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Poultry Market in West Africa: Niger

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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 Niger 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] As of 2009, Niger maintains the 20 percent tariff for live chickens and hens, poultry meat, and eggs for consumption. Live turkeys and other poultry, reproducers, and hatching eggs are subject to a five percent tariff.

The primary source for this analysis is the presentation document by the *Groupement des Aviculteurs Privés de la Communauté Urbaine de Niamey et ses Environs* (GAP/CUN/E) at the FAO Emergency Centre for Transboundary Animal Disease Operations' (ECTAD) Second Poultry Farming Technical Workshop, held Dakar in June 2009. Appendix 1 presents an overview of Niger's poultry sector compared to other West African 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.

Niger

Figure 1. Niger

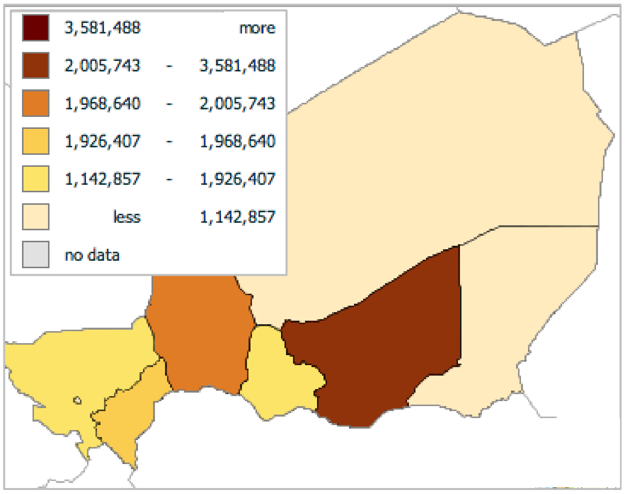
Source: CIA World Factbook

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.

Consumption & Consumer Preferences

Nigeriens consume only 1.54 kilograms per capita of chicken meat and eggs every year, well below the West Africa regional average of 5.1 kilograms per capita. While chicken meat and eggs account for only 0.24 percent of daily caloric intake, poultry products comprise 13.3 percent of all calories derived from livestock.[7] *Figure 2* illustrates the distribution of chickens in Niger.

Figure 2. Number of Chickens in Niger (2007)



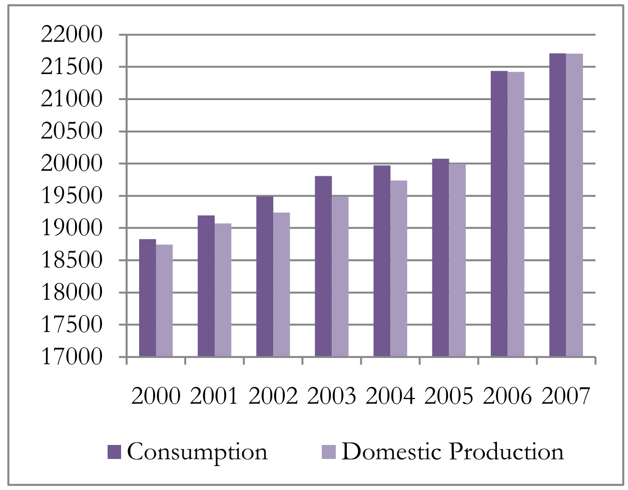
Source: FAO Global Livestock Production and Health Atlas

Domestic Production

Niger produces over 99 percent of the poultry it consumes, as shown in *Figure 3*. Chickens account for about 58 percent of all poultry raised in Niger, with local varieties predominating.[8] Differences between domestic production and consumption between 2002 and 2004 were due in large part to the insufficient production of eggs for consumption, with the widest gap in 2003.[9] As *Figure* 4 demonstrates, per capita domestic production of both chicken meat and eggs generally trended down between 2000 and 2008.

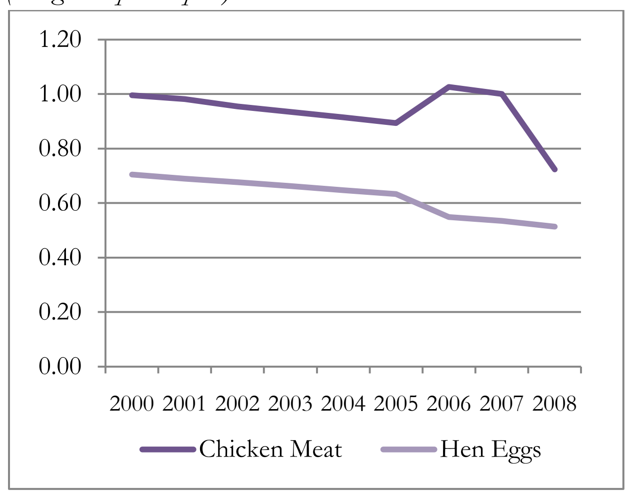
Traditional poultry production is a low-input system in which the animals either roam freely or are confined to a poultry yard.[10] Birds forage for their own food, although many keepers provide water or low grade grains during the dry season.[11] In very remote areas, eggs are produced for household consumption and slaughtering is reserved for festivities.[12] Domestic production of guinea fowl eggs is especially important during the rainy season.[13]

