# Extended Abstract Please do not add your name or affiliation

Paper/Poster Title	Have farm households' livelihoods and food security rebounded from COVID-19 shocks? Results from a follow-up phone survey in Nigeria
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# Abstract prepared for presentation at the 96<sup>th</sup> Annual Conference of the Agricultural Economics Society, K U Leuven, Belgium

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Abstract	200 words max		
The effect of COVID-19 on livelihoods and food security of households have continued			
despite perceptible reductions in transmission and lifting of restrictive policy measures.			
We collected baseline data in July 2020 capturing the initial three months after the			
outbreak of COVID-19 in Nigeria. To track changes, we conducted a follow-up survey			
with the same households a year later (July 2021). We undertook a comparative			
analysis between the two surveys focusing on income loss, job loss, food insecurity,			
and dietary diversity. We further investigate how changes in income, wealth, social			
capital, safety nets, and conflicts affected the severity of food insecurity. We found that			
both income and jobs have rebounded significantly (by 50%) compared to the baseline			
results. However, increased conflicts amid the pandemic negatively affected farm			
investment decisions in 44 percent of smallholders surveyed. While livestock and			
social capital cushioned households from falling into a more severe food insecurity;			
safety net programs did not improve households' food security. We suggest four policy			
propositions: prioritize investment in job creation; enable households build wealth to			
enhance resilience to shocks; revisit targeting approaches of safety net programs to			
enhance effectiveness; and devise conflict resolutions to induce investment and			
enhance productivity.			
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Introduction		100 – 250 words	
JEL Code	I38, Q12, Q18		
Keywords	COVID-19, Conflicts, Dietary diversity, Food insecurity, Livelihoods, Income loss, Farm households		

The interruptions of general economic activities and within food supply chains, following the outbreak of the COVID-19 pandemic have severely threatened the livelihoods and food security of households in developing nations like Nigeria. We conducted a phone survey in July 2020 to assess the effects of the pandemic on Nigerian households in the initial three months after the outbreak (April-June 2020). About 88% of the households reported up to 50% income loss due to the pandemic; 66% reported reduced food consumption; and many households, especially poorer ones, indicated that COVID-19 significantly worsened their food insecurity. Survey



households also reported a significant reduction in consumption of proteins and fruits since the pandemic. Increases in food prices were felt by 85% households. To assess the changes in the livelihoods and food security situation of households since the baseline survey; we interviewed the same households in a follow-up phone survey in July 2021. The results presented in this paper are based on data obtained from the follow-up phone survey. The purpose of this study was to assess whether the livelihoods and food security situations of households rebounded a year after the baseline survey where most of the stringent COVID-19 related policy measures were lifted. We focused on changes in households' income, employment, food security, and dietary diversity.

#### Methodology

100 – 250 words

#### 1. Data

This study was based on primary data collected through phone interview. To track changes in the effects of the pandemic on households since the first-round survey (July 2020), we administered a follow-up phone survey with respondents who participated in the first survey sampled from four Nigerian states. Details of the sampling frame and selection of survey households were reported in Balana et al. (2020). About 82 percent of the original sample households (840 respondents of the 1,031 in the first-round) were recovered in our follow-up survey.

## 2. Conceptual framework

We adopt a livelihood approach (DFID, 1999) for our analysis, focusing on four key livelihood enhancing variables—*income, wealth endowments, social capital, and government/NGOs support programs*—and how the changes in these variables during COVID-19 affected the severity of food insecurity and dietary diversity of smallholder farm households.

## 3. Variables and analytical approach

*Food insecurity* indicators were constructed from survey data using the eight-standard experience-based food insecurity experience scale (FIES) questions (FAO, 2016). *Household Dietary diversity scale (HDDS)* is measured by the number of different food groups from which food was consumed by a household over the given reference period. Ordered logit model was used to examine the factors conditioning the FIES situation amid the COVID-19 pandemic. As the HDDS exhibits features of count data; we used Negative Binomial (NB) model to model HDDS.

#### Results

100 – 250 words

Results show that income and job losses have significant negative effects on food security and dietary outcomes for households. We found that household food security is relatively more susceptible to job loss than to the income effect. Regarding the wealth effect, livestock ownership significantly cushioned household from falling into a deep and severe food insecurity situation. Results on the role of social capital as a risk coping strategy indicate that the COVID-19 pandemic eroded the capacities of households and communities alike. Hence, social capital did not play the 'usual' risk-mitigating role in the times of shocks. In situation where shocks are isolated incidents,



social groups in a community network respond in supporting other members. But the indiscriminate nature of the COVID-19 pandemic made the situation difficult for people to help one another. In a similar fashion, safety net mechanisms by the government and NGOs were not significant in providing protection to households from severe food insecurity or malnutrition. This may be because such support may either be limited in scale or scope compared to the magnitude of the shock. Regional differences were seen in the likelihood of households facing food insecurity and poor diet quality amid the pandemic. Households in the north of Nigeria are more likely to be exposed to severe food insecurity than those in other regions.

#### **Discussion and Conclusion**

100 – 250 words

Like other African countries south of the Sahara, the livelihoods and food security of endowed households) households (especially less were severelv and disproportionately affected by the COVID-19 pandemic. However, it appears that a year after the outbreak of the pandemic, there is a significant rebound in income, and employment. In terms of changes in food security, comparison of the two surveys indicates that there is a slight increase in "food secure" households (from 7 to 13 percent) and a drop of 8 percentage points of the "severely food insecure" households. Comparison of the HDDS results in the two surveys demonstrates an improvement of 5 percentage points in the HDDS results in the follow-up round survey. These indicate positive transitions. In examining the effects of conflicts on agriculture, we find that 33 to 44 percent of survey households were severely affected by insecurity threats. Particularly, farm investment decisions are the most affected activity. This highlights the long-term significance of the effects of insecurity on smallholder farm households because lack of investment reduces farm productivity, income, and food security in future. Based on these findings, we suggest the following policy propositions: prioritize investment in job creation; enable households build wealth to enhance resilience to shocks; revisit targeting approaches of safety net programs to enhance effectiveness; and devise conflict resolutions to induce investment and enhance productivity.

