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Bottlenecks and Prospects of Poultry Production in Kasoa, Awutu Senya District, Ghana

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Abstract

It is widely believed that the poultry sector plays a significant role in Ghana's development by generating jobs, improving nutrition, and ensuring food security. Despite these efforts, the poultry business still faces several issues that need to be resolved. The study's objectives were to identify present challenges and opportunities associated to the poultry sector using the Awutu Senya District as a case study and offer recommendations for policy. Fifty chicken farms and ten significant poultry input suppliers in Kasoa, Awutu Senya District were chosen at random for the survey. Semi-structured interviews, questionnaires, and observations were used to collect primary data. The District Assembly, the District Veterinary Services Division, and the chicken Farmers' Association were further sources of secondary data on chicken production. Based on the analysis, the main issues faced by chicken farmers were inadequate funding, illness, and the lack of electricity in the majority of their operations. The district's poultry industry could grow thanks to opportunities provided by the existence of feed processing mills, stores selling poultry inputs, and organized markets.

Keywords

Poultry Farming, Supply Chain, Financial Market

1. Introduction

Statistical data reveals that agriculture plays a significant role in Ghana's economy, contributing to 19.7 percent of the country's GDP and representing more than 40 percent of its export earnings (Essegbey & MacCarthy, 2020). Poultry farming holds a crucial position in Ghana's overall national revenue and is vital for meeting annual nutritional requirements (Yevu & Onumah, 2021). However,

Ghana's poultry sector has been experiencing a steep decline according to Apike et al. (2024). Many, if not all the commercial poultry farms that were established in the late 1960s and early 1970s have collapsed and/or are on the verge of collapsing (Andam et al., 2017). Nonetheless, the increasing demand for meat and eggs as healthy protein sources to supplement major meals has triggered new trends in the poultry sector. Available data as of 2022 indicated Ghana imported approximately 261 million tons of poultry meat in 2019 (Zamani et al., 2022; Hafez & Attia, 2020). In 2022, Ghana's import of poultry amounted to \$286 million. Also, according to the Animal Production Directorate (APD) of the Ministry of Food and Agriculture (MOFA), Ghana imports meat (chicken, beef, and others) heavily to make up for its meat deficit, costing the country over US\$375 million annually (Taylor, 2024). This contributes significantly in addressing/reducing the nutritional gap as an affordable and nutritious source of protein. The consumption rate has risen as poultry meat imports from 2012 accounted for nearly 92 percent of consumption while the domestic production of all types including commercial and non-commercial, or backyard poultry production provided about 8 percent (Nyarko & Kumi, 2016). The estimated per capita consumption of poultry products increased from 3.5 kg meat in 2003 to 7 kg in 2012 and 13.7 kg in 2021. This is 21.9% more than in the previous year of 2022. Historically, poultry meat consumption per capita in Ghana reached an all-time high of 13.7 kg in 2021 and an all-time low of 0.450 kg in 1986. Records of Ghana's poultry meat importation from 2022 to 2024 are indicated in Table 1.

Poultry production is characterized by diverse systems i.e., broiler production and layer production. Commercial poultry production in Ghana can be categorized into large-scale (over 50,000 birds), medium-scale (10,000 - 50,000 birds) and small-scale (less than 10,000 birds) enterprises (Akolgo et al., 2022). Domestic and commercial farms are privately owned by individuals or families (Mensah-Bonsu et al., 2019). According to the Ghana Poultry Project (GPP), there are 29 large-scale commercial poultry farms currently in Ghana and mostly found in the Ashanti region (13), Brong Ahafo (12) and Greater Accra region (4). These constitute 20 per cent of the total poultry sector, producing mainly eggs (Kusi et al., 2015). Even though there are local hatcheries that produce day-old chicks, the quality is generally low, so most poultry farmers prefer to buy imported day-old chicks, especially layer day-old chicks. In 2018, Ghana imported 511,960 broiler day-old chicks and 7,130,999-layer day-old chicks (Asogwa, 2023). Currently, there is limited regulation on local hatcheries. It is reported that day-old chicks for commercial production are primarily produced by 15 local hatcheries and 8 importers (Mensah-Bonsu, 2019). To support the local poultry industry, the Government of Ghana (GoG) in 2013 removed customs duties on poultry inputs such as feed, additives, drugs and vaccines and had facilitated improved access to veterinary services (Banson et al., 2015). Moreover, in July 2014, the Broiler Revitalization Project was launched aiming to stimulate local broiler production (Donnie, 2015). As part of the project, a new poultry import policy

Table 1. Ghana's chicken meat production, supply and distribution.

