

Impact of COVID-19 on the Informal Sector and Coping Strategies in Sabon Tasha, Chikun LGA, Kaduna, Nigeria

Simeon DOGO, Albert MADAKI and Abdu KOSAU

Department of Geography, Kaduna State College of Education, Gidan
Waya, Kaduna, Nigeria

Email: simeondogo@gmail.com

Abstract

This research investigated the impact of COVID-19 on the informal sector in Sabon Tasha, Chikun LGA, Kaduna, Nigeria and the various strategies that could be applied to sustain the sector. Primary data was collected using a questionnaire. The questionnaire was administered to 100 respondents in the study area engaged in informal businesses using the simple random sampling technique. The data was analysed using frequency, arithmetic mean score, and the one way analysis of variance (ANOVA). The findings reveal that the COVID-19 pandemic caused the loss of sources of income and increased the level of food insecurity, which pushed poor households and individuals to resort to negative coping strategies, including criminal activities. The study therefore recommends that government should provide long-term soft loans that informal business owners can access and pay back without difficulty; and palliatives donated to households by individuals and NGOs should be conscientiously shared such that people at the grassroots are reached.

Keywords: COVID-19, Impact, Coping strategies, Informal sector, Sabon Tasha

Introduction

The coronavirus outbreak, later coded as COVID-19, adversely affected the world towards the end of December 2019. When it broke out in Wuhan city in China, it was regarded as a regional health challenge, summarily underestimating its global potential risk. Although, many countries were in solidarity with China concerning this health disaster, COVID-19 was not perceived as a threat on a global scale. In fact, the World Health Organization (WHO) declared that the health crisis in China had no global potential threat (WHO, 2020). However, given that the modern world is entrenched in the concept of globalization and the position of China as the manufacturing hub of the world, a seemingly minor Chinese health issue metamorphosed into a global problem with lethal consequences (Ezeaku and Asongu, 2020; Price and van Holm, 2020). As at the 20th of June 2020 (WHO, 2020), statistics showed that total global confirmed cases of COVID-19 were 33.1 million, those recovered were 22.9 million while the global death toll was 998,000 (as of 28th September 2020; WHO, 2020).

Africa, being a highly vulnerable continent, soon recorded imported cases of COVID-19. The total confirmed cases of COVID-19 in Africa stood at 1,459,714 cases; with about 1,205,671 recoveries and 35,440 deaths recorded (WHO, 2020). However, there have been many debates on the reasons for the low incidence of cases of COVID-19 recorded in Africa (Diop and Asongu, 2020; World Bank, 2020). This seemed ironical given the level of public health infrastructure deficiencies, below-standard governance structures, porous borders, weak institutions, inter alia, in the region. It was argued that the low number of confirmed cases of COVID-19 recorded in Africa was due to low testing capacity and not necessarily because of location or the effectiveness of containment policies (Diop and Asongu, 2020).

Nigeria recorded the first case of COVID-19 on 27 February 2020. As at 28 September 2020, the total confirmed cases in Nigeria stood at 58,324 with 49,794 discharged and 1,108 deaths, representing about 35 per cent recovery rate and 2.6 per cent fatality rate respectively. What is evident in the trend of the COVID-19 pandemic in Nigeria is the increase in community transmission. Since the gradual relaxation of the lockdown in the country, cases of COVID-19 have increased by about 60 per cent

and the corresponding deaths recorded have also increased by about 33 per cent; implying that the country had entered a second wave of infection based on community transmission (Diop and Asongu, 2020).

The coronavirus pandemic represents both a public health and an economic crisis. While the public health crisis addresses disease containment measures, treatment, and development of vaccines, the economic crisis is reflected in supply and demand shocks as well as oil price shocks consequent upon disruptions in economic activities caused by the global lockdown. The outbreak of the coronavirus has thus disrupted the conduct of major macroeconomic policies across the globe (KPMG, 2020).

Like many resource-dependent developing countries, Nigeria has been hard hit by the fluctuations in the price of crude oil – which accounts for about 70 per cent of her gross domestic product (GDP) and 65 per cent of total government revenue. The rise in government spending driven by the need to combat the effect of COVID-19 had increased the country's fiscal deficit and her susceptibility to high public debt vulnerabilities (KPMG, 2020).

