

Strengthening Ghana's Domestic Poultry Sector: Addressing Challenges and Seizing Opportunities through Policy and Governance

Gordon Akon-Yamga, Selorm Ayeduvor, Wilhemina Quaye, Nana Kofi Sarfo, and María Bustamante

KEY MESSAGES

- The domestic poultry sector in Ghana is significantly **challenged** by high inputs costs, reliance on imported day-old chicks, competition from imported poultry products, and infrastructural deficiencies → **Missed opportunity to enhance and support local production and markets** and improve the livelihoods of smallholder farmers and others in domestic poultry system.
- Enhanced **policy frameworks and governance mechanisms** are essential for improving the competitiveness and sustainability of domestic poultry systems.
- The noticeable **lack of awareness** among poultry farmers about government programs aimed at supporting the poultry sector indicates a **gap in communication or geographical concentration of the programs**.
- **Farmers' associations play a crucial role** in the sector as conduits for information dissemination, capacity building, and advocacy.



BACKGROUND

In Ghana, the poultry sector constituted a critical component of the agricultural sector, serving as a **cornerstone for food security, employment, and economic growth**. In past two decades, Chicken meat has become **most popular source of animal protein** in Ghana, with per capita consumption increasing from 1.6kg in 1999 to 13kg in 2022 (Zamani et al. 2022, MOFA, 2022).

Factors such as the growth in the nation's population, the emergence of a more affluent middle class, and the revitalization of the economy are the key driving forces behind the observed significant **increase in chicken meat consumption**.

Reliance on imports

Despite the increased in demand for chicken meat, domestic supply has remained relatively static over the past decade, leading to an **increased reliance on imports** to bridge this gap. In 2022, broiler meat constituted about 85% of the total meat imports into the country (MOFA, 2022). For instance, volume of frozen meat imports, increased from 40,591 metric tons (Mt) in 2003 to approximately 400,000 Mt in 2022.

Barriers to competitiveness

Coupled with high imports, the Ghana's poultry sector is faced with several challenges making it uncompetitive. **High cost of feed ingredients** continues to be a major challenge of the sub-sector. Cost of most poultry feed ingredients such as soybean meal, cotton meals, maize, oyster shells, wheat brand meal, dicalcium, and fish meal continue to increase astronomically. Other challenges include increased **incidence of emerging and re-emerging animal diseases, lack of improved breeding stock and inadequate infrastructure**.

Research focus

In this paper, we explore evidence, as to **how policy frameworks and governance mechanisms can improve the competitiveness and sustainability of domestic poultry meat** and thus contribute to protein self-sufficiency and decent livelihoods for farmers in Ghana.

POLICY, GOVERNANCE, AND INSTITUTIONAL ENVIRONMENT

Policies and programs

Over the past six decades, several policy measures have been implemented to improve the performance of the livestock and poultry sector in Ghana. For instance, the Seven Years Development Plan of the 1st Republic and subsequent strategies like the Accelerated Agriculture Development Strategy (1996) and the Medium-Term Agricultural Development Plan (MTADP) laid the foundational framework for agricultural development in Ghana. The **Food and Agriculture Sector Development Policy** (FASDEP I, 2002) and the Ghana Shared Growth and Development Agenda I (GSGDA 2010-2013) represent more recent policy iterations focusing on comprehensive sector development, including the poultry sector. Others include:

- **Ghana Livestock Development Policy and Strategy (2016)** aimed to alleviate poverty and improve “sustainable and environmentally friendly livestock production and productivity” among others (MOFA, 2016, p. 44).
- **Planting for Food and Jobs (PFJ)**, an initiative to support the poultry sector through subsidies on inputs and extension services.
- **Ghana Broiler Revitalization Project** aimed at reducing reliance on imported poultry products by enhancing local production capacities.

Governance and institutional environment

The governance and institutional environment for the poultry sector in Ghana involves various organizations, actors, and stakeholders working together to regulate, support, and develop the sector. They can be categorized into:

- Government ministries and agencies: **Ministry of Food and Agriculture**, responsible for agricultural policy formulation; the **Veterinary Services Directorate**, responsible for animal health services, disease control, and ensuring biosecurity; and the **National Poultry Development Board** that provides strategic direction and recommendations for the development of the poultry sector
- Regulatory agencies such as **Food and Drugs Authority** that regulates the safety and quality of poultry products and the **Ghana Standards Authority** that develops and enforces standards for poultry production
- Farmers' associations and cooperatives principally represented by the **Poultry Farmers Association of Ghana** that seeks the interests of poultry farmers and facilitates information dissemination; and several **regional and local cooperatives** the support smallholder farmers.
- **Private sector**: Includes feed mills, hatcheries, and processing companies that invest in the poultry value chain.
- **NGOs and development partners** that provide for capacity building, technical assistance, and advocacy in the poultry sector.