Meat, Chicken	202	2	202	23	2024	4
Market Year Begins	Jan22		Jan23		Jan23	
Ghana	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Beginning Stocks (1000 MT)	0	0	0	0	0	0
Production (1000 MT)	55	55	60	60	65	70
Total Imports (1000 MT)	253	253	255	270	225	270
Total Supply (1000 MT)	308	308	285	330	290	340
Total Exports (1000 MT)	0	0	0	0	0	0
Human Consumption (1000 MT)	0	0	285	330	290	340
Other Use, Losses (1000 MT)	308	308	0	0	0	0
Total Dom. Consumption (1000 MT)	0	0	285	330	290	340
Total Use (1000 MT)	308	308	285	330	290	340
Ending Stocks (1000 MT)	0	0	0	0	0	0
Total Distribution (1000 MT)	308	308	285	330	290	340

Source: Taylor (2024).

was designed to cut down the country's importation of chicken meat. The policy limits imports to 60 percent, meaning that importers must buy 40 percent of their produce from local sources (Donnie, 2015).

Despite these efforts, the poultry industry is challenged by several challenges. Aside the general challenges including the quality of vaccines, a nascent hatchery sector, inability of local feed mills to meet local demand due to inadequate maize and soybean production locally (Etuah et al., 2020; Sumberg et al., 2017), there are critical bottlenecks in the sectors supply chain. Trend in feed/ingredient At the production level, the major challenges include; inadequate bio-security systems, low quality day-old chicks due to poor quality local hatcheries and lack of regulations to regulate the hatcheries, self-on-farm feed production, inefficient production systems, especially in feed wastage, abuse of antibiotics and poor linkages between input suppliers and marketers. Limited processing and cold chain facilities, high cost of local poultry production and inability to meet consumer preference and competition from imported poultry products are some of the challenges at the processing and marketing level (Apike et al., 2024; Tamir, 2019). Table 2 shows the price trend for poultry feed and ingredients in Ghana.

In this study, the author provides an overview of the present bottlenecks, challenges which poultry farmers in the Awutu Senya District face in particular to Kasoa.

2. Methodology

2.1. Sampling Strategy

The research used a cross-sectional approach (Maier et al., 2023) where variables

Table 2. Price [GH¢ (\$) per 50 kg] trends of some feed and primary ingredients.

Feed/Ingredient	2019	2022	2021	2022	2023
Broiler Starter Mash	110	135	175	360	422
broner Starter Masn	(\$21)	(\$24)	(\$30)	(\$44)	(\$36)
Broiler Finisher Mash	110	130	173	345	420
broner finisher wash	(\$21)	(\$23)	(\$30)	(\$42)	(\$36)
Comm	50	95	160	265	227
Corn	(\$10)	(\$17)	(\$28)	(\$32)	(\$19)
Carrhaan Maal	135	160	215	550	460
Soybean Meal	(\$26)	(\$29)	(\$37)	(\$67)	(\$39)
Annual Average Exchange Rate GH\$/	5.21	5.59	5.8	8.27	11.69

Source: OAA Accra Field Office, 2023 in Taylor (2023).

of interest in a sample of subjects were established. It specifically used a case study design because a contemporary phenomenon (challenges faced by the poultry industry) based on a real-life situation was studied. Data from primary sources were collected based on interviews using semi-structured questionnaires. Additional information relevant to the study was also obtained from secondary sources such as the Awutu Senya District Assembly, Ministry of Food and Agriculture (MOFA), Greater Accra Poultry Farmers Association, and other relevant legislative framework and publications. The views of the various stakeholders; veterinary officers, poultry farmers and poultry input dealers were gathered through interviews and questionnaires administration. The mathematical method $n = N/[1 + N(\alpha)^2]$ (where n = sample size; N = sample frame; α = confidence level) was used in determining the size of the sample of poultry farmers to interview. Thus, a total of 45 commercial poultry farmers (sample size) were sampled for interview based on the sample frame (i.e. total number of poultry farms registered with the District Assembly) of 136 at a confidence interval (a) of 88% (sample size $n = 136/1 + 136 (0.12)^2 = 45$). The sampling frame (N) was ascertained through consultations with the District Assembly and the Poultry Farmers Association in the district and a confidence interval (α) of 88%.

