

# Feed the Future Nigeria Agricultural Policy Activity

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## Nigeria Agricultural Policy Activity

### The impact of COVID-19 and associated shocks on Agri Food SMEs along the poultry and fish value chain in Kaduna State

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#### Introduction and Background

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 Kaduna State. We leverage monthly data collected from 48 agri-food enterprises over a period of 9 months (February 2020 to October 2020) to understand how the impact of COVID-19 and associated policies on business operation and employment varies for firms of different sizes (small and non-small) and by gender and how these impacts vary across different nodes of the supply chain; i.e. lateral (feed, chicks and fingerlings) upstream (e.g. farms), midstream (feed millers and wholesalers) and downstream (e.g. retailers).

A total of 12 nodes in the study value chains were selected for the survey. These included feed millers and sellers, and fish hatcheries (lateral supply chain), artisanal fishers, fish farms and chicken farms (upstream) fish processors and fish and chicken traders/wholesalers (midstream) and fish, chicken, and egg retailers (downstream). The sample of 48 firms were selected via a modified snowballing approach. A list of respondents from the poultry and fish value chain sectors were received from the State Ministry of Agriculture. At least one enterprise was randomly picked from the list that was provided for each selected nodes of value chain. After an introduction and upon agreeing to be part of the study, respondents were asked to provide names of other respondents involved in the poultry and fish value chain activities. Information on business operation activities was collected via monthly calls covering a 9-month period (February 2020 to October 2020).

#### Key Messages:

- During the COVID-19 pandemic, activities of enterprises in the lateral, midstream and downstream of the study value chains were severely disrupted despite their crucial role in the processing and distribution of food in the state.
- There was a drop in the share of businesses hiring workers towards the end of the lockdown period and in the ensuing months when hiring resumed, it was largely of temporary daily workers. This reveals likely medium to long-term effect of the pandemic which has given rise to lay-offs and/or replacement of regular salaried workers with daily workers.
- While both small and non-small businesses in the study value chains in Kaduna State faced increasing challenges during the lockdown period, in the months succeeding the lockdown (August to October) only small businesses continued to report facing challenges. This reveals a likely medium to long-term effect of COVID-19 and associated policies on smaller businesses.
- Very few business enterprises received assistance during and after the lockdown period and those who did only received assistance from friends and family.

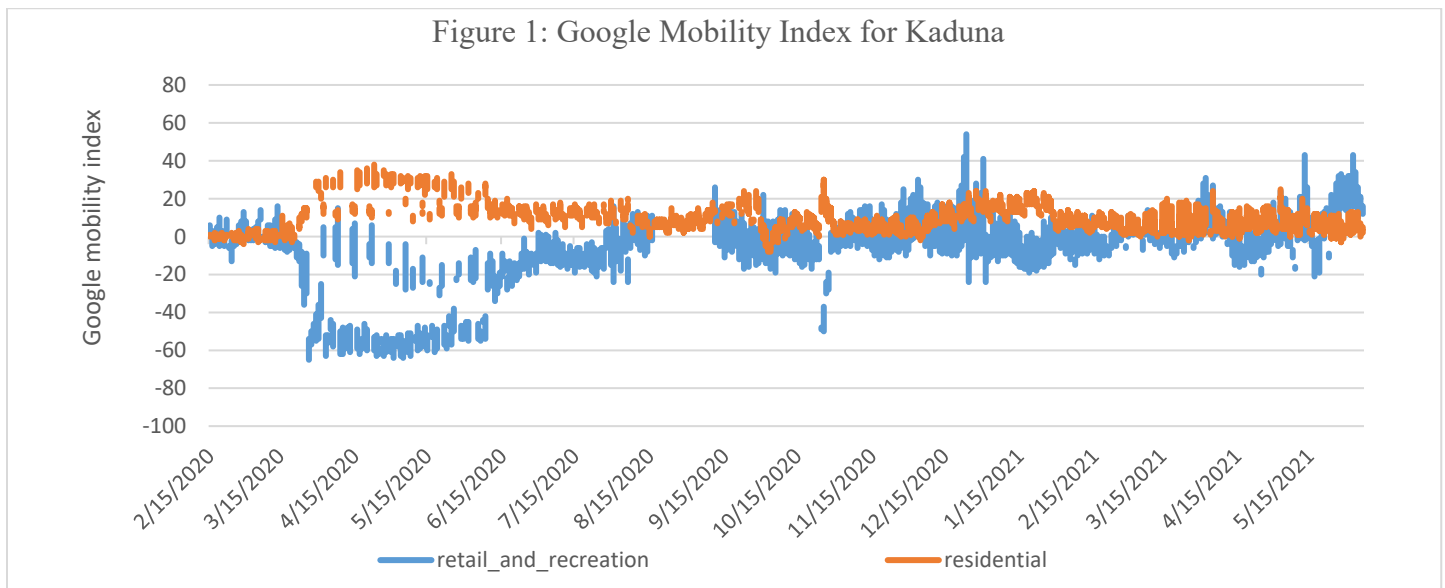
#### Covid-19 and Associated Policies in Kaduna State

