Covid-19 Pandemic: The Economic Impact on Rural Dwellers in Nigeria

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ABSTRACT

The study aimed at finding out the economic impact of COVID-19 on rural dwellers; a case study of economists, rural farmers, traders, and transporters in Nigeria. The research design used for the study was an Expost-Facto. A sample of 35 respondents was selected using the stratified systematic sampling technique and interviewed over the phone through contacts made available by the Chairmen of various SMEs in Nigeria. A structured questionnaire tagged; "COVID 19 PANDEMIC ECONOMIC IMPACT AND RURAL DWELLERS QUESTIONNAIRE (CPEIRDQ). The research instrument was subject to face and content validation by experts in the field. The instrument was also tested for validity and reliability at 0.05 level of significance. Descriptive statistics was used to analyse the research question while simple regression analysis was used to analyse the research hypotheses. The result revealed that there is significant economic impact of covid-19 pandemic on rural dwellers in Nigeria. It also reveals that Covid-19 poses significant threat on health of rural dwellers. On this premise, one of the recommendations was that government, non-governmental and private individuals should invest in rural agricultural programmes, help people become more self-reliant, mitigate the impact of severe events, increase rural prosperity, ensure more sustainable food systems and food security, and create greater resilience in fragile areas of the state.

KEYWORDS: Covid-19, economy, agriculture, threats, human health, rural, food insecurity, unemployment, chronic infection,

Introduction

COVID-19 outbreak has taken a toll on human life and brought major economic disruption across the world. The Nigerian economy, since the 2016 economic recession, is still sluggishly grappling to recover from the fallout of global oil price crash and insufficient foreign exchange earnings to meet imports. (Lateef and Gabriel, 2018). Several sectors contribute to economic growth in Nigeria such as in production, which since 2019 has been primarily driven by services, particularly telecoms. Agricultural growth remains below potential due to continued insurgency in the Northeast and ongoing farmer-herdsmen conflicts. Industrial performance is mixed. Oil GDP growth is stable, while manufacturing production expectedly slowed down in

2019 due to a weaker power sector performance. Food and drink output increased significantly, likely in response to import restrictions. Construction continues to perform positively, supported by ongoing megaprojects, higher public investment in the first half of the year, and import restrictions. The series of growth experienced is too low to lift the bottom half of the population out of poverty. The weakness of the agriculture sector weakens prospects for the rural poor, while high food inflation adversely impacts the livelihoods of the urban poor. Despite expansion in some sectors, employment creation remains weak and insufficient to absorb the fast-growing labor force, resulting in high rate of unemployment (23% in 2018), with another 20% of the labor force underemployed. Furthermore, the instability in the North and the resulting displacement of people contribute to the high incidence of poverty in the North East (World Bank Report in Nigeria).

The emergence of COVID-19 and its increasing incidence in Nigeria has called for drastic review policy responses. Containment measures to slow the spread of the COVID-19 virus have slowed national trade by reducing international travel and disrupting global value chains (GVCs). Official quarantines have interrupted the free flow of people and goods, while precautionary behaviours (such as flight cancelations) by consumers and firms, and restrictions imposed by governments have reduced travel and tourism. Tighter border controls and production delays have also disrupted the tightly-linked system of economy. Factories around the country have slowed production due to shortages of intermediate inputs from China and elsewhere. Large parts of the services and entertainment sectors, an important contributor to the nation's economic growth, have been closed across the country. International and national efforts are being deployed to find ways to treat and immunize against COVID-19. In addition to national medical research developments, there is a strong will between G-7 countries to develop a COVID-19 vaccine. Some advanced economies are already testing with anti-retroviral drugs (typically used for the treatment of AIDS) and chloroquine phosphate (a drug for the treatment of malaria). Efforts are also being deployed to increase the production of personal protective equipment (such as masks and gowns), testing kits, ventilators, and other medical equipment. The WHO and countries are increasingly raising awareness on personal protection and prevention of spreading the virus in the population by providing correct information about COVID-19 (Africa's Pulse, 2020). COVID-19 crisis is also contributing to increased food insecurity as currencies are weakening and prices of staple foods are rising in many parts of the country. Given overwhelming dependency on oil receipts, negative economic growths of more than two months will plunge the economy into a recession. In addressing these daunting economic challenges, such considerations put up to revise the budget downward is inevitable.