Purposive sampling, proportional stratification and simple random sampling were adopted in selecting the interviewees. The poultry farms were stratified into small, medium and large scale based on the number of birds, the physical sizes of farms and equipment used within farms. Proportional stratification was used in selecting a sample from each stratum. Random sampling was used in selecting specific interviewees (i.e. poultry farms) in each group for the questionnaire administration. In addition, 10 major dealers of poultry inputs in the district were purposively selected and interviewed. The research was carried out from March 2022 to December 2023.

2.2. Study Area

Kasoa has territory in 1 of the 20 Metropolitan, Municipalities and Districts

(MMADs) in the Central Region of Ghana: Awutu Senya East Municipal Assembly (ASEMA). It is one of largest and fastest growing towns and municipality. Kasoa experiences a five-month dry season lasting from November through March. During the dry season, the northeast trade winds are prominent. The dry season is followed by a seven-month rainy season that lasts from April through October. During this rainy season, the southwest monsoon winds are most common. The rainy season is usually characterized by flooding, low crop yield, and financial strain for a large portion of Kasoa's population. Kasoa is home to one of the most prominent markets in the Awutu-Senya district. Agro-processed products are popular items at these markets. Agriculture and businesses associated with agriculture is one of the leading economic activities for Kasoa's working population. The study area is illustrated in Figure 1.

3. Results and Discussion

3.1. Farmers Profile

The poultry farmers were predominantly males (about 70%), and females made up 30%. Males in the age group of 35 and 49 years made up 64.3% whiles 35.7% were in the age group of whils those who fell within the ages of 25 and 39 years. Most of the farmers had reached senior high school level (50%), 37.5% had obtained junior high school level while 12.5% did not attain any formal education but learned the skill of poultry farming as handed over training from parents and guardians.

3.2. Types of Poultry

The system of keeping commercial poultry in the district is mainly battery/intensive system which is a modern poultry farming practice. About 60% of the poultry farmers also reared livestock such as pigs, sheep and goat.

3.3. Poultry Types Grown

The survey revealed that the farmers generally rear Layers, Broilers, Parent stock and Cockerels. Layers are purposely reared for eggs whiles the broilers are kept for their meat. About 20% of the farmers kept more than one type of poultry (Table 3). The reason for the emphasis on the rearing of layers at the expense of broilers which are relatively cheaper to rear is attributed to lack of processing plants in the district to process the broilers for ready market, particularly during the festive season which is mostly characterized by high demand for chicken than eggs. This is evident in the relatively high percentage of poultry farmers engaged in the rearing of only layers as indicated in Table 3. From the survey, none of the farmers engaged in broiler rearing process their chickens prior to market sale. Broilers under normal environmental conditions do take seven to eight weeks to mature for the market as compared to layers which take sixteen to twenty weeks to begin laying eggs.

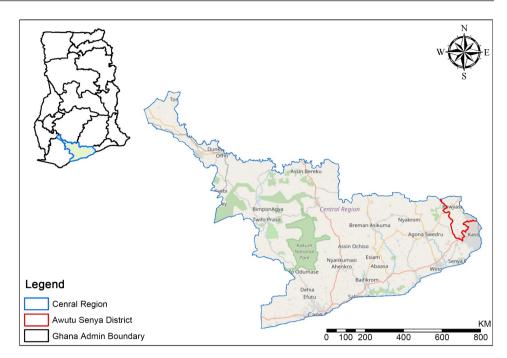


Figure 1. Study area.

Table 3. Type of poultry grown.

Type of Poultry	Number of Farmers	Percentage of Farmers
Boilers only	120	30
Layers only	150	37.5
Broilers and Layers	10	2.5
Layers and parent stock	70	17.5
Layers and cockerels	50	12.5
Total	400	100

Farmers who continue to rear broilers indicated that during the seasonal period of rearing, they often make losses depending on the length of time that the birds are kept in the farm without buyers. The loss is predominantly attributed to inadequate market for the sale of live birds especially after periods such as holidays and other festive seasons. Recent, the situation has been complicated and compounded due to high importation of cheap frozen poultry meat into the Ghanaian market (Chibanda et al., 2022), thus making it more difficult for locally produced chicken to have a formidable share of the market. These observations have been reported by other authors across the sub-Saharan African region (Knößlsdorfer & Qaim, 2023). Reports however indicate that, most consumers of such imported poultry are urban dwellers whose schedules do not allow them the time to purchase live poultry for consumption so they prefer to purchase poultry processed into convenient parts, which saves time during meal preparation. However, local poultry producers mostly sell live birds and if processed for

sale, birds are sold whole due to lack of facilities to further process and store them. The current lifestyle in Ghana, where preference to purchase items from mega supermarkets and shopping malls have also driven the preference and sale of imported poultry meat (Asante-Addo, 2020).

