Feed the Future Nigeria Agricultural Policy Activity

NAPA Policy Research Note 4 November 2021

Nigeria Agricultural Policy Activity

The impact of COVID-19 and other shocks on Agri Food SMEs along the poultry and fish value chains in Rivers State

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Introduction and Background

This policy research note summarizes key findings from a study on the impact of COVID-19 and associated policies on SMEs along the poultry and fish value chain in Rivers State. We use monthly data collected from 66 agri-food enterprises over 9 months (February 2020 to October 2020) to understand how COVID-19 and associated policies impacted business operations and employment. We evaluate impacts on firms of different sizes (small and non-small), and how these impacts varied across different nodes of the supply chain, i.e., lateral (feed mills, chicks and fingerlings) upstream (e.g., farms), midstream (e.g., wholesalers and processors) and downstream (e.g., retailers).

As it was not possible to visit the field, selected respondents were interviewed by phone. The sample of 66 firms was selected through a combination of convenience sampling and snowballing. First, the study team received a list of potential respondents from the chicken and fish subsectors from the state Ministry of Agriculture. At least one enterprise from selected nodes of the value chains was randomly picked. After a brief introduction, selected respondents were asked for their consent to be part of the study. They were then asked to provide additional names and phone numbers of other persons engaged in the same activity as them or another activity along the poultry and/or fish value chains.

Key Messages:

- Though there was a significant decline in mobility during the lockdown in Rivers Sate, the average number of days on which surveyed businesses operated each week did not change significantly.
- COVID-19 and associated policies saw a post lockdown shift from use of regular salaried labor to temporary hired daily wage workers, particularly for small businesses.
- The share of SMEs facing challenges increased significantly before the Rivers State lockdown but at the time that lockdowns were instituted in other states in Nigeria that are important sources of inputs or output market.
- Little assistance was received by surveyed businesses and those who received any assistance received such assistance from family or friends and not government.

COVID-19 and associated policies in Rivers State

Rivers State is located in the Niger Delta region of Southern Nigeria. It is an oil producing state with over 11 million citizens. As of August 2021, the state had recorded a total of 7,616 confirmed cases and 102 deaths from COVID-19 (NCDC dashboard). Rivers State recorded its index case on 26th March 2020 through a Nigerian that visited Europe. Subsequently the number of cases continued to increase significantly (NCDC, 2020).

Rivers State government imposed a lockdown on 7th May, 2020 with a break observed between 12th -16th of May for residents of affected Local Government Areas (LGAs) to buy food. A complete lockdown continued from 17th May, 2020, but was cancelled in Port Harcourt and Obio/Akpo Local government areas on 26th May, 2020. In addition, the Rivers State Government imposed a curfew in the state from 2nd June, 2020 where movement was restricted from 8pm to 6am (BBC News Pidgin, 26th May, 2020). The subsequent curfew was relaxed at different times depending on the level of compliance to the conditions put in place by the state government.

The Rivers State government imposed these measures to ensure the safety of people in the state. This policy mainly affected Port Harcourt and Obio/Akpor Local Government Areas; the city centers where most commercial activities take place (Promise, 2020). Some of the policies and recommended practices that accompanied or followed the lockdown included use of facemasks, social distancing and limiting the number of people attending religious gatherings.

Overview of poultry and fish production in Rivers State

Information on the status of poultry production in the Niger Delta region, and particularly in Rivers State, is scarce. The Niger Delta region engages in limited poultry production due to climatic conditions which are wet almost all year round, causing lots of diseases in poultry. However, NAERLS (2020) reported an increase of 7.5% in chicken population from 1,752,308 in 2019 to 1,883,731 in 2020, suggesting that the enterprise is slowly gathering people's interest.

