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Feed the Future Innovation Lab for Food Security Policy

Policy Research Brief 19 November 2016

Nigeria Agricultural Policy Project

Contrary to Conventional Wisdom, Smuggled Chicken Imports are not Holding Back Rapid Development of the Chicken Value Chain in Nigeria

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Introduction

Poultry imports into Nigeria were banned starting in 2003. While Nigeria dropped a lot of bans on imports of other products in the 2000s (WTO 2011), the government kept the ban on imports of live or frozen chickens, with the exception of day-old chicks (Sahel Capital 2015; PIND 2013). A decade after the chicken import ban, debate continues over whether and why Nigeria is or could be able to supply its large domestic demand for chicken. Some think one reason is that there is a huge volume of smuggled imported frozen chickens over porous borders with Benin and lack of government assiduity to fully implement the import ban (USDA 2014). But there is huge variation over estimates of how much smuggled chicken is coming into Nigeria. Some say most of the 14.2 million birds reported imported into Benin in 2014 are thought to make their way into Nigeria (Hinshaw 2015). Others put the number vastly higher: the Poultry Association of Nigeria claims 725 million frozen chickens are slipped past the official import ban (The Poultry Site 2015a); Sahel Capital (2015) thinks it is 635 million frozen chickens.

In this paper we take a position on the debate and find that smuggled chickens are a small share of chicken consumed in Nigeria–at most 15%. That means that chicken imports are not a big problem holding back the chicken value chain development in Nigeria. Given there is no statistical way of solving once and for all the puzzle of how much chicken is being smuggled in, we come at the issue from a different angle. We use a detailed national survey to find out how much chicken is consumed and produced and find that the gap is only about 15%, setting a cap on what can be the real levels of imports. These data are the Nigeria Living Standard Measurement Study-Integrated Survey on Agriculture (LSMS-ISA) (World Bank 2013). We supplement that with a *triangulation* view using data from trade statistics compiled by the UN Food and Agricultural Organization (FAO) and the UN Comtrade, a repository of official trade statistics and relevant analytical tables which contains annual trade statistics starting from 1962 and monthly trade statistics since 2010. We also sought a localized case perspective on the issue to *ground truth* the broad national data: we conducted a survey in the Ibadan area in 2015 and 2016 with a modest sample of chicken farmers and millers, chicken processors and chicken cold storage firms and retailers to get their views on how the chicken value chain is developing in the area and whether and how much they think imports are holding them back.

Key Findings

- *Smuggled chickens are a small share of chicken consumed in Nigeria.*
- *Eighty five percent of national consumption of chicken is met by the domestic value chain.*
- *At least equal efforts need to go towards supporting the sustainable growth of domestic poultry production in Nigeria as is given to the enforcement of the ban of poultry products.*

Facts from the Most Reliable Data Source–Detailed LSMS Survey of Chicken Consumption and Production

We used nationally representative LSMS-ISA data to calculate production of chicken by small farmers in urban and rural areas in Nigeria (Figure 1). We supplemented that with data from the Corporate Affairs Commission (CAC) on chicken production among medium and large scale farms in Nigeria; the latter are likely underestimates but give a view on that segment which is not covered in the LSMS survey.

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We then used the LSMS data on consumption from urban and rural households. The rural and urban households in the survey total 5,000, the largest survey extant in Nigeria on this. Table 1. shows the key results. It shows that consumption exceeds production of chickens in Nigeria in 2012 by only 52 million birds–extremely lower than the high end estimates of illegal imports. That 52 million is only 15% of total chicken consumption. That is then likely the import share in chicken consumption.

The LSMS production results are in are close to estimates of the Nigerian Veterinary Research Institute (NVRI) who estimate that there are 120,000,000 million chickens raised by small farmers and 50,000,000 raised by medium/larger farmers per year in Nigeria (The Poultry Site 2015b).

The flip side of this is that 85% of national consumption of chicken is met by the domestic value chain. That suggests a large and dynamic local chicken sector. That concords closely with what we found on the ground in our rapid reconnaissance in the Ibadan area.