Farmers who are unable to find a buyer for their broilers are forced to sell for less in order to recoup a small amount of their initial investment. For example, at the time of the survey, a broiler's market value was GH¢120.00, but farmers were only charging GH¢100.00 for it. When it comes to layers, no matter how long they live on the farm, they continue to yield eggs that are valuable to the farmers financially before being sold at the market for an average of GH¢100.00. Farmers in the district are greatly discouraged from starting a broiler or other poultry rearing operation by this state of affairs. In contrast, there aren't any intense competitions like this.

Furthermore, the demand for broilers during the Christmas and Easter holidays is seasonal, which supports farmers' specialization in layer rearing. This is due to the fact that the district's need for locally produced chicken declines significantly following such well-attended celebrations. During the interview, a specific farmer who had a designated area for the selling of poultry, particularly broilers, shared his thoughts. As indicated by one of the respondents, "A few days before Christmas, I could sell 50 to 60 broilers a day, but, right after Christmas, the most I could sell was four birds per day. Therefore, because I can't even recover the capital, I don't see why I should spend my money on raising broilers after Christmas".

3.4. Operational Mechanism

Most people believe that an economic setting's style of operation has a direct impact on the amount of output produced by that particular economic endeavor. The majority of farmers (84.4%) feed their birds manually, while 48.9% use generators to provide water for their birds. This is partly explained by the fact that only 84.4% of the farms have electricity, and there are insufficient cash. The automatic water supply system makes it easier to give the birds medicine and drink. The majority of the time, medications intended for birds are administered to the farm via water in reservoirs. When their financial situation prevents them from adopting automatic feeding and watering systems, poultry breeders turn to improvised systems for water supply system such as connecting PVC pipes. Since such systems are not engineered, they are easily prone to infestations which are transferred to the birds easily.

3.5. Brooding of Day-Old Chicks

Because the majority of farms in the district lack power, 93.3% of chicken farmers brood day-old chicks using charcoal. Moreover, polythene materials are employed to shield the chicks from predatory animals and to maintain the brooding house's temperature at the appropriate level.

3.6. Financing Poultry Activities

By granting five-year tax breaks to newcomers to the poultry industry, the Kasoa Assembly indirectly contributes its quota to funding poultry activities in the District. According to the survey, around 69% of the district's poultry farmers finance their operations with personal savings, 9% rely on money from family members, and 19% additionally use bank loans, the prompt delivery of which is rarely reliable. Farmers are forced to close their doors if their own finances cannot support their farms' operating expenses. This is because, in contrast to other agricultural sector subsectors, the government has not been able to provide financial support to the majority of farmers. The circumstances have gotten worse. The few that are able to obtain these bank loans, however, occasionally find it very difficult to pay them back, particularly when the monies are not given to the farmers in a timely manner so they may begin planned activities. One further element that must be discussed in the context of the financial limitations facing the poultry sector is the delay in loan processing. The sources of funding for poultry activities disclosed by the survey are depicted in Figure 2.

3.7. Output Levels of Poultry Industry

Headings, or heads, are organizational devices that guide the reader through your Eggs produced specifically for human use and as raw materials for a few biscuit manufacturing enterprises outside the district are the main products as a result of the district's farmers concentrating their efforts on raising layers at the expense of other types of chicken. The surveyed/sampled poultry farms produce roughly 300 egg boxes on average every day. It is also important to note that the type and quantity of feed fed to the birds as well as the frequency of diseases in the farm have a positive correlation with the predicted daily output in a poultry farm.

