

Evans School Policy Analysis and Research (EPAR)

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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 (EU) and others receiving very little. This report provides an overview of poultry market trends in Benin in 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.¹ African livestock markets are also limited by global concerns about product safety.² The persistence of animal disease outbreaks continues to limit domestic and export production potential.³ In addition to biological issues, the lack of breeders, marketing, and processing technology present technical constraints to poultry sector growth.⁴

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} In Benin, live chickens,

hens, poultry meat, and eggs for consumption are subject to the 20 percent tariff. Live turkeys and other poultry, reproducers, and hatching eggs are subject to a 5 percent tariff.

In the late 1990s, Benin experienced an influx of cheap poultry products primarily from the EU. By 2002, annual poultry imports reached approximately 24,000 tons, more than the poultry imports of any other country in West Africa.⁷ In 2004 and 2005, Benin banned imports of poultry and poultry by-products from countries affected by avian flu.⁸

Current information about the poultry industry in Benin is limited. The primary sources for this analysis are a FAO poultry sector review from 2006, a poultry sector project report from the New Partnership for African Development (NEPAD), and a 2006 assessment by the GoB Ministry of Agriculture, Livestock, and Fishing. Appendix 1 presents an overview of Benin's poultry sector compared to other West African countries. Overall, access to imports, exports, and production and consumption data is poor for Benin. 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.

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.

Benin

Figure 1. Benin



Source: CIA World Factbook

The poultry sector plays an important economic, social and cultural role in Benin. Poultry and egg production is a major contributor to the agricultural sector and is an important source of nutrition and income for Beninese households.⁹

Consumption & Consumer Preferences

Information on poultry consumption and consumer trends in Benin is not readily available.¹⁰ As of 2005, the Food and Agriculture Organization (FAO) and the Government of Benin (GoB) estimated per capita consumption of poultry meat and by-products to be between 2.0 kg and 5.14 kg per year.^{11,12} Overall, poultry accounted for approximately 21 percent of all meat consumed in Benin, second to beef consumption at 58 percent.¹³ In 2005 approximately 20,000 tons of eggs (about 44 eggs per person) were consumed domestically; an increase from 17,310 tons in 2001.¹⁴

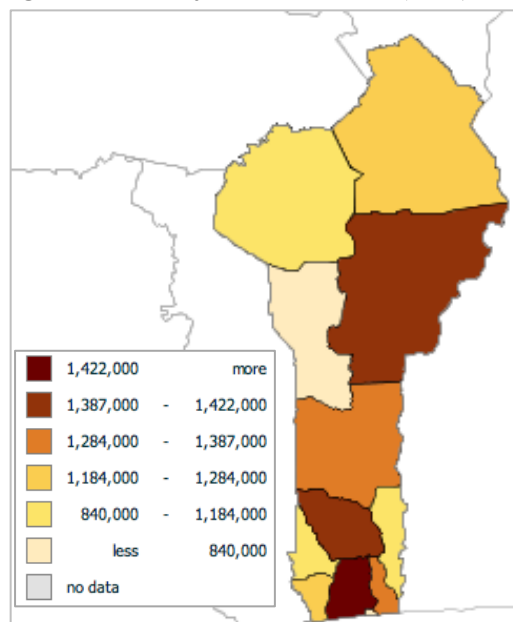
Demand for poultry products is extremely active during holidays, funerals, and religious ceremonies.¹⁵ In a 2005 survey of consumer preferences, the GoB Ministry of Agriculture, Livestock and Fishing found that consumers valued the “quality” of poultry products more than other

characteristics, such as taste, health risks, availability of supply, and cost, although the characteristics of quality were not elaborated.¹⁶ Consumer preferences regarding poultry varieties were not available.

