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Perceived changes in food security, finances and revenue of rural and urban households during COVID-19 pandemic in Nigeria

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ABSTRACT

The Covid-19 pandemic has generated shocks that have affected the global economy. The study examined perceived changes in food security as well as finances and revenue of rural and urban households during Covid-19 pandemic in Nigeria. Data were sourced from the National Longitudinal Phone Survey executed between April and June 2020 by the National Bureau of Statistics in collaboration with the World Bank. Data were analysed using descriptive statistics and the Chi-Square test. Findings revealed 83 percent of urban households and 78 percent in rural were food insecure. About 83 percent of rural households and 79 percent of Urban perceived Covid-19 pandemic as a threat to household finances. Household finances dropped for 29.3 percent of urban and 31.5 percent of rural households while 30.5 percent of urban and 20.0 percent of rural households who operate family business had no revenue at all. The study concluded that the pandemic has worsened the food security situation of both rural and urban households and has also adversely affected rural and urban household finances. Given a new surge in the epidemic, the government should take cognizance of the disparities in the context in which the pandemic affects the rural and urban households in Nigeria.

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KEYWORDS

COVID-19; residence; differential; finance; burden; sustenance

1. Introduction

The survival of all humans on Earth is constraint by availability of any consumable substance which is rich in nutritive constituents, capable of sustaining life, dissipates calories, and maintains healthy body (Kazeem *et al.*, 2020). For this, food security according to FAO (2015) is conceptualized as a phenomenon of regular physical, social and economic accessibility of all people to unlimited, safe and nutritious food to cater for their dietary needs and healthy existence. In the contrary dimension, food insecurity is a situation when there is uncertainty or limited access of safe and balanced foods available in a socially acceptable manner. Food insecurity is a critical problem facing the entire world populace as FAO (2017) estimated that nearly 1 billion people are food insecure around the globe in which the larger number of these chronically malnourished people are inhabitants of developing countries, mainly Asia and Africa. According to Economist Intelligence Unit (EIU) (2019); Nigeria's ranking in the Global Food Security Index (GFSI) has continued to be poorly rated since 2013 when it ranked 86th among 107 countries with 33/100 score and reached an unimpressive rank of 94th (with 48.4/100 score) among 113 countries behind Ethiopia, Niger and Cameroon in 2019. Given the above, food insecurity has been identified as a major outstanding problem in Nigeria,

CONTACT Olaide Akintunde olaide.akintunde@uniosun.edu.ng Department of Agricultural Economics and Agribusiness Management, Osun State University, Osogbo, Nigeria as depicted by Nigeria's high Global Hunger Index (GHI), low Food Consumption Score (FCS), and high calorie deficiency (Grebmer et al. 2019). There is no gainsaying the fact that Nigeria is dependent on imports of major staple foods such as rice and wheat. These underscore the fragile nature of the food system and its vulnerability to shocks like that created by the advent of the COVID-19 pandemic.

The World Health Organization (WHO) first announced to the world a novel coronavirus named COVID-19 on 31 December 2019 and declared COVID-19 a pandemic on the 11 March, 2020 because of its contagious effect and rate of spread across many countries (Cucinotta Vanelli 2020; World Health Organization 2020). Roughly two weeks before the WHO pronouncement, Nigeria had already recorded its index case of the virus on February 27, 2020 courtesy of an Italian man on a business trip to Nigeria (Ebenso and Otu 2020). By the first week of April 2020, Nigeria has started witnessing the onset of community transmission (Adejoro 2020). The number of confirmed cases has gradually reached 73,175 with a total of 418 new cases as at 13 December, 2020 (Nigeria Centre for Disease Control 2020). This accounts for about 3.1 percent of the total number of confirmed cases in Africa (2,361,271) (Africa Centre for Disease Control 2020). This made the Nigerian Government put in place some policy measures on 30 March, 2020 such as lockdown and restriction of movements. There was also public sensitization regarding preventive measures such as social distancing and use of nose masks to curtail the spread of the pandemic. However, these generated shocks have affected virtually all the sectors of the economy and social well-being in Nigeria.

These shocks resulted in a further backslide of the nation's already fragile food system due to the significant reliance on activities of international food markets (Devereux, Béné, and Hoddinott 2020; Baldwin and Weder di Mauro 2020; Haddad et al. 2020; Béné 2020). National and state-level restrictions during the COVID-19 crisis in Nigeria were affecting food transportation within the country with a consequential effect on food supply and increased food prices. These are thought to have manifested on the food insecurity status of the poorer and vulnerable urban households (Gilligan 2020).