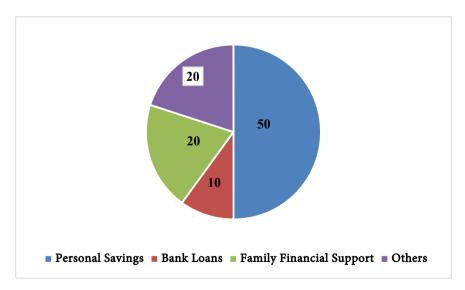


Figure 2. Available sources of funds for poultry farm.

For instance, farmers that aim to achieve faster results and larger yields do add more protein to the feed that is fed to the birds. The drawback of adding more protein to diet is that it causes birds to mature later than usual and become weaker earlier. The survey also revealed that, in an effort to boost bird productivity for the market, farmers continued to vaccine their flocks against illnesses including Gamboro and Chronic Respiratory Disease.

3.8. Marketing Poultry Products

Due to the low level of demand from local consumers in the district, eggs and chicken produced by the poultry industry in the area are often sold beyond the district. The district sells over 98% of the eggs that are produced there. About 60% of the eggs sold outside the district in a given week are sold in Kasoa and the surrounding areas, with the remaining 15% going to Accra, 12% going to Winneba, 55% going to Tema, and 8% going to other locations. The majority of these buyers are foreign nationals from nearby nations who have agents at the central markets. It's important to note that some farmers do participate in two or more of these markets and sell their eggs there. This is a result of organized markets existing.

The survey also showed that eggs shipped to the market are sold without any value-adding through effective preservation techniques and are marketed in their raw state with a shelf life of roughly 30 days. The poor flow of government funds, according to the planning unit of the Awutu Senya District Assembly, had caused the Assembly, working with MOFA, to halt construction of a processing plant. The locations of the district's egg markets, and the number of eggs used in each are displayed in **Figure 3**.

Ghana's poultry product market is not all that different from other sections of the country, where large markets sell live birds for domestic use. In most rural communities, birds are sold at the household level, particularly with small-scale poultry raising. The Ghanaian market has been overrun with inexpensive imported chicken from the US and the EU throughout the last few years. The declining demand for local poultry is endangering the livelihoods of thousands of Ghanaian poultry farmers who operate both small- and large-scale operations. Resolving this issue has been made possible by significant efforts made by poultry associations like the Accra Poultry Farmers Association.

The non-availability of processing plants and industries that use poultry products as raw materials coupled with the perishable nature of products such as eggs compel farmers (especially in June and July each year when demand for poultry products goes down) to sell products below their cost of production. Customers who purchase during these times will now be able to choose how much they want to spend for the poultry goods. Farmers are forced to sell their goods at such low prices because they may wish to recover their investment capital yet do not want to run at a loss. Poultry goods must typically be sold on a credit basis. Payment delays (after a week) for goods offered on credit are frequent. Current retail price of check leg over three years in Ghana is shown in **Table 4**.

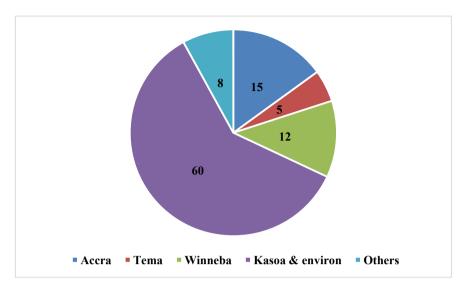


Figure 3. Available markets for sale of eggs.

Table 4. Chicken Leg Quarter Retail Price [GH ¢(\$) per 1kg] Trend over three years

Type of Chicken Meat	2019	2022	2021	2022	2023
Imported Chicken	13 (\$3)	12 (\$2)	15 (\$3)	30 (\$4)	35 (\$3)
Domestic Chicken	35 (\$7)	30 (\$5)	40 (\$7)	45 (\$5)	52 (\$4)
Annual Average Exchange Rate GH\$/	5.21	5.59	5.8	8.27	11.69

Source: OAA Accra Field Data in Taylor (2023).

3.9. Access to Vertinary Services

The availability of veterinary services to poultry producers is particularly important in lowering the number of illnesses in the sector. One significant issue that necessitates quick attention in the effort to advance chicken farming in Kasoa and the country as a whole is the supply of logistics to governmental organizations like the Veterinary Service Division, which is in charge of animal husbandry.

Due to a lack of transportation, the Veterinary Service Division in the Awutu Senya District has not been able to fulfill its duty and schedule regular visits to farms. The absence of a database on poultry diseases in the district might be ascribed to the challenges encountered in gathering and organizing information due to insufficient computers and cars. Before any visits to their farms, farmers who are experiencing disease-related issues are required to visit the Veterinary Service Division and provide a means of transportation for the officers.