The informal sector, as defined by the International Labour Organization (ILO 2014), consists of units engaged in the production of goods and services with the primary objective of providing employment and income to the people involved. The ILO (2014) further characterized the informal sector as organized, unregulated, and mostly legal but unregistered. Given that this sector is made up of many unorganized economic activities such as trade, agriculture, construction, manufacturing, transport, and services, businesses in this sector are an important form of production organization and a key provider of employment opportunities and income to the populace. The ILO (1999) estimated that the share of the informal sector in the urban labour force is highest in sub-Saharan Africa and accounts for more than 50% of urban employment in two-thirds of countries surveyed. This is an indication that informal activities in the sector are important in many African countries and possibly in developing countries in general. Ogunde (2019) claims that more than 61% of the world's active population works in the informal sector, with 85.8% of employment in Africa in the informal

sector and more than 65% of the active population in Nigeria belongs to this sector.

In Nigeria in general, the contributions of the informal sector to the development of the economy in terms of job creation, capital savings and mobilization, efficiency, strong links with other sectors, use of local technology training for entrepreneurs cannot be overemphasized. However, since the early 1980s, Nigeria's economic situation has deteriorated seriously (Fasanya & Onakoya, 2012).

The advent of COVID-19 disrupted the interconnectedness of the global economy through global value chains which account for almost half of global trade; sharply falling prices of goods, tax revenues, foreign exchange receipts, foreign financial flows; travel restrictions, reduction of tourism and hotel patronage, frozen labour market, drastic drop in oil prices, etc. In Nigeria, the COVID-19 crisis crippled the activities of both the formal and informal sectors of the economy with ensuing economic consequences.

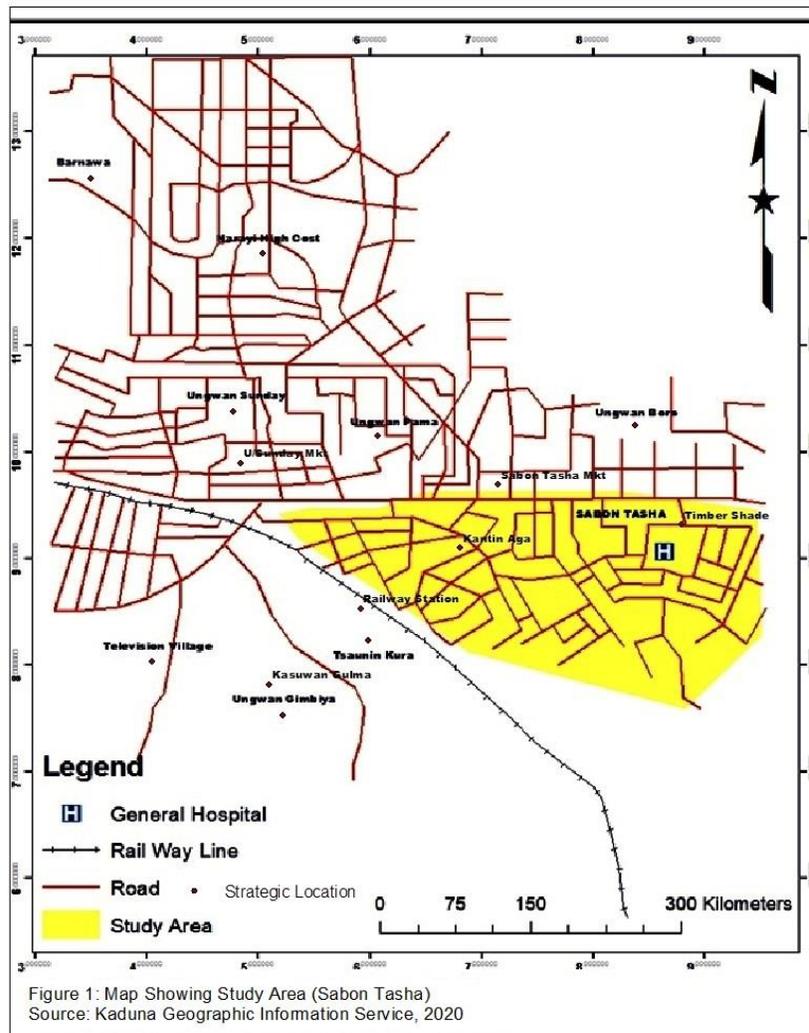
Many women and men in the informal sector need to earn an income on a daily basis to feed themselves and their families, as most of them cannot rely on income replacement or savings. Not working and staying at home means losing income and their livelihoods. To die from hunger or from the virus is the all-too-real dilemma faced by many informal economy workers. In 2020, over 2 billion workers were earning their livelihoods in the informal sector (Geneva, 2018). In view of this, the study investigates the impact of COVID-19 on the informal sector in Sabon Tasha, Chikun LGA, Kaduna, Nigeria and the various strategies that could be applied to sustain the sector.