While there have been some studies on the socio-economic impact of COVID-19 at the global level (Ali et al., 2021; Bashir, Ma, and Shahzad 2020) and in Nigeria (Obi et al. 2020; Awofeso and Irabor 2020), there is scant evidence-based disaggregated data on the magnitude of the effect of the pandemic on rural and urban households in Nigeria. Available studies on rural-urban disparities have focused on the knowledge, attitude and preventive behaviour (Lau et al. 2020; Reuben et al. 2020) and nutritional status of urban and rural children (Francis and Pegg 2020). The context in which the coronavirus pandemic affects the rural and urban households may differ in dimensions and to the best of our knowledge there have not been any research efforts that compare the magnitude of the Coronavirus crises on the food security and finances of urban and rural households in Nigeria. The lockdown and restriction of movements have led to partial or total closure of the economy (Chirisa et al. 2020; Ayanlade and Radeny 2020). In the urban area jobs were lost, some businesses closed down and household livelihoods became worse. The restriction of movement also slowed down production, intra- and inter-regional agricultural trade as well as the movement of key agricultural products (Ayanlade and Radeny 2020). Local markets and retail stores in the urban areas, and the nation's food supply chains were affected for significant periods especially during the period of April-May, 2020 (Andam et al. 2020).

As of January 24, 2022, the confirmed cases stood at 252,428, while the total number of active cases was 25,424. The number of deaths rose from 1227 on December 21, 2020–3126 (National Centre for Disease Control 2022). In December 2020 all schools and colleges in Kaduna State were asked to close down because of the new surge of the pandemic in the State. If the trend continues, another lockdown or partial lockdown may be imminent in the country. In the light of this, there is need for evidence-based empirical information on perceived changes in household finances and food security of rural and urban households in Nigeria for appropriate programming, reprogramming and advocacy to mitigate the effect of the pandemic both in the medium and long term.

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1.1 Objectives

The objectives of the study were to:

- 1. examine the perceived effects of COVID-19 pandemic on food security of rural and urban households;
- 2. compare the perceived threat of COVID-19 pandemic on family finances of rural and urban households; and
- 3. examine perceived changes in revenues of rural and urban households before and during the pandemic.

1.2 Hypotheses

- 1. There is no significant relationship between place of residence and COVID-19 perceived threat to household finances.
- 2. There is no significant relationship between household place of residence and family finances
- 3. There is no significant relationship between household place of residence and food security

1.2.1 Theoretical framework

Guided by theory of access developed by Ribot and Peluso (2003), restriction of movement due to COVID-19 predisposes many households to be trapped into food insecurity and poor finances. Access to land and productive resources can lead to increased productivity needed to achieve sustainable livelihoods while limited access to productive resources can lead to decrease in household finances and make households food insecure.

In an organized market economy, an equilibrium exists for which quantity of goods and services supplied (S_t) equals quantity of goods and services demanded (D_t) which lies on determinants of: market prices (P_t), information, and awareness about COVID-19 (C_t), a discrete variable. C_t could be a variable that determines the magnitude of effect of outbreak of COVID-19, or the frequency of infections which measures the severity of diseases. In the context of this research paper, the quantity of goods and services demand (D_t) in the era Covid-19 pandemic is assumed to be household finances. Adapting the model of Sun, Koemle, and Yu (2017), quantity of goods and services demanded (D_t) equals quantity of goods and services supplied (S_t) which is determined by price and discrete variable of awareness of COVID-19 pandemic.

Thus,

$$D_t (P_t, C_t) = S_t (P_t, C_t)$$

$$(1)$$

Considering the total derivative of both sides of equation (1), results

$$\frac{\partial D_{t}}{\partial P_{t}} \partial P_{t} + \frac{\partial D_{t}}{\partial C_{t}} \partial C_{t} = \frac{\partial S_{t}}{\partial P_{t}} \partial P_{t} + \frac{\partial S_{t}}{\partial C_{t}} \partial C_{t}$$
(2)

Rearranging equation (2), gives

$$\frac{dD_{t}}{dC_{t}} = \frac{\frac{\partial S_{t}}{\partial C_{t}} - \frac{\partial D_{t}}{\partial C_{t}}}{\frac{\partial D_{t}}{\partial P_{t}} - \frac{\partial S_{t}}{\partial P_{t}}}$$
(3)