Demand for fisheries and aquaculture products in Rivers State is rising due to increasing population. Fish farmers are not able to meet demand due to the nature of operations that have made fish expensive and thus regarded as food for the rich (Ifebemere and Ezeano, 2014). The artisanal fishing sector is characterized by subsistence fishing, remoteness and difficult access, and outdated and obsolete fishing gears and crafts.

Four key findings on the impact of COVID-19 and associated policies on business operations in Rivers State.

1. ***Though there was a significant decline in mobility during the lockdown in Rivers Sate, the average number of days on which surveyed businesses operated each week did not change much***

The Google mobility index is constructed using mobile phone user data, and shows percentage changes in mobility each day, relative to a baseline during the first half of February 2020. The Rivers State mobility index indicated a sharp decrease in retail and recreational movement from May, 2020 and for same period a significant increase was recorded from the base for residential movement (i.e., staying at home). This pattern reflects the lockdown imposed in the state which led to a decrease in retail and recreational activity and increased the length of time people spent at home. Although this affected businesses operations in the state, its effects might not have been felt so strongly by residents of agricultural zones II and III.

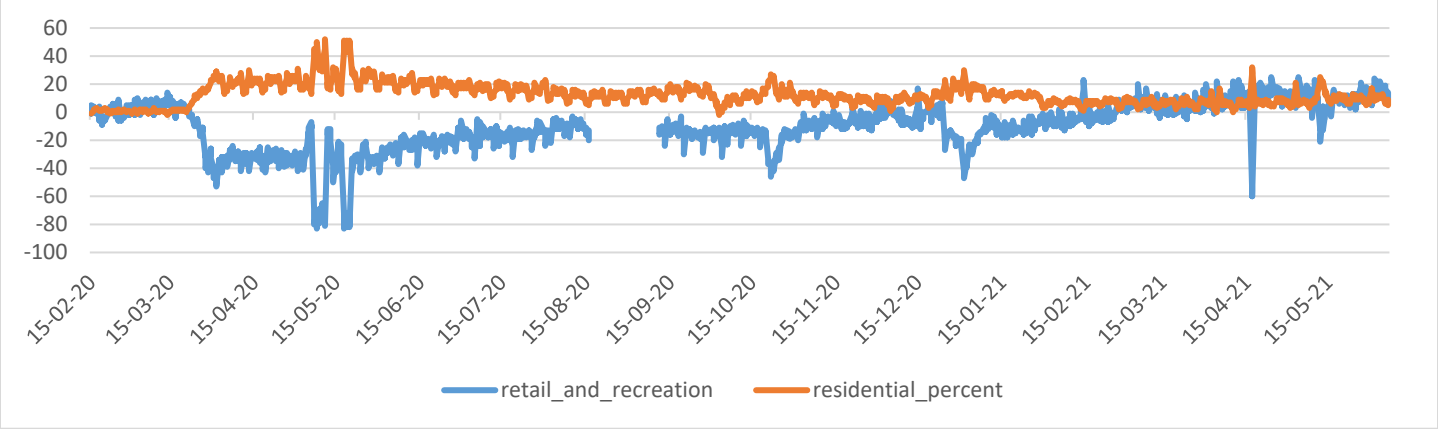
Surprisingly, though we note significant decline in mobility. during the lockdown, the average number of days on which surveyed businesses operated each week did not change markedly during the lockdown period. There was only a slight difference in days of operation by scale of business operation (small and non-small, as self-reported by respondents). Compared to small businesses, the non-small businesses had more days of operation. The limited effect of the lockdown on business operation among SMES in our study sample could be because of their location relative to where the lockdown was imposed. The lockdown in Rivers State was imposed in only two out of 23 LGAs in the

state. Both of these LGAs belong to agricultural zone I (crop zone) which is an area where more crop production takes place and includes the state capital with a lot of government offices, banks, schools, restaurants, hotels, supermarkets and other activities. Hence the lockdown wasn't felt much in the fishing and livestock zones (Zones II and III) or in more peri-urban areas. Businesses located in the state metropolitan LGAs (Port Harcourt and Obio/Akbor) were reported to be more affected by the lockdown than those in other areas (Promise, 2020).