Statement of Problem

The effect of the pandemic had been felt and seen in every aspect of the nation's economy. This is as a result of cessation of movement; closure of border and the stay at home order to curb the spread of the contagious virus. Meanwhile, as the efforts of federal government to contain the spread of the virus is ongoing, some 736 million people currently live in extreme poverty, which is a root cause of many global problems, from ill health to social unrest to migration. Meanwhile, hunger already devastates the lives of more than 820 million people, not only robbing them of a future but weakening their immunity and health – a more dangerous combination than ever in the present crisis. Food insecurity and poverty are most severe among rural marginalized groups, including women and youth. It is of paramount importance to consider how rural areas will be

affected as the rate of coronavirus (COVID-19) infection and death had been on the increase, owing to older population (75%) in the rural area, compared to elderly people in the urban area (25%). The economy of the rural dwellers is also of concern to the researcher because most of the food consumed in the urban area is produced by the rural dwellers.

Objectives of the Study

The aim of the study is to evaluate the economic impact of Covid-19 pandemic on rural dwellers in Nigeria. The objectives are:

- 1. To evaluate the economic impact of Covid-19 on the living standard of the rural dwellers in Nigeria.
- 2. To find out Covid-19 threat on the health of rural dwellers in Nigeria.
- 3. To examine strategies aimed at overcoming negative Covid-19 economic threat on the living standard of the rural dwellers in Nigeria.

Research questions

- 1. What is the economic impact of Covid-19 on the living standard of the rural dwellers in Nigeria?
- 2. What is the threat of Covid-19 on the health of rural dwellers in Nigeria?
- 3. What are the strategies aimed at overcoming negative Covid-19 economic threat on rural dwellers in Nigeria?

Research Hypothesis

1. There is no significant economic impact of Covid-19 on the living standard of the rural dwellers in Nigeria.

Concept of Covid-19 Pandemic

COVID-19 is an infectious disease caused by SARS-CoV-2, the most recently discovered coronavirus. The outbreak that began in Wuhan, China, in December 2019, has rapidly spread across the world, profoundly disrupting fundamental activities we all depend on, including agriculture and food systems – and endangering all those who depend on it as their livelihood. The coronavirus pandemic is a global emergency affecting all countries, requiring immediate and sustained international action. While mitigating the terrible human and economic toll worldwide is rightly uppermost in our minds, we are also gravely concerned about the underlying problems this emergency exposes, especially for those most at risk for severe consequences – older people, poor households, the undernourished, and those who live in remote rural areas without access to services or help. These problems heighten the risks of the current pandemic and must not be neglected.

COVID-19 is a supply shock, health shock and a demand shock. On the supply side, there is a discrete drop in employment that goes beyond the number of people infected by COVID-19. It also includes a decline in employment as a result of workplace closures and travel bans. Employment can also be reduced directly due to health measures aimed slowing the spread of the

virus —for example, school and daycare closures, and quarantines—as people stay away from work to take care of their children or tend sick relatives, or they have been in contact with or are family of infected people. On the demand side, consumer and firms will tend to defer spending when facing the Knightian uncertainty that is currently associated with the nature, strength and length of the COVID-19 crisis. In previous crises, households and entrepreneurs postponed purchases and delayed investments. Additionally, access to good and services will be reduced as stores are shut down (or service hours are cut) and some home delivery services are suspended.