Figure 3. Domestic Poultry Production & Consumption (Tonnes)



Source: FAOSTAT

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



Source: FAOSTAT

Intensively raised poultry represent only 3 percent of the total poultry population in Niger.[14] Broiler chickens and hens under intensive production account for 1.6 and 1.2 percent of Niger's total poultry population.[15]

Four intensive poultry operations make up the state-owned segment of the sector. The main Goudel station is near Niamey and the others lie in the interior of the country.[16] The GAP/CUN/E presentation reports that these operations could have played an important role in the development of modern poultry production in Niger by allowing for large scale day-old chick production and serving as stepping stones to facilitate the development of private producers. The reality, however, is that as of 2009 these operations had nearly ceased to function. In 2008, the Goudel station was given over to management from the United Arab Emirates with only 23,000 birds. It now imports day-old chicks from Europe, Nigeria, and most recently, Mali.[17]

Private intensive poultry farms nearly all closed in the wake of the Avian Influenza epidemic. The resurgence of the private intensive sector has been slow because it has received no government support. As of 2009, there were 20–30 such operations, fewer than half of the 67 that were functioning in 2005.[18]

Production Costs

The GAP/CUN/E reports that production costs for traditional poultry are low.[19] This estimate likely fails to account for the losses due to malnourishment, disease and predation. Because the cost of feed for traditional poultry producers is high, animals do not receive sufficient or regular feed.[20,21] Insufficient shelter contributes to the spread of disease as well as increasing vulnerability to predators such as sparrow hawks and snakes.

The economic environment for intensive poultry production is unfavorable in Niger. High production costs result from the difficulty procuring inputs. In addition, fluctuation in agricultural production leads to highly volatile prices for feed inputs and potential lack of availability. [22] As of 2007, no domestic poultry producers raised parent birds to replenish stocks. In November 2008, one poultry producer in the Maradi region imported 2,200 parent chickens.[23]

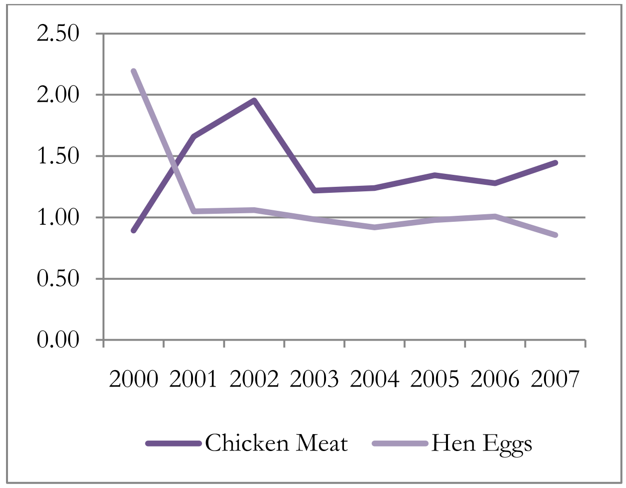
Processing & Marketing

It is difficult to estimate the quantity of poultry products marketed commercially in Niger. Even in the capital, Niamey, and large urban areas, informal sale is very common.[24] The market for broiler chicken meat consists mostly of output from traditional production as well as some imports. Intensive poultry producers are not able to compete well with meat from these sources due largely to the higher production costs of intensive production and lack of any economies of scale at present.[25,26]

Producer Prices

As *Figure 5* demonstrates, producer prices for chicken meat and hen eggs fluctuated significantly in the early 2000s and have stabilized in relation to average world prices in more recent years. Since 2003 the producer price for chicken meat has been 25 to 50 percent above world average prices. The producer price for hen eggs was in line with world average prices every year between 2001 and 2006, and fell below the average in 2007 (the most recent year for which there is data).[27]

Figure 5. Ratio of Niger's Producer Price to World Average Price for Chicken Meat & Hen Egg



Source: FAOSTAT

Safety Concerns

Disease is the primary constraint to the development of traditional poultry, as outbreaks sometimes wipe out entire stocks. Predominant diseases include Newcastle disease, Avian Smallpox, Avian Cholera (Pasteurellosis), Salmonella, and Coccidia.[28] Improper shelter, usually constructed from locally available materials, contributes to the spread of diseases and parasites.[29] The GAP/CUN/E presentation reports that mechanisms for disease prevention are unreliable, but does not provide details on what these "mechanisms" are or why they are unreliable.[30]

The outbreak of Avian Influenza in 2005 decreased the poultry population of Niger substantially. This loss resulted in part from many producers clearing their stocks as a preventive measure, in part from government seizure of birds along central transit routes, and in part from the inability to replenish stocks due to the ban on day-old chick imports. The loss is estimated to have been 1.3 million chickens, but this may not be accurate since it is based on the 2008 general livestock and agriculture census estimate that the poultry population was between 12 and 13 million birds. As the census report itself notes, this is very far from other estimates of the poultry population.

