) revealed that daily consumption of poultry meat in Ghana has risen from 2 calories per day to 20 calories within the last two decades.

While substantial investments in national poultry production have been made, production is still not able to keep up with the growing demand for poultry meat in Ghana. Although local poultry production in recent has seen 10.5% annual growth from 20,588 metric tons (Mt) in 2003 to 89,210 metric tons (Mt) in 2019, Ghana still imported about 150,039Mt of poultry meat in 2019 (Figure 1). The share of expenditure on poultry products in total food budget increased from 3% in 1991/1992 to 8% in 2012/2013. This expenditure share increased to nearly 9% in 2016/2017(GSS, 2018). Though imports constituted only about 12% of the total domestic supply of poultry meat in 1961, it increased to 44% in 1990 and reached about 76% by 2018 (FAO, 2018). However, the share of domestic supply in poultry meat decreased from 80% in 2000 to 24% in 2018 (FAO, 2019).

Figure 2: Import of Frozen Meat in Ghana



Source: MoFA, 2020

This paper also reviewed that the share of poultry meat in the overall domestic meat supply increased drastically within the last six decades. Specifically, it increased from 11 percent in

1969/1970 to 30 percent in the late 1990s and 66 percent in 2010/2011. Total meat import between 2015 to 2019 was 910,604Mt, of which poultry is estimated to be 728,386Mt, pork (26,962Mt), cattle (136,930Mt), sheep and goat (2,041Mt), and others including ducks, geese and guinea fowls were noted to be 1,010Mt. Total chicken meat import within the five years (2015-2019) was valued at US$700 million. In addition, MoFA (2020) noted that in 2019, poultry meat imports accounted for nearly 79.9 percent of total meat imports in Ghana (Figure 2). This was followed by Bouvine (2.96percent), Pork (15.02percent), Small ruminants (1.92percent), and others (ducks, geese and guinea fowls) accounting for (0.11percent).

Price and non-price factors are believed to be the main drivers of demand for imported poultry meat in Ghana. Egyir et al. (2012) analyzed the "poultry made in USA" label and consumer choice in Ghana and revealed that consumers prefer imported chicken meat because of packaging, meat quality, and food safety. Their paper also established that consumers who prioritize country of origin as a factor influencing demand for imported poultry meat, do not necessarily choose the US poultry label. Their results further showed that in 2012, about 71% of consumers had preference for domestically produced meat, followed by imports from the United States (56%), European Union (48%), and Brazil (40%). Thus, the Ghana poultry label can also be advanced if a repute for quality and food safety can be gained. This finding agreed with Asante-Addo & Weible (2020) and Ragasa et al., (2020) who also reported that some consumers prefer domestically produced poultry meat to imported chicken and may be willing to pay a premium for it.

Consumers bought imported poultry meat because of its availability, convenience, affordability, packaging, and proximity of access, while domestic poultry meat is preferred for its high quality, freshness, tastier and tenderness (Woolverton et al., 2013; Atuahene et al., 2014; Asante-Addo et al., 2020). Kwadzo et al. (2013) found that the price of the meat remains an important attribute influencing consumer preference for purchasing broiler meat in Ghana. This finding is also in agreement with Makanyeza et al. (2016) and Boimah et al. (2021) who reported price as a driver of purchasing decision of imported poultry meat in Zimbabwe and Senegal, respectively.

Demand for chicken meat is also driven by heath, nutrition, and food safety concerns. According to Asante-Addo & Weible (2020), consumers perceived local chicken meat as fresh, antibiotic- and hormone-free. Additionally, Ragasa et al. (2019) investigated consumer demand and willingness to pay for safe food in Accra. The study found that consumers are willing to pay a premium for chicken meat certified with a food safety management system. Consumers preferred HACCP-certified and antibiotic residue-free chicken over non-certified chicken. Consumer perception of chicken meat safety can be an important driver of purchasing decision. Recent findings revealed that nearly 50 percent of chicken meat consumers are health and safety conscious and are willing to pay 15 percent premium on chicken meat products (Ragassa et al., 2019). Thus, producers and processors could expand their market opportunities by having their meat tested for HACCP and antibiotic residue-free. However, since food safety certification is done at production and processing levels, it requires some changes in farm level management and governance (Grunert, et al., 2005).

From the above discussions, consumer demand for chicken meat in Ghana is becoming more differentiated: on one hand, many low-income (46%[2] of the population) consumers whose primary emphasis remains on obtaining chicken meat at low cost; and on the other hand, there is an emerging middle income-class (19.7% of the population) that puts increasing importance on the quality, diet diversity, and safety of chicken meat. Thus, the ability of local producers to capture these markets will depend on their capacity to be consistent and reliable suppliers of quality local chicken meat at competitive prices. Currently, consumers perceived imports as meeting these benchmarks in terms of price, quality, and consistent availability. Thus, failure to meet such requirements will continue to shift demand to imported chicken meat.