Given the condition of market equilibrium Dt = St, equation (3) becomes

$$\frac{\mathrm{d}\mathsf{D}_{\mathsf{t}}}{\mathrm{d}\mathsf{C}_{\mathsf{t}}}\frac{C_{t}}{P_{t}} = \frac{\frac{\partial\mathsf{S}_{\mathsf{t}}}{\partial\mathsf{C}_{\mathsf{t}}} \frac{C_{t}}{S_{t}} - \frac{\partial\mathsf{D}_{\mathsf{t}}}{\partial\mathsf{C}_{\mathsf{t}}} \frac{C_{t}}{D_{t}}}{\frac{\partial\mathsf{D}_{\mathsf{t}}}{\partial\mathsf{P}_{\mathsf{t}}} \frac{P_{t}}{D_{t}} - \frac{\partial\mathsf{S}_{\mathsf{t}}}{\partial\mathsf{P}_{\mathsf{t}}} \frac{P_{t}}{S_{t}}}{\frac{\partial\mathsf{P}_{\mathsf{t}}}{S_{t}}}$$

Can be rewritten as

$$\eta_{P,C} = \frac{\eta_{S,C} - \eta_{D,C}}{\eta_{D,P} - \eta_{S,P}}$$
(4)

Where $\eta_{P,C}$ denotes the price elasticity with respect to changes in the COVID-19 information and awareness Ct. While $\eta_{S,C}$ and $\eta_{D,C}$ are supply and demand elasticities, respectively, in response to COVID-19 information and awareness Ct; and similarly, $\eta_{S,P}$ and $\eta_{D,P}$ are supply and demand elasticities, respectively, with respect to food price Pt.

Given $\eta_{D,P} < 0$, and $\eta_{S,P} > 0$ for normal food products, Equation (4) indicates that the sign of $\eta_{P,C}$ is the same as the sign of $\eta_{D,C} - \eta_{S,C}$. That is, the changes of food prices are influenced by the shock difference between supply elasticity $\eta_{S,C}$ and demand elasticity $\eta_{D,C}$.

After the outbreak of COVID-19, most governments of the world took strict measures including locking down cities and control of human mobilities and goods to contain or slow down the spread of the disease. These measures could indirectly reduce demand and supply. In another way, if the forces of demand exceed the supply, the market prices will rise, and *vice versa*. Consequently, the effect of COVID-19 on food prices and entire household finances is unpredictable

2. Materials and methods

Secondary data sourced from the COVID-19 National Longitudinal Phone survey (NLPS) 2020 carried out in Nigeria was employed for this study. Description of the data and other information from the published metadata are presented below.

2.1 Data source, sampling procedures and sample size

The NLPS survey was conducted by the Nigeria National Bureau of Statistics with technical assistance from the World Bank. The survey was jointly funded by the Bill and Melinda Gates Foundation and the Federal Government of Nigeria. The survey period was stated as between 20 April and 11 June, 2020 and conducted by a team of trained interviewers with the use of a computer-assisted telephone interview (CATI). This COVID-19 baseline survey was based on the sampling frame of the Wave 4 of the General Household Surveys (GHS – Panel survey) conducted in 2018/2019. Data were analysed for a weighted sample of 1950 households. Details of the sampling procedures, data collection as well as the details of the computation of sampling weighting are available for public use in the websites of the World Bank and National Bureau of Statistics, Nigeria (see Nigeria COVID-19 National Longitudinal Phone Survey, 2020). Permission sought from the World Bank was granted to use the COVID-19 NLPS 2020 data for research purposes.

2.2 Measurement of variables

Some variables from the dataset were selected as guided by the research objectives. The selected available background characteristics were the household region of residence (geopolitical zone) and household place of residence. Available variables that were directly related to the study objectives include household food security, household revenue compared to February 2020, and perception of COVID-19 pandemic on household finances.

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2.2.1 Household food insecurity

Three questions were asked and used as a proxy measure of household food security. A household is said to be food insecure if, during the 30 days preceding the survey, there was a time when any of the adults in the household had to skip a meal because there was not enough money or other resources to purchase food; if the household ran out of food because of a lack of money or other resources, or if any adult in the household went without eating for a whole day because of a lack of money or other resources.

2.2.2 Household food security index

A household food security index of range 0–3 was computed using the composite score of the three proxy measures of household food security. Each of the questions attracted a binary outcome of 1 for yes and 0 otherwise. Thus, a score of 0 indicated that the household was food secure; the higher the score the more food insecure the household.