Domestic Production

The poultry industry consists of two primary means of production: traditional or familial production and commercial production.¹⁷ Traditional forms of production dominate the domestic market. The FAO estimates that smallholder farmers manage 90 percent of poultry stocks in Benin.¹⁸ In 2002, this sector raised approximately 12 million poultry, far exceeding commercial output.¹⁹ Production practices are fairly basic in the traditional poultry sector, which therefore limits productivity. Typically households raise poultry as a way to meet their nutritional needs, however, in some cases, families sell excess “production” in local markets to earn a small income.²⁰

Figure 2. Number of Chickens in Benin (2004)



Source: FAO Global Livestock Production and Health Atlas

Figure 2 shows the distribution of poultry stocks in Benin; commercial poultry production is primarily centered around urban areas, which may account for the higher levels of stocks there. Of the approximate 400 commercial operations in Benin, 80 percent of them are located in the southern part of the country.²¹ 65 percent of those are small operations that produce an average of 500 heads per year, 26 percent produce around 2,500 per year, 8 percent produce 7000 per year, and 1 percent produce around

20,000 per year.²² The commercial poultry system mainly produces live chickens (hens, broiler chickens, and young male chickens), processed chickens (typically broiler chickens that are cleaned, emptied, and bagged), and other live birds such as turkeys, guinea fowl, geese, and quail.^{23,24} Collectively, this sector produces a total of 1,400 tons of chicken meat per year (500 tons from broiler chickens and 900 tons from “spent” hens) and 7000 tons or 112 million eggs per year.²⁵ The exact amount of meat produced from other fowl is not available.

The commercial poultry sector uses improved strains of chicks that are either imported or produced domestically in commercial hatcheries.^{26,27} In 2005, it maintained a herd of over 2.9 million birds, somewhat lower than the peak of over 4.0 million birds in 2003.²⁸ The drop in production was largely due to the high price of feed and an increase in frozen poultry products, likely coming from the EU although some may also enter Benin from Latin America.²⁹ Overall, the modern poultry sector is second in total production to more traditional methods of poultry production.³⁰

As *Figure 3* indicates, poultry production in the traditional and commercial sectors does not meet national demand. The gap between consumption and domestic production is filled by foreign imports, but these consumption figures likely overestimate domestic consumption, since a large volume of poultry products are illegally “re-exported” to other countries in Sub-Saharan Africa.³¹ Accurate export figures are not available.³²

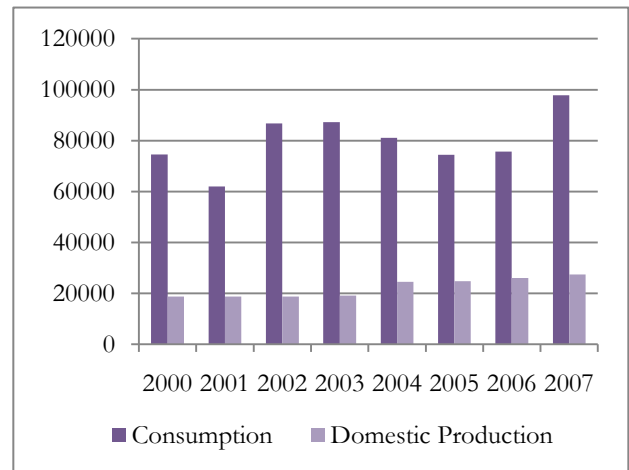
Egg production constitutes a major part of the poultry sector in Benin, especially among commercial producers.³³ As *Figure 4* indicates, domestic egg production in Benin in 2008 was at an all time high. The previous peak in 2003 of 11,800 tonnes was followed by a stagnation in production due to imports of frozen eggs and high prices for corn (feed). Since then, domestic egg production has picked up due to government restriction on imports.³⁴

Production Costs

In 2005, the Republic of Benin Ministry of Agriculture, Livestock and Fishing estimated the cost of producing a commercial broiler chicken at 1,278 FCFA (US\$2.66).³⁵ The average cost of domestically produced “day-old” broiler chicks was 500-525 FCFA (US\$1.04-\$1.09), hen chicks averaged 590 FCFA (US\$1.23), and rooster chicks averaged 225 FCFA (US\$0.47).³⁶ Imported broiler chicks

averaged between 550 and 575 FCFA (US\$1.14-\$1.20), imported hen chicks were 600-900 FCFA (US\$1.25-\$1.87) and imported rooster chicks were 175 FCFA (US\$0.36).³⁷ Traditional poultry producers typically raise local species and refrain from purchasing feed. They either leave animals to forage for their own food or provide self-mixed feed.³⁸