3. Data and Methods

The study used data from both secondary and primary sources. Price and trade data were collected from the Ministry of Food and Agriculture (MoFA) and the Ghana Statistical Service (GSS) over the period of sixteen years between 2003 and 2019. Data from Food and Agricultural Organization (FAO) on export quantities and per capita consumption was also employed. The information from these multiple sources was validated using survey data between September and November 2021 from malls, supermarkets, cold stores, and open markets on imported and local chicken meat prices and brands in four regions (Greater Accra, Western, Ashanti, and Northern).

Two (2) separate focus group discussions (FGD) among chicken wholesalers and retailers were conducted in each of the four regions, making a total of eight (8). Participants selected for the

[2] AfDB. 2011b. The middle of the pyramid: dynamics of the middle class in Africa. Market Brief. African Development Bank (AfDB).

FGDs were traders from malls, supermarkets, cold stores, and local markets in Ghana. In all, 80 traders participated in the focus group discussion. Information on price of chicken, outlets of purchase and consumer quality indicators were collected during the focus group discussion. Trend, content analytical investigations, and descriptive statistics using Tables, Graphs and Bar-charts were employed for the analysis of the data obtained.

4. Results and Discussion

4.1 Price, Packaging and Sale Points of Imported and Local Chicken Meat

Poultry sector in Ghana is faced with cheap imports (Asante-Addo, 2020). However, beside price, products form (packaging, labelling and country of origin) coupled with sale point of chicken meat have emerged as an important factor that drive consumers purchasing decision. This section presents discussion on differences in price of chicken meat, kinds of brands, country of origin of chicken found in various sales points (traditional, supermarkets, cold stores and malls) in the study regions.

4.1.1 Price Formation and Differentials

Data from a field survey of selected markets in the four regions of Ghana revealed that in 2021, the mean retail price of imported chicken meat stood at GHS 26.6/kg, while the mean retail price of domestic chicken is found to be GHS 34/kg (Table 1). A price margin for imported chicken ranges between 27.8-30.0 percent. Also, the data showed that 10kg of imported chicken (soft, usually for stew) and (hard, usually for soup) are priced at GHS 126 and GHS 147, respectively in the study area. Specifically, the average price of local chicken is Gh34.00/kg in Accra, GH₵30.00/kg in Tamale while it is priced Gh35.00/kg Takoradi and Kumasi. The imported full chicken meat is priced at GH₵26.60, GH₵18.00, GH₵22.00, and GH₵17.80 in Accra, Takoradi, Kumasi, and Tamale, respectively. Similarly, the imported chicken thigh is priced at GH₵18.00, GH₵19.00, GH₵18.99, and GH₵13.30 in Accra, Kumasi, Takoradi, and Tamale respectively. The relatively high price of domestic poultry over imported chicken could be attributed to high production cost especially feed and medication costs (Naggujja et al., 2020). Whilst imported formulated feeds are expensive due to high taxes, some ingredients used for locally prepared feed such as yellow corn, soybean, fish meal, vitamin-mineral premixes are equally imported and taxed, making cost of feed about 70% of the cost of chicken production in the country (Banson et al., 2015). Etuah et al. (2020) also noted that poor and inadequate local infrastructure including poor rural urban road network add on distribution cost. Additionally, poultry production in the US and EU are heavily subsidized, making imported chicken comparatively cheaper than domestic poultry meat.

The study also revealed during the focus group discussion that imported chicken meat of the same weight is priced lower in Tamale than other locations. Though such differences in pricing is contrary to expectation due to cost of transporting the product over a long distance, the participants attributed it to high demand for substitute meat products such as guinea fowls in the northern region which may compel retailers and wholesalers of imported chicken meat to reduce price to remain competitive. Also, imports of beef and mutton from Burkina Faso into Northern part of Ghana, may account for low price meat in the region (Sumberg et al., 2016; Rich & Wane, 2021).