Materials and Methods

Study area

Sabon Tasha is in Chikun Local Government Area of Kaduna State, in northern Nigeria. It lies between latitudes 10°26'05" and 10°26'19" North of the equator and longitudes 7°27'54" and 7°27'52" East of the Greenwich meridian showing the square coordinate of the area. The elevation of Sabon Tasha is 611 meters above sea level. Sabon Tasha is within Sabon Tasha District in Chikun Local Government Area of

Kaduna State. The coordinate of the study area was collected using a conventional survey method; GPS instrument was used to capture the coordinates (longitude and latitude) in the field for subsequent study area map design.



The area experiences average annual rainfall of 164mm while its highest temperature ranges between 27°C and 32°C (90°-105°F) in April, and lowest is between 14°C - 18°C (45°-60°F) in January. The water table

is quite high, and wells are sunk to a depth of about 611 meters. The water used for agricultural and domestic activities is sourced from various protected and non-protected wells, boreholes together with seasonal rivers around the vicinity (UNDP, 2012).

According to the Independent National Electoral Commission (INEC, 2018), Sabon Tasha comprises linear and cluster settlements with a population of about 15,082 people. The dwellers of Sabon Tasha engage in formal and informal sector activities, but the majority are in the informal sector. The area is populated by different ethnic groups from the state and other tribes from neighbouring states, but those from southern Kaduna dominate the area. Sabon Tasha is served by a government secondary school in Sabon Tasha; government primary schools built and operated primarily by the local government; a primary health care facility, private schools operated by individuals, and private clinics that provide basic preventive and curative services to the people of the area (Communication with Chief of Sabon Tasha, 2020).

Economically, Sabon Tasha is a town with the majority of its populace in the informal economy in occupations such as manufacturing, trading, hair dressing, service delivery, transportation etc., and civil servants from the formal economy. The major markets in the area include the major Sabon Tasha Market, Kantin Aga market, Kasuwan Gulma in Ungwan Gimbiya, Ungwan Sunday Market, and Timber Shade. The railway station in the area is also of economic importance as it makes it easier for farmers and traders from neighbouring villages and towns to convey their agricultural products and other goods down to Sabon Tasha to sell (Kaduna State Ministry of Economic Planning (KADSMEP), 2004).

Procedure for Data Collection

A cross sectional research design was adopted for the study. It involved the selection of a sample to represent the target population of households and business sites in the study area. A hundred (100) respondents were selected through the simple random sampling technique out of the 15,082 (INEC, 2018) population that makes up Sabon Tasha.

A wide range of collected primary data required for the study included the demographic characteristics of respondents; the impact of COVID-19 on the informal sector; and various strategies that could be

applied to sustain the formal sector. The responses were sought for through a series of questions with a number of options provided for the respondents to tick the appropriately the ones that apply to them, but they were allowed to freely make comments. The sources of the other information for the study were: the Independent National Electoral Commission (INEC, 2018) for the population of the study area; Kaduna Geographic Information Service for the published map of Sabon Tasha; while relevant literature were obtained from textbooks, articles in academic journals and through internet searches.

A semi-structured questionnaire, which served as the main instrument, was constructed for the data collection exercise from the field. In order to test the validity of the instrument, a pilot study was conducted in the study area. This was done to detect ambiguous questions and difficult expressions and amend them before the real field exercise.

In determining the sample size of the study area, Yamane's (1964) formula was used. The formula is given as follows:

$$n = \frac{N}{1 + N(e)^2}$$

where:

n = sample size

N = population

1 = constant

(e)² = margin error

Note: This study allowed ten (10) per cent margin of error in calculating the optimal sample size (i.e. 0.1). Noting that the population size (N) in this case was 15,082, the estimated sample size was calculated as:

$$n = \frac{15082}{1 + 15082(0.1)^2}$$

$$n = \frac{15082}{15083(0.01)}$$

$$n = \frac{15082}{150.83}$$

$$n = 99.993$$

Approximate sample size then became:

$$n = 100$$

The total number of questionnaires administered was 100 for the purpose of this study. A hundred copies of the questionnaire were distributed to selected respondents from the study area using the simple random sampling technique; ninety-seven copies of the questionnaires were dully filled and returned for analysis.

