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The impact of COVID-19 and associated shocks on agri-food SMEs along the poultry and fish value chains in Abuja (FCT), Nigeria

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Introduction and Background

The Federal Capital Territory (FCT), Abuja occupies an area of about 8,000 square kilometers with a population of about 776,298 (National Population Commission, 2006). Agriculture is a main part of the economy, with notable farm produce such as Groundnut, Maize, Yam, Sorghum, Cassava and Vegetables (Ifeonu *et al.*, 2019; Haruna *et al.*, 2020).

This policy research note summarizes the key findings from a study on the impact of COVID-19 and associated policies on SMEs along the poultry and fish value chains in Abuja (FCT). We leveraged on monthly data collected from agri-food enterprises in Abuja over 9 months (February 2020 to November 2020) to understand how the impact of COVID-19 and associated policies on business operations and employment varied for firms of different sizes (small and non-small) and across different nodes of the supply chains; i.e., lateral (feed, chicks and fingerlings) upstream (farms), midstream (feed millers and wholesalers) and downstream (retailers).

The sample of Abuja enterprises used for this study was selected using a modified snowballing approach.

Key Messages:

- Lockdown policies in Abuja severely restricted the operations of SMEs in the midstream and downstream of the poultry and fish value chains
- While the impacts of the restrictions appear to be temporary for non-small businesses generally, we find some evidence of longer-term effects on small businesses in the midstream
- The Covid-19 lockdown policies significantly affected firm employment decisions with important differences between male and female owned enterprises. While employment by male owned businesses appear to have partially recovered, employment levels remain extremely low among female owned enterprises
- Very few SMEs received any assistance to support their response to COVID-19 and the few that did only received assistance from friends and family

First, the study team facilitated a meeting between the state data collector and the FCT Agriculture and Rural Development Secretariat. From the list of participants provided by the FCT, at least one enterprise from each of the selected nodes of the value chains was randomly picked. Upon introduction to respondents, the data collector asked each respondent to provide names of others, engaged in activities along the poultry and/or fish value chains During the first interview, information was collected on the location of the respondent's business and characteristics of the owner. This was supplemented by information on the business operating days, input use decisions, input prices, sales decisions and prices. Information on these business operation activities was collected monthly for the months of February 2020 to October 2020.











An overview of poultry and fish production in Abuja (FCT)

Bwari, Abuja municipal and Kuje are the main areas in FCT where fish farming is popular (Ifeonu *et al.*, 2019). FCT fish farmers' main rearing system is monoculture with a few of them into integrated and polyculture system of rearing (Ifeonu *et al.*, 2019, FAO, 2021). They keep catfish as the most traded fish species, followed by tilapia. This is because catfish have fast growth rate, high adaptation, ease of rearing, and low mortality rate. These fish species are traded both fresh and smoked by the farmers in FCT (NAERLS and FMARD, 2020; Oyedeji, 2016). NAERLS and FMARD (2020) reported 1,688 metric tons of catfish produced in 2019. No data was captured for 2020.

NAERLS and FMARD (2020) reported that the poultry population of smallholders and commercial farms in FCT with varying number of stocks are being kept by farmers either in the backyard or commercial production. The population of poultry in smallholding stock is about 21, 345; this is taken from 166 farms with an average flock size of 308 while the population of poultry for commercial farms was about 1,894,590, taken from 76 farms with an average flock size of 27,198. There is a huge reduction in the population of poultry in FCT as the pandemic prevented most poultry farmers from keeping birds. Egg –gluts were recorded as producers could not connect with consumers during lockdown periods. Inputs such as day-old-chicks, feeds, medications and vaccines were also highly expensive (NAERLS and FMARD, 2020).

COVID-19 and associated policies in Abuja, FCT

FCT witnessed the first Covid-19 cases on 3rd of March, 2020 with a total of suspected cases to be six. With the increase in number of cases daily, a federally mandated lockdown was imposed in FCT and its environs on 30th March, 2020 which lasted for five weeks (NCDC, 2020). This was the first of the two phases of lockdown and only affected some parts of Abuja. Movement was restricted for everyone with the exception of essential workers (Health workers, Military personnel and Journalists). Markets were opened twice a week for residents to go get food items and for other essential activities. Measures taken to curtail the number of cases include: ban on interstate travel, limited trading hours in informal markets, restriction on gatherings and festivities, and closure of food services, offices and schools as advised by the Nigeria Center for Disease Control (Odukoya *et al.*, 2020).