Table 1: Average Retail Prices (GH) of Imported and Local Chicken Meat

Chicken Parts	Prices per kg (GHC)							
	Accra		Kumasi		Takoradi		Tamale	
	Impo.	Local	Impo.	Local	Impo.	Local	Impo.	Local
Full chicken	26.60	34.00	22.00	35.00	18.00	35.00	16.75	30.00
Chicken Thighs	20.00	-	19.00	23.00	18.99	22.99	13.30	-
Chicken wings	18.00	-	19.00	20.00	18.00	23.99	16.30	-
Gizards	16.00	-	20.00	22.00	13.50	16.99	14.20	-

Source: Market Survey, 2021 ***impo=Imports***

The study identified two local companies namely, Everyday chicken and Master meal chicken, who process chicken into cuts parts. These companies are in Kumasi and Takoradi. The study revealed in these two locations that indeed the local chicken parts (thighs, wings, and gizzards) are relatively priced higher than imported ones. For example, the price of local chicken thigh ranges between GHC22.99 to GHC23/kg in Kumasi and Takoradi respectively, compared to GHC18.99 to GHC20.00 of imported chicken thigh in the same locations. From the above discussion, the market survey also showed that in 2021 the average retail price of imported chicken is revealed to be relatively lower than the retail price of local chicken in all the regions visited. The high price of local chicken is attributable to high cost of feed ingredients (prices of white maize, yellow maize, and soybean), high cost imported inputs (e.g feed additives), high cost of processing and inadequate processing technologies (MoFA, 2020; Andam et al., 2017).

4.1.2 Retail Prices and Sale Points of Imported Chicken Meat

Generally, prices of chicken meat at Supermarkets and Malls are higher than other selling points in all locations surveyed. Imported full chicken is priced between GH₵20.00 to GH₵26.00 at supermarkets while it's priced between GH₵21.50 to GH₵26.90 at Malls across the country (Table 2). The survey results established that differences in quality and country of origin account for some of the price differences. It is believed that these modern markets (supermarkets and malls) also operate in a more improved shopping environment in terms of space, hygiene, air conditioning, food safety and security which comes with additional cost. Ashraf et al. (2017) noted that products from the mall come with a premium. However, the study observed that though consumers still purchase household food items such staple food (cereals, tubers, and roots), vegetables, fish, and eggs in traditional markets, supermarkets and malls are emerging as major sale outlets for imported chicken meat apart from cold stores. Also, prices at various cold stores are relatively lower than other selling points. These cold stores are mostly located in traditional open markets. For instance, a price of a kg of imported chicken meat on average cost between GHC16.0 to GHC20.0 in the four regional markets surveyed. This finding is consistent with the results of Amfo and Ali (2020) who noted that frozen meat at the cold stores is usually priced lower due to the notion of product preservation rather than value addition.

Table 2: Average retail price (GHC) of full imported chicken meat at various selling outlets

Market Outlets	**Locations (Prices/kg (GHC))**							
	Accra		Kumasi		Takoradi		Tamale	
	Impo	Local	Impo	Local	Impo	Local	Impo	Local
Traditional	20.00	28.50	18.00	32.00	18.00	30.00	20.00	30.00
Super Markets	20.20	-	22.00	28.00	26.00	-	21.10	-
Mall	26.00	-	26.90	35.00	23.00	-	21.50	-
Cold Store	17.00	-	20.00	30.00	18.00	-	16.00	-

Source: Market Survey, 2021

The survey of major markets, supermarkets, cold stores, and malls in the study area revealed that local chicken meat is not available in these major selling points. These supermarkets, malls and cold stores offer various qualities at different prices of imported chicken meat, including cut pieces and whole frozen birds. This could be due to unbranded and low-quality packaging materials for local chicken meat. Malls usually cash in on products differentiated by brands, packaging and country of origin as noted by Ashraf et al. (2017).

4.1.3 Product Packaging, Branding and Country of Origin

Branding and packaging of food stuff usually boost marketing and profit making (Yeboah 2016). This study found that local chicken meat is mostly sold unbranded in all markets surveyed with exception of some malls where three (3) branded products (Master-meal, Every Day, Seladels) were identified (Table 3). This is because branded chicken meat may be priced higher, hence can only be sold only in malls. Additionally, all imported chicken meat is sold branded and well packaged in 1kg, 2kg, 2.5kg, and 10kg, which is available in all outlets visited.

Table 3: Brands and Country of Origin of Chicken Meat at various Selling Outlets

Major Brands of Chicken Meat	Country of Origin
Golden Dutch, Sadia, Seara, Perdix, Nature Al, Qualiko,	Brazil
Alpi, Frangosul, Lezita	Italy
Mountaire, Quickfrozen, Lamex, Mountaire, Crider	USA
Doux	France
Mastermeal, Every day, Seladels	Ghana
Miki, Ayekoo, Plukon, Vd-Bor, Remkes	Holland
Nana, Cedrob	Poland