The Rural Nigerian Dwellers

Nigerian society is largely made up of rural communities. Rural population is about 72.7 million of 140 million, equivalent to 52.7 per cent and is increasing by an average of 1.2 per cent each year (2006 population census). Land and natural resources are important productive factors in the rural economy and livelihoods in Nigeria. Agriculture account for 45 per cent of Nigeria's Gross Domestic Product (GDP) and it is the main base of rural livelihood. About 44% of male farmers and 72% of female farmers respectively grow less than one hectares of farmland per household. More than half of all farmers cultivate food crops on small scale level and produce 90% of the country's food (IFAD 2009). According to Okafor and Onokerharaye cited in Onwuemele and Khuase (2011) Nigeria's rural economy system comprises of five major components, which includes; human resources, agricultural activities, non-agricultural activities, primary production and natural resources.

More than 80 percent of the rural labour force is engaged in subsistence farming at smallholder level (Edo and Ikelegbe 2014). Accordingly, crop and livestock production are usually fused together as rural agricultural activities and there are variation in agricultural production, the Northern region of Nigeria majorly produces more of cotton, rice, beans, groundnut, horticulture and livestock while the Southern region majorly produce more of palm product, cassava, rubber, cocoa and fishing product (Etemike and Efanodor, 2015). Most food crop is produced for consumption, while cash crops are exported. Agriculture as a large sector of the rural economy contributes about 50 percent to Nigeria's Gross Domestic Product (GDP) and account for large portion of income of farmers in relation to other sources of income in the rural communities (Edo and Ikelegbe 2014: 20).

Although farming is the dominant economic activity among rural communities from pre-colonial to post-colonial among rural communities in Nigeria, majority of the rural population are also engaged in variety of non-farm activities which serve as alternative source of livelihood. Non-farm activities in the rural economy has been defined by Edo and Ikelegbe (2014: 28) as activities other than those performed on the farm or related to farming which includes agro processing, handicraft, commerce, construction, transportation and services. Agro business ventures engage in the processing of agricultural products into semi-finished or finished product such as groundnut oil, palm oil and kernel, cassava product, dried fish etc. Rural household engaged in agro processing venture depend on the use of traditional method of food processing. Rural household also engage in petty trading, working in micro agro business outfits, and on construction sites amongst others. The rural economy is characterised with traditional system of farming using traditional farm input for subsistence farming, limited access to information,

limited access to credit facilities as most credit institution are mostly urban-based, land tenure is based on communal system and poor access to market (Edo and Ikelegbe 2014). Local agri-food supply chains are already experiencing disruptions, including reduced access to inputs and services, labor movements, transport and roadblocks, and credit or liquidity due to Covid-19.

Economic Impact of Covid-19 on Nigeria's rural dwellers

Given Nigeria's high level of poverty, lockdowns without social protection plans could lead to severe consequences, including starvation and the depletion of coping mechanisms, particularly among the rural population (ACSS, 2020). Previous studies have shown that rural population composition is about 50% of elderly persons, 15% of younger persons and 35% of children. The older populations of the rural area therefore have higher rates of several chronic health conditions, and the area has a less robust health care infrastructure to deal with coronavirus cases, hence the rural dwellers are at high risk of covid-19 infection. According to a recent CDC report, thus far, 31% of COVID-19 cases, 45% of hospitalizations, 53% of intensive care admissions, and 80% of deaths have been among adults aged 65 and older, with the highest percentage of severe outcomes among those 85 years and older which are predominantly found in the rural areas.

In addition to its implications for mortality rates, the COVID-19 pandemic is a global crisis which is already affecting the agricultural sector. Farming households in Nigeria are apparently in a state of overwhelming fears concerning their mainstay with the recent clampdown as a result of the new Coronavirus pandemic. This global crisis is envisaged to have more tangible effects on crop production in widespread States and Nigeria at large. The country risks a looming food crisis unless measures are taken to protect the most vulnerable ruralites, keep food supply chains alive and mitigate the pandemic's effects across the food system. Thus, the ability of rural farmers to increase food production is pertinent in this pandemic and beyond. Greater testing with targeted quarantine policies can mitigate the economic impact of COVID-19 and reduce peak symptomatic infections—which is important to relieve hospital capacity constraints (Berger et al. 2020)

