

# Drivers and Barriers for Poultry Production: the Case of Ghana

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## ABSTRACT

The annual consumption of broiler meat keeps on increasing in Ghana as its population and economic activity grows. The country only produces about 10% of the total consumption, and this has given room for larger importation of frozen chicken to meet the local demand. This calls for investment and expansion of the poultry industry in Ghana, however the opportunity have not been utilized. As a result, about 90 percent of domestic consumption is imported. The local production keeps on going down annually as government has failed to come out with policies that will create much protection for the local poultry industry. There are opportunities for the poultry industry in Ghana looking at the trend of population growth and predictions from the Food and Agriculture Organization of the United Nation on increase demand for poultry meat in Ghana and other developing countries by 2030. This study appraised the difficulties faced by the Ghana poultry industry. It asserted that the country needs to put measures in place to embrace these opportunities. Among the problems encountered in domestic production of poultry in Ghana are: the weak agricultural sector policies, poor management practices, frequent outbreak of diseases, lack of value addition to the produce before marketing, difficult access to extension and veterinary services. As a result, the study concludes that poultry farmers should be given continuous training through attendance to regular seminars and workshops on poultry production and management as this will build their capacity on production and husbandry practices.

**Keywords:** Poultry, Agriculture, Domestic Farmers, Beef, Disease

## INTRODUCTION

Poultry meat is known to be cheaper compared to beef, and contains high amounts of protein, iron, zinc, vitamin B-complex, calcium and phosphorus [1]. Global consumption of poultry meat is expected to increase by 1.7kg per person from around 13.2kg in 2013 to 14.9kg in 2023 due to improvements in incomes, urbanization, changing diets and reductions in the relative prices of livestock products. According to [2] publications, poultry meat consumption in developing countries is expected to increase from 16.7 million tonnes in 2011 to 84.2 million tonnes in 2024 as a result of rapid population growth in the regions. Another assertion which attempts to explain the situation described, is that, Africa's population has been predicted to increase from 15.4 per cent in 2013 to almost 19 per cent by 2030 bringing the figure to 1.6 billion. This percentage increases in population will lead to higher demand for animal protein of which poultry meat will be the choice due to its shorter production period and cheaper price [3]. The demand for poultry meat and its consumption in the West African region has outweighed its domestic production in recent years, this has created a deficit in the area. Nigeria, being a highly populated country in West Africa produced 290,000MT of poultry meat in 2013 and consumed approximately 1.2 million metric tonnes of poultry meat. There was therefore a deficit of 910.000MT, which was imported from the European Union and the United States of America through the port of Benin due to the ban on importation of poultry products into the country. FAO forecasts that Nigerians are expected to consume two thirds more animal protein, with meat consumption rising nearly 73% by 2050 [4]. In 2010 the Gambia imported 18,000MT of poultry meat, produced only 300MT in the same year. More than 3,439 metric tonnes of eggs were imported into the country in the same year. Liberia, produced 11,600 metric tonnes of chicken meat, this terminology being analogous to the poultry meat used earlier on. Liberia imported 25,290 metric tonnes of Chicken meat and 5,753 metric tonnes of eggs in 2013 from India and China [4]. The population of the Liberia is expected to reach 6,414,000 by 2030 from 4,195,666 in 2015 which would

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significantly increase poultry meat and egg consumption in the country [5]. The rate of consumption of poultry meat in Liberia appears high because that was exclusively for chicken, to differentiate it from poultry in this analysis. Poultry in Ghana comprises turkey, guinea fowls, ducks, pigeon, ostrich and fowls, among poultry chicken is the most preferred meat. Poultry meat constitutes 40 percent of total animal protein consumption in the country. The intake of chicken in Ghana is on the increase as meat imports in 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. According to the data of the United States Department of Agriculture, the consumption of broiler meat in Ghana increased from 62 metric tonnes in 2003 to 220 metric tonnes in 2013 [6]. According to [7], the EU, USA and Brazil together exported over 200,000 tonnes of frozen chicken to Ghana in 2001 which valued at about US\$200 million. In 2002, more than 260,000 tonnes of chicken were imported into the country, mostly from the EU where farmers received generous subsidies for production. Ghana is making significant progress in its economic development as Sustainable Development Goal of reducing poverty by 2015 was met in 2013 by having a poverty rate of 24 percent as against 52 percent in 1991. This improvement in the standard of living has increased the consumption patterns of households, restaurant, hotels and fast food sector in urban and rural areas. The Food and Agriculture Organization of the United Nations, has predicted that poultry consumption will go up 150 percent by 2030, creating a huge opportunity for investment. Accordingly, the population of Ghana keeps on increasing annually as well as its economic activities. These had instigated the demand for chicken meat. The Food and Agriculture Organization of the United Nations, the United States Department of Agriculture, the European Union had released data indicating that the demand and consumption of poultry meat and its products are going to triple by 2030. This calls for investment and expansion of the poultry industry in Ghana, but this opportunity has not caught the eyes of the poultry industry players yet. As a result, about 90 percent of domestic consumption is imported [8]. The local production keeps on going down annually as government has failed to come out with policies that will create much protection for the local poultry industry. The livelihoods of poultry farmers in both small and large-scale farms are threatening as the foreign competitors have dominated the business with imported frozen chicken. As a result, this paper aims to raise awareness concerning the economy for poultry producers and opportunities accessible for poultry production.

