

Poultry Market in West Africa: Burkina Faso

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Kate Schneider, Associate Professor Mary Kay Gugerty & Professor Robert Plotnick

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Evans School Policy Analysis and Research (EPAR)

Professor Leigh Anderson, PI and Lead Faculty Associate Professor Mary Kay Gugerty, Lead Faculty

Overview

Demand for livestock products, including poultry, is expanding in West Africa as a result of population growth and increased urbanization. Trade liberalization has had differing effects on poultry markets in the region, with some countries experiencing large import flows of frozen poultry from the European Union and others receiving very little. This report provides an overview of poultry market trends in Burkina Faso for comparison with trends in the wider West African region.

The West African poultry sector faces high production costs, safety concerns due to lack of sanitary controls, and technical constraints in processing and marketing. Production costs are higher in Africa due to the lack of an integrated and automated industrial poultry sector. Farmers lack reliable access to inputs, including chicks and feed, and face high costs for veterinary services. African livestock markets are also limited by global concerns about product safety. The persistence of animal disease outbreaks continues to limit domestic and export production potential. In addition to biological issues, the lack of breeders, marketing, and processing technology present technical constraints to poultry sector growth.

The introduction of the Common External Tariff (CET) in West Africa reduced the tariff rate applied in most countries, facilitating an influx of cheap poultry imports from Europe and decreasing the ability of the regional sector to compete with imported products. Under the CET, import tariffs on final consumer goods (including poultry) are set at 20 percent.^{5,6}

The main resources available for this analysis are the FAO Pro-Poor Livestock Policy Initiative working paper Navigating the Livestock Sector: The Political Economy of Livestock Policy in Burkina Faso from 2005 and the FAO-ECTAD poultry sector review from 2007.^{7,8} Appendix 1 presents an overview of Burkina Faso's poultry sector in comparison with West Africa as a whole and several other individual countries. An accompanying EPAR Brief number 82, Poultry Market in West Africa: Overview (forthcoming) provides detailed comparative analysis of the West African countries examined in this study.

Burkina Faso

Figure 1. Burkina Faso



Source: CIA World Factbook

Livestock fulfills a fundamental economic and social role in Burkina Faso. The government estimates that 85

NOTE: The findings and conclusions contained within this material are those of the authors and do not necessarily reflect positions or policies of the Bill & Melinda Gates Foundation.

percent of households depend on livestock for some part of their income.⁹ While there is no data to indicate what percent of this is accounted for specifically by poultry, the available evidence suggests that small-scale poultry production is central to the daily survival of Burkina Faso's rural population.¹⁰ Village chicken production represents a significant part of the rural economy in Burkina Faso and also plays a significant role in cultural life as gifts, starting capital for young people, and sacrifices.¹¹ In addition to providing revenue for producers, poultry from small-scale production also drives a commercial enterprise that employs vendors and transporters across the country.¹²

The most significant challenges facing the country's livestock sector stem from limited supply rather than weak demand, and this is particularly true for the poultry sector.¹³

Consumption & Consumer Preferences

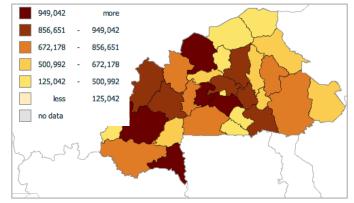
The population of Burkina Faso consumed an average of 5.5 kilograms of chicken meat and eggs per person in 2007.¹⁴ Although there is no direct information regarding poultry preferences in Burkina Faso, production information indicates that chickens account for 76 percent of poultry produced, Guinea fowl account for another 19 percent, and turkeys, ducks, and pigeons account for the remainder.¹⁵ Approximately 25 percent of all meat consumed in Burkina Faso's urban areas is poultry coming from small-scale producers in rural areas.¹⁶ Consumers generally purchase poultry by the unit, as opposed to by the kilogram for parts of the animal. Most consumers, even some up-scale hotels and expatriates, prefer traditionally produced poultry for its flavor.¹⁷

Based on World Food Programme daily caloric intake calculations and FAO estimates of daily caloric intake by commodity, poultry and eggs together account for less than one percent (.89 percent) of daily caloric intake per capita in Burkina Faso.^{18,19} However, the FAO data are average estimates and may conceal substantial differences between urban and rural consumers.