Strategies to Overcome Negative Covid-19 Economic Threat

Targeting vulnerable populations: Innovations should be implemented to support those households most vulnerable to restrictions on mobility and the economic hardships COVID-19 restriction creates. Helping them meet basic livelihood needs such as access to food can reduce the threat of spread in Africa's many sprawling urban informal settlements where COVID-19 could spread like wildfire due to massive congestion, poor hygiene, and pre-existing health conditions (ACSS, 2020). Also, according to Ajibola (2020), the government, non-government and private sector actors should invest in food storage warehouses at the rural areas and possibly create improvised food market channels for the rural populace to purchase essential food items at regular prices. Likewise, existing and new social assistant programmes (cash or in-kind) by relevant agencies to the vulnerable and marginalized rural households should be adjusted to impact the current crisis.

Combating Misinformation: As COVID-19 continues to spread around the world, so too have rumors, misinformation, and fake news about the pandemic. Videos, voice messages, texts, and stories have swirled around conflicting information, from unproven cures to bizarre claims that

Africans are somehow immune from COVID-19, despite an abundance of contrary evidence. Facebook is also working with Nigerian media agencies to combat misinformation on social media. The Nigerian Presidential COVID-19 Task Force has also established a 24-hour hotline providing up-to-date information to inform and protect the public from misinformation and rumors. Many presidents and senior health leaders are also using their daily briefings to dispel rumors and misinformation about COVID-19. This action should be encouraged to reduce fear on the minds of the rural dwellers.

Opening of land borders (strictly for trade): Premised on the plan to curb rice smuggling and to support profitability of local production, the Nigerian land borders have been closed since October 2019, preventing imports from neighbouring countries (such as Niger Republic, Benin Republic, Chad and Cameroon). While the borders remain closed, ironically, the neighbouring countries are arguably substantial recipients of Nigeria's non-oil exports. The border closure particularly lays to ridicule the African Continental Free Trade Agreement (ACFTA) the Country recently signed (even though un-ratified by the National Assembly). The border closure continues to increase inflation in Nigeria. Last month's (February's) food inflation was 14.9 percent, up by 0.05 percent from 14.85 percent recorded in January 2020. This has also affected cross-borders businesses, with many turning losses and closing shops, lengthening unemployment rate. With the fall in oil prices and impending budget cut, the resultant outpour is inflation; which will cause a rapid loss of purchasing strength of Nigerians, and accelerate the economy towards another recession (Temple, 2020). A border re-opening will revive legitimate cross-border businesses, which will by its shed reduce the unemployment spike. Food inflation will flutter down as more agriculture goods flood the Nigerian market. This reduces the strain on expendable income of Nigerians who already spend almost 60 percent of income on food. A competitive agriculture market and higher expendable income of Nigerians are mild fodders to withstanding any impending economic downturn.

Method

The survey design used for this study was Expost-Facto. The research area for this study was rural areas in Nigeria. The population of this study comprised economists, farmers, traders, and transporters. A stratified systematic sampling technique was used to select 35 respondents for the study. The main instrument used in this study was an interview schedule titled "COVID 19 *IMPACT* ANDRURAL**DWELLERS PANDEMIC ECONOMIC QUESTIONNAIRE** (CPEIRDQ)". The reason for using the interview schedule was because of restricted movement in the state and the respondents were called and interviewed over the phone. The contacts of the respondents were made available by the various trade unions of small scale and medium enterprises. The instrument for the study passed through face and content validation by the experts. Cronbach Alpha technique was used to determine the level of reliability of the instrument. In the trial test, a total of 8 respondents who did not form part of the main study were randomly selected and the interviewed. The reliability coefficient obtained was 0.78 and was high enough to justify the use of the research instrument. The data generated for this study was subjected to appropriate statistical techniques such as descriptive analysis for research question and simple regression for hypotheses. The test for significance was done at 0.05 alpha levels.

Results and Discussion

Research Question 1

The research question sought to find out the economic impact of Covid-19 on the living standard of the rural dwellers in Nigeria. To answer the research percentage analysis was performed on the data, (see table 1).

