Yam Consumption and Production in Nigeria

In 2010/2011, the National Bureau of Statistics in collaboration with the World Bank conducted the General Household Survey Panel (GHS-Panel), which collects detailed data on income with a focus on gender. The GHS-Panel is a nationally representative survey with a sample of 5,000 households; the second wave will run from 2012 to 2013. This note uses wave 1 data to explore the production and consumption of yams in Nigeria.

Profile: Yam Consumers in Nigeria

Nigeria is the largest yam producer in the world, contributing to two-thirds of global yam production each year; and, according to the GHS-Panel, 46 percent of households in the post-planting season, and 53 percent of households in the post-harvest season, reported consuming yams in the week preceding the interview.

We used household-level consumption to create welfare quintiles. The poorest households are grouped into the 1st quintile and the richest households fall into the 5th quintile. Twenty-three percent of households in the poorest quintile consume yams, compared to 63 percent of households in the richest quintile (see Figure 1). The share increases steadily as we move up the quintile ladder. Note that this pattern is consistent in both post-planting and post-harvest seasons.

Types of Acquisition

There are three primary means of acquiring food: through purchases, production (i.e., agriculture), or as a gift. The second is particularly germane for a country like Nigeria, where the agriculture sector employs approximately 60 percent of the labor force and contributes to over 40 percent of the country's GDP. Post-planting, we find 75 percent, 20 percent, and 3 percent of households consume yams coming from purchases, production, and gifts, respectively. This shifts slightly post-harvest, when yam consumption from purchases drops to 72 percent.

Figure 2 shows how households are obtaining yams, across welfare quintiles. Post-planting, the share of yam consumption coming from production drops from 38 percent among those in the poorest households (1st quintile), to 9 percent among the richest (5th quintile). The inverse is true for purchases; yam consumption from purchases rises from 55 percent in the 1st quintile to 88 percent in the 5th quintile.

Yam Production

Yams are the fifth most widely harvested crop in Nigeria (following cassava, maize, guinea corn/sorghum, and beans/cowpeas); and, after cassava, the most commonly harvested tuber crop. However, LSMS-ISA data show only 43 percent of households harvesting yam sell any share of the production. In comparison, we find households are...
much more likely to sell harvested cassava, maize, and beans/cowpeas (66, 57, and 69 percent, respectively).

The data also indicate that harvested yams serve different functions for the least well off versus those in the highest quintile. As Figure 3 shows, over 56 percent of yam-growing households in the 1st welfare quintile (poorest) sell any of their harvest, compared to 37 percent from the 5th quintile (richest). On average, the five other staple crops do not exhibit this distinct pattern.

Figure 3: Share of households selling harvested yam, by quintile

Yams are one of the most expensive crops to produce; the planting and harvesting processes require significant labor input, yam seeds are expensive, and the supply of seed is limited. The LSMS-ISA data indicate that approximately 45 percent of harvested yam seed is saved for the next planting season. This starkly contrasts with other staple crops, for which approximately 20 percent of harvested yields are saved (see Figure 4).

Figure 4: Share of harvest crop saved as seed for next season, for most common crops

Even though households are more likely to save their yam seed than sell the harvests, yams still represent a valuable component of farmers’ agriculture income. For each of the six main crops, we looked at the crop’s contribution to total crop sales. Yams and beans/cowpeas each represented over 12 percent of total agricultural income. As seen in Figure 5, these two crops comprise a significantly higher portion of agricultural income than the remaining four staple crops.

Figure 5: Proportion of crop sales, for most common crops

Conclusion

Yams are an integral component of food consumption and agriculture sales in Nigeria. However, analysis of the LSMS-ISA data shows that the crop’s role differs for the poor and non-poor. Relatively better off households are consuming more yams (particularly those acquired through purchases), but selling less harvested yam than poorer households. Poorer households consume fewer yams, but depend more heavily on yam sales and income than their richer counterparts.

This brief is based on data collected by the National Bureau of Statistics as part of the Living Standards Measurement Study – Integrated Surveys on Agriculture (LSMS-ISA) project. The full dataset is available for download at NADA via www.nigerianstat.gov.ng.

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