Corroboration of Our Micro View from Macro Trade Data Sources

The analysis of the information from sources such as Comtrade, and the Wall Street Journal confirmed the generally perceived notion that the poultry importation ban in Nigeria is not fully respected. Though surprising, given the official ban on poultry importation, official data from Comtrade indicates that close to 200,000 birds were imported into Nigeria in 2012.[1] Since anecdotal evidence indicates that large volumes of poultry products come into Nigeria via the Republic of Benin, we extracted data on poultry product imports to Benin. Assuming that about 50% of the birds imported to Benin have Nigeria as final destination, it is likely that close to 64 million birds enter the country through that channel.

Policy Implications

A key policy implication that comes out of this preliminary analysis is that efforts towards enforcing the ban and addressing illegal smuggling of poultry products should be supplemented with at least equal effort to support the sustainable growth of domestic poultry production in Nigeria. A better understanding of the structure and dynamics of the subsector as well as its challenges is necessary to develop and employ strategies to increase the profitability and sustainability of domestic poultry production.

References

Hinshaw, D. "Nigeria Plays Tough Game of Chicken with Smugglers." *The Wall Street Journal*. November 10, 2015. Accessed on September 30, 2016 at http://www.wsj.com/articles/nigeria-plays-tough-game-of-chicken-with-smugglers-1447197546

Liverpool-Tasie, S., B.T. Omonona, A. Sanou, W.O. Ogunleye, S. Padilla, and T. Reardon. 2016. *Growth and Transformation of Chicken and Eggs Value Chains in Nigeria*. Feed The Future Nigeria Agricultural Policy Project Report No. 21. E. Lansing: Michigan State University.

PIND. 2013. Catering Services and the Poultry Industry Value Chain in the Niger Delta. Abuja, Nigeria: Foundation for Partnership Initiatives in the Niger Delta (PIND).

Sahel Capital Newsletter. 2015. "An Assessment of the Nigerian Poultry Sector." (June, Vol. 11). Lagos, Nigeria. *Sahel Capital Newsletter*. Accessed on September 27, 2016 at http://www.sahelcp.com/files/Sahel%20Newsletter,%20Volume%2011.pdf

The Poultry Site. 2015a. "Nigeria Poultry Industry Faces Losses from Smuggling." May 28. *The Poultry Site*. Accessed on September 27, 2016 at http://www.thepoultrysite.com/poultrynews/35148/nigeria-poultry-industry-faces-losses-from-smuggling/

The Poultry Site. 2015b. "Nigeria Does not Need Poultry Imports, Institute Says." September 16. *The Poultry Site*. Accessed on September 27, 2016 at http://www.thepoultrysite.com/poultrynews/35803/nigeria-does-not-need-poultry-imports-institute-says/

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[1] The import data sources for each country and period are clearly documented by Comtrade with detailed information located under Publication Notes in the Metadata and Reference tab.

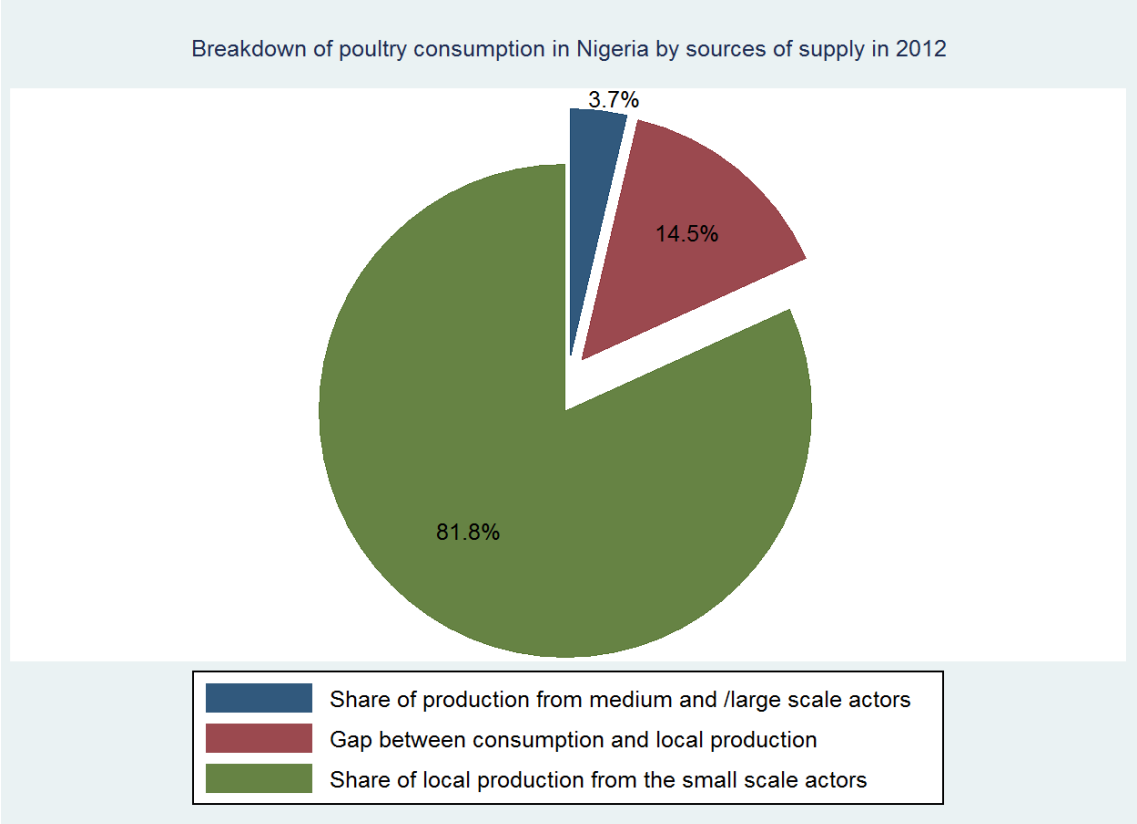
UN Comtrade. International Trade Statistics Database. Accessed on September 28, 2016 at http://comtrade.un.org/