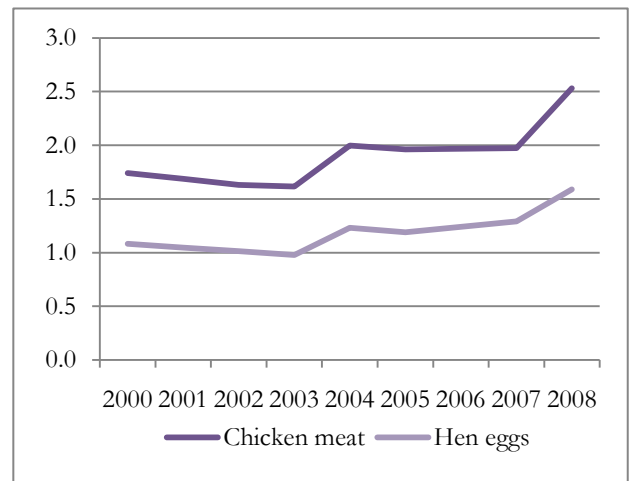
Figure 3. Domestic Poultry Production & Consumption (Tonnes)



Source: FAOSTAT

The cost of poultry feed ranged between 159 FCFA (US\$0.33) per kilogram to 206 FCFA (US\$0.43) per kilogram depending on the type feed used.³⁹ Access to feed among commercial producers has become a major issue in this sector, likely due to cost. As of 2004 about 15 manufacturers produced 21.7 tons of feed, with the vast majority coming from smaller businesses.⁴⁰ As a result, the quality of feed varies significantly in the country.

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



Source: FAOSTAT

Processing & Marketing

As of 2005, only three official slaughterhouses existed in Benin. All three belong to private companies that specialize in the production of broiler chickens.⁴¹ The facilities slaughter chickens from their own production and process a limited number of live chickens from smallholder farmers in Southern Benin.⁴² In the traditional poultry sector some producers slaughter their own animals for personal consumption or sale to supermarkets and restaurants, though most sell live animals.⁴³

The poultry marketing system is divided into three main segments: industrial, commercial, and consumer markets. The industrial market is geared towards large food companies and poultry processors in Southern Benin's industrial zone.⁴⁴ Commercial markets in the urban centers of Cotonou, Porto-Novo, Djougou, Parakou and Natitingou are frequented by poultry traders who purchase products from small and medium producers for resale in other locations.⁴⁵ Consumer markets are located throughout the country and typically serve individual consumers.⁴⁶ Consumer markets also serve as the main point of sale for domestically consumed poultry products. The volume of sales in each market is not readily available.⁴⁷

Producer Prices

There is little up-to-date information regarding producer and consumer prices in Benin. A 2005 government survey of the poultry sector suggests that imported poultry tends to be less expensive than domestically produced items. Here, too, exact figures are not available.⁴⁸

Safety Concerns

Biosecurity measures among traditional producers tend to be poor or non-existent.⁴⁹ Poultry roam freely and often come into contact with other wild birds and animals.⁵⁰ An estimated 40-50 percent of poultry specimens are lost due to disease or natural prey.⁵¹ When transporting these animals to market, smallholder producers and merchants use vehicles and cages that are often unclean and take few or no biosecurity measures.⁵²

Commercial producers use some industrial techniques, including sanitary inputs, proper feed and commercial varieties of birds.⁵³ Lack of training and government oversight limit the extent to which safety and biosecurity

practices have been adopted.⁵⁴

Trade Flows

Since 1990, Benin has imported more poultry products than all other countries in the UEMOA economic block combined. Most of those imports are then exported to other countries in Sub-Saharan Africa (SSA).⁵⁵ In 2002, for example, Benin re-exported 52,000 tons of frozen poultry to Nigeria, approximately 60 percent of all Nigerian poultry imports.⁵⁶ That same year, Nigeria banned imports of frozen poultry from European countries, which restricted the amount of official trade that went through Benin.⁵⁷ Nigeria's ban is still in place, however, illegal imports enter via land borders.^{58,59}

Virtually all domestic poultry production is consumed within Benin.⁶⁰ According to a survey by Sofia International in 2004, domestic poultry production is not sufficient for local demand.⁶¹ Foreign imports of poultry products help meet demand.