Table 5 presents statistics on the Veterinary Service Division's current and necessary logistics, which accurately reflects the reason behind the sporadic farm visits. The percentage of farmers who had monthly or quarterly access to veterinary services was about 8.9% and 13.3%, respectively. Table 3 demonstrates that over half of the farmers had access to free veterinary treatment whenever they invited veterinary personnel. Only one of the seven motorcycles that the Veterinary

Table 5. Logistics and staff requirements.

Thomas a	Logi	stics	Category of Staff	Perso	onnel
Туре	Existing	Required		Existing	Required
Vehicle	-	1	Doctor	1	1
Motorbike	1	7	Animal Health Nurse	1	3
Computer and accessories	1	2	Technical Officer	1	5
Sterilizers	1	1	Other Staff (Drivers, Cleaners, Security etc)	2	4
Deep freezer	1	1			

Service Division needs to make routine trips to poultry farms are grossly insufficient to provide the department's entire range of services to poultry farms situated on the outskirts of the district.

The Veterinary Service Division in the Awutu Senya District is unable to store enough vaccines to suit the needs of poultry breeders due to the lack of a deep freezer. This has opened the door for private sellers to offer these vaccines, which might not be kept in an appropriate manner and so exacerbate the district's chicken illness problem. **Table 6** shows frequency of vertinary visits to farms.

3.10. Disease Control Measures

It is well acknowledged that one of the main obstacles slowing down the expansion of Ghana's livestock and poultry subsectors is disease. This assertion is not far from the image painted by the study in the Kasoa poultry sector. Regarding the issues that poultry farmers in the district were interviewed about, the survey found that, aside from funding and product marketing, 16% of them cited infections as the main obstacle to their operations. **Table 4** lists common diseases that are prevalent in the district's poultry sub-sector. The illnesses that are frequent in the Kasoa do not differ from those that are common throughout the world's poultry business (Fiorilla et al., 2023).

Therefore, in order to reduce or completely eradicate the poultry diseases in the district, it may be possible to replicate control and preventive techniques from elsewhere. This includes implementing biosecurity protocols, such as using disinfectants on farms. Speaking with representatives from the Veterinary Service Division, it became clear that one reason for the district's comparatively high incidence of chronic respiratory illnesses (62.2%) is that the birds are housed in cages that are warmer than the recommended temperature (30°C), a fact that most farmers are unaware of. This reinforces the necessity of giving the Veterinary Service Division the necessary resources in order to lower the number of illness cases by implementing preventive measures that might be spread during field visits.

The above-mentioned diseases are typically controlled by vaccination, which farmers, particularly those who operate on small and medium scales, provide to

Table 6. Frequency of visit by vertinary health officers.

Frequency of visits	Number of Farmers	Percentage of Farmers
Monthly	3	7.9
Quarterly	7	18.4
Bi-annually	4	10.5
Annually	3	7.9
By request or as needed	21	55.3

their livestock on a regular basis. During immunization campaigns, 35.6% of farmers use the services of veterinary officers.

However, 37.8% of the district's poultry producers have only partially implemented biosecurity measures, such as placing disinfectant at strategic locations within the farms. The Food and Agriculture Organization's (FAO) goal of reducing the deadly avian influenza (Guyonnet & Peters, 2020) has been made a reality by the District Assembly working in tandem with the Poultry Farmers' Association and the Veterinary Services Division. A task team headed by the District Assembly and other poultry industry stakeholders was tasked with destroying and confiscating imported poultry products in areas where the number of avian influenza cases was reportedly alarmingly high. This made a significant difference in the district's exposure to avian influenza. Table 7 shows common poultry diseases mentioned by respondents.

3.11. Insurance

Any business venture that is susceptible to hazards and other unforeseen epidemics from both inside and outside the activity is considered to benefit from insurance packages. To act as safety nets in case of emergencies, none of the tested poultry farmers that were questioned had insurance on their farms. This was ascribed to the insurance companies' high premiums since raising birds is a risky endeavor.