Kaduna State, the headquarters of the former northern region, with a total population of 10 million citizens (NPC, 2006), had recorded 10,283 confirmed cases and 82 deaths of COVID-19 as of 19<sup>th</sup> December 2021. The index case (the state governor, who was exposed to COVID-19 patients in the nation's capital Abuja), tested positive to COVID-



19 on 28 March 2020 (NCDC, 2020). In line with the national guidance, Kaduna State activated the COVID-19 Emergency Operating Centre (EOC) with the confirmation of a case to coordinate the response (NCDC, 2020). The EOC trained various cadres of health care workers across the state, including volunteers and partners, set up treatment and isolation centers, and four (4) functional laboratories (United Nations Relief Works Agency, 2020). The Kaduna state-enforced total lockdown for 75 days to stem the rise in COVID-19 and prevent community transmission (PTF, 2020).

Figure 1 shows the 2020 and 2021 Google Mobility Index (GMI) for Kaduna State, which depicts the severity of COVID-19 containment policies in the state



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

These strategies affected movement and business enterprises. It shows how the COVID-19 and associated policies (i.e., travel bans and closures of businesses, work from home policies, etc.) reduced the movement of people for recreation and leisure and increased the number of people in residential areas with more people staying at home. The GMI for Kaduna State shows that for the months of February through July 2020, there was significant reduction in leisure activities as the lockdown was quite intense in the state. The lock down was eased around June and despite some of the injunctions still in place, residents grew tired of the restrictions and largely resumed their normal activities.

## The Impact of Covid-19 and Associated Policies on Business Operation.

### 1. Activities of enterprises in the lateral, midstream and downstream of the poultry and fish value chains were severely disrupted despite their crucial role in the processing and distribution of food.

Table 1 presents the average number of days businesses in the study sample were in operation over the study period. We see that both male and female owned businesses in the upstream sector operated fully despite the lockdown restriction. This is consistent with the lockdown policy that considered upstream actors as essential, and thus free to continue their operations unhindered. However, for SMEs in the lateral, midstream and downstream, we see a significant drop in the days of operation for male owned enterprises during the months of intense lockdown, particularly April, May, and June. For example, the average days of operation for male owned SMEs in the downstream (retailers of fish and poultry products) in April and May was about 70% and 40% lower than the levels in February. Similarly for enterprises in the midstream, the average number of days of operation in April and May was 30% and 40% lower than in February. Similarly for enterprises in the midstream, the average number of days of operation in April and May were 30% and 40% lower respectively, compared to February. Though our sample size is small, we note that for female owned enterprises in the midstream and downstream, there is not much difference in the average number of days of operation during the peak of the lockdown period (March to June) compared to levels in February. Since many female enterprises are home based, this might explain the limited impacts of the restrictions on their days of operation. However, from July onwards, we see a surge in the average number of days of operation for both male and female owned enterprises; often to levels even higher than those in February. The significant increase in the average days of operation for businesses in Kaduna to similar or higher levels than pre-lockdown might reflect the need for these enterprises to intensify their operations to increase sales to compensate for the generally low market demand observed across Nigeria in 2020, due to income shocks associated with COVID-19 and other factors. Together, these results indicate that the activities of enterprises in the midstream and downstream of the poultry and fish value chains and lateral services were severely disrupted for 5-7 of the 9 study months in Kaduna State despite their crucial role in the processing and distribution of food.