Policy & Organizational Environment

In the last several years, the GoB initiated programs to help promote the poultry industry due to increasing consumer demand.⁶² In 2003, the government deemed the poultry industry as one of ten "priority sectors."⁶³ Between 2005 and 2008, the Government initiated several workshops to encourage better production practices and promote safeguarding techniques against the avian flu.⁶⁴

Since 2005, the GoB imposed several restrictions on imported poultry by-products, frozen poultry, and live specimens from countries that have experienced avian flu outbreaks.⁶⁵ The impact of this legislation on the poultry industry is not yet available.

Despite the policy and legislative interventions described above, most poultry farmers have not received much guidance from the government.⁶⁶ Overall, the government has little involvement with the modern producers, which generally received input and training from various non-governmental organizations (NGOs).⁶⁷ Poultry producers generally form professional organizations on their own, sometimes with the guidance of NGOs.⁶⁸ Three major producer organizations currently operate in Benin. The *Association Nationale des Aviculteurs du Bénin* (ANAB) was established in 2002 and serves poultry producers nationwide. Its objectives are to improve traditional production

techniques. The *Groupement des Aviculteurs pour Une Promotion Durable* (GAPD) was created in 2002 to promote poultry farming in Southeast Benin and “contribute to food self-sufficiency” among traditional producers. *Groupe Volaille InterCommunal* (GVIC) was established in Southeastern Benin in 2003 to help producers reduce animal mortality rates and participate in producer networks.⁶⁹

Opportunities for Poultry Development

Throughout the last decade, poultry production did not appear to satisfy domestic demand, although the lack of reliable information on the re-export of poultry products makes this gap hard to estimate.⁷⁰ In order to sufficiently boost domestic production to meet demand, the L'Association Nationale des Aviculteurs du Bénin (ANAB), the national producer organization for the poultry sector, believes that poultry producers must become “professionalized” and the government must protect the sector from foreign imports.^{71,72} Even with less competition from international markets, domestic producers would have to adopt improved production techniques to boost productivity to a sufficient level.

In 2005, the FAO estimated that per capita consumption of protein was 9 kg per year in Benin, well below the FAO's minimum recommended a level of 20 kg per year.⁷³ Expansion of the poultry industry could help increase available sources of protein and meet the nutritional requirements of the population.⁷⁴ Furthermore, promotion of the poultry industry could spill over to other agricultural sectors, which as a whole make up 37 percent of Benin's GDP and 85 percent of total export earnings.^{75,76} Improving the poultry industry would particularly benefit the maize and soy sectors, both of which are key ingredients in poultry feed and potential areas of growth.⁷⁷

Challenges facing the development of the poultry sector in Benin include insufficient technical training for poultry producers, lack of affordable feed and veterinary products, the insufficient quantity of industrial hatcheries, poor organization of producers, poor health standards in production facilities, and the threat from avian flu.⁷⁸

Conclusion

The poultry sector in Benin has the potential to improve the nutritional wellbeing and income security of a large percentage of the population. Traditional smallholders produce the majority of poultry products domestically;

however, current production is limited due to low productivity, poor biosecurity, and lack of inputs. A reduction of foreign imports and greater institutional support for the industry may help domestic producers reach their potential.