USDA. 2014. Grain and Feed Annual Report. Accessed August 21, 2014 at http://gain.fas.usda.gov/Recent%20GAIN%20Publications/Grain%20and%20Feed%20Annual_Lagos_Nigeria_3-13-2014.pdf.

World Bank. 2013. LSMS-ISA. Nigeria Data. Accessed on February 11, 2015 at http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTRESEARCH/EXTLSMS/0,,contentMDK:23635560~pagePK:64168445~piPK:64168309~theSitePK:3358997,00.html

World Trade Organization (WTO). 2011. Trade policy review by Nigeria. The Policy Review Body. Geneva: WTO. WT/TPR/G/247.

Figure 1.



Source: Authors' estimations from the LSMS-ISA data and CAC data.

Table 1.

LSMS Extrapolations (2012)		
	Total chicken consumption (number of birds LSMS)	360,000,000
	Small farmers holdings – LSMS	294,420,705
	Medium and large farms holdings- CAC	13,200,000
	Gap between demand and supply likely met by imports	52,379,295
Comtrade (2012)		
	Total exports to Nigeria ($US)	684,884
	Total exports to Nigeria (kg)	283,567
	Total exports to Nigeria (number of chickens)	189,045
	Exports to Nigeria from Benin ($US)	-
	Exports to Nigeria from Benin (kg)	-

	Exports to Nigeria from Benin (number of chickens)	-
Comtrade extrapolations (2012)		
	Exports to Benin ($US)	325,188,089
	Exports to Benin (kg)	190,588,705
	Percentage of Benin exports to Nigeria (assumption)	0.50
	Imports to Nigeria from Benin (kg)	95,294,353
	Imports to Nigeria from Benin (number of birds)	63,529,568
Wall Street Journal		
	Frozen chicken imports to Benin - 2010 ($US)	30,000,000
	Price per chicken ($US/kg) - average of number used by Sahel Capital	3
	Frozen chicken imports to Benin - 2010 (number of birds)	10,000,000
	Frozen chicken imports to Benin - 2014 ($US)	42,600,000
	Frozen chicken imports to Benin - 2014 (number of birds)	14,200,000
Nigerian Veterinary Research Institute		
	Small holders (number of birds)	120,000,000
	Medium and Large (number of birds)	50,000,000
Poultry association of Nigeria		
	Chicken smuggled in Nigeria (kg)	1,088,621,688
	Chicken smuggled in Nigeria (number of birds)	725,747,792
Sahel capital		
	Nigeria poultry industry (number of birds)	165,000,000
	Poultry consumption in Nigeria (kg)	1,200,000,000
	Consumption (number of birds)	800,000,000
	Imports (number of birds)	635,000,000

Source: Based on report by Liverpool-Tasie et al. 2016.

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