2. *COVID-19 and associated policies in Rivers State saw a post lockdown shift from use of regular salaried labor to temporary hired daily wage workers, particularly for small businesses.*

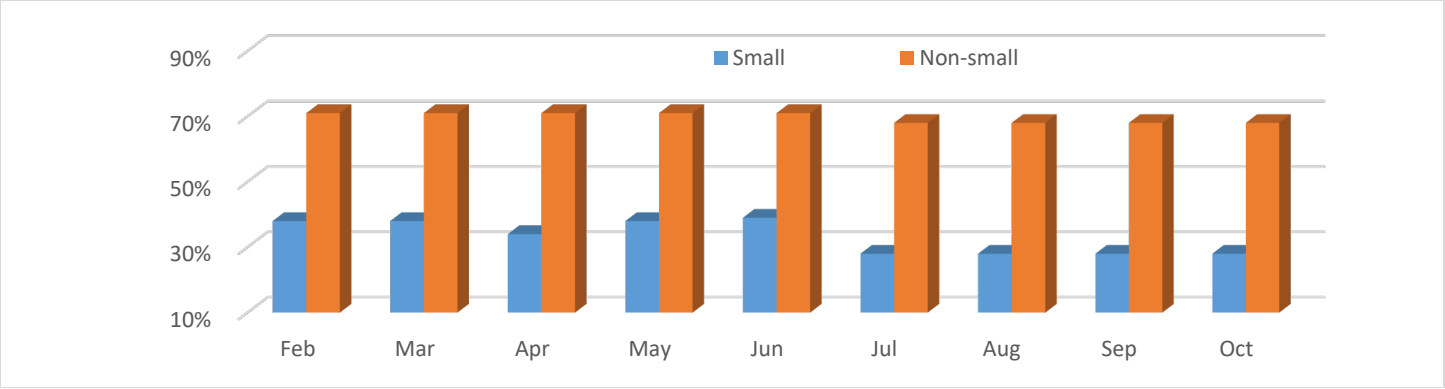
During the study period our surveyed businesses generally used more regular salaried workers than temporary hired labor and we don't find evidence of employment changes during the lockdown. However, we observe a drop in the use of regular salaried workers after June (for both small and non-small businesses) along with an increase in the hiring of temporary hired labor (from July onwards); particularly among small businesses (Figures 2 and 3). The pattern observed in Figure 2 could imply that after the lockdown, due to reduced business activity, business owners were not able to pay salaries and so had to relieve some regular workers of their jobs and resort to use of temporary hired labor later in the year, as seen in Figure 3. These adjustments may also be linked to the fluctuations in wage rates seen in Figure 4.

Figure 1: Rivers State Mobility Index



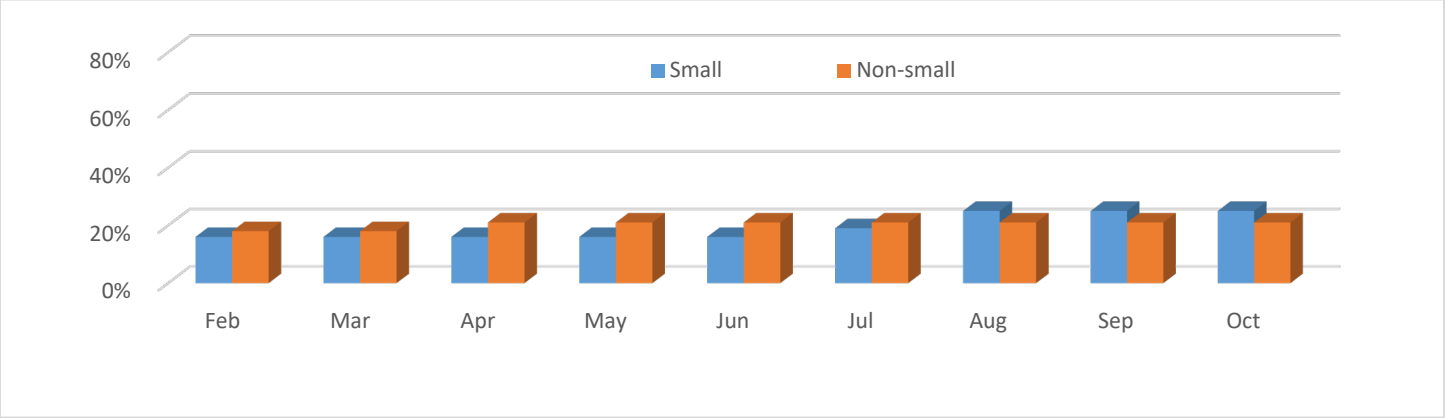
Source: https://www.google.com/covid19/mobility/