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	
<i>Demographic Overview</i>	Population ¹	291,266,000	15,234,000	23,351,000	12,705,700
	Percent rural population ¹	59%	80%	50%	68%
	GDP per capita ¹	\$807	\$522	\$713	\$688
	Percent annual GDP growth ²	4.9%	4.5%	7.3%	5.0%
	Major urban areas	N/A	Ouagadougou, pop. 1,475,000 ³ Bobo-Dioulasso, pop. 490,000 ³	Accra, pop. 1,847,000 ⁴ Kumasi, pop. 1,170,000 ⁵	Bamako, pop. 1,475,000 ⁶ Segou, pop. 490,000 ⁶
<i>Consumption & Preferences</i>	Per capita consumption of poultry products ⁹	5.1 kg/capita	5.5 kg/capita	6.0 kg/capita	3.94 kg/capita
	Percent of daily calories from poultry and eggs ⁸	0.78%	0.89%	0.60%	0.69%
	Percent daily calories from all livestock ⁸	9.5%	8.4%	6.6%	14.8%
<i>Domestic Production & Market Structure</i>	Per capita poultry production ⁹	4.4 kg/capita	5.5 kg/capita	2.5 kg/capita	3.93 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
	Smallholder Production Share	--	--	--	90–96% ¹⁰
	Percent of consumption** supplied by domestic production ⁹	86.3%	99.94%	41.7%	99.7%
<i>Trade Flows***</i>	Imports ⁹	0.68 kg/capita	0.004 kg/capita	3.52 kg/capita	.011 kg/capita
	Exports ⁹	.001 kg/capita	.0002 kg/capita	.002 kg/capita	.002 kg/capita
<i>Policy & Organizational Environment</i>	Common External Tariff of 20%; growing need to address negative externalities of livestock production	Non-profit producer organization (MDA) working to increase the domestic poultry sector	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	

*Includes Benin, Burkina Faso, Cape Verde, Côte d'Ivoire, Gambia, Ghana, 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; -- indicates no data; see endnote⁷⁹ for sources

		West Africa*	Senegal	Nigeria	Cote d'Ivoire
<i>Demographic Overview</i>	Population ¹	291,266,000	12,211,200	151,212,300	20,591,300
	Percent rural population ¹	59%	58%	52%	51%
	GDP per capita ¹	\$807	\$1,087	\$1,370	\$1,137
	Percent annual GDP growth ²	4.9%	3.3%	6.0%	2.2%
	Major urban areas	N/A	Dakar, pop. 1,009,300 ⁷ Touba, pop. 451,300 ⁷	Lagos, pop. 8,030,000 ¹² Kano, pop. 2,993,000 ¹³	Abidjan, pop. 3,576,000 ¹³ Bouake, pop. 574,000 ¹³
<i>Consumption & Preferences</i>	Per capita consumption of poultry products ⁹	5.1 kg/capita	5.84 kg/capita	5.39 kg/capita	2.42 kg/capita
	Percent of daily calories from poultry and eggs ⁸	0.78%	1.00%	0.83%	0.57%
	Percent daily calories from all livestock ⁸	9.5%	10.1%	4.98%	5.9%
<i>Domestic Production & Market Structure</i>	Per capita poultry production ⁹	4.4 kg/capita	5.76 kg/capita	5.39 kg/capita	2.37 kg/capita
	Producers	Varies by country	Both traditional, rural producers and semi-industrial producers in urban areas	Traditional, rural producers; semi-commercial backyard producers, and large-scale industrial facilities	About 70% family production, 30% semi-industrial production of chicken meat and eggs
	Smallholder Production Share	--	47% ¹¹	69% ¹⁶	70% ¹⁷
	Percent of consumption** supplied by domestic production ⁹	86.3%	98.6%	99.98% ⁹	97.7%
<i>Trade Flows***</i>	Imports ⁹	0.68 kg/capita	.094 kg/capita	.001 kg/capita	.056 kg/capita
	Exports ⁹	.001 kg/capita	.012 kg/capita	--	Less than .001 kg/capita
<i>Policy & Organizational Environment</i>		Common External Tariff of 20%; growing need to address negative externalities of livestock production	Ban on poultry imports from all countries since 2006	Ban on poultry imports from all countries since 2002, but illegal imports continue to enter the country	IPRAVI coordinates the sector, umbrella for producer organizations and connection to government

*Includes Benin, Burkina Faso, Cape Verde, Côte d'Ivoire, Gambia, Ghana, 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; -- indicates no data; see endnote (79) for sources