3.12. Effect of Poultry Farming on the Environment

Even though raising chickens helps to enhance nutritional standards and provide jobs, the environment in which it works is deteriorated. The district's environmental risks are largely caused by the way that solid waste from chicken farms is disposed of. According to the survey, 37.8% and 48.9% of chicken producers, respectively, dispose of solid waste products by burning and dumping on the ground. There are locals who live close to the district's poultry farms and are upset about this because burning waste poultry products pollutes the surrounding air.

3.13. Complementary Activities of Poultry Farming

Complementary activities are defined for the purposes of this study as those related activities that work together to support the production and/or sale of inputs and products utilized or generated by poultry farmers, hence accelerating

Table 7. Common disease of poultry indicated by respondents.

Diseases	Number of Farms	Percentage of Farms
Respiratory Diseases	25	54.3
Newcastle	10	21.7
Coccidiosis	4	8.7
Gamboro	4	8.7
Diarhoea	3	6.5

the expansion of the poultry sector. Farmers may readily get poultry inputs, which include day-old chicks, feed, water, medications, energy for lighting and brooding, and equipment stores, at strategic locations in Awutu Senya and some other major areas, such as Accra. The District is the primary location for these poultry farmers to obtain the majority of the services they require. The District provides feed, medications, and equipment to roughly 82.2%, 86%, and 88.9% of farmers, respectively, for their poultry.

This offers the District's poultry sector a lot of promise. Feed and other poultry input dealers in the district face significant challenges due to the scarcity of feed, particularly wheat bran, and the ongoing price increases of poultry inputs like medications and premixed feed on the global market. As a result, poultry farmers' demands cannot be met by poultry input dealers. The absence of financial assistance from the government and other financial institutions exacerbates the situation.

Poultry producers throughout the area and beyond receive an average of 1,600 crates a day from a crate manufacturing company located in the district capital. Before being officially shipped to the market, eggs are kept in these containers. However, the main issues endangering the district's crate business market are the importation of comparatively less expensive crates from nearby towns as well as regular power outages. The district's other characteristics, which can be used to boost the poultry business, are the existence of organized egg markets, land available for future growth, and tax breaks offered to newcomers by the Awutu Senya Assembly. Transporting goods from the poultry farms to the market might be made easier with access to farms along the trunk road that leads to the district capital.

3.14. Conclusion

The Kasoa poultry farmers focus on producing more layers than broilers, and their eggs are sold both inside and outside the district, with Kasoa, Winneba, and Accra serving as the main marketing centers. Diseases common in the poultry industry, ongoing input price increases, and a lack of poultry processing equipment are some of the obstacles that must be overcome in order to meet the market's growing demand for poultry products. Nevertheless, addressing these issues alone will not be sufficient without also enhancing the district's poultry

farmers' access to credit and strengthening the logistical and human capacities of important institutions that directly impact the poultry farmers' operations. The district's poultry sector can flourish thanks to several factors, including the existence of organized marketplaces, supplementary businesses such as feed processing mills and stores selling chicken feedstock, and acreage for future expansion. As stated in the 2023 budget statement, it is hoped that the government will help chicken farmers obtain tools, feed for their birds, pesticides, and other inputs so they can start large-scale poultry operations in the nation.

Credit Authorship and Contribution Statement

Seth Oduro: investigation, data curation, writing-original draft preparation, data analysis, visualization, writing-review & editing.

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Conflicts of Interest

The author declares there no competing financial interests or personal relationships with any institutions or persons related to publishing this work.

References

- Akolgo, G. A., Uba, F., Opoku, R., Tweneboah-Koduah, S., Alhassan, A. R. M., Anokye, E. G., Jedaiah, A. O. A., & Nunoo, E. (2022). Energy Analysis of Poultry Housing in Ghana Using Artificial Neural Networks. *Scientific African*, *17*, e01313. https://doi.org/10.1016/j.sciaf.2022.e01313
- 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.
- Apike, I. A., Osei Mensah, J., Aidoo, R., Wongnaa, C. A., & Boakye Appiah, G. (2024). Structure of Imported Chicken Market and Willingness of Distributors to Accept Domestically Produced and Processed Chicken: Evidence from Ghana. *Cogent Food & Agriculture*, 10, Article ID: 2296121. https://doi.org/10.1080/23311932.2023.2296121
- Asante-Addo, C. (2020). *Analysis of Consumer Attitudes, Preferences, and Demand for Poultry Meat in Ghana.* Doctoral Dissertation, Georg-August Universität.
- Asogwa, J. H. I. (2023). Drivers and Barriers for Poultry Production: The Case of Ghana, Eurasian Experiment Journal of Humanities and Social Sciences (EEJHSS), 4.
- Banson, K., Muthusamy, G., & Kondo, E. (2015). *The Import Substituted Poultry Industry; Evidence from Ghana.*
- Chibanda, C., Almadani, M. I., Thobe, P., & Wieck, C. (2022). Broiler Production Systems in Ghana: Economics and the Impact of Frozen Chicken Imports. *International Food and Agribusiness Management Review*, 25, 619-634.