Figure 2: Use of Regular Labor by Scale of Business (% of businesses reporting)



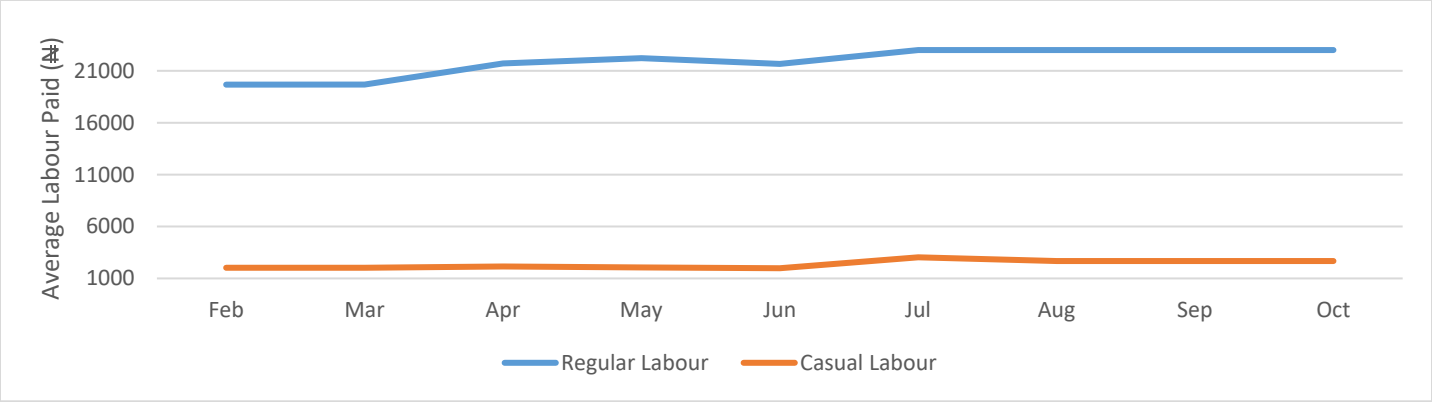
Source: Authors Calculation

Figure 3: Use of Casual Hired Labor by Scale of Business (% of businesses reporting)



Source: Authors Calculation

Figure 4: Average wage for Regular workers (Naira/month) and Casual Laborers (Naira/day), by month