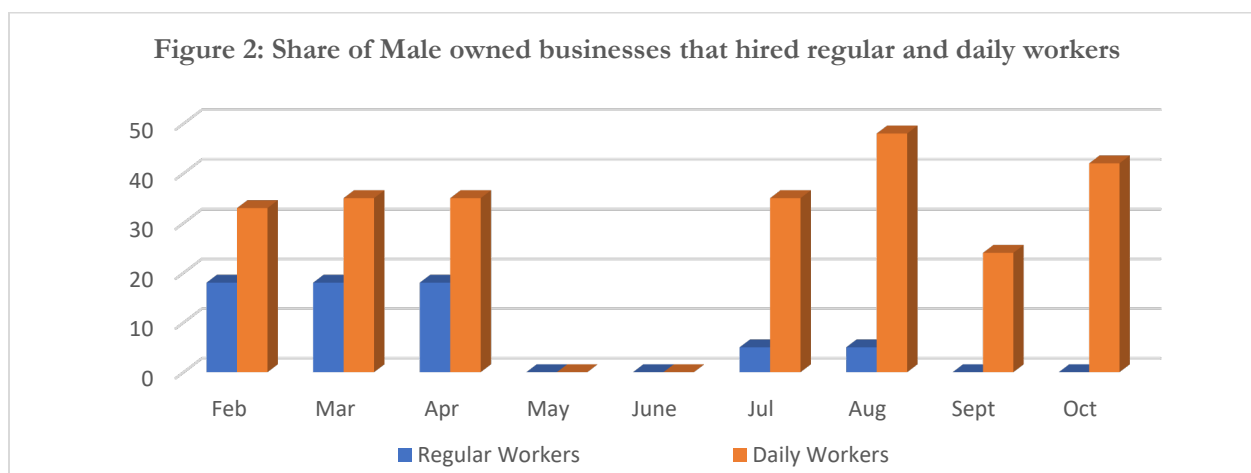
**Table 1: Average number of days businesses are in operation by gender of the business owner**

	Feb	Mar	Apr	May	June	Jul	Aug	Sept	Oct
<b>Male</b>									
Lateral	17	22	19	19	17	24	2	24	25
Upstream	30	29	30	31	30	31	28	28	31
Midstream	26	25	18	15	21	25	26	27	25
Downstream	28	24	12	18	21	31	31	30	29
Observations	37	38	36	37	37	39	40	38	38
<b>Female</b>									
Lateral	0	0	0	0	0	0	0	0	0
Upstream	31	30	31	30	30	31	31	30	31
Midstream	10	14	11	12	9	19	9	22	24
Downstream	15	14	-	-	14	31	31	30	24
Observations	8	6	5	5	8	8	8	8	8

Source: Field survey, 2020

**2. There was a drop in the share of businesses hiring workers towards the end of the lockdown period and in the ensuing months. When hiring resumed, this was largely of temporary daily workers.**

Figures 2 and 3 show the share of male and female owned businesses that hired regular salaried workers and temporary daily workers. Figure 2 shows that generally, male businesses use more of daily hired workers (about 30% of enterprises hired daily workers in February pre-pandemic) than regular salaried workers (about 15% in February). However, while there was a complete reduction in hiring workers in May and June, resumption of hiring in July and onwards was largely only for temporary daily workers. The labor hiring freeze in May and June coincides with the period when lockdown restrictions were intense and had persisted for over two months forcing many businesses to shut down or reduce activities.