2.2.3 Household perception of threat to finances

To measure the households' perception of threat to finances, the survey question asked the respondents to express their concern on how much of a threat the coronavirus outbreak was to their household's finances. This is a proxy measure of household perception of threat to finances. The ordinal response options were of a four-point Likert-type scale – Substantial threat; Moderate threat, Not much threat; and Not a threat at all.

2.2.4 Change in household finances

Two questions were used to measure the change in household finances. First, we used current revenue from all households as at the time of the survey and secondly whether the current revenue from the household business as at the time of survey has remained the same, become lower or higher compared to the month of February among households that reported household business.

2.3 Data analysis

For the background variables, frequency and percentages were used to describe the household place of residence and region of residence, respectively. For the three objectives, simple cross-tabulations were also used to compare the perceived threat of COVID-19 outbreak to rural-urban household finances; the differential effect of the outbreak on rural-urban household food security and changes in household finances of rural and urban households. A non-parametric measure based on Chi-square distribution was employed to test the three hypotheses.

3. Results

The output of the statistical analysis of the data in line with the focus of this study as exemplified in the objectives is presented here. For a general description, the results of the percentage distribution of the households by region and residence were presented in Table 1.

3.1 Percentage distribution of household characteristics according to region and place of residence

Table 1 showed the data on household characteristics such as region of residence also known as geopolitical zone in Nigeria and by place of residence (rural/urban). Overall, the results showed that 31.4 percent of urban households and 68.6 percent of the rural households were covered in the survey. This shows that the proportion of rural households sampled was more than double those in the

Table 1.	Percentage	distribution	of household	characteristics	according t	to region	and place o	f residence.

	Urban	Rural	Total
Region	n (%)	n (%)	n (%)
North Central	72 (11.7)	226 (16.9)	298 (15.3)
North East	42 (6.8)	175 (13.1)	217 (11.1)
North West	83 (13.6)	361 (27.0)	444 (22.8)
South East	106 (17.2)	197 (14.8)	303 (15.5)
South South	89 (14.5)	257 (19.2)	346 (17.7)
South West	221 (36.2)	120 (9.0)	341 (17.5)
Total	613 (100.0)	1337 (100.0)	1950 (100.0)

urban sample. In the urban area, South West region had the highest proportion of households (36.2%) but the lowest in the rural area (9.0%). In all, the proportions of households in the urban and rural North were 32.0 and 57.1, respectively, while the proportions of urban and rural households in the Southern region were 68.0 and 42.9, respectively.

3.2 Experiences of food security in rural-urban households

Three indicators were reported as a measure of food security at the household level. Results in Table 2 showed rural-urban differentials in experiences of food security by households. Overall, at least 7 in 10 (74.7%) of the households reported that at least one adult in the household skipped a meal as a result of the COVID-19 pandemic. Nearly 3 out of 5 households (58.3%) had at least one adult in the household that skipped a meal, while 26.4 percent had one or more adults in the household who did not eat for a whole day. Rural-urban differentials showed that urban households (79.8%) are more likely to have adults who skipped a meal than those in rural households (72.3%); more households in the urban (62.5%) than those in the rural households (56.4%) reported that at least one adult ran out of food. About 26.8 percent of urban households claimed that at least one adult in the household went without eating for a whole day in contrast to 24.8 percent of their rural counterparts. At least 4 in every 5 urban households (80.0%) and about 7 in 10 rural households (73.7%) reported that one or more households either had an adult who skipped a meal or ran out of food. This result is not different from households which reported that at least one adult skipped a meal or went without eating for a whole day. Similarly, urban households (65.4%) reported that at least one adult ran out of food or went without eating for a day compared with the rural households (59.0%). In terms of the overall measure of food security using the food security index, 20.8 percent of all the households had a food security index of "0" indicating that the households were food secure. This implies that 80 percent of the households are food insecure. Rural-urban disaggregation by food security index shows that 17.0 percent of urban households and 22.5 percent

Table 2. Experiences of food security in rural-urban households.