Table 1: Percentage analysis of the economic impact of Covid-19 on the living standard of the rural dwellers in Nigeria.

EXTENTS	RURAL	PERCENTAGE	
VERY HIGH EXTENT	23	65.71**	
HIGH EXTENT	12	34.29*	
TOTAL	35	100%	

^{**} The highest percentage frequency

SOURCE: Field survey

The above table 1 presents the percentage analysis of the economic impact of Covid-19 on the living standard of the rural dwellers in Nigeria. From the result of the data analysis, it was observed that the highest percentage 23(65.71%) of the respondents affirmed that the economic impact of Covid-19 on the living standard of the rural dwellers in Nigeria is very high extent. While this was followed by 12(34.29%) percentage of the respondents who affirmed that the economic impact of Covid-19 on the living standard of the rural dwellers in Nigeria is high extent.

Research Question 2

The research question sought to find out the threat of Covid-19 on the health of rural dwellers in Nigeria. To answer the research percentage analysis was performed on the data,(see table 2)

Table 2: Percentage analysis of the threat of Covid-19 on the health of rural dwellers in Nigeria.

EXTENTS	RURAL	PERCENTAGE	
VERY HIGH EXTENT	6	17.14*	
HIGH EXTENT	7	20	
LOW EXTENT	10	28.57	
VERY LOW EXTENT	12	34.29**	
TOTAL	35	100%	

^{**} The highest percentage frequency

SOURCE: Field survey

The above table 2 presents the percentage analysis of threat of Covid-19 on the health of rural dwellers in Nigeria. From the result of the data analysis, it was observed that the highest percentage (34.29%) of the respondents affirmed that the threat of Covid-19 on the health of

^{*} The least percentage frequency

^{*} The least percentage frequency

rural dwellers in Nigeria is very low extent. This was seconded by those who affirmed that the extent is low extent (28.57%). The third group of the respondents (20%) affirmed that the extent is high extent while the least percentage (17.14%) of the respondents stated that the threat of Covid-19 on the health of rural dwellers in Nigeria is very high extent.

Research Question 3

The research question sought to find out the strategies aimed at overcoming negative Covid-19 economic threat on rural dwellers in Nigeria. To answer the research percentage analysis was performed on the data, (see table 3).

Table 3: Percentage analysis of the strategies aimed at overcoming negative Covid-19 economic threat on rural dwellers in Nigeria.

EXTENTS	RURAL	PERCENTAGE
Targeting vulnerable populations for support	14	40**
Combating Misinformation	2	5.71*
Opening of land borders	8	22.86
Provision Palliative for other groups of people	11	31.43
TOTAL	35	100%

^{**} The highest percentage frequency

SOURCE: Field survey

The above table 3 presents the percentage analysis of the strategies aimed at overcoming negative Covid-19 economic threat on rural dwellers in Nigeria. From the result of the data analysis, it was observed that "targeting vulnerable populations for support" 14(40%) rate the highest percentage of the strategies aimed at overcoming negative Covid-19 economic threat on rural dwellers in Nigeria. This was seconded by "provision palliative for other groups of people" 11(31.43%). This was followed by "opening of land borders" 4(11.43%) while "combating misinformation" 2 (5.71%) rate the least percentage of the strategies aimed at overcoming negative Covid-19 economic threat on rural dwellers in Nigeria.

Hypothesis

The null hypothesis states that there is no significant economic impact of Covid-19 on the living standard of the rural dwellers in Nigeria. In order to test the hypothesis simple regression was used to analyse the data, (see table 4).

Table 5: Simple regression of the economic impact of Covid-19 on the living standard of the rural dwellers in Nigeria.

Model	R	R Square	Adjusted R Square	Std. error of the Estimate	R Square Change
1	0.97a	0.95	0.95	0.51	0.95

^{*}Significant at 0.05 level; df = 33; N = 35; critical r-value = 0.361

^{*} The least percentage frequency

The table 4 shows that the calculated R-value 0.97 was greater than the critical R-value of 0.361 at 0.5 alpha level with 33 degree of freedom. The R-square value of 0.95 predicts 95% of the economic impact of Covid-19 on the living standard of the rural dwellers in Nigeria.