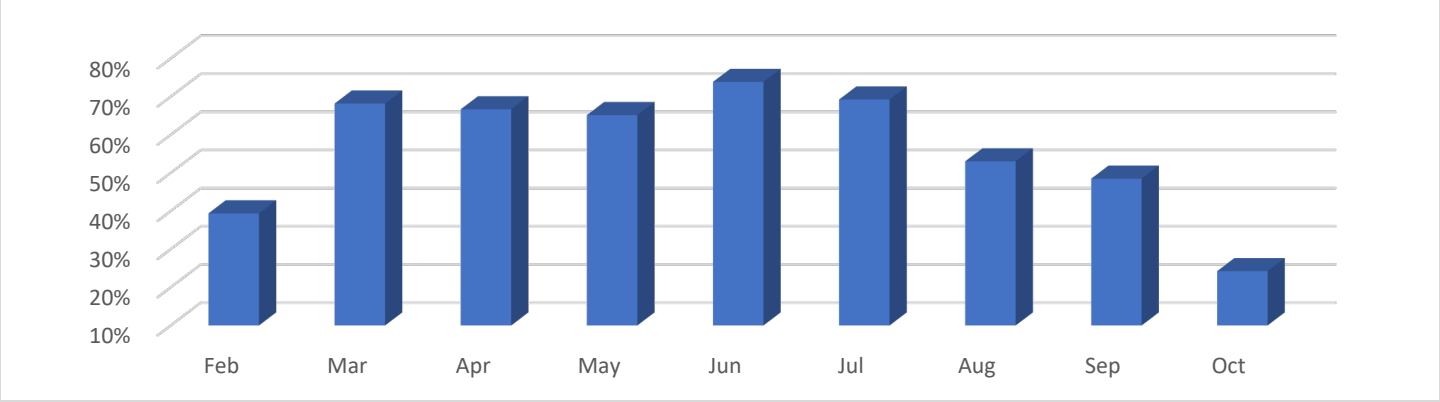


Source: Authors Calculation

3. **The share of SMEs facing challenges increased significantly before the Rivers State lockdown but at the time when other states in Nigeria instituted lockdowns. This reflects the links between supply chain actors across state boundaries**

Compared to 39% of businesses that reported facing challenges in February 2020, we see a 43% jump in the share of businesses reporting challenges to between 65% and 68% in March, April and May (Figure 5). This sharp rise in the share of businesses facing challenges in March and April coincides with when other states around Nigeria had significant movement restrictions including neighboring states such as Akwa Ibom, Bayelsa, Cross River, Delta and Edo. It was also when commercial centers such as Lagos and Abuja also had lockdowns. We then see a further increase in the share of businesses reporting challenges to over 70% in June, right after the Rivers State Lockdown. These findings indicate that though businesses were able to stay in operation (as noted by the limited impacts on average days of operation), businesses still faced challenges due to disruptions associated with the pandemic in neighboring states as well as other states in the country that were important markets for Rivers State agri-food SMEs.