Variables	Urban n (%)	Rural n (%)	Total n (%)
At least one adult in the household skipped a meal	489 (79.8)	966 (72.3)	1456 (74.7)
At least one adult in the household ran out of food	383 (62.5)	954 (56.4)	1137 (58.3)
At least one adult in the household did not eat for a whole day	184 (26.8)	332 (24.8)	496 (25.4)
At least one adult skipped a meal or run out of food	508 (82.90)	1027 (76.8)	1535 (78.7)
At least one adult skipped a meal or going without eating a whole day	493 (80.)	985 (73.7)	1479 (75.8)
At least one adult ran out of food or went without eating a whole day	401 (65.4)	789 (59.0)	1190 (61.0)
At least one adult experienced one of the three	509 (83.0)	1036 (77.5)	1545 (79.2)
Food security index			
0	104 (17.0)	301 (22.5)	405 (20.8)
1	125 (20.3)	307 (22.9)	431 (22.1)
2	242 (39.4)	442 (33.1)	684 (35.1)
3	143 (23.3)	287 (21.5)	430 (22.0)

*Multiple response situation, hence n is not equal

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of rural households had a food security score of 0, indicating they are food secure. This implies that at least 83 percent of urban households and 78 percent of rural households are food insecure as a result of the pandemic. The proportions of urban and rural households who had food security score of 3 on the 0–3 scale were 23.3 and 21.5 percent, respectively.

3.3 Perceived threats and changes in household finances of rural and urban households due to COVID-19 pandemic

Table 3 highlights rural-urban differentials in the household perceived threat and changes in household finances due to the COVID-19 pandemic Most households (80.5%) perceived the threat of the pandemic to household finances as substantial. This comprised 79.1 percent of the urban households compared with the 81.3 percent of the rural households. About 4 percent of the urban and rural households reported that the pandemic was of no threat to their household finances. Data on the current sales revenue of rural and urban households who operated a family business revealed that many households who had a family business claimed that they had less revenue on their sales compared to the month of February, 2020. Fewer sales revenues from family businesses was more evident in rural households (60.2%) than in urban households (52.7%). Even more so, 30.5 percent of those in urban areas and 20.0 percent of those in rural areas had no revenue at all from their family business at the time of the survey. For all households, whether they had a family business or not, less current sales revenue was reported by 29.3 percent of urban households and, 31.5 percent of rural households. Further analysis showed that there is a significant association between household place of residence and perceived threat of COVID-19 to household finances measured in terms of current sales revenue ($\mathbf{x}^2 = 36.7$; p < 0.01). There is also a significant association between household place of residence and household finances of all households ($\chi^2 = 444.0$; p < 0.01) and of households who operated a family business ($\mathbf{x}^2 = 425.4$; p < 0.01).

3.4 Rural-urban differentials in reasons for less or no revenue

Results in Table 4 showed differences in reasons for less or no revenue among rural and urban households. Five reasons were potentially attributed to coronavirus while four reasons were not potentially

	Urban n		
Coronavirus Threat to Household finance	(%)	Rural n (%)	Total n (%)
Substantial threat	485 (79.1)	1086 (81.3)	1571 (80.6)
Moderate threat	84 (13.7)	147 (11.0)	231 (11.8)
Not much	20 (3.3)	48 (3.6)	67 (3.5)
Not a threat	24 (4.0)	56 (4.2)	80 (4.1)
$\chi^2 = 36.7; p < 0.01$			
Current sales revenue of households with a family business as at the time of the survey compared to the month of February 2020 ($n = 1041$)			
Higher	18 (5.1)	92 (13.2)	110 (10.5)
Same	40 (11.7)	46 (6.6)	86 (8.3)
Less	180 (52.7)	421 (60.2)	601 (57.8)
No revenue	104 (30.5)	140 (20.0)	244 (23.4)
$\chi^2 = 425.4; p < 0.01$			
Current sales revenue of all households as at the time of survey compared to the month of February 2020 (n = 1950)			
Higher	18 (2.9)	92 (6.9)	110 (5.6)
Same	40 (6.5)	46 (3.5)	86 (4.4)
Less	180 (29.3)	421 (31.5)	601 (30.8)
No revenue	104 (17.0)	140 (10.5)	244 (12.5)
No family business	272 (44.3)	638 (47.7)	909 (46.6)
$\chi^2 = 444.0; p < 0.01$			
~ 0.01 $\rightarrow 0.01$ $\rightarrow 0.01$ ~ 0.01			

 Table 3. Perceived threats and changes in household finances of rural and urban households due to COVID-19 pandemic.

p < 0.01 significant at 1% level

Table 4. Rural-urban differentials in reasons for less or no revenue.