#### **Population and Consumption of Broiler Meat in Ghana**

The Ghanaian population keeps growing annually; there has been about 5 million additional people in the total population between 2004 and 2013. Increase in population has impacted on the increase in broiler meat consumption. The consumption rate was 73,000 metric tonnes in 2004 but had a sharp increase in 2013 which recorded 220 000 metric tonnes. The increase in consumption can be attested to the fact that there has been economic transformation in the country as Ghana met the Millennium Development Goal of reducing poverty by 2015, poverty rate reduced from 52 percent in 1991 to 24 percent in 2013 [9]. However, in 2008 and 2009 there was a drop in the consumption of 0.85% and 2.59% respectively. This could be the result of the world food crisis in 2008. Individual intake annually has greatly improved over the ten year period, from 3.517kg per person in 2004 to 8.730Kg per person in 2013. The trend shows that the demand for poultry meat keeps on increasing in Ghana as its economy grows. According to [1], poultry meat uptake is forecast to rise faster than pork and beef worldwide in the coming decade. Africa consumption will go higher as the developed countries' consumption decreases due to the high population growth rate in Africa. The developed world on the other hand, has a declined in population and switch from poultry to other meat products such as; beef and pork.

#### **Prospects for Broiler Poultry Industry**

The economy of Ghana keeps on expanding as well as its population growth; this has triggered tremendous increase in poultry consumption in the country for a decade now. According to the Food and Agricultural Organization of the United Nations [4], "growing populations, economies and incomes are the main driving forces for the high demand for poultry products in Africa". It further has a forecast that Ghana is expected to consume two thirds more animal protein, with meat consumption rising nearly 73% by 2050. There are more international hotels, restaurants such as Kentucky Fried Chicken (KFC) and large shopping malls built recently which are going to add the extra demand for chicken products in the years ahead. The rising growth in poultry meat demand and consumption calls for an opportunity to invest and expand the domestic poultry business sector by both individuals and the government. The per capita consumption of poultry meat in Ghana, keeps on increasing yearly, and this has drawn the attention of farmers in the USA and Brazil to export large volumes of broiler meat into the country. Ghana is a member of the Economic Community of West Africa States (ECOWAS), therefore, has the opportunity to trade within the West Africa communities with less restrictions, taxes and import duties. These open doors for poultry farmers to increase their poultry production and export the excess to the neighbouring countries such as Nigeria, which as of 2013 has a production deficit of 910,000 metric tonnes of broiler chicken which were covered by import

from the EU, USA, and Brazil. Gambia who equally imported 18,000 metric tonnes of broiler chicken meat in 2013 to fill its production deficit; Liberia who also imported 25,290 metric tonnes of poultry meat in the same year and other West African countries such as Togo, Benin and Cote D'ivoire whose annual imports exceed their domestic production. The government of Ghana has launched a project called Ghana Broiler Revitalization Project (GHABROP), the project aimed at boosting local capacity in the production, processing and marketing of broiler chicken in the country. The project is backed by \$5,115,625 to produce 30,000 metric tonnes of broiler meat annually [10]. The programme is expected to run for 10 years, and will create the enabling environments for the poultry industry players such as production farms, input suppliers, hatcheries, feed mills, veterinary service producers, processors, marketers/cold stores to increase their activities to ensure self-sufficiency in the industry. The programme is expected to create about 240 new jobs annually for the youth. The United States Department of Agriculture signed an agreement with the Ghana government in 2015 to invest about \$56 million in Ghana's poultry sector. The investment is to add value to chicken products produced in the country through processing, refrigeration and transporting of products to the market [11].

### Challenges in the poultry industry

i. **Influence of Government:** Policy activities of the poultry industry are highly dependent on the agricultural policy of Ghana. According to [12], the main policies of the government that affect poultry production and marketing are tariffs on imported goods and subsidies to support poultry production. The level of tariffs on imported frozen chicken is 20 percent in Ghana, and this makes the price of locally-produced chicken about 50 percent higher than the imported ones making it lose its competitive advantage [12]. [11] revealed that, "the government passed a regulation to increase import tariffs from 20 percent to 40 percent to protect the local poultry sector, but till now the bill has not been implemented".. Due to the weak system of agricultural policy implementation, the imported frozen chicken keeps on increasing in the country as its price is about 30 to 40percent cheaper than the locally produced ones. There has also not been a special allocation of fund from the national budget to the poultry sector; this makes it difficult for the sector to implement projects that will increase its production.