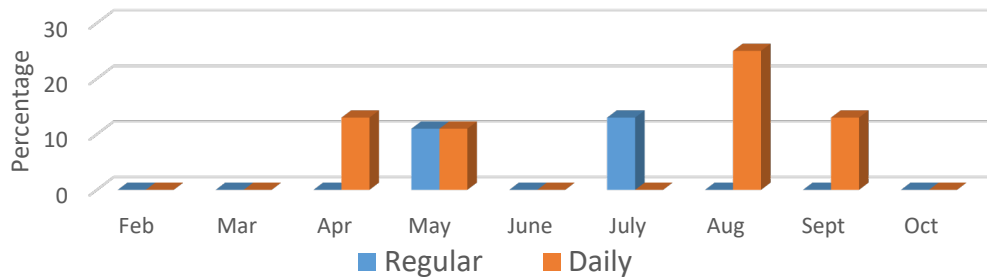
Source: Field survey, 2020

Only 5% of regular salaried workers were hired in July and August and they were not hired by any firms in the months of September and October. This indicates that majority of the lay-offs/reduction in use of regular salaried workers during the lockdown period might be more permanent with firms tending to rely more on daily laborers, post lockdown.

Contrary to their male counterparts, female owned businesses generally did not tend to hire labor. On average, only about 5% of female owned businesses hired any labor (daily hired laborers or regular salaried workers) during the study period. This indicates that female owned businesses along the poultry and fish value chains in Kaduna State tend to rely more on self or family labor. Figure 3 also shows that for the most part the low levels of hiring by female owned businesses was consistent over the entire study period and largely unaffected by the lockdown policies (i.e. during the months of March to June). This is not surprising if they are home based enterprises dependent on family labor.<sup>1</sup>

<sup>1</sup> The figure shows a change in the share of female owned businesses hiring labor in the month of May and July (for hired salaried workers) and hired daily laborers in April and May (when the lockdown was quite severe). While this might reflect a need for help to support their

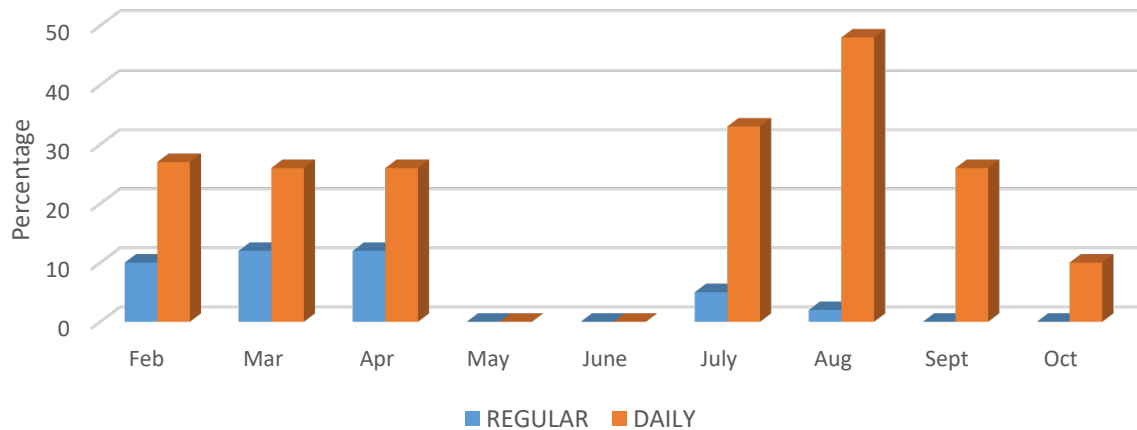
**Figure 3: Share of female owned businesses that hired daily workers or regular salaried workers**



Source: Field survey, 2020

The share of peri-urban businesses that hired regular salaried workers and temporary daily laborers is shown in figure 4. On average, peri-urban firms tended to hire more of temporary daily workers (26% of businesses hired daily laborers in February) compared to regular salaried workers (at about 10%). However, we still saw a drop in the share of businesses hiring regular salaried workers from about 10% in February to 0% in May and June, towards the end of the lockdown period in the state. Though we see a slight resumption in hiring regular salaried workers in July and August (at lower levels less than 5%), the share of peri-urban businesses hiring salaried workers went back to 0% in September and October. This likely indicates that the regular salaried workers in peri-urban areas were laid off due to the restriction alongside other challenges in Kaduna State. On the other hand, we see that the share of peri-urban businesses hiring daily laborers increased significantly to 33% and then 48% in July and August respectively compared to 26% pre lockdown.