Domestic Production

Frozen poultry imports have not had a significant impact on the domestic market for poultry in Burkina Faso. Imports have not flooded the market as they have in neighboring countries, despite similar import regulations and tariffs. Most observers note that Burkina Faso's distance from the closest port likely contributes to the lack of imports.²⁰ A railway connects Burkina with the closest port of Abidjan in Cote d'Ivoire, 1,150 kilometers (712 miles) away.²¹ Exactly why Burkina Faso is virtually import-free remains unclear.²²

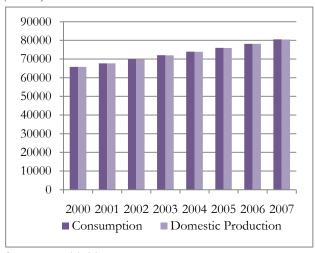
Figure 2. Number of Chickens in Burkina Faso (1999)



Source: FAO Global Livestock Production and Health Atlas

Domestic sources currently supply the entire egg and chicken meat markets. Figure 3 demonstrates that domestic production of chickens and hen eggs accounted for between 99 and 100 percent of total consumption for every year from 2000–2007.²³ These are yearly averages and do not reflect seasonal fluctuation. There is still some unmet demand for poultry products, particularly during holiday periods.²⁴

Figure 3. Domestic Poultry Production & Consumption (Tonnes)



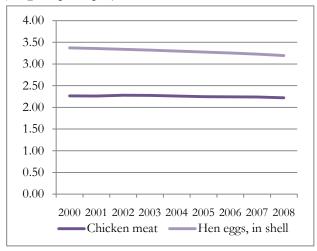
Source: FAOSTAT

Family poultry production (village poultry raising) accounts for 70 percent of all poultry production.²⁵ Within the village production system, women and children tend to be more involved in poultry production than tending to

any other livestock the family may possess.²⁶ Semiintensive operations located mainly around urban areas supply the remaining 30 percent of the market. There is little indication at present that semi-intensive poultry production creates any serious commercial competition for rural smallholders. Poultry from semi-intensive production is generally either more expensive or less attractive to most consumers than traditionally produced livestock products and therefore appeals to an entirely different market, namely urban restaurants, hotels and supermarkets.²⁷

Given that some unmet demand for livestock products, including poultry, exists, state officials, producers, and donors agree that intensification in the sector is needed.²⁸ As Figure 4 demonstrates, per capita production of chicken meat has remained constant between 2000 and 2008 while egg production has declined slightly.

Figure 4. Domestic Chicken Meat and Egg Production (Kilograms per Capita)



Source: FAOSTAT

Production Costs

The only information regarding smallholder production costs concern the high cost of veterinary inputs.²⁹ The government-run *Programme de Développement des Animaux Villageois* (PDAV) sells discounted vaccines to poultry producers in rural areas, however evidence suggests that few rural smallholders use vaccines for their poultry.^{30,31} According to one study of poultry farming systems in two different villages, chickens found most of their feed by scavenging with households providing supplementary food mainly for chicks and according to the availability of feedstuffs.³²

Costs of entry into semi-intensive poultry production are

high, thus producers aim to minimize their losses by investing in material and veterinary inputs. The *Maison De l'Aviculture* (MDA) producer organization has played a strong role in facilitating wholesale input purchases to provide reasonably priced inputs to these producers.³³

Processing & Marketing

The FAO analysis of Burkina Faso's poultry sector states that improving the infrastructure and equipment for marketing and processing is essential to the development of the sector.³⁴ Ninety percent of the 180 *Maison De l'Aviculture* (MDA) producer organization members process their own chickens for meat.³⁵