		West Africa*	Niger	Benin¹	Sierra Leone
<i>Demographic Overview</i>	Population ¹	291,266,000	14,704,300	8,662,086	5,559,853
	Percent rural population ¹	59%	84%	59%	62%
	GDP per capita ¹	\$807	\$364	\$771	\$352
	Percent annual GDP growth ²	4.9%	9.5%	5.1%	5.5%
	Major urban areas	N/A	Niamey, pop. 708,000 ¹⁴ Zinder, pop. 171,000 ¹⁴	Cotonou, pop. 818,100 ⁷ Abomey, pop. 114,800 ¹⁵	Freetown, pop. 772,900 ⁷ Bo, pop. 150,000 ⁷
<i>Consumption & Preferences</i>	Per capita consumption of poultry products ⁹	5.1 kg/capita	1.54 kg/capita	2.0-5.14 kg/capita ¹⁸	4.89 kg/capita
	Percent of daily calories from poultry and eggs ⁸	0.78%	0.24%	1.48%	0.63%
	Percent daily calories from all livestock ⁸	9.5%	13.31%	6.32%	5.24%
<i>Domestic Production & Market Structure</i>	Per capita poultry production ⁹	4.4 kg/capita	1.53 kg/capita	3.27 kg/capita	3.8 kg/capita
	Producers	Varies by country	Mostly smallholders	Mostly smallholders	Mostly rural backyard, some commercial operations ¹⁸
	Smallholder Production Share	--	97%	90%	90% ¹⁸
	Percent of consumption** supplied by domestic production ⁹	86.3%	99.97%	28.02%	78.09%
<i>Trade Flows***</i>	Imports ⁹	0.68 kg/capita	Less than .001 kg/capita	8.29 kg/capita	1.07 kg/capita
	Exports ⁹	.001 kg/capita	--	Less than .001 kg/capita ¹⁹	--
<i>Policy & Organizational Environment</i>		Common External Tariff of 20%; growing need to address negative externalities of livestock production	Weak due to political instability, GAP/CUN/E organizes producers around the capitol	Limited government involvement; producer organizations and NGOs working to improve the domestic poultry sector	Avian Secretariat established in 2006

¹ Per capita consumption of poultry products in Benin is based on 2004/2005 estimates from the Food and Agriculture Organization (FAO) and the Government of Benin. Exact statistics on domestic consumption are not available due to the high volume of undocumented poultry exports. Benin is a high-volume transit point for poultry products from the EU and Latin America to other countries in Sub-Saharan Africa. Trade flow volumes are based on estimates.

*Includes Benin, Burkina Faso, Cape Verde, Côte d'Ivoire, Gambia, Ghana, 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; -- indicates no data; see endnote (79) for sources

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Endnotes

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⁷⁰ Fanou, 2008, p.28
⁷¹ Fanou, 2008, p.28
⁷² Agoli-Agbo et al, p.2
⁷³ Fanou, 2008, p. 6
⁷⁴ ANAB, p.1
⁷⁵ ANAB, p.2
⁷⁶ Fanou, 2008, p. 6
⁷⁷ ANAB, p.2
⁷⁸ Fanou, 2008, p.26-27
⁷⁹ *Sources:* ¹World Development Indicators, 2008; ²World Development Indicators, 2007 – 2008, based on constant 2000 U.S. dollars; ³Encyclopædia Britannica Online, 2006; ⁴Encyclopædia Britannica Online, 2003; ⁵Encyclopædia Britannica Online, 2000; ⁶Gale Virtual Reference Library, 2006; ⁷Encyclopædia Britannica Online, 2004, ⁸World Food Programme, 2004 – 2006, FAOSTAT, 2004 – 2006; ⁹Esimates based on FAOSTAT, 2007 data; ¹⁰Dupaigne, 2004; ¹¹USDA, 2005; ¹²Encyclopædia Britannica Online, 2002; ¹³Encyclopædia Britannica Online, 2005; ¹⁴ Encyclopædia Britannica Online, 2001; ¹⁵Oxford Reference Online, 2002; ¹⁶Obi, T. W., Olubukola, A., & Maina, G. A., 2008; ¹⁷Kone & Danho, 2008; ¹⁸Government of Sierra Leone, 2006