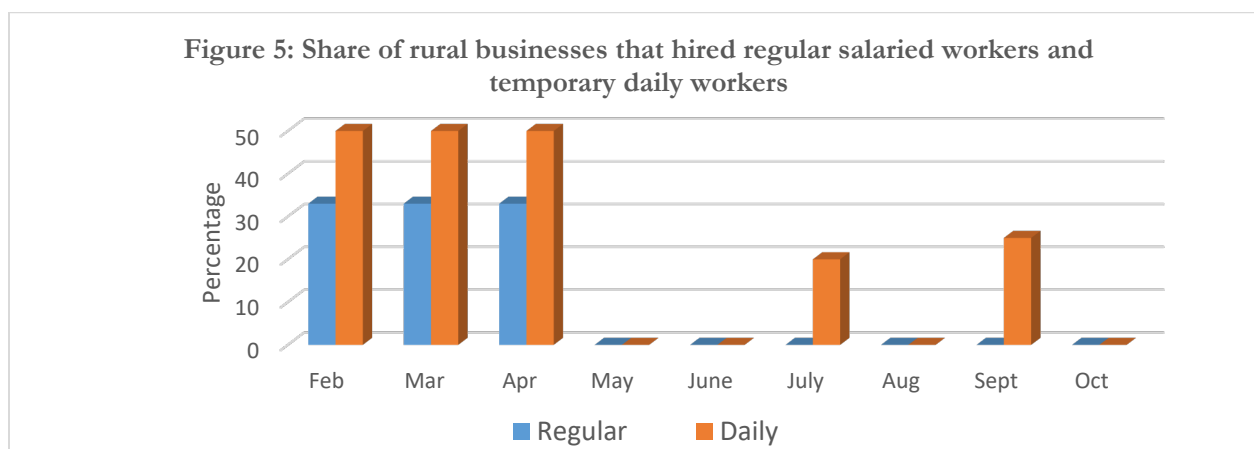
**Figure 4: Share of peri-urban businesses that hired regular and daily workers**



Source: Field survey, 2020

need to balance increased home responsibilities (such as childcare due to school closures) the sample size is too small to make this generalization. It might also be due to temporary or seasonal factors.

Figure 5 shows the share of respondents in rural areas that hired regular and daily labor. Here, we see that 50% of rural businesses hired temporary daily labor in the months of February to April while 33% of businesses hired regular salaried workers in those months. The share of businesses that hired both regular and daily labor drastically dropped in the months of May and June where no workers (both daily laborers and salaried workers) were hired. Post Lockdown we see a resumption in the hiring of daily workers (but not salaried workers) and at lower levels compared to April. This reveals that though there was a perception that rural businesses were less affected by lockdown policies these firms did in fact feel the impact either directly (in terms of disruptions to their access to labor due to movement restrictions) or indirectly due to low demand for their products during the period requiring them to downscale their activities.

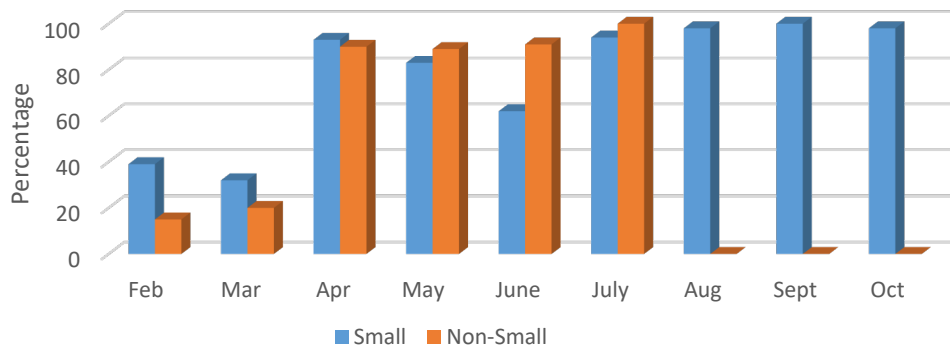


Source: Field survey, 2020

**3 While both small and non-small businesses in the study value chains in Kaduna State faced increasing challenges during the lockdown period, in the months succeeding the lockdown (August to October) only small businesses reported facing challenges. This reveals a likely medium to long-term effect of COVID-19 and its associated policies on small businesses.**