The mandatory lockdown was eased on May 4th, 2020, after five weeks. A few weeks later, the second phase of the lockdown was imposed. The second phase of lockdown in FCT lasted from June 2nd, 2020 till July 20th, 2020. During this phase, government offices were opened between 9:00am and 2:00pm, Mondays to Fridays for workers on levels 14 and above while workers below level 14 were required to work from home. An overnight curfew from 8:00pm – 6:00am was also imposed and other preventive measures to curtail the spread of the virus continued (NCDC, 2020; Andam *et al.*, 2020). COVID-19 and associated policies in FCT imposed supply and demand shocks simultaneously. On the demand side, people were only permitted to buy essential goods on certain days and on the supply side only essential businesses were permitted to operate (Andam *et al.*, 2020).

Figure 1 presents the Google mobility index (GMI) of Abuja (FCT) from February 2020 to July 2021. It illustrates how severely COVID-19 containment policies affected human movement and business enterprises. It measures visitor numbers to various categories of location such as grocery stores, parks, and train stations every day and compares this change relative to a typical day before the pandemic outbreak.¹ (Google 2021). Figure 1 reveals that despite general awareness about cases of COVID-19 around February, people were going about their normal activities When lockdown was imposed from April to the middle of May, businesses and their activities were observed as not in operation as the measures/policies taken during the lockdown heavily affected them. During these periods, there was also a huge increase in people home bound. Businesses, other activities, and general

¹ The baseline days represent a normal value for that day of the week, given as median value over the five-week period from January 3rd to February 6th 2020 (Google, 2021)

movements were fully back to normal around September but the protective measures for COVID-19 including washing hands, social distancing, use of sanitizers and face masks remained in force.



Figure 1: Google Mobility Index showing periods of lockdown in Abuja (FCT)

Source: Authors calculations

Four key findings on the impact of COVID-19 and associated policies on business operation in Abuja

1. The lockdown policies severely restricted business activities in the midstream and downstream of SMEs along the poultry and fish value chain in and around Abuja (FCT)

Table 1 presents the average number of days businesses were in operation across the study months by scale of business. While majority of the study enterprises were opened for business for all the study months, the number of operating days significantly reduced during the lockdown months of April and May 2020 compared to February and March. This reduction in operating days was about 50% (for non-small businesses) to 100% (for small businesses) in April generally and between about 25% and 50% for enterprises in the midstream and downstream in May. The disruption of business operations was consistent for both urban and peri-urban areas and among both small and non-small enterprises. We find no much impact of the lockdown on farm and hatchery operations, consistent with the policy categorization of them as essential services. We also see that smaller SMEs in the lateral supply chain (feed mills and hatcheries) tended not to have operated for some months (February, March and April) but resumed fully in May and onwards. Similarly, majority of the study enterprises in other nodes as well appear to have resumed normal business operations by June.

	Feb	Mar	Apr	May	June	Jul	Aug	Sept	Oct
NODE (SMALL BUSINESS)									
LATERAL	-	-	-	30	30	30	30	30	30
UPSTREAM	28	31	30	31	30	31	31	30	31
MIDSTREAM	28	27	20	14	27	29	29	26	26
DOWNSTREAM	26	25	13	25	29	29	30	27	27
Observations	18	18	18	20	20	20	20	20	20
NODE (NON-SMALL BUSINESS)									
LATERAL	25	27	17	16	23	26	29	26	26
UPSTREAM	28	31	30	31	30	31	31	30	31
MIDSTREAM	28	29	17	15	25	29	29	30	30
DOWNSTREAM	27	22	14	20	26	28	28	28	28
Observations	27	27	27	25	26	26	27	25	26

Table 1: Average number of days businesses were in operation

Source: Authors calculations. Note: - means data was not available for that month.

2. The Covid-19 lockdown policies significantly affected firm employment decisions with important differences for male versus female owned enterprises. While employment by male owned businesses appear to have partially recovered, employment levels remain extremely low among female owned enterprises

Figures 2 and 3 present the share of male and female owned businesses that hired daily workers and regular workers respectively. Figure 2 reveals that prior to the COVID-19 pandemic, male owned businesses in our sample relied more on regular salaried workers than daily workers. Following the first lockdown period (April 2020), we see that in May and June 2020, there is a drastic drop in salaried employment among male owned enterprises. These male owned businesses appear to have laid off their salaried workers where necessary and possibly maintained minimal use of daily labor. After the two phases of lockdown in Abuja, we see that employment levels for the salaried workers (July and onward) resumed, though at a lower level on the average compared to the pre-lockdown period. On average, we see that the share of businesses hiring daily labor post July is either higher or similar to the levels during the lockdown. This lower use of hired regular workers in later months (along with maintained share of farmers using hired daily labor) might reflect that some businesses that resorted to using less salaried workers (during the lockdown) substituted them with daily workers (or more of their own labor or family labor) and continued to depend on daily workers post lockdown or just relied on less hired workers.