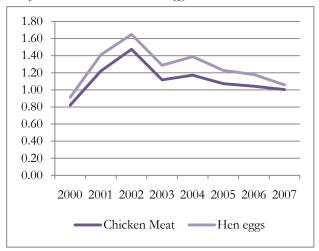
High transportation and transaction costs have limited Burkina Faso's ability to supply the regional market. However, an informal marketing system has developed to supply the domestic market. The system is well adapted to the realities of the country's infrastructure and moves poultry from small-scale producers to the urban consumer. Approximately 20,000 chickens reach Ouagadougou every day through bicycle-based collection, moped transportation, and street vendors. 99

Producer Prices

Revenue from the sale of poultry allows smallholders to purchase food all year long. It is especially important as a consumption smoothing mechanism for rural households.⁴⁰ One study from the Technical Committee on Livestock, Population and Environment in Ouagadougou found small-scale poultry production to be the principal source of daily revenue to meet family needs in certain areas of Burkina Faso.⁴¹

Producer prices for chicken meat and hen eggs, in nominal terms, doubled between 2000 and 2007. Chicken meat prices rose from \$1291.72 per tonne in 2000 to \$2461.10 in 2007. Similarly, producer prices for eggs rose from \$1176.78 per tonne to \$2242.11 over that same period.⁴² Figure 5 demonstrates that the rise in producer prices in Burkina Faso was surpassed by the rise in average world prices for chicken meat and hen eggs, bringing Burkina Faso's producer prices to parity with the world average for chicken meat in 2007, and only slightly above the world average for hen eggs.

Figure 5. Ratio of Burkina Faso's Producer Price to World Average Price for Chicken Meat & Hen Eggs



Source: FAOSTAT

Safety Concerns

Disease-related animal losses are largely responsible for producers' inability to meet market demand.⁴³ While the current commercial system is likely capable of expanding to deal with greater poultry supply, disease continues to wipe out a large proportion of rural poultry stocks, thereby constraining production potential.⁴⁴

In 1998, the government of Burkina Faso liquidated the livestock marketing board, leaving producers with very limited access to the now privatized veterinary medicine sector. Importers of veterinary medicine are required to pay pharmaceutical companies up-front for medicine. A lack of capital and credit prevents larger purchases and importers are typically unable to secure bulk rates. High purchase costs result in small profit margins, which in turn increase the risk of providing credit to producers and limits the quantity that producers are able to purchase. Finally, the persistence of a parallel market for fraudulent medicines sold at discounted prices further limits the sector. In the sector.

The imported medicines are largely anti-parasitics (trypanocides). Vaccines are under-utilized because producers do not perceive a visible benefit.⁴⁷ The government promotes vaccination through the *Programme de Développement des Animaux Villageois* (PDAV). PDAV purchases small ruminant and poultry vaccines through an open-bidding system with foreign companies and then sells these vaccines at a discounted rate to producers at the village level.⁴⁸ The state does not hire or fund the training

of veterinarians. The private veterinary medicine sector shows very little interest in the small ruminant and poultry vaccination market as there are few market incentives for private veterinarians to serve low-income, low-input producers in rural areas.⁴⁹

Trade Flows

Imports accounted for less than one percent of total chicken and eggs consumed in Burkina Faso between 2000 and 2007.⁵⁰ While there is no data to trace the origin of these imports, European Union data show no direct exports of poultry products and eggs to Burkina Faso.⁵¹ Between 2000 and 2007, Burkina Faso exported an average .012 percent of total domestic chicken meat and egg production.⁵²

Policy & Organizational Environment

Producer organizations in the urban and peri-urban areas of Burkina Faso are composed largely of elite stakeholders, many having very close ties to the government. However, they share common interests with poor producers and thus the advocacy efforts of the peri-urban associations have positive side effects for smallholders. Efforts to limit the amount of poultry imported by Burkina Faso and its trading partners in the UEMOA will likely have positive effects for all poultry producers regardless of income level or production method.⁵³

The Maison De l'Aviculture (MDA) producer organization is the leader in facilitating the development of the poultry sector in Burkina Faso. It is composed mainly of producers found in and around Burkina Faso's two major urban centers and fulfills both advocacy and serviceprovision roles. MDA has received support from the French-funded Projet d'Appui au Renforcement Institutionnel des Organizations Professionnelles d'Eleveurs Modernes (ARIOPE) and also had, as of 2005, a part-time technical assistant from the government to facilitate the association's service delivery role.54,55 The association travels to provide on-site services to most farms once a year and also facilitates the purchase of bulk inputs. In addition, members can come to the MDA headquarters to attend meetings and educational seminars or to purchase products and services.56