The descriptive statistical technique in the form of frequency counts and percentages were used to analyse and present the demographic characteristics, nature of informal businesses in the area and coping strategies used in sustaining the informal sector. Arithmetic mean score using a 4-point Likert scale and a descriptive statistical technique were used to analyse and present the impact of COVID-19 on the informal sector. Inferential statistical technique in the form of one-way analysis of variance (ANOVA) was used to test the hypothesis in the study. Literature reviews were obtained from secondary sources, particularly textbooks, articles in learned journals, and internet searches.

Results of the Study

Demographic characteristics of respondents

The profile of the respondents are presented in Table 1. The results show that the majority (73.2%) of the respondents were male. Most (57.7%) of the respondents were married, followed by 36.1% who were single, and 6.2% who were widows. The results on educational qualification show that a large proportion of the respondents had at least secondary education – 39% attained tertiary level of education, 25% had secondary level of education; while the rest had either primary level of education (20%) or no formal education at all (16%).

Table 1: Demographic characteristics of respondents

Variable	Frequency	Percentage (%)
Sex		
Male	71	73.2
Female	26	26.8
Marital Status		
Single	35	36.1
Married	56	57.7
Widow	6	6.2
Educational Qualification		
No Formal Education	16	16
Primary	20	20
Secondary	25	25
Tertiary	39	39
Household Size		
1 – 3	25	25.8
4 – 6	52	53.6
7 – 9	14	14.4
10 and above	6	6.2
Nature of Informal Business in the Area		
Petty road trading	18	18.56
Barbing salon	11	11.34
Shop owner (provisions, appliances, and clothes)	14	14.43
Food vendor	4	4.12
Business centre	7	7.22
Tailoring	15	15.46
Mechanic workshop	6	6.19
Transporting services	3	3.09
Private school owner	17	17.53
Others	2	2.06
Years in Business		
< 5 years	29	29.9
6-10 years	56	57.7
11 years and above	12	12.4

Source: Field survey, 2020.

The most common household size among the respondents was 4–6 people (53.6%), followed by respondents with households of 1–3 people (25.8%), then those with households of 7–9 people (14.4%). The least common household size among the respondents was 10 people and above (6.2%).

The table shows that the highest number of the respondents were petty roadside traders (18.56%), followed by private schools owners (17.53%), tailors (15.46%), and shop owners selling provisions, appliances, and clothes (14.43%). Also 11.34% of the respondents were barbing salon owners, 7.22% of the respondents were business centre owners, 6.19% of the respondents were mechanic shop owners, and 4.12% of the respondents were food vendors. Furthermore, only a few respondents were into transporting services (3.09%), and other types of informal businesses (2.06%) in the area.

The majority of the respondents had been in business for 6–10 years (57.7%). Others had less than 5 years experience (29.9%), while a few (12.4%) had been in business for 11 years and above.

The results of the arithmetic mean analysis of the impact of COVID-19 on the informal sector and the descriptive analysis of coping strategies to sustain the informal sector in Sabon Tasha, Chikun LGA of Kaduna State are presented in Tables 2 and 3 respectively. The research instrument used was a 4-point Likert scale as follows: Strongly agree (SA) = 1, Agree (A) = 2, Disagree (D) = 3, Strongly disagree = 4. The decision rule states that the grand mean of 2.5 and above is agreed and below 2.5 is disagreed based on the 4-point Likert scale mean score.

Therefore, Table 2 with a total grand mean of 3.07 is agreed and this implies that COVID-19 has had great impact on the informal sector in the study area as business owners were trying to revive their businesses that had suffered from the hits and shock of the COVID-19 lockdown; the lockdown has caused hardship to most households by affecting their level of income and expenditure negatively.

Table 3 shows that a majority of the respondents admitted to the need for governments around the world to take necessary actions that would boost crumbling economies and bring relief to citizens and businesses that have been more affected by the COVID-19 pandemic.