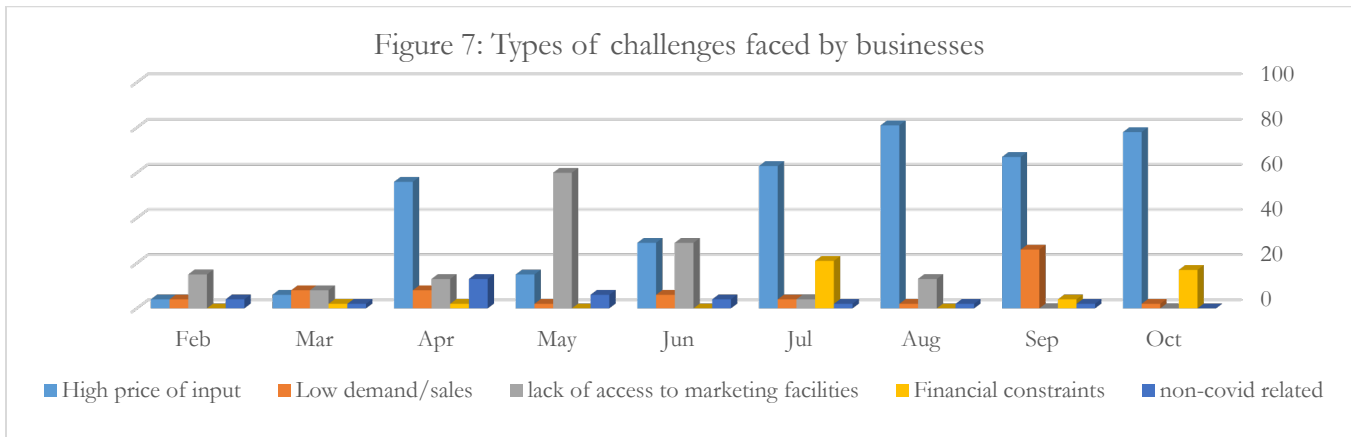
Figure 6 shows the share of businesses that faced challenges during the period under survey. We see that both small and non-small businesses faced increasing challenges from the month of April to July which coincides with the peak of the lockdown period in the state. While non-small businesses appear to have overcome these challenges by August, this was not the case with small businesses. Increasing number of small businesses appear to have continued facing challenges in the months succeeding the lockdown period from August up to October. This may be an indication of a medium to long-term effect of COVID-19 and its associated policies on these smaller enterprises.