Reasons for Less or No Revenue	Urban n (%)	Rural n(%)	Total n(%)
Reasons potentially related to coronavirus	263 (92.6)	508 (90.5)	771 (91.2)
Usual place of business closed due to coronavirus pandemic restriction	187 (65.8)	371 (66.1)	557 (66.0)
Need to take care of a family member	1 (0.4)	8 (1.4)	9 (1.0)
No customers/fewer customers due to lockdown/movement restrictions	67 (23.7)	101 (18.0)	168 (20.0)
Unable to get input due to lockdown/movement restrictions	4 (1.4)	7 (1.3)	11 (1.4)
Unable to travel/transport goods for sale due to lockdown/movement restrictions	4 (1.4)	21 (3.8)	25 (3.0)
Reasons potentially unrelated to coronavirus	21 (7.4)	53 (9.5)	74 (8.8)
Usual place of business closed for another reason	3 (1.1)	14 (2.5)	17 (2.0)
Seasonal closures	1 (0.4)	4 (0.6)	5 (0.5)
Vacation	1 (0.3)	0 (0.0)	1 (0.1)
Others	16 (5.6)	36 (6.4)	52 (6.2)
Total	284 (100.0)	561 (100.0)	845 (100.0)

related to the pandemic. In all, 9 in 10 households (91.2%) in both rural and urban areas, who reported less or no revenue, gave reasons that were potentially related to coronavirus outbreak. Specifically, the majority of the respondents in both rural (66.1%) and urban (65.5%) households attributed less or no revenue to the closure of their usual place of business as a result of coronavirus pandemic movement restriction.

4. Discussions

The study examined perceived changes in rural and urban households food security status, finances and revenue of rural and urban households in Nigeria in the era of the COVID-19 pandemic outbreak. The proportions of urban and rural households who experienced all three indicators of food security were 23.3% and 21.5%, respectively, suggesting that not less than 1 in 4 rural and urban households were food insecure as a result of the COVID-19 pandemic. This showed that to a large extent, that the food security of all the households (rural or urban) was being threatened as a result of the pandemic. This may be as a result of the loss of jobs because of social distancing and total lockdown or loss of income as some people were not paid by their employers. The consequences of this made households unable to buy the needed food and made them vulnerable to poverty.

PwC (2020) reported that with the associated effects of the COVID-19 pandemic as manifested in movement restrictions, the disruption to the rainy season farming and the imminent logistics challenges associated with domestic food distribution; there is a strong tendency for soaring food prices and their consequential effects to further worsen the poverty level in Nigeria.

Rural-urban disaggregation by food security index shows that 17.0% of urban households and 22.5% of rural households were food secure, suggesting that at least 83% of urban households and 78% of rural households were food insecure as a result of the pandemic. Shahzad et al. (2021) concluded that food insecurity substantially increased during the COVID-19 pandemic.

This finding implies that the level of food insecurity as a result of the COVID-19 pandemic is more pronounced in urban households than in rural households. This is expected, as rural households engage in farming more than urban households. Also, food items are cheaper in rural communities than urban. Concerning the COVID-19 pandemic and food security in Nigeria; Ajibola (2020) found that supply and distribution of agricultural inputs (improved seeds, herbicides and fertilizers) to rural farming communities were hindered owing to the near lockdown situations as linkages between major metropolises in the various states in Nigeria have become very difficult. These scenarios discourage farmers from crop cultivation leading to less production and scarcity of food.

Further analysis showed that there is a significant association between household place of residence and perceived threat of COVID-19 to household finances measured in terms of current sales revenue; there is also a significant association between household place of residence and household finances of all households which operated a family business. This implies that change of revenue before the advent and during the period of the pandemic is dependent on place of 290 👄 O. BAMIWUYE ET AL.

residence. Similar findings have been reported in the study of Rozelle et al. (2020). They observed that rural areas of the developing world were hardest hit in terms of loss of income in the advent of the COVID-19 pandemic.

5. Conclusion and recommendation

The study examined perceived changes of rural-urban households in food security finances and revenue in the era of the COVID-19 pandemic in Nigeria using the baseline data from COVID-19 National Longitudinal Phone survey (NLPS). The drop in household finances during the COVID-19 pandemic as perceived by the respondents was more evident in rural households than in urban households.

The study concluded that the outbreak of the coronavirus pandemic and the restricted measures to curtail the spread caused a serious threat to the survival of households in Nigeria as a result of its biting effect on the food security system and household finances.

Given a new surge in the epidemic, the government should embark on the new legislative decision process and proper channelling of resources that take cognizance of the disparities in the context in which the pandemic affects the rural and urban households. Also, all-inclusive palliative measures should be sustained by the government together with all other stakeholders to reduce the effects and financial burden of the pandemic on the entire populace.

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Disclosure statement

No potential conflict of interest was reported by the author(s).

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