ii. **Diseases:** Diseases remain a major challenge to the poultry industry in Ghana. In May 2007 Ghana became the eighth African country to confirm H5N1 avian influenza (AI) outbreak, since then there have been several reports on the disease in different regions in the country. In May 2015 about 33,000 birds in 11 poultry farms that were culled [12]. Newcastle disease has been found to be the major cause of mortality in poultry in Ghana, it causes close to 80% of poultry mortality annually [13]. Diseases cause high production cost by reducing the live weight of the bird or high mortality rate due to inability to eat properly. The continuous importation of poultry product from different countries keeps on increasing the risk of diseases. The other forms of diseases that affect poultry production in the bronchitis, avian metapneumovirus, Gumboroandcoccidiosis. These diseases are mostly caused by microorganisms such as viruses, bacteria, rickettsia, and parasites like ectoparasites and endoparasites.

iii. **Management of Poultry Farms:** Farming is perceived to be the job for the poor and illiterates in Ghana. This attitude makes people without the technical know-how and skills in poultry find themselves operating in the enterprise. Most of the Sockmen do not know the right drugs and it's administering dosage at the various stages of the birds' growth during production phase; Feeds are mostly formulated without using the right ingredients. Record keeping is another problem in most poultry farms in Ghana. It is difficult to get records on activities that go on daily in most poultry production areas. Management issues such as poor housing structure, climatic conditions such as poor ventilation, excessively high or too low temperature, irregular changing of litter materials in the poultry house, high stocking density leading to overpopulation, which increases the risk of disease outbreak, poor feed and water supply, poor sanitary conditions, inexperienced and unqualified labours are predominant management problems in poultry keeping in Ghana. [14] reports that, whether or not a poultry product meets the consumer's expectations depends upon the conditions surrounding various stages in the bird's development from the fertilized egg through production and processing to consumption.

iv. **Extension and Veterinary Services:** Ministry of Food and Agriculture is responsible for extension and veterinary delivery in Ghana, but due to a host of problems, including inadequate staff, they are not able to visit farmers on a timely basis. Ghanaian Times [15] informed the public that there were less than 100 veterinary doctors in Ghana at that moment; as a result, farmers were left with no option than to do all the technical activities such as vaccinations, debeaking and others by themselves and these keep contributing to low output. As vaccinations and disease treatments are mostly done by the farmers themselves or with the assistance of untrained personnel the diseases are not well treated and cause further disease outbreak. Lack of veterinary clinics in the rural areas has made it difficult for the veterinary services division to supply live vaccines to the farmers in the remote areas as a result, private enterprises have taken the role of supplying vaccines and drugs to farmers in these areas. Most of these vaccines are not properly stored; therefore the live vaccines expire before they are administered to the fowls.

The extension services lack the logistics to train and educate farmers on the technicalities of poultry production. Database for agricultural activities are not easily accessible to enable extension officers and farmers to access updated information on production. Extension officers rely on their own knowledge and discretion in the provision of extension services. Most Extension officers in Ghana have little or no knowledge of Information and Communication Technology (ICT) and this makes it difficult to access current information on the internet to advance their knowledge on new developments in the poultry industry.

v. **Marketing Problems:** According to [16], problems in marketing poultry products arise from the location of the product with respect to consumption centres, their seasonal distribution relative to the time of consumption, and the maintenance of quality through the marketing channels while they are held or transported. Most of the broiler chicken produced in Ghana cannot compete with the imported chicken because they lack value addition. The locally produced chicken lack value in terms of packaging, fowls are mostly sold alive under unhygienic environment. As [17] stated that, "the goal of value addition of poultry product is higher sales. Like many other areas of supermarket merchandising, it is achieved by appealing directly to the buyer". Lack of good roads to the farm, inadequate market information and low stock volume to meet constant supply affect marketing of poultry meat in Ghana.

vi. **Storage of Poultry Products:** [18] recommends that from the farm to the store, meat and poultry products must be chilled and kept chilled, packaged and handled properly to avoid contaminations. Most poultry farms in Ghana lack storage facilities such as refrigerators to keep slaughtered animals before transported to the market outlets, this compels them to sell their birds alive. Unreliable power supply also makes it difficult for fewer farmers that have cold rooms to store their dressed meat whilst preparing for market.

### CONCLUSION/RECOMMENDATION

The annual consumption of broiler meat keeps on increasing in Ghana as its population and economic activity grows. The country only produces about 10% of the total consumption, and this has given room for larger importation of frozen chicken to meet the local demand. There are opportunities for the poultry industry in Ghana looking at the trend of population growth and predictions from the Food and Agriculture Organization of the United Nation on increase demand for poultry meat in Ghana and other developing countries by 2030. The country needs to put measures in place to embrace these opportunities. Among the problems encountered in domestic production of poultry in Ghana are: the weak agricultural sector policies, poor management practices, frequent outbreak of diseases, lack of value addition to the produce before marketing, difficult access to extension and veterinary services. As a result, Poultry farmers should be given continuous training through attendance to regular seminars and workshops on poultry production and management as this will build their capacity on production and husbandry practices.

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