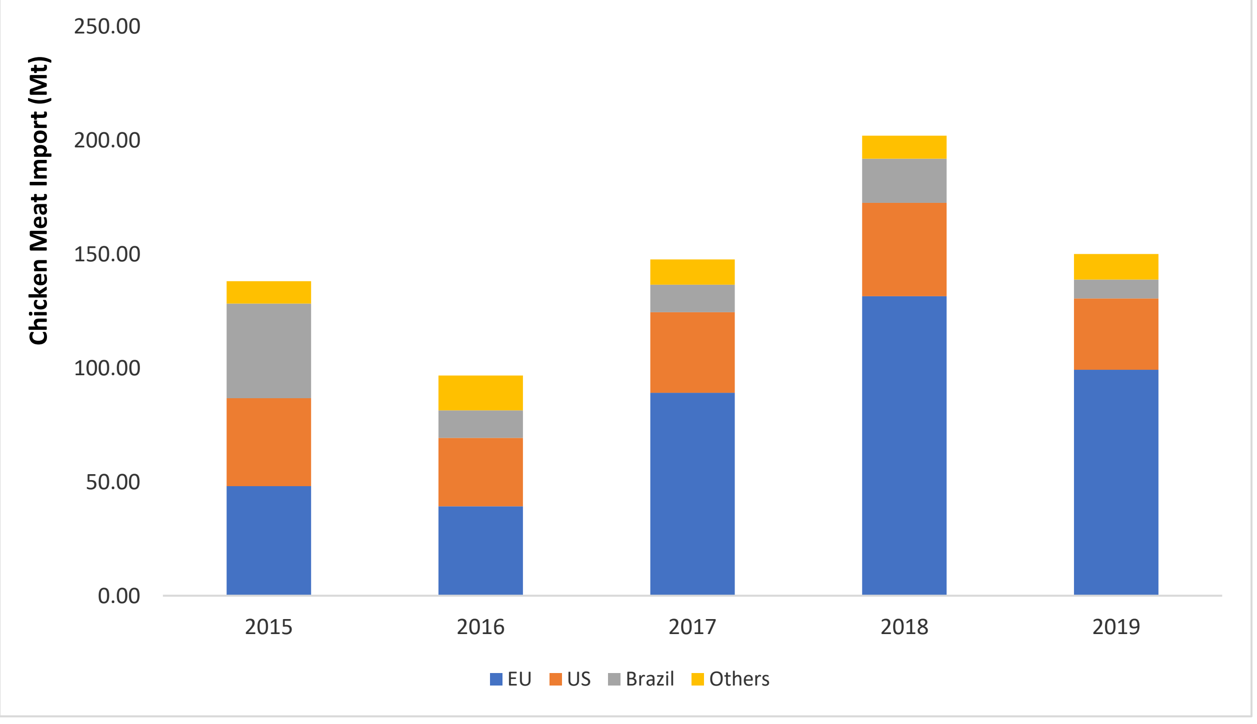
Sources: Field Survey, 2021

The identified brands of imported chicken meat include Sadia, Golden Dutch, Seara, Nature Al, Qualiko and Perdix from Brazil. Other brands imported from major European countries (Italy, France, Holland, and Poland) and US are reported in Table 3. These branded chicken meats are found in all outlets. The branded products are mostly cut parts, packaged in cartons and frozen with labels providing information such as the country of origin of the products, expiry dates, nutritional and health information, and weight of the products. Unfortunately, the local branded chicken products do not have such packaging details. Ragasa et al. (2020) noted that packaging and branding are major challenges for local chicken in Ghana. Recent findings by Hollinger and Staaz (2015) revealed that urban consumers in Ghana are concerned about the lack of packaging and reliable labeling and other information about the health concerns of local chicken meat they consume. Furthermore, urban consumers in Accra often prefer international branded products to local alternatives because they trust the quality of these brands (Hollinger et al. 2015). This perceived mistrust of safety of domestically processed and branded food drives consumers towards international brands, putting local producers at a disadvantage. For local producers to compete with imports, the domestic poultry meat industry may have to focus on differentiating its product in packaging brands from imported brands with important advertising outlook.

4.2 Domestic and International Trade

According to FAO (2020), the chicken meat import in Africa stood at 1.75 million tonnes in 2018 with South Africa accounting for 515,000 tonnes (29.5%), followed by Angola with 335,000 tonnes (19%), whilst Ghana ranked third with 205,000 tonnes (11.7%). Figure 3 summarizes the trends of import market shares for chicken meat between 2015 and 2019. Chicken imports into the country have been dominated by products from the EU between 2015 and 2019. From Figure 3, the dominance by the EU is followed by imports from the US, Brazil, and other countries (Canada, Australia, and Asia), respectively.