Figure 5: Share of Respondents that Faced Challenges



Source: Authors Calculation

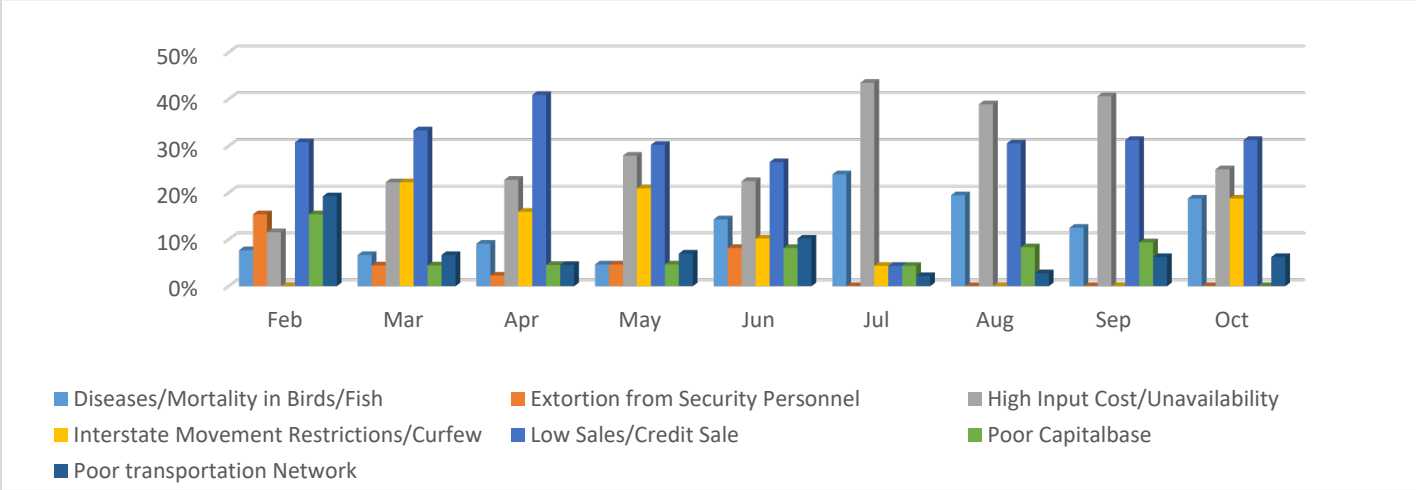
An investigation into the nature of challenges faced by our study enterprises confirmed that businesses in the study sample reported facing movement restrictions within and out of state, disease or mortality in birds or fish, low sales volumes, needing to make sales on credit, high inputs costs or unavailability of inputs, and poor transportation infrastructure (Figure 6). Comparing the prevalence of different kinds of challenges across the study months, we see that movement restrictions were most commonly reported during the lockdown months (across Nigeria including but not only in Rivers State) of March-May, whereas high inputs costs or unavailability of inputs peaked in August-October. The fact that complaints about movement restrictions only started in the study sample in March (when other states imposed lockdown) confirms the link between economic activities in Rivers and other states.

Though low sales or needing to make sales on credit were reported as common challenges throughout the period, they were mentioned most frequently during the lockdown months. Sales on credit is a rational adaptation strategy to low sales and might be associated with the lower demand for poultry and fish products due to restricted movements in key commercial centers of the state with many restaurants, hotels, schools, supermarkets, offices etc.

Higher input prices and unavailability appear to have peaked in July (mentioned by over 40% of respondents) and though this reduced in October still remains higher than pre-pandemic levels (~10%) in February. This is consistent

with inflation in Nigeria that tends to increase prices of items. The inflation rate for Nigeria has been on the rise from 11.4% in 2019 to 13.3% in 2020 and 16.9% in 2021 (Aaron, 2021). The price shock is associated with the inflation rate and not exclusively due to the COVID-19 pandemic.