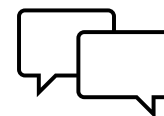
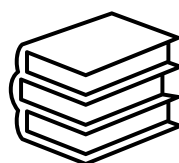
METHODOLOGY

Food systems approach:

Using the TEEB AgriFood (TEEB, 2018) framework as guiding framework to systemically explore the poultry system.

Mixed methods

LITERATURE REVIEW



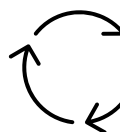
KEY INFORMANT INTERVIEWS

Poultry farmers (48), policy makers public officers (3) poultry feed millers and input dealers (4).



COST-BENEFIT ANALYSIS

Evaluation of the financial feasibility of investments in the poultry sector – broilers and layers.



CAUSAL LOOP DIAGRAM

Tool to inform collective exploration and discussions about interrelationships and dynamics.

SYSTEMIC EXPLORATION OF POULTRY SECTOR IN GHANA

To understand the poultry system in Ghana through a food systems lens, we engaged in participatory processes involving key stakeholders and a diverse array of perspectives. Employing a **Causal Loop Diagram (CLD)**, we mapped out the complex web of connections that shape the poultry sector's dynamics, shedding light on reinforcing loops that amplify certain trends and balancing loops that act as stabilizing forces.

The CLD was used as a guiding tool for exploring the potential repercussions of different decisions and interventions within the poultry system. This approach not only facilitated a shared understanding of poultry sector's situation, but also inspired discussions about transformation strategies, fostering a sense of collective ownership and dedication to improving the poultry system in Ghana.



SYSTEMIC EXPLORATION OF POULTRY SECTOR IN GHANA

At the hearth of the poultry system, strategic investments in high-quality inputs and advanced farming techniques lead to improved farm performance, which ultimately drives profitability. Higher profitability, in turn, creates a positive loop, encouraging further investments into poultry farms to continue enhancing farm performance (R1). Along with this, high-quality inputs and advanced practices aligns with meeting quality standards, enabling farmers to secure better prices and bolster profitability. This improvement allows farmers to reinvest in their operations and continue improving quality (R2).

However, pursuing superior practices and technologies can be costly. Advanced husbandry methods, upgraded housing and farm equipment, and improved processing, storage, and retail facilities, all come with increased expenses. These added costs can limit profitability and reduce ability to reinvest in further improvements, introducing a balancing effect that moderates profitability (B1).

Investments in enhanced processing, storage, and retail facilities can also boost profitability, creating a reinforcing loop that further encourages investment in these areas (R3).

Improving farm performance, product quality, and access to storage and processing facilities does not just benefit profitability – it also makes the domestic poultry sector more competitive. Increased competitiveness in the domestic poultry market fosters the development of custom knowledge and technology transfer services (R4). Similarly, greater competitiveness can lead to stronger enforcement of supportive regulations (R5). These factors prompt farmers to adopt improved practices and technologies, incurring in costs that act as counterbalance to the sector's competitiveness (B2). This balancing loop ensures that while competitiveness and profitability are pursued, they are checked by the practicalities and costs associated with implementing higher standards and innovations in the sector.

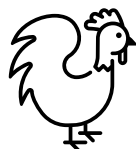
As profitability and reinvestment capacity grow, farmers are more likely to expand their flock size, which opens up opportunities for additional funding and loans. Access to loans can lead to further investments in farm yields, quality improvements, and other aspects that reinforce competitiveness (R6). Furthermore, farmers who gain access to low-interest loans are more likely to adopt better financial and business management practices, making them even more eligible for future loans (R7).

COST BENEFIT ANALYSIS

Functioning as a pre-investment mechanism, a cost-benefit analysis was done with focus on market prices, productivity, and subsidies. The analysis underscores the point that without the activation of certain economic levers, **investments in layers and broilers do not appear to be financially sustainable.**

Economic levers to enhance economic viability:

A 10% increase in **market prices**
A 10% improvement in **productivity**
GHG 150,000 annual **feed price subsidies**



A 10% increase in **market prices**
A 10% improvement in **productivity**
GHG 260,000 annual **feed price subsidies**

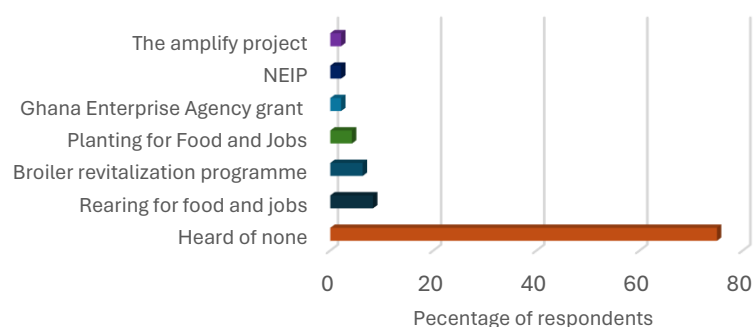


BCR (Benefit-to-Cost Ratio)	IRR (Internal Rate of Return)	NPV (Net Present Value)
1.01	44%	GHG 11,000 (3 years recoupment period)
1.01	32%	GHG 4,500 (3 years recoupment period)

Policy recommendations should include the **design and implementation of subsidy programs, tailored technology transfer and capacity building initiatives** that reduce the operational costs and improve productivity of small-scale poultry farms.