The MDA has achieved financial self-sufficiency and is able to sustain its staff and operational costs. MDA leadership attribute much of this success to the semiintensive poultry sector, which is concentrated mainly in the country's two main urban areas.^{57,58} The MDA has been able to provide tangible returns to semi-intensive poultry farmers by purchasing wholesale inputs and providing access to materials, veterinary inputs, and educational resources at a lower cost.⁵⁹

MDA presented its three-year plan and objectives at the recent UOFA/UEMOA Technical Poultry Workshop, conducted by the Central and West African regional unit of the FAO Emergency Centre for Transboundary Animal Diseases (ECTAD). The meeting was held in Dakar, Senegal in June 2009. Among the organization's objectives were:

- Forming a contract between MDA and the national Ministry of Animal Resources
- Constructing a hatchery with capacity for 160,000 eggs and the production of 27,000 chicks/broilers
- Promoting broiler production
- Lowering the cost of poultry feed to producers
- Searching for partners to support the institutional and organizational aspects of the poultry sector
- A two-year tax exemption
- Promoting the poultry sector as a mechanism of growth and development warranting consideration and inclusion in development programs/plans⁶⁰

The MDA is currently working with the Ministry of Animal Resources and the Maison de l'Enterprise de Burkina Faso (a private sector development NGO) to accomplish these objectives.⁶¹ There is no information regarding the extent or nature of these current efforts.

The most vulnerable producers are not included in periurban professional associations, however. Many possess only a small number of animals and spend much of their time engaged in subsistence farming. Since they likely do not have the time, means, or money to invest in any large-scale organizational efforts, coordinating the sector is challenging. Furthermore, smallholder poultry producers are spread across almost the entire country, making coordination exceedingly difficult.⁶²

Opportunities for Poultry Development

The existing systems for the marketing of village poultry provide strong starting points for promoting the sector.⁶³ An informal transportation system has allowed small rural

producers to supply urban markets, despite low-quality road infrastructure, and consumer preferences continue to favor traditionally raised products. However, in their study of village chicken production under two farming systems, Kondombo et al (2003) observed a disease related mortality rate of over 80 percent. The authors argue that this was due to the inefficiency of the production system, suggesting that improving rural production practices could contribute significantly to strengthening the poultry sector.⁶⁴

Producer prices for chickens and eggs in Burkina Faso have converged to average world prices according to the most recent available data (2007), suggesting the potential to compete in the international poultry and egg markets. Without the competition from imports facing other West African countries, Burkina Faso's poultry producers are poised to supply consumers' increasing demand for meat. Capitalizing upon this market opportunity has been constrained in large part by persistent animal diseases and lack of sufficient veterinary services. On the other hand, there is concern that stronger safety controls could edge smallholders out of the commercial market. Some evidence suggests that vertical integration models can support stronger biosafety controls and standards while shielding smallholder production from the impact of any higher costs of complying with new standards.65

Conclusion

Due in part to the country's landlocked location, Burkina Faso's poultry market is comprised almost entirely of domestic producers. Despite the poultry system's performance and lack of direct competition, the system is not currently meeting market demand for poultry, particularly at holiday periods. 66 Opportunities exist to increase domestic production and potentially supply the regional market. In addition, the organizational environment is strengthening as the *Maison De l'Aviculture* (MDA) producer organization works to support poultry sector growth by importing production inputs, providing education, and engaging in policy advocacy. 67

Please direct comments or questions about this research to Leigh Anderson, at eparx@u.washington.edu