Figure 6: Type of Challenges Faced Over time

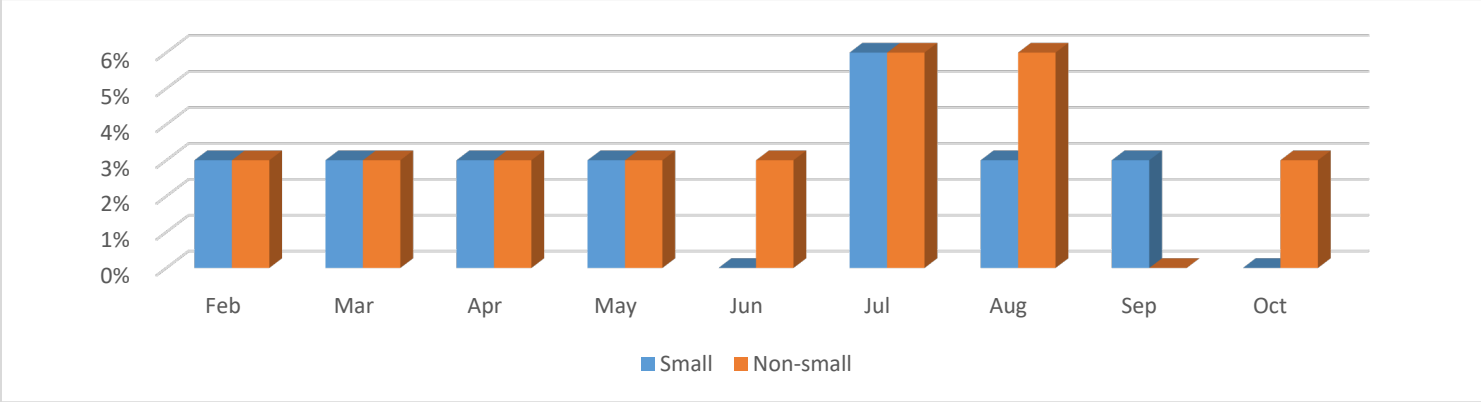


Source: Authors Calculation

4. **Less than three percent (3%) of the study sample received any assistance and those who received any assistance, got it from friends and families and not government.**

Only a few respondents (<3% on most months) received any assistance and this was from friends and family, community, or NGOs (Figure 7). This pattern did not vary much by size of business or month. Assistance provided by the State and/or Federal Government did not reach any of the survey respondents. However, the nature of challenges faced were such that packages made available by government would be unlikely to provide a solution even if accessed.

Figure 7: Share of Respondents that received Assistance



Source: Authors Calculation

Conclusions and policy recommendations

Lockdown policies were implemented to curb the menace of COVID-19, but also made significant numbers of citizens worse-off economically, contributing to declines in household income, increased unemployment, food price hikes, and food insecurity. Though Rivers State only imposed a lockdown in 2 LGAs in May, 2020, SMES along the poultry and fish value chains began to face significant challenges in March of 2020 when other states had imposed lockdown and a general fear about the pandemic was on the rise. This implies that disruptions to business activity extend beyond the direct effects of lockdown measures in a particular state. States in Nigeria depend on each other for inputs and output markets and this interdependence might explain why lockdown in one state and movement restrictions across states can significantly affect the operation of food supply chains. Food supply chains are a cluster of interconnected supply chains such that disruption to activities in one node could affect other nodes and other associated supply chain with important livelihood and employment impacts. Some policy recommendations given these findings include:

- Ensure that possible disruptions to the supply of inputs are minimized when imposing movement restrictions and consider both inter and intra state movement restriction implications and thus the need for coordination across states when designing policy responses to shocks
- Encourage producers in product value-chains to be organized in clusters and supported with information about market opportunities and prices. Additional measures to support market access such as government procurement of products for school feeding or other programs can further support agrifood SME access to guaranteed markets
- Establish an effective digital data management system containing citizens' details to ensure assistance reaches people most in need.

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This research note was a product of collaborative research funded by the CGIAR Research Program on Policies, Institutions, and Markets (PIM) and the USAID Nigeria mission under the Feed the Future Nigeria Agricultural Policy Activity. The lead author, Hudu, Muhammad I. is a researcher at the National Agricultural Extension and Research Liaison Services (NAERLS/ABU Zaria) and a participating scholar of the NAPA early career mentoring program. He is currently pursuing his PhD in Agricultural Economics at ABU Zaria. Lenis S.O. Liverpool-Tasie, Ben Belton, Oyinkan Tasie and Thomas Reardon are all faculty at Michigan State University and Wellington Osawe is a postdoctoral research fellow at the Economic and Social Research Institute (ESRI) and a visiting research fellow at Trinity College Dublin. The authors would like to appreciate Prof. Chris Daudu, Prof Emmanuel Ikani (Executive Director, NAERLS) and Mr. Steve Longabaugh for their support in the coordination of the associated training and mentoring sessions

This work was a product of collaborative research funded by the CGIAR Research Program on Policies, Institutions, and Markets (PIM) and the USAID Nigeria mission under the Feed the Future Nigeria Agriculture Policy Activity. The contents are the responsibility of the authors and do not necessarily reflect the views of the funding agencies.

Published by the Department of Agricultural, Food, and Resource Economics, Michigan State University, Justin S. Morrill Hall of Agriculture, 446 West Circle Dr., Room 202, East Lansing, Michigan 48824.