Figure 3: Poultry Meat Import of Ghana



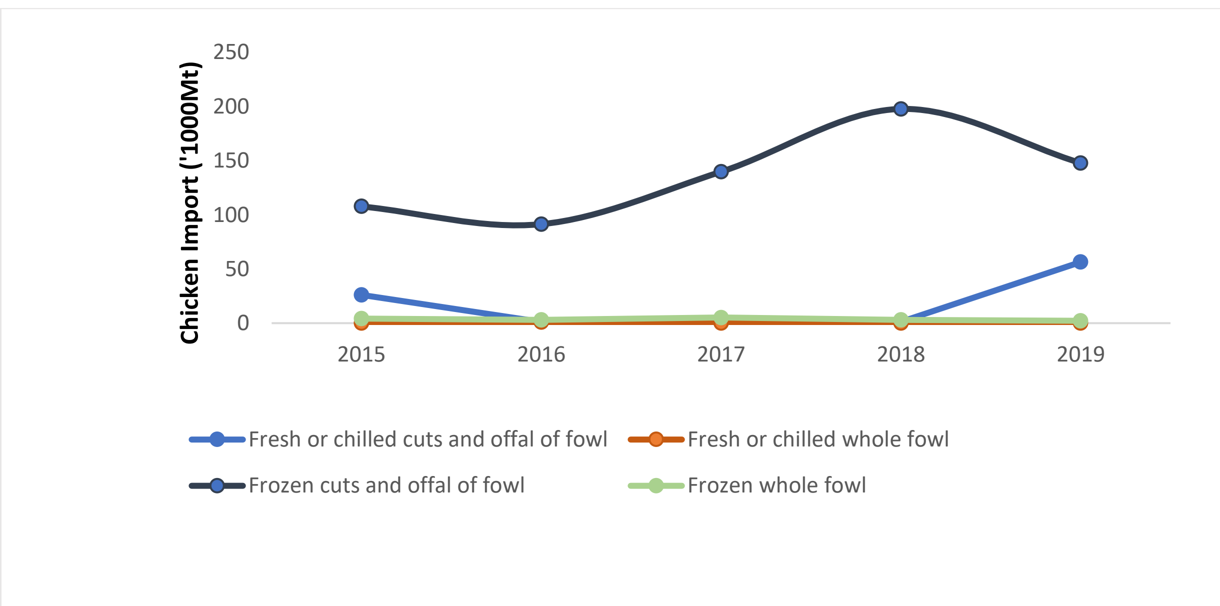
Source: GSS, 2020

For instance, in 2018, out the total chicken meat import of 201,936Mt, nearly 131,427Mt (65%) was supplied by EU, followed by US with 41,031Mt (20%), Brazil with 19,318Mt (10%) and other countries with 10,158Mt (5%). Though this trend has been quite consistent between 2015 and 2019, Figure 3 further shows that Brazil and USA reduced their chicken meat into the country within the same period. The ensuing deficit has been made up by increasing poultry meat exports from EU countries.

For example, the USA's share of Ghana's poultry imports declined from 27.89% in 2015 to 20.88% in 2019 (GSS, 2020). Similarly, the data also revealed that the share of chicken meat import from Brazil decreased from 30.16% in 2015 to 5.52% in 2019. However, the EU share of chicken meat import increased from 34.8% in 2015 to 66.08% in 2019. The emerging increase in import of chicken meat from EU is attributable to strong relationship between importers and exporters and loyalty to EU products. However, the decline in poultry exports from the USA may be due to perceived distinguishing attributes of products from other countries, existing non-tariff barriers, and the bureaucracy in the process of acquiring licenses for poultry meat exports (Ashitey, 2017; Asante-Addo & Weible, 2020). However, US products still enjoy price reward over commodities from Brazil, the EU, and other parts of the world, as noted by Zamani et al. (2021).

In Ghana, most imported poultry meat comes in the form of frozen chicken and cut portions. Figure 4 shows the top four forms in terms of quantity and products in which chicken meat are imported into the country.