Figure 6: Share of businesses that faced challenges



Source: Field survey, 2020

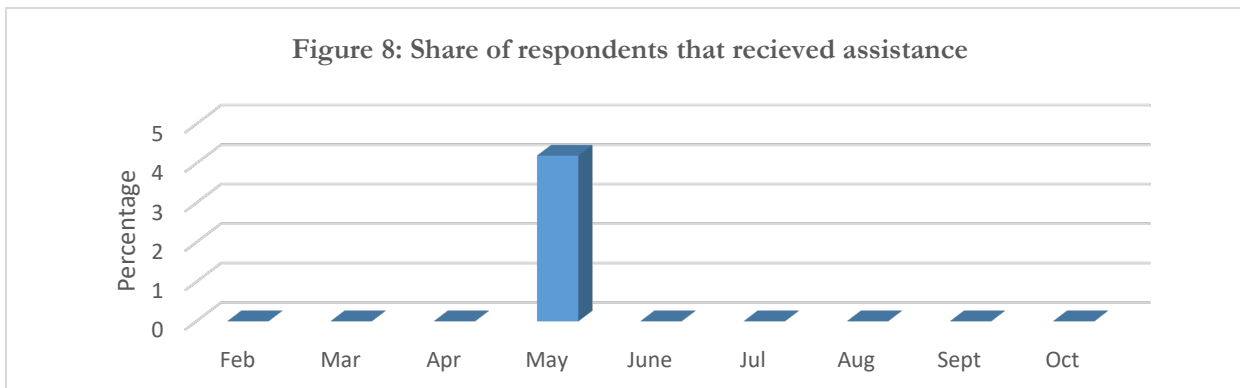
The types of challenges faced by businesses is shown in figure 7. Here, we see that in the month of April (in the earlier part of the lockdown), the major problem faced by businesses (56%) was high input price. This was replaced with lack of access to markets and logistics challenges in May when 60% reported having difficulties in accessing the market, storage facilities, transportation, and inputs. This is consistent with the peak of the lockdown period (when movement restriction was strongly enforced) and when the lockdown had been in effect long enough for businesses to begin to face increasing challenges associated with the lockdown. In the month of June however, there seemed to be a decline with about 29% of businesses reporting high price of inputs and difficulties in accessing marketing facilities as the major challenges faced. We see a spike in the number of businesses faced with high input prices in the month of July which was when the lockdown was eased by the state government. For the months of August, September, and October when small business were the ones reporting challenges, we see that the major challenge faced was high input price. This may be an indication of the longer-term effect of COVID-19 restrictions (particularly for SMEs dependent on inputs coming from other states) alongside broader economic issues going on in Nigeria and reflects the financial struggle these businesses faced considering their low capital base. Low demand and/or sales and financial constraints are also challenges faced by the businesses in the months succeeding the lockdown period.



Source: Field survey, 2020

**4. Very few business enterprises received assistance during and after the lockdown period and those who did received from friends and family.**

Figure 8 shows the share of respondents that received assistance during the study period. We find that very few farmers received any support. The only month of the survey that any respondents reported getting assistance was May and this was for only 4% of the respondents who reported that they got assistance from either family and/or friends. This is consistent with a general belief that government palliatives were only shared among a few residents of the urban areas and did not extend to the peri-urban or rural areas.



Source: Field survey, 2020

**Conclusions and policy recommendations**

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 chains in Kaduna State. Our findings revealed that business operations of SMEs across the supply chain nodes not in the upstream (i.e. lateral, midstream and downstream) were significantly disrupted by the lockdown movement restrictions in Kaduna State. Medium to long-term effects of COVID-19 and associated policies gave rise to business owners laying off the use of labor (particularly regular salaried workers) for



their business operations which has significant livelihood implications for laborers who lost their jobs or hiring opportunities. Even rural businesses (perceived by many to be less affected by lockdown policies) significantly reduced their hiring of labor during the lockdown period. This reveals their dependence on other supply chain nodes and exposure to the impacts of these policies. Small businesses particularly continue to face challenges post lockdown indicating that these small businesses are less able to cope with supply chain disruptions. Despite the increasing challenges faced by business owners during the lockdown and post-lockdown periods, only 4% (non- small businesses) in our study revealed receiving any assistance or support to enable them deal with the COVID-19 pandemic and all of this assistance came from family and friends. It is imperative that while designing and subsequently implementing policies, consideration is given to the interconnectedness of supply chain nodes and the vulnerability of small-scale enterprises to the supply chain disruptions associated with these policies. Efforts to maintain the operations of the food supply chains and reduce the negative impact of COVID-19, especially for the small business who are less able to absorb shocks, should be considered. These are paramount for preserving livelihoods and consumer access to affordable food.

### Key References

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### About the Authors

This brief 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 (Aisha Lawal Ibrahim) is a researcher at the National Agricultural Extension and Research Liaison Service (NAERLS/Ahmadu Bello University (ABU) Zaria) and a participating scholar of the NAPA early career mentoring program. She is currently pursuing her PhD in Agricultural Economics from ABU, Zaria. L. Saweda. 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.

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