Table 2: Arithmetic mean analysis of impact of COVID- 19 on the Informal Sector

SN	Variables	SA	A	D	SD	Mean score	Remark
1	Restrictions on movement during COVID 19 lockdown not only reduced the consumption of non-basic products in general, but also affected the ability of informal businesses to generate income, thus reducing their consumer spending.	42	31	16	8	3.1	Agreed
2	The restrictions on movement during COVID 19 have rendered many people informal businesses owners jobless, as all economic activities have slowed down.	56	27	9	5	3.4	Agreed
3	Small enterprises having difficulties adapting to virtual means of doing business during COVID 19 lockdown, battled some period of hardship as daily earning were lacking.	58	24	11	4	3.4	Agreed
4	People experience unemployment during COVID 19 period and some will be affected still, most especially those working with private sector such as private schools.	53	35	7	2	3.4	Agreed
5	Paying bills like house bills, food and children school will be almost impossible for some parent to cater for because of how COVID 19 pandemic hit their business.	67	21	5	4	3.6	Agreed
6	Movement restrictions together with lockdown measures have decreased trade (import, export, and inter-state trade) and caused business closures, leading to higher prices for goods and services in your area	59	21	13	4	3.4	Agreed
7	Loss of source of income and increased levels of food insecurity push poor households and individuals to resort to negative coping	50	39	6	2	3.4	Agreed

SNVariables	SA	A	D	SD	Mean score	Remark
strategies such as criminal activities.						
8 This pandemic causes loss of my prominent customers who patronize my goods due to hike in price of goods.	45	32	12	8	3.2	Agreed
9 I benefited from the Central Bank of Nigeria 50 billion Nigerian naira (130 million US dollars) credit facility geared towards households, and micro, small and medium-sized enterprises affected by the pandemic.	0	0	91	6	1.9	Disagreed
10 A conditional cash transfer of #20,000 Nigerian naira (52 US dollars) per month (for up to four months) to the most vulnerable households registered in National Social Register of Poor and Vulnerable Households get to people around you.	4	2	67	24	1.9	Disagreed
Total					30.7	
Grand mean					3.07	Agreed

Source: Field survey, 2020.

Note: Grand mean = 3.07

4-point Likert scales mean score is calculated as thus:

$$4\text{-point Likert mean scale score} = \frac{1+2+3+4}{4} = \frac{10}{4} = 2.5$$

Decision rule: stated that the grand mean of 2.5 and above is agreed and below 2.5 is disagreed based on the 4-point Likert scale mean score as shown in the calculation above.

Table 3: Descriptive Analysis of Coping Strategies to Sustain the Informal Sector

S/N	Variable	SA (%)	A (%)	D (%)	SD (%)	Total/F (%)
1	Governments around the world need take action to boost their crippling economies and bring some relief to citizens and businesses more affected by the pandemic.	84(86.6)	13(13.4)	0(0)	0(0)	97(100)
2	The Central Bank of Nigeria (CBN) need to provide more fiscal stimulus package that includes a credit facility just like the #50 billion naira (\$138.89 million) for households and small and medium-size The Central Bank of Nigeria (CBN) need to provide more fiscal stimulus package that includes a credit facility just like the #50 billion naira (\$138.89 million) for households and small and medium-sized businesses most affected by the pandemic.	92(94.8)	5(5.2)	0(0)	0(0)	97(100)
3	Implementing social protection programs to support employees, especially those in the informal sector need to be taking seriously.	23(24)	74(76)	0(0)	0(0)	97(100)
4	The federal government's #50 billion naira fiscal stimulus package can be effectively controlled through the use of social capital mechanisms. This is mainly due to the fact that a large percentage of people in the informal sector do not have a bank account or means of identification, so the use of the bank verification number (BVN) can considerably limit the access to many people in the package.	65(67.0)	24(24.7)	5(5.2)	3(3.1)	97(100)
5	The Federal Inland Revenue Service (FIRS) as well as the State Inland Revenue Service (SIRS) will have to waive personal and corporate income tax for people in the informal sector in the second and third quarters of 2020, as the shock has affected the income and profits of households and small businesses, as this will allow the sector to recover from the sharp drop in demand.	79(81.4)	18(18.6)	0(0)	0(0)	97(100)

Source: Field survey, 2020.

