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# Broiler value chains in Ghana and Senegal: organization, challenges and potential policy interventions

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- Ghana and Senegal are pursuing different poultry trade policies. Ghana permits the trade of poultry meat and Senegal banned the importation of uncooked poultry meat.
- In both countries, broiler value chains face high costs of production, especially feed costs, despite their differing policies.
- Domestic chicken trade is dominated by live fowl sales in Ghana and Senegal due to limited processing and cooling facilities.
- Incentives that encourage local and foreign investments in the processing, distribution and marketing of domestic chicken meat are key to the development of the broiler value chains.

# **Background and aims**

Ghana permits the trade of poultry products and is dependent on frozen chicken imports. In contrast, Senegal has banned the importation of uncooked poultry meat since 2006, officially to prevent an outbreak of the Avian Influenza virus. We present the results of Work Package (WP) 3 of the project "Impact of meat and milk product exports on developing countries" (IMMPEX). We present the organization, infrastructure and logistics of broiler value chains in Ghana and Senegal.

# Methods and data

The broiler value chains in Ghana and Senegal were studied using multi-stakeholder workshops, key informant interviews and the Delphi method. The multi-stakeholder workshops brought together 44 participants in Ghana and 45 participants in Senegal. The key informant interviews involved 25 actors in Ghana and 19 in Senegal. The Delphi method was used to identify and rank the main challenges facing the Ghanaian broiler value chain. The study was composed of 21 poultry experts.

# **Key findings**

Structure of the Ghanaian and Senegalese broiler value chains The key actors in the Ghanaian and Senegalese broiler value chains include feed millers, hatcheries, producers, traders, slaughterhouses and distributors (retailers, cold stores, live bird markets). The main inputs for broiler production are day-old chicks (DOCs) and feed. In Ghana, the producers use imported DOCs and locally hatched DOCs. Many producers prefer to rear imported DOCs because they are of a higher quality than the locally hatched ones. Most of the imported DOCs originate from Europe and the Ivory Coast. In contrast, the Senegalese poultry industry largely rears locally hatched DOCs. The local hatcheries hatch the DOCs from either imported hatching eggs or from imported breeder stocks. In terms of feed, Ghana produces a significant amount of its key feed ingredients (maize and soy meal) while the Senegalese feed industry relies almost entirely on imports of key feed ingredients.

While poultry production in Senegal has witnessed significant growth after the ban, processing remains limited. An estimated 70% of the chickens are sold as live birds. The remaining 30% are sold as processed birds. The processing is often done by a few automated formal slaughterhouses and numerous informal manual processors. However, manual processing has a high probability of introducing bacteria into the meat. Similar to Senegal, sale of live chickens dominates the trade in Ghana and there is little value addition. In both countries, when processing does happen, it ends up as whole dressed chickens.

# Comparing imported with domestic chicken meat in Ghana

In Ghana, imported frozen chicken pieces (thighs, wings, backs, feet, gizzard, etc.) dominate the market. Imported chicken meat varies from domestic chicken meat in various ways. First, imported chicken meat is always available with traders (importers, wholesalers and retailers) while live chicken trade is faced with frequent shortages. Second, imported chicken meat

is more convenient to consumers, saving time spent on preparation. Third, imported chicken is retailed in smaller portions offering consumers the opportunity to buy what they can afford compared to domestic chickens which are often sold live or in its whole processed state. Fourth, imported chicken meat is cheaper compared to domestic chicken meat.

## Dressed chickens being sold in an open market in Dakar, Senegal



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# Challenges facing the broiler value chains

The Delphi study revealed that poultry experts in Ghana perceive low-cost frozen chicken imports and high feed costs as the most important challenges facing the broiler value chain. Other challenges that were identified include: limited access to credit, low biosecurity measures, high costs of equipment, poultry diseases, low-quality feed, high costs of DOCs, inadequately equipped slaughterhouses and low quality of locally hatched DOCs. The Senegalese broiler value chain faces the same challenges as the Ghanaian value chain. However, the main differences are that chicken imports, quality of locally hatched DOCs and quality feed are not considered as key challenges in Senegal. Furthermore, both countries have limited processing and cooling facilities. As compensation for the lack of cooling facilities, chicken meat sold in open markets is sometimes treated with formalin, which poses health risks to consumers.

### Conclusion

Based on our study, the following are some broad policy interventions that policymakers in Ghana and Senegal may consider:

- Incentives that encourage local and foreign investments in the processing, distribution and marketing of domestic chicken meat are key to the development of the broiler value chains. Such incentives could include financial incentives (e.g. grants, loans), technical support incentives (e.g. extension services) and fiscal incentives.
- Capacity development through training and increased extension services is important for improving hatchery practices and poultry husbandry.

# **Further Information**

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Mavis Boimah, Chibanda, C., Schott, C., & Awuni, S. (2022). Doing it right to alleviate poverty: application of the sustainable food value chain development framework to Ghana's poultry sector, International Journal of Agricultural Sustainability.

Boimah, M., Weible, D., Chibanda, C., & Schott, J. (2022). Value creation pays ": a business model canvas approach to improve post- production activities in Senegal 's broiler industry. Proceedings in System Dynamics and Innovation in Food Networks 2022, 120-

Chibanda, C., Sall, M., & Wieck, C. (2023). An analysis of the broiler value chain and economics of broiler production in Senegal: status quo after two decades of import restrictions. Journal of Agribusiness in Developing and Emerging Economies.