AWARENESS ABOUT POLICIES TARGETED AT THE POULTRY SECTOR

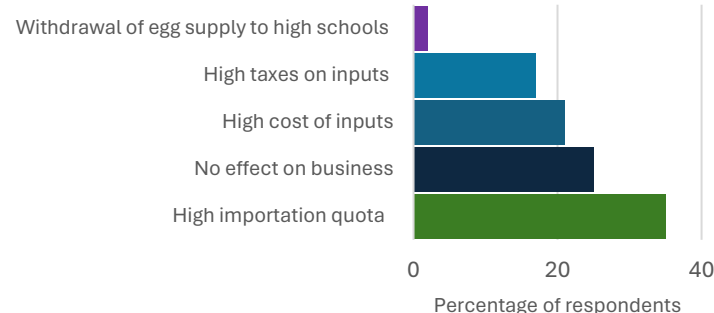
Government programmes/projects in the poultry sector



- The high fraction of interviewed farmers (75%) expressing lack of knowledge of government programs indicate weak communication and outreach about such initiatives. It could be due to the concentration of the programs in some geographical locations instead of being country wide.
- Although Rearing for Food and Jobs is the most well-known initiative among interviewed farmers, it is worth noting that none of the above is recognized by even 10%.

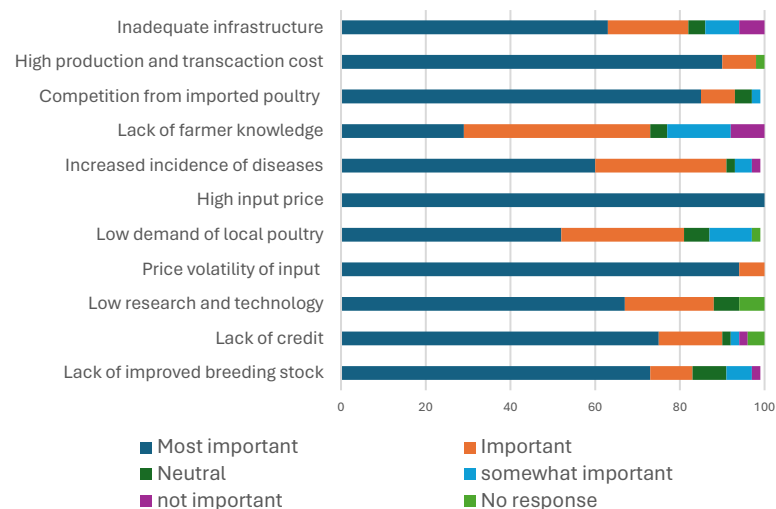
PERCEPTION ABOUT THE IMPACT OF POLICIES/ PROGRAMS ON POULTRY FARMING

Ways farmers are affected by policy



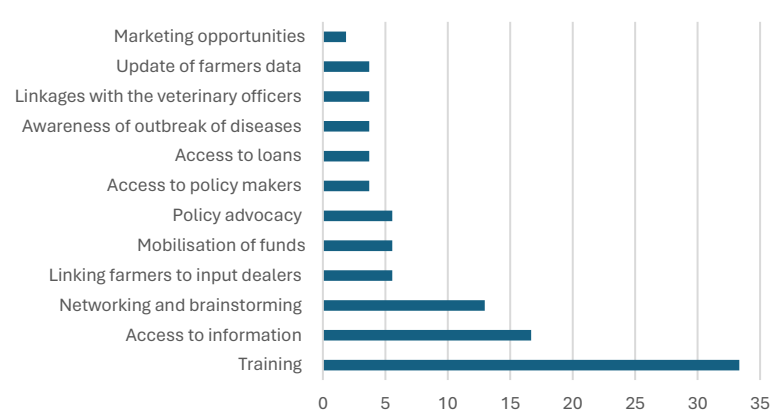
- While most farmers recognize the impacts of policy frameworks on their businesses, 25% do not feel a direct impact. The response of the latter group (25%) could reflect a smoother adaptation to such measures.
- About one third of farmers mention the high import quotas for poultry products, which greatly affect their business. Importers undercut local markets, making it difficult for local farmers to compete.
- Similar attention is placed on import duties and tax policies on key poultry farming inputs, which significantly increase farmers' production costs, representing a huge burden to their competitiveness.