Appendix 1. West African Poultry Market Comparison

		West Africa*	Burkina Faso	Ghana	Mali	Senegal
Demographic Overview	Population ¹	291,266,000	15,234,000	23,351,000	12,705,700	12,211,200
	Percent rural population ¹	59%	80%	50%	68%	58%
	GDP per capita ¹	\$807	\$522	\$713	\$688	\$1,087
	Percent annual GDP growth ¹	4.9%	4.5%	7.3%	5.0%	3.3%
	Major urban areas	N/A	Ouagadougou, pop. 1,475,000 ² Bobo-Dioulasso, pop. 490,000 ²	Accra, pop. 1,847,000 ³ Kumasi, pop. 1,170,000 ⁴	Bamako, pop. 1,475,000 ⁵ Segou, pop. 490,000 ⁵	Dakar, pop. 1,009,300 ⁶ Touba, pop. 451,300 ⁶
Consumption & Preferences	Per capita consumption of poultry products ⁷	5.1 kg/capita	5.5 kg/capita	6.0 kg/capita	3.94 kg/capita	5.84 kg/capita
	Percent of daily calories from poultry and eggs ⁷	0.78%	0.89%	0.60%	0.69%	1.00%
	Percent daily calories from all livestock ⁷	9.5%	8.4%	6.6%	14.8%	10.1%
Domestic Production & Market Structure	Per capita poultry production ⁸	4.4 kg/capita	5.5 kg/capita	2.5 kg/capita	3.93 kg/capita	5.76 kg/capita
	Producers	Varies by country	Mostly rural smallholders and peri- urban, semi-industrial producers	Dominated almost exclusively by urban, industrial production	Mostly traditional rural production, industrial sector produces at most 10% of domestic total	Both traditional, rural producers and semi-industrial producers in urban areas
	Smallholder Production Share				90–96%9	47%10
	Percent of consumption** supplied by domestic production ⁸	86.3%	99.94%	41.7%	99.7%	98.6%

		West Africa*	Burkina Faso	Ghana	Mali	Senegal
Trade Flows***	Imports	0.68 kg/capita	0.004 kg/capita	3.52 kg/capita	.011 kg/capita	.094 kg/capita
	Exports	.001 kg/capita	.0002 kg/capita	.002 kg/capita	.002 kg/capita	.012 kg/capita
Policy & Organizational Environment		Common External Tariff of 20%; growing need to address negative externalities of livestock production	Non-profit producer	International and domestic NGOs promoting poultry development in eight of ten regions	Several producer organizations at all levels of the supply chain supporting industrial production	Ban on poultry imports from all countries since 2006

Sources: FAOSTAT, World Development Indicators, ^ Encyclopædia Britannica Online & Gale Virtual Reference Library, \$\sqrt{World Food Programme}\$ (2004 – 2006 data)

⁻⁻ indicates no data

^{*}Includes Benin, Burkina Faso, Cape Verde, Côte d'Ivoire, Gambia, Ghana, Guinea, Guinea, Guinea, Bissau, Liberia, Mali, Mauritania, Niger, Nigeria, Senegal, Sierra Leone, Togo

^{**}Chicken meat & eggs, ***Chicken meat, turkey meat, duck meat, canned chicken, hen eggs

References

- Dieye, P.N., Duteurtre, G., Cuzon, J.R. & Dia, D. (2004).

 Livestock, liberalization and trade negotiations in West Africa.

 Retrieved from

 http://www.hubrural.org/pdf/dieye_et_al_livestock_and_trade.pdf
- Dupaigre, F., Baris, P. & Liagre, L. (2004). Étude sur la compétitivité des filières agricoles dans l'espace UEMOA. Retrieved from http://www.pdmas.org/pdf/Etude_competitivite_filieres_agricoles_espace_UEMOA.pdf
- Gning, M. (2005). Navigating the Livestock Sector: The Political Economy of Livestock Policy in Burkina Faso. Retrieved from http://www.fao.org/AG/AGAInfo/programmes/en/pplpi/docarc/execsumm_wp28.pdf
- Kondombo, S.R., Nianogo, A.J., Kwakkel, R.P., Udo, H.M.Y. & Slingerland, M. (2003). Comparative analysis of village chicken production in two farming systems in Burkina Faso. *Tropical Animal Health and Production* (35): 563–574.
- La Maison De l'Aviculture. (2009). Présentation succincte de la Maison De l'Aviculture et de la repartition geographique [Presentation]. Retrieved from http://www.fao-ectad-bamako.org/fr/IMG/pdf/Presentationde_la_Maison_de_l_Aviculture_au_Burkina_Faso.pdf
- Perry, B., Pratt, A.N., Sones, K. & Stevens, C. (2005). An appropriate level of risk: Balancing the need for safe livestock products with fair market access for the poor. Retrieved from www.fao.org/AG/AGAINFO/programmes/en/pplpi/docarc/wp23.pdf
- Richard, K.S. (2007) *Burkina Faso: Revue du secteur avicole.* Available from http://www.fao-ectad-bamako.org/fr/Poultry-sector-reviews?lang=en
- U.S. Department of State. 2010. *Background Note: Burkina Faso*. Available from http://www.state.gov/r/pa/ei/bgn/2834.htm