Source: Authors calculations

Contrary to male owned businesses, Figure 3 shows that when female owned enterprises in our sample hired labor (which was not consistent) they tended to depend more on hired daily workers compared to regular salaried workers. Interestingly while none of our female owned enterprises hired labor pre-lockdown, during the lockdown months with severe movement restriction, we see that female owned enterprises were more likely to hire workers. This might reflect their need to hire workers to keep the businesses operational while trying to manage the movement restrictions as well as the implications of the lockdown restrictions on their families (including increased time spent on child- care). In the post lockdown era, there is no clear pattern in employment though the use of daily workers increased significantly in August and September.²



Source: Authors calculations

3. While hired labor use by non-small businesses appear to have partially resumed, employment levels remain extremely low among small enterprises

Figure 4 and 5 show the share of small and non-small businesses that hired regular salaried workers and daily workers. Not surprisingly, non-small businesses are more likely to use regular workers compared to small businesses as revealed in figure 4. Though both kinds of businesses significantly reduced the hiring of regular workers in May and June (following the main lockdown period), the non-small businesses seem to have resumed hiring of regular

² This could also just reflect increase activity due to seasonality.

workers (in July onwards, though at lower levels than pre-lockdown) while the low share of small businesses that hired regular workers appear to have almost (except July at about 3%) completely stopped hiring labor from June onwards



Source: Authors calculations

The share of small and non-small businesses that hired daily workers is shown in Figure 5. During the months with severe movement restrictions, we see that the non-small businesses were not relenting on hiring daily workers. Interestingly, the non-small businesses were more likely to hire daily workers compared to the small businesses. Daily workers were not hired by non-small businesses in March, but hiring continued amidst movement restriction periods to the post lockdown periods.

Compared to non-small businesses, the small businesses were just as likely to use daily workers as regular worker during the lockdown months at low levels (figure 4 and 5). Post lockdown, where they hire, it is for the most part daily laborers. On the other hand, the non-small businesses never stopped hiring workers (both regular and daily workers) throughout the lockdown periods and the impact of the COVID-19 pandemic did not significantly affect their labor hiring.



Source: Authors calculations

4. SME support/assistance was extremely limited and female owned SMEs did not receive support.

Figure 6 presents the share of businesses receiving assistance. We consistently find that few SMEs received any assistance and where assistance was received, it was from family and/or friends. Interestingly we find that only male owned businesses received support/assistance. Female owned enterprises did not enjoy any support. We also find that only small business owners in our sample reported receiving some assistance. Smaller businesses are typically less able to absorb the impact of the lockdown and other COVID-19 impacts on their businesses without assistance.



Source: Authors calculations

Conclusions and policy recommendations

This policy research note summarized some key findings from a study on the impact of COVID-19 and associated policies on SMEs along the poultry and fish value chains in FCT, Nigeria. We leveraged on monthly data collected from Abuja agri-food enterprises over the 9 months (February 2020 to October 2020). Our findings reveal that many agrifood SMEs along food supply chains that are critical to the production and distribution of food were significantly affected by the COVID-19 lockdown policies in the FCT. Business operations were particularly hit during the lockdown periods leading to direct loss of income for the many SMEs and their employees.

While the impacts of the restrictions appear to be temporary for non-small businesses generally, we find some evidence of longer-term effects on small businesses in the midstream. The COVID-19 lockdown policies significantly affected firm employment decisions with important differences between male and female owned enterprises. While employment by male owned businesses appear to have partially recovered, employment levels remain extremely low among female owned enterprises. Very few SMEs received any assistance to support their response to COVID-19 and the few that did only received assistance from friends and family.

Some of the most severe and lasting negative business impacts of lockdown were experienced by businesses owned by women in the midstream and downstream segments of the value chain, and their employees. These

findings underline the importance of considering actors in all value chain segments when planning for the distribution of palliatives or other assistance, rather than focusing predominantly on farms, as is often the case. However, the very limited assistance received by businesses in the sample suggests that designing and implementing containment policies and movement restrictions to allow businesses throughout agri-food value chains to continue operations could have greater scope for impact than attempting to retroactively distribute assistance to businesses. Efforts to extend the reach of social safety nets can be increased over the medium term to provide a greater buffer to the self-employed and workers in the informal sector in the face of future shocks. In addition, efforts to maintain the operations of food supply chains and minimize the negative impacts of shocks such as the COVID-19 pandemic are crucial for preserving livelihoods and consumer access to affordable and nutritious foods.

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