FAOSTAT reports over 24.5 million birds on average for the years between 2000 and 2007.[31]

Trade Flows

Poultry imports have fluctuated between 2000 and 2007. At their highest in 2003, imports accounted for only 1.7 percent of all chicken meat and eggs consumed.[32] Niger imports eggs from Ghana, Nigeria, Côte d'Ivoire, and to a lesser extent from Burkina Faso.[33] Chicken meat imports come from Europe, in large part from France.[34]

Policy & Organizational Environment

Niger's poultry sector has a long organizational history. The country's first poultry sector association, the *Coopérative des Aviculteurs*, formed in 1982. In 1989, the *Filière Avicole Moderne* (FAM) project took over the association in order to integrate it with the livestock feed plant and Goudel poultry station to form three pillars of Niger's modern poultry sector. For about a decade, modern poultry production in Niger experienced a "golden age." The exact end date of the FAM project is unclear. After it ended, internal conflict inhibited continued cooperation among actors in the production and commercialization of poultry products. The end of the FAM project also exposed producers to competition in eggs for consumption from neighboring countries (Nigeria, Côte d'Ivoire, Burkina Faso, and Ghana).[35] Furthermore, the national office for the promotion of aviculture in Niger, which was responsible for the FAM project, closed for reasons that have still not been made public.[36]

Despite the sizable investments in the sector through the FAM project, poultry production in Niger has not reached its potential.[37] Political instability and changes in government officials have slowed or halted projects and disbursement of funds for the development of intensive poultry production. In addition, there is little coordination among actors within the sector.[38] The GAP/CUN/E formed in 2004 and is currently the predominant professional organization, but it only includes actors in and around the Niamey area.[39] No cooperative coordinates large-scale private sector producers at the national level.[40]

Opportunities for Poultry Development

Institutional and technological opportunities exist to develop the poultry sector in Niger. Institutionally, better coordination and organization is needed to support the sector. Banks provide limited financing for poultry production because they consider it a risky sector.[41,42] This may provide opportunities for the government or other lenders to help finance the industry.

Technologically, vaccines and infrastructure for disease prevention are required to improve the health of traditional poultry stocks and prevent widespread losses. A weak gene pool also constrains the productivity of traditional egg and poultry meat production.[43] Selective breeding to improve the genetic stock presents a promising opportunity to increase productivity.[44]

In March 2010, the Red Cross issued an emergency appeal for aid to Niger in response to the food shortage resulting from last year's poor harvest. The appeal includes a plan to increase traditional poultry farming for household egg production as part of its proposed action in coordination with the World Food Programme and the FAO. As a medium term intervention, poultry farming at the household level can contribute to early recovery and livelihood restoration. Poultry provide protein through eggs and households can raise the animals with no additional feed. In light of the current food crisis, the plan does not include an increase in intensive poultry farming as there is concern it could divert grain resources away from human consumption.[45]

Conclusion

The poultry sector in Niger currently exhibits poor productivity, widespread disease concerns, and poor organization. The Avian Influenza epidemic devastated poultry stocks in Niger and the sector has yet to fully recover. Since smallholders comprise the majority of poultry producers in Niger, developing the sector presents the opportunity to improve health and food security.

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
Demographic Overview	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]
Consumption & Preferences	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%
Domestic Production & Market Structure	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%
*Trade Flows****	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
Policy & Organizational Environment		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

		West Africa*	Senegal	Nigeria	Cote d'Ivoire
Demographic Overview	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]
Consumption & Preferences	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%
Domestic Production & Market Structure	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%
*Trade Flows****	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
Policy & Organizational Environment		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

		West Africa*	Niger	Benin	Sierra Leone
Demographic Overview	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]
Consumption & Preferences	Per capita consumption of poultry products[9]	5.1 kg/capita	1.54 kg/capita	11.65 kg/capita	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%
Domestic Production & Market Structure	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 rural backyard, some commercial operations
	Smallholder Production Share	--	97%		90%[18]
	Percent of consumption** supplied by domestic production[9]	86.3%	99.97%	28.02%	78.09%
*Trade Flows****	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	--
Policy & Organizational Environment		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		

Sources: [1]World Development Indicators, 2008; [2]World Development Indicators, 2007 – 2008, based on constant 2000 U.S. dollars; [3]Encyclopædia Britannica Online, 2006; [4]Encyclopædia Britannica Online, 2003; [5]Encyclopædia Britannica Online, 2000; [6]Gale Virtual Reference Library, 2006; [7]Encyclopædia Britannica Online, 2004, [8]World Food Programme, 2004 – 2006, FAOSTAT, 2004 – 2006; [9]FAOSTAT, 2007; [10]Dupaigre, 2004; [11]USDA, 2005; [12]Encyclopædia Britannica Online, 2002; [13]Encyclopædia Britannica Online, 2005; [14] Encyclopædia Britannica Online, 2001; [15]Oxford Reference Online, 2002; [16] Obi, T. W., Olubukola, A., & Maina, G. A., 2008; [17]Kone & Danho, 2008; [18]Government of Sierra Leone, 2006; -- indicates no data *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

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Endnotes

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