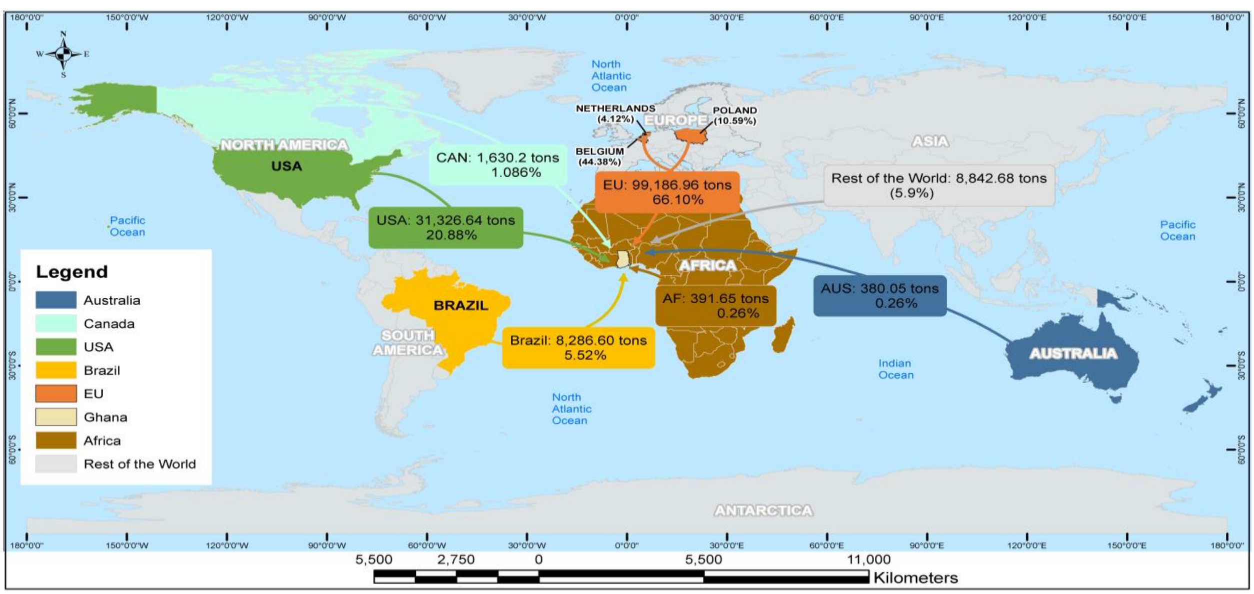
Figure 4: Trends in Poultry Product Imports to Ghana



Source: GSS, 2020

The category of forms includes fresh or chilled cuts and offal of fowl, frozen cuts and offal of fowl, fresh or chilled whole chicken, and frozen whole chicken. The imported cut parts include chicken backs, necks, rumps, wings, and feet, whilst the offal is composed of gizzard, heart, and liver. Figure 4 reveals that between 2015 to 2019, nearly 98% of all chicken meat imports into Ghana were frozen cuts and offal of fowl. For example, in 2015, frozen cut parts and offal constituted 78.0% (107,719Mt) out of 138,056Mt chicken meat imported. Similarly, frozen cuts and offal of fowl made up 94.5% (91,343.2Mt) out 96,634Mt in 2016, while it constituted 94.7% (139,722Mt) in 2018. In 2019, 98.05% (147,806 Mt) out of 150,044 Mt were frozen cuts and offal were imported into the country. Other products such as fresh or chilled cuts and offal of fowls, fresh or chilled whole fowl, and frozen whole fowl constitute about 2% of imports. This revelation also reflects the high demand for the cuts products because it is usually ready to be used by consumers.

From Figure 3 & 4, this study observed a significant decrease in poultry meat import in 2016. This was due to broiler revitalization project which was implemented to stimulate and increase domestic production to about 40% of total chicken meat demand in Ghana. Though the overall goal of the project was laudable, it could not achieve its aim due to inadequate production and processing logistics, and heavy import competition (Asante-Addo & Weible, 2020).



Source: Authors depiction from GSS data

Figure 5: Global Poultry Trade Flows to Ghana in 2019

Further analysis from Figure 5 reveals that revealed that 66.10% of imported chicken to Ghana are coming from European Union countries (with Belgium accounting for *44.38%*, Netherlands ➔ *10.59%*, Poland ➔ *4.12%* with the rest coming from Spain, France and Netherlands). The other major importing countries include the US accounting for 20.88%, Brazil taking up 5.52%, whilst Asia, Canada, and Australia account for the rest. In 2019, Ghana imported Chicken meat amounting to 392 million USD of which 61.14% was received from the EU (239 million USD). Chicken imports from the US and Brazil were valued at 89 million USD and 28 million USD accounting for 22% and 7.38% of the total import value to Ghana in 2019. Imports from other countries including Asia, Canada and Australia were valued at 34 million USD, accounting for 7.49%. Ghana's trade with other African countries including Kenya (0.45Mt), Namibia (50 Mt), South Africa (214.2 Mt), Togo (74.8Mt), and Tanzania (53Mt) account for only 0.26 % of total poultry import to Ghana between 2015 to 2019. Official data from FAO revealed that about 27Mt of chicken meat is re-exported from Ghana to other African countries such as Togo and Ivory Coast in 2019. This ensuing argument reveal that Ghana is heavily dependent on poultry importation to meet demand. Boschloo (2020) confirmed that Ghana spends about $374 million annually for importation of chicken and chicken products. However, Boscholoo (2020) was of the view that the amount of money spent by the government of Ghana on poultry import annually can be cut down drastically if attention will be focused on domestic production through input subsidies, improvement in processing technologies, marketing strategies, and reforms in the poultry and livestock import policy.