Table 3 also reveals that the majority of the respondents admitted that the strategy whereby the Central Bank of Nigeria (CBN) provides fiscal stimulus packages that include credit facilities, like the ₦50 billion naira (\$138.89 million) stimulus package for households and small and medium-sized businesses most affected by the pandemic. Most of the respondents also agreed such stimulus packages can be effectively controlled using social capital mechanisms. This is mainly because a large percentage of people in the informal sector do not have bank accounts or means of identification, so the use of the Bank Verification Number (BVN) considerably limits many from accessing the package.

Table 3 also shows that the majority of respondents admitted that the strategy that implements social protection programmes to support employees, especially those in the informal sector needs to be taken seriously.

Finally, the table shows that many of the respondents admitted to the suggestion that the Federal Inland Revenue Service (FIRS) and the State Inland Revenue Service (SIRS) should waive personal and corporate income taxes for people in the informal sector in the second and third quarters of 2020 because the shock of the COVID-19 lockdown has affected the income and profits of households and small businesses. This waiver will allow the sector to recover from the reduced income due to the sharp drop in demand for products and services from the informal sector.

Hypothesis

There is no significant impact of COVID-19 on the informal sector in Sabon Tasha, Chikun LGA, Kaduna, Nigeria.

Table 4: One way analysis of impact of COVID-19 on the informal sector

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	41.786	3	13.929	226.514	.000
Within Groups	5.719	93	.061		
Total	47.505	96			

Table 4 shows the computed F-value of 226.514 and a P-value of 0.000. Testing the hypothesis at an alpha level of 0.05, the p-value of 0.000 was less than the alpha level 0.05. Therefore, the null hypothesis was thereby rejected. This implies that there was a significant impact of COVID-19 on the informal sector in Sabon Tasha, Chikun LGA, Kaduna State, Nigeria, which affected respondents' income and expenditure levels.

Discussion of Findings

Findings from this study show that the majority of the respondents engaged in informal businesses were married, with the male gender forming the highest percentage with about 73.2% as shown in Table 1.

Many of the respondents in the study area were educated and had good knowledge of the COVID-19 pandemic and its effects, not only globally and nationally, but also on them as individuals. This is because most of the respondents (53.6%) had household sizes of 4-6 members, which means that their family responsibilities were made harder by the effect of the COVID-19 pandemic.

The results also show that most of the respondents (57.7%) have been managing their businesses for between 6-10 years (see Table 1).

This research indicates that the restriction on movement during the COVID-19 lockdown rendered many informal business owners jobless, because all economic activities either shut down completely or operated minimally. This finding is similar to that of Onyekwena & Ekeruche (2020) who found that the restriction on movement rendered many people jobless because many informal businesses slowed down.

Based on the result obtained from Table 1, the nature and types of informal businesses observed in the study area were petty roadside trading, barbing salons, shop (provisions, appliances, and clothes/wears), food vending, business service centres, tailoring, mechanic workshops, transportation services, private schools, and chemist shops among others. This finding is in consonance with that of Fapohunda (1991) who found that the informal sector is a heterogeneous mix that spans a wide range of economic activities.

The results in Table 2 reveal that the COVID-19 pandemic had great impact on the informal sector such that it resulted in unbearable hardship for households, most especially homes that had depended on these informal businesses for their income and expenditure needs.

The table also revealed that there was loss of sources of income and increased levels of food insecurity which pushed poor households and individuals to resort to negative coping strategies such as criminal activities. This finding agrees with that of ACAPS (2020) who found that poor households were engaged in negative survival coping strategies due to loss of sources of income resulting from the COVID-19 lockdown.

In addition, people experienced increased unemployment during the COVID-19 lockdown and some are still affected, most especially those working in the private sector, like private schools. This finding agrees with that of Onyekwena & Ekeruche (2020) who found that many people experienced unemployment, especially those whose livelihood were based on daily income.

From the one way analysis of the impact of COVID-19 on the informal sector, results show significant impact of COVID-19 on the informal sector in Sabon Tasha, Chikun LGA, Kaduna, Nigeria as shown in Table 4.

Conclusion and Recommendations

It can be concluded from the study that the COVID-19 pandemic has had a great impact on the informal sector resulting in unbearable hardship for households, most especially homes that were dependent on informal businesses for their source of income and expenditure. The study also concluded that the COVID-19 pandemic not only caused loss of sources of income to households depending on informal sector businesses, but also increased the level of food insecurity. Poor households and individuals had to resort to negative coping strategies, including criminal activities, to enable them survive hardship.