MAIN CHALLENGES AFFECTING COMPETITIVENESS



- All the listed challenges are deemed important and therefore need to be addressed to strengthen the competitiveness of domestic poultry products.
- It is worth noting that the challenges ranked as most important directly relate to policy and governance frameworks that could act upon cost-related issues and competition, as illustrated previously.

BENEFITS OF BEING A MEMBER OF POULTRY FARMERS' ASSOCIATIONS



- About 70% of the interviewed farmers belong to an association. This high fraction of membership suggests a wide awareness of their benefits, and places farmers' associations as a prevalent and influential force within the poultry sector.
- Close to half (54%) of the respondents reported benefits from the associations, while 27% see no benefits. This significant portion indicates potential improvement areas in associations' services or engagement with its members.
- As illustrated in the figure, most respondents considered access to training (33%) as one of the main benefits of belonging to an association.

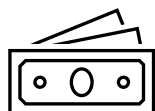
KEY FINDINGS



- Need for **integrated, systemic, and participatory approaches in policy and governance** to enhance poultry sector's sustainability and competitiveness.



- The lack of awareness and misalignment between policies and interventions and the poultry sector's needs underscores the importance of **enhanced communication, collaboration, and mutual support among stakeholders to foster a more cohesive and resilient community in addition broadening scope of interventions in the sector**



- Without economic interventions to **reduce operational costs for poultry farmers and enhance the sector's competitiveness** (e.g., subsidies for feed, tailored technology transfer and capacity building services), the financial viability of poultry farming remains precarious.



- The high membership rates of poultry farmers in associations point to their potential as critical conduits for information dissemination, capacity building, and advocacy. Although there is a wide range of benefits from being a member of associations, poultry farmers do not perceive in practice all the benefits recognized in theory. This gap indicates areas where **farmers' associations could benefit from policies that help them to strengthen scope and services to better meet the needs and requirements of association's members.**

RECOMMENDATIONS

- 1 Review and streamline **regulatory processes** to support the poultry sector. Enforce **quality standards** to enhance local products' quality and competitiveness.
- 2 Invest in **poultry infrastructure** to reduce transportation and operational costs. Modernize **local hatcheries** to reduce reliance on imported day-old-chicks.
- 3 Strengthen **local feed production** through subsidies, technical assistance, and research into alternative feed ingredients.
- 4 Implement **biosecurity measures** (incl. vaccination and training programs) to control the spread of diseases.
- 5 Facilitate **access to finance** by offering products tailored to poultry farmers' needs.
- 6 Promote and strengthen **farmers' associations and cooperatives** to reduce costs, improve market access, and amplify the voices of poultry farming community in policy and decision-making.
- 7 Encourage **the adoption of sustainable farming practices** that improve efficiency and reduce environmental impacts.
- 8 Promote the **consumption of local poultry products** through marketing campaigns and incentives.

BIBLIOGRAPHY

- Ashitey, E. (2017). Ghana Poultry Report. Global Agricultural Information Network, USDA Foreign Agricultural Services.
- Asuming-Brempong, S. (2003). Agricultural policy and its impact on farmers in Ghana. West African Journal of Applied Ecology, 4(1).
- FAO (2022) FAOSTAT database, to be found in <http://www.fao.org/faostat/en/#home>
- Kuyek, D. (2000). Ghana: Structural Adjustment in Agriculture. Third World Network.
- MoFA. (2022). Ministry of Food and Agriculture (MoFA) Investment Guide for The Agriculture Sector in Ghana.
- TEEB (2018). TEEB for Agriculture & Food: Scientific and Economic Foundations. Geneva: UN Environment.
- Zamani, O., Chibanda, C., & Pelikan, J. (2022). Impacts of import restrictions on poultry producers in Ghana. Q Open, 2 (1), qoac007

About the authors

- **Dr. Mrs. Wilhemina Quaye** is a Chief Research Scientist and the Director of Science and Technology Policy Research Institute (CSIR-STEPRI). quayewilhemina@yahoo.com
- **Dr. Gordon Akon-Yamga** is a Research Scientist and Head of Department for Commercialization and Information Division at Science and Technology Policy Research Institute (CSIR-STEPRI). gakon.yamga@hotmail.com
- **Dr. Selorm Ayeduvor** is a Research Scientist at Science and Technology Policy Research Institute (CSIR-STEPRI). selormayeduvor@gmail.com
- **Dr. Nana Kofi Sarfo** is a Research Scientist at Science and Technology Policy Research Institute (CSIR-STEPRI). chairmannanakofi@gmail.com
- **MSc. María Bustamante Liria** is a Food Systems Researchers at the Technical University of Madrid (UPM) maria.bustamante@gmail.com