5. Conclusion and Recommendation

The exponential increase in poultry meat import in Ghana which is attributable to growth in urban population (2.13% per annum), increase in per capita income (5.35% per annum), changes in consumer preference over the last three decades are well documented in the literature. However, the linkages between global import and local poultry markets are rarely studied. This paper discussed the dynamics of the poultry market in Ghana, highlighting the specific products imported, drivers of imports, and the potential for local poultry to substitute for imports.

This study confirmed that there is high demand for chicken meat in Ghana, which is currently being met by imports of about 80% from high-income countries. The study revealed that 66.10%

of these imports are coming from EU countries (Belgium, Netherlands, and Poland), whilst about 20.88% from the US, 5.52% from Brazil with the rest from Asia, Canada, and Australia. These chicken imports are nicely packaged, branded, and mainly come in the form of cut-parts such as rumps, wings, legs, back, and offal, making them cheap and ready to use. Despite the imposition of about a 35% increase in tariffs, the study revealed that imported chicken and chicken parts are 27-30% cheaper than locally produced chicken. However, prices differ from region to the other due to transportation cost and availability of substitute product. The study also revealed that prices of chicken meat at supermarkets and malls are higher than other selling points in all locations surveyed.

Though two local companies were found to process chicken into cuts parts in the study area, domestic chicken are sold mainly at the local market in live or whole state with no branding and proper packaging material and are usually priced relatively higher than imported ones. The cheap imported chicken meat has negatively affected domestic production, making them uncompetitive for profit gains. Findings further showed that though there is some preference for domestic poultry meat, but this does not translate into actual purchase decisions due to preference for handier chicken and ready-to-use products.

The paper recommends that poultry sector development policies meant to boost local production must prioritize investment in poultry meat processing infrastructure (slaughter, cutting into parts, packaging), storage (refrigeration systems), and marketing. This will encourage private sector participation in the poultry value chain. Also, policies meant to reduce chicken meat import volumes that jeopardize prices of local poultry meat may additionally be focused on non-tariff measures such as licenses, allotments, trade embargoes, foreign exchange restrictions, and import depositaries. Further, local producers should focus attention on ensuring the processing of local meat into parts with branded packaging.

Additionally, improvement in the marketing system for local chicken through development and modernization of wholesaling and retailing industry to enhance the availability and quality of products at various selling points including malls and supermarkets is paramount.

References

Amfo, B., & Ali, E. B. (2020). Consumer Satisfaction and Willingness to Pay for Upgraded Meat Standards in Kumasi, Ghana. *Journal of International Food & Agribusiness Marketing*, 1-35.

Andam, K. S., Johnson, M. E., Ragasa, C., Kufoalor, D. S., & Das Gupta, S. (2017). A chicken and maize situation: the poultry feed sector in Ghana (Vol. 1601). Intl Food Policy Res Inst.

Asante-Addo, C., & Weible, D. (2020). Is there hope for domestically produced poultry meat? A choice experiment of consumers in Ghana. Agribusiness, 36(2), 281-298.

Ashitey, E. (2017). Ghana Poultry Report. Global Agricultural Information Network, USDA Foreign Agricultural Services.

Ashraf, S. F., Li, C., & Mehmood, B. (2017). A Study of Premium Price Brands with Special Reference to Willingness of Customer to Pay. *International Journal of Academic Research in Business and Social Sciences*, *7*(7), 619-639.

Atuahene, C. C., Atuahene, A. J., Adjei, M. B., & Donkor, E. (2014). The perception and preference of consumers for local poultry meat in the Kumasi metropolis of Ghana. *Ghana Journal of Agricultural Science*, *47*(1), 31-38.

Banson, K., Muthusamy, G., & Kondo, E. (2015). *The import substituted poultry industry; evidence from Ghana*.

Birol, E., & Asare-Marfo, D. (2008). Impact of HPAI on Ghanaian rural poultry producer's incomes. HPAI Research Brief, (1).

Boimah, M., & Weible, D. (2021). “We Prefer Local but Consume Imported”: Results from a Qualitative Study of Dairy Consumers in Senegal. Journal of International Food & Agribusiness Marketing, 1-17.