https://doi.org/10.22434/IFAMR2021.0142

- Donnie, O. (2015). Ghana Broiler Revitalization Project Launched.
- Essegbey, G. O., & MacCarthy, D. S. (2020). Situational Analysis Study for the Agriculture Sector in Ghana.
- 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*, 1149-1159. https://doi.org/10.1007/s11250-019-02115-6
- Fiorilla, E., Birolo, M., Ala, U., Xiccato, G., Trocino, A., Schiavone, A., & Mugnai, C. (2023). Productive Performances of Slow-Growing Chicken Breeds and Their Crosses with a Commercial Strain in Conventional and Free-Range Farming Systems. *Animals*, *13*, Article No. 2540. https://doi.org/10.3390/ani13152540
- Guyonnet, V., & Peters, A. R. (2020). Are Current Avian Influenza Vaccines a Solution for Smallholder Poultry Farmers? *Gates Open Research*, *4*, 122. https://doi.org/10.12688/gatesopenres.13171.1
- Hafez, H. M., & Attia, Y. A. (2020). Challenges to the Poultry Industry: Current Perspectives and Strategic Future after the COVID-19 Outbreak. *Frontiers in Veterinary Science*, 7, Article No. 516. https://doi.org/10.3389/fvets.2020.00516
- Knößlsdorfer, I., & Qaim, M. (2023). Cheap Chicken in Africa: Would Import Restrictions Be Pro-Poor? *Food Security*, 15, 791-804. https://doi.org/10.1007/s12571-022-01341-5
- Kusi, L. Y., Agbeblewu, S., Anim, I. K., & Nyarku, K. M. (2015). The Challenges and Prospects of the Commercial Poultry Industry in Ghana: A Synthesis of Literature. *International Journal of Management Sciences*, 5, 476-489.
- Maier, C., Thatcher, J. B., Grover, V., & Dwivedi, Y. K. (2023). Cross-Sectional Research: A Critical Perspective, Use Cases, and Recommendations for IS Research. *International Journal of Information Management*, *70*, Article ID: 102625. https://doi.org/10.1016/j.ijinfomgt.2023.102625
- Mensah-Bonsu, A., Lartey, N. N., & Kuwornu, J. K. (2019). Gender-Segregated Analysis of the Poultry Value Chain in Ghana. *Gender, Technology and Development, 23*, 130-164. https://doi.org/10.1080/09718524.2019.1661611
- Nyarko Ayisi, D., & Kumi Adu, J. (2016). Challenges and Future Prospects for Broiler Meat Consumption in Ghana. *Imperial Journal of Interdisciplinary Research*, *2*, 648-654.
- Sumberg, J., Awo, M., & Kwadzo, G. T. M. (2017). Poultry and Policy in Ghana: Lessons from the Periphery of an Agricultural Policy System. *Development Policy Review, 35*, 419-438. https://doi.org/10.1111/dpr.12223
- Tamir, D. (2019). Assessment of Broiler Production; Processing and Marketing Practices in Ethiopia: Identifying the Root Causes for Poultry Products Importation to Ethiopia and Way forward. *Novel Techniques in Nutrition & Food Science*, *4*, 350-355.
- Taylor, J. (2024). Ghana Poultry Voluntary Update 2024. United States Department of Agriculture Foreign (USDA), Foreign Agricultural Service, Report Number: GH2024-0002.
- Yevu, M., & Onumah, E. E. (2021). Profit Efficiency of Layer Production in Ghana. *Sustainable Futures, 3,* Article ID: 100057. https://doi.org/10.1016/j.sftr.2021.100057
- Zamani, O., Chibanda, C., & Pelikan, J. (2022). Impacts of Import Restrictions on Poultry Producers in Ghana. *Q Open, 2,* qoac007. https://doi.org/10.1093/qopen/qoac007