Finally, it was conclusively established from the study that people experienced loss of employment during the COVID-19 lockdown period because their employers could not pay salaries due to lack of income.

Some employees, especially those in the private sector, like private schools, were greatly affected.

From the findings of this research and the conclusions drawn therefrom, the following recommendations are made:

- Palliatives donated by individuals and NGOs should be made available and shared to households conscientiously and equitably to enable them reach the grassroots; this will help curtail hunger and starvation since households have been terribly hit by the COVID-19 pandemic.
- The Federal Inland Revenue Service (FIRS) as well as the State Inland Revenue Service (SIRS) should consider waiving personal and corporate income tax for people in the informal sector in the second and third quarters of 2020. This is because the shock of COVID-19 has affected the income and profits of households and small businesses; this would allow those in the sector to recover from the losses incurred due to the sharp drop in demand for their products and services.
- Government should provide long-term soft loans that informal business owners can access and pay back without much difficulty.

References

- Assessment Capacities Project (ACAPS). (2020). *Thematic report: COVID-19 in Nigeria*.
- Diop, S., & Asongu, S. A., (2020). *The COVID-19 Pandemic and the New Poor in Africa: The straw that broke the camel's back*. African Governance and Development Institute Working Paper, No. 20/038, Yaoundé.
- Ezeaku, H. C., & Asongu, S. A., (2020). *COVID-19 and Cacophony of Coughing: Did international commodity prices catch influenza?* African Governance and Development Institute Working Paper, No. 20/040, Yaoundé.
- Fapohunda, O. J. (1991). The urban informal sector of Lagos. *Centre for Management and Development Journal*, 11, 23-36.

- Fasanya, I. O. & Onakoya, A. B. O. (2012). Informal sector and employment generation in Nigeria: An error correction model. *Research on Humanities and Social Sciences*, 2(7), 48-55.
- Independent National Electoral Commission (INEC). (2018). *Sabon Tasha Population*. Kaduna, Nigeria: INEC.
- International Labour Organization (ILO). (2014). *Women and Men in the Informal Economy: A statistical picture*. Third Edition. Geneva: ILO.
- International Labour Organization (ILO). (1999). *Reducing the Decent Work Deficit: A Global Work Agenda to the Circumstances and Realities of the Region*, at the 89th Session of the International Labour Conference, Geneva.
- Kaduna State Ministry of Economic Planning (KADSMEP). Kaduna State Economic Empowerment and Development Strategy (KADSEEDS) (2004).
- KPMG. (2020). COVID-19: A business impact series-economic impact and pandemic planning. *KPMG COVID-19 Publication*, Issue 1, pp. 1-4.
- Ogunde, O. (2019). Nigeria's Informal Economy: A Catalyst for Economic Growth. Retrieved from <https://businessafricaonline.com/nigeria-3/> accessed on 24/04/2020.
- Onyekwena, C. & Ekeruche, M. A. (2020). Understanding the Impact of the COVID-19 Outbreak on the Nigerian Economy. Retrieved from <https://www.brookings.edu/blog/africa-in-focus/2020/04/08/understanding-the-impact-of-the-COVID-19-outbreak-on-the-nigerian-economy> accessed on 02/05/2020.
- Price, G. & van Holm, E. J. (2020). The Effect of Social Distancing On the Spread of Novel Coronavirus: Estimates From Linked State-Level Infection And American Time Use Survey Data. Urban Entrepreneurship and Policy Institute, University of New Orleans, New Orleans.
- UNDP. (2012). MGDs in Nigeria: Current progress. Retrieved April 6, 2013, from <http://www.ng.undp.org/mdgsngprogress.shtml>.
- World Bank (2020): Assessing the Economic Impact of COVID-19 and Policy Responses in Sub-Saharan Africa. Washington: The World Bank.

World Health Organisation (WHO) (2020). Corona Virus Disease (COVID-2019) Situation Reports. Retrieved from <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/situation-reports>, accessed on 22/06/2020.

Yamane, T. (1964). *Statistics, an Introduction Analysis*. Third Edition. New York: Harper and Row Publishing Limited.