Boschloo, R. (2020). Analysis poultry sector Ghana 2019, An update on the opportunities and Challenges. Commissioned by the Netherlands Enterprise Agency.

Diao, X. (2009). Economywide impact of avian flu in Ghana: A dynamic CGE model analysis (Vol. 15). Intl Food Policy Res Inst.

Egyir, I. S., Adu-Nyako, K., & Okafor, R. (2012). The “Made in USA poultry label” and consumer choice in Ghana (No. 1372-2016-109083).

Etuah, S., Ohene-Yankyera, K., Liu, Z., Mensah, J. O., & Lan, J. (2020). Determinants of cost inefficiency in poultry production: Evidence from small-scale broiler farms in the Ashanti region of Ghana. *Tropical Animal Health and Production*, *52*(3), 1149–1159.

FAO (2018) FAOSTAT database, to be found in http://www.fao.org/faostat/en/#home

FAO (Food and Agriculture Organization of the United Nations). (2020). FAOSTAT - The Food and Agriculture Organization Corporate Statistical Database website. Rome: FAO

Grunert, K. G., Jeppesen, L. F., Jespersen, K. R., Sonne, A. M., Hansen, K., Trondsen, T., & Young, J. A. (2005). Market orientation of value chains: A conceptual framework based on four case studies from the food industry. *European Journal of Marketing*.

GSS (Ghana Statistical Service) (2018). Ghana Living Standards Survey Round 7 (GLSS 7): Poverty Trends in Ghana 2005–2017.

Hollinger, F., & Staatz, J. M. (2015). Agricultural Growth in West Africa. Market and policy drivers. FAO, African Development Bank, ECOWAS. Pobrano październik.

Kwadzo, G. T., Dadzie, F., Osei-Asare, Y. B., & Kuwornu, J. K. (2013). Consumer preference for broiler meat in Ghana: a conjoint analysis approach. International Journal of Marketing Studies, 5(2), 66.

Makanyeza, C., & Du Toit, F. (2016). Factors influencing consumers' choice of imported poultry meat products in a developing market: lessons from Zimbabwe. Agrekon, 55(3), 191-215.

Mensah-Bonsu, A., & Rich, K. M. (2010). Ghana’s poultry sector value chains and the impacts of HPAI. Pro-Poor HPAI Risk Reduction Project Working Paper. ILRI, Nairobi.

MoFA (Ministry of Food and Agriculture) (2020). Facts and Figure. Statistics, Research, and Information Directorate. Accra: MoFA.

Naggujja, J., Njiru, N. M., Msoffe, P., Naazie, A., Kelly, T., Enahoro, D. K., & Ouma, E. A. (2020). *Tanzania and Ghana Poultry Sector Policy Review*.

Pingali, P. (2015). Agricultural policy and nutrition outcomes–getting beyond the preoccupation with staple grains. Food security, 7(3), 583-591.

Ragasa, C., Andam, K. S., Amewu, S., & Asante, S. (2019). Consumer demand and willingness to pay for safe food in Accra, Ghana: Implications for public and private sectors’ roles in food safety management (Vol. 1795). Intl Food Policy Res Inst.

Ragasa, C., Andam, K. S., Asante, S. B., & Amewu, S. (2020). Can local products compete against imports in West Africa? Supply-and demand-side perspectives on chicken, rice, and tilapia in Ghana. Global Food Security, 26, 100448.

Rich, K. M., & Wane, A. (2021). The competitiveness of beef exports from Burkina Faso to Ghana. Frontiers in Veterinary Science, 888.

Rudloff, B., & Schmieg, E. (2016). More bones to pick with the EU? Controversial poultry exports to Africa: Sustainable trade policy as a task for the G20. SWP Comments 57. German Institute for International and Security Affairs, Berlin.

Sumberg, J., Jatoe, J., Kleih, U., & Flynn, J. (2016). Ghana's evolving protein economy. Food security, 8(5) 909-920.

Tschirley, D., Reardon, T., Dolislager, M., & Snyder, J. (2015). The rise of a middle class in East and Southern Africa: Implications for food system transformation. Journal of International Development, 27(5), 628–646.

Woolverton, A. E., & Frimpong, S. (2013). Consumer demand for domestic and imported broiler meat in urban Ghana: bringing non-price effects into the equation. British Journal of Marketing Studies, 1(3), 16-31.

Yeboah, M. (2016). Impact of Product Branding on Sales Revenue of Listed Companies in Ghana. *International Journal of Academic Research in Business and Social Sciences*, *6*(9), 112-124.

Zamani, O., Pelikan, J., & Schott, J. (2021). EU exports of livestock products to West Africa: An analysis of dairy and poultry trade data.