Endnotes

- ¹ Dupaigre et al, 2004, p. 147
- ² Perry et al, 2005, p. vii
- ³ Dupaigre et al, 2004, p. 147
- ⁴ Dupaigre et al, 2004, p. 147
- ⁵ Dieve et al, 2004, p. 7–8
- ⁶ World Trade Organization Statistics
- ⁷ Gning, 2005
- 8 Richard, 2007
- ⁹ Gning, 2005, p. 1
- 10 Gning, 2005, p. 25

- ¹¹ Kondombo, Nianogo, Kwakkel, Udo & Slingerland, 2003, p. 563
- ¹² Gning, 2005, p. 25
- 13 Gning, 2005, p. 21
- 14 FAOSTAT
- ¹⁵ Richard, 2007, p. 4, Author's calculations
- 16 Gning, 2005, p. 24
- ¹⁷ Gning, 2005, p. 9
- ¹⁸ World Food Programme Statistics
- 19 FAOSTAT
- ²⁰ Gning, 2005, p. 25
- ²¹ U.S. Department of State, 2010
- ²² Gning, 2005, p. 25
- 23 FAOSTAT
- ²⁴ Gning, 2005, p. 25
- ²⁵ Dupaigre et al, 2004, p. 142
- ²⁶ Gning, 2005, p. 13
- ²⁷ Gning, 2005, p. 9
- ²⁸ Gning, 2005, p. 21
- ²⁹ Richard, 2007, p. 19
- ³⁰ Gning, 2005, p. 18
- ³¹ Richard, 2007, p. 19
- ³² Kondombo et al, 2003, p. 568
- 33 Gning, 2005, p. 8
- ³⁴ Richard, 2007, p. 23
- ³⁵ La Maison De l'Aviculture, 2009, slide 6
- ³⁶ Gning, 2005, p. 21
- ³⁷ Gning, 2005, p. 24–25
- ³⁸ Gning, 2005, p. 24–25
- ³⁹ Gning, 2005, p. P. 24–25
- 40 Richard, 2007, p. 6
- ⁴¹ Gning, 2005, p. 25
- 42 FAOSTAT
- ⁴³ Gning, 2005, p. vi
- 44 Gning, 2005, p. 17
- 45 Gning, 2005, p. 17
- 46 Gning, 2005, p. 17
- ⁴⁷ Gning, 2005, p. 18
- 48 Gning, 2005, p. 18
- ⁴⁹ Gning, 2005, p. 18, 19
- 50 FAOSTAT
- ⁵¹ Eurostat

- 52 FAOSTAT
- ⁵³ Gning, 2005, p. 8
- ⁵⁴ Gning, 2005, p. 6
- ⁵⁵ Richard, 2007, p. 12
- ⁵⁶ Gning, 2005, p. 6
- ⁵⁷ Gning, 2005, p. 6
- ⁵⁸ Richard, 2007, p. 12
- ⁵⁹ Gning, 2005, p. 6
- 60 La Maison De l'Aviculture, 2009, slides 17-19
- 61 La Maison De l'Aviculture, 2009, slide 20
- 62 Gning, 2005, p. 14
- ⁶³ Gning, 2005, p. 33
- ⁶⁴ Kondombo et al, 2003, p. 573
- 65 Perry et al, 2005, p. vii
- ⁶⁶ Gning, 2005, p. 25
- ⁶⁷ La Maison De l'Aviculture, 2009