This rate is strongly positive and therefore means that there is significant economic impact of Covid-19 on the living standard of the rural dwellers in Nigeria.

It was also deemed necessary to find out the extent of the variance of each class of independent variable as responded by each respondent (see table 6).

Table 6: Analysis of variance of the economic impact of Covid-19 on the living standard of the rural dwellers in Nigeria.

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	151.60	1	151.604	604.08	.000b
Residual	8.28	33	0.251		
Total	159.89	34			

a. Dependent Variable: Living Standard

b. Predictors: (Constant), COVID-19 Economic Impact

The above table presents the calculated F-value as (604.08) and the critical f-value as (000^b) . Being that the critical f-value (000^b) is below the probability level of 0.05, the result therefore means that there is significant impact exerted by the independent variables (COVID-19 economic impact) on the dependent variable which is living standard.

Discussion of the Findings

The result of the data analysis in table 5 and 6 was significant due to the fact that the calculated R-value 0.97 was greater than the critical R-value of 0.361 at 0.05 level with 33 degree of freedom. The result implies that there is significant economic impact of Covid-19 on the living standard of the rural dwellers in Nigeria. The result therefore is in agreement with the research findings of Berger et al. (2020), who asserted that greater testing with targeted quarantine policies can mitigate the economic impact of COVID-19 and reduce peak symptomatic infections—which is important to relieve hospital capacity constraints. The significance of the result caused the null hypotheses to be rejected while the alternative was accepted.

Conclusion

The study examined the economic impact of covid-19 infection on rural dwellers in Nigeria. The study showed that rural dwellers make a significant portion of a country and state as they supply labour, agricultural products, forest resources, water resources, craft etc and also provide a safe haven for retirees; free from the noise, hustle, bustle and pollution found in cities. The study also shows that the economic impact of the pandemic is of great concern because if the infection gets to the rural areas, the spread will aggravate and mortality increased. The findings of the study

revealed that there is significant economic impact of covid-19 pandemic on rural dwellers in Nigeria. It also reveals that Covid-19 poses significant threat on health of rural dwellers.

Recommendation

- 1. It is recommended that the borders be re-opened strictly for trade (essentially- processed agricultural produce, with attendant incorporation of social distancing guidelines given the pandemic) while the Nigeria's Customs tightens its enforcements mechanism to curb smuggling, and the Federal government creates enabling infrastructure for local producers.
- 2. Government, non-governmental and private individuals should invest in rural agricultural programmes which can help people become more self-reliant, mitigate the impact of severe events, increase rural prosperity, ensure more sustainable food systems and food security, and create greater resilience in fragile states.
- 3. The rural dwellers through village heads, town criers as well as specific means of information dissemination peculiar to each community, should be enlightened on the preventive measures of the global pandemic.

REFERENCES

- ACSS–African Centre for Strategic Studies (2020) *African Adaptations to the COVID-19 Response*.https://africacenter.org/spotlight/african-adaptations-to-the-covid-19-response
- Africa's Pulse (2020) An Analysis of Issues Shaping Africa's Economic Future. Volume 21
- Ajibola, B. (2020). *COVID-19 Pandemic* Post-Effect on Rural Dwellers and Crop production in Nigeria. http://www.linkedin.com/in/ajibola-bidemi-olayemi-
- Berger, D., Herkenhoff, K., and Mongey, S. (2020). An SEIR Infectious Disease Model with Testing and Conditional. Duke University, manuscript.
- Edo J.and Ikelegbe O. (2014) *Quantitative Analysis of Rural Poverty in Nigeria*. International Food Policy Research Institute. Brief No 17 Retrieved from www.ifpri.org/sites/default/files/publication.pdf on 06/04/2015
- Etemike, L. and Efanodor, O. (2015) Contemporary Globalisation and the Rural Economy in Nigeria. *American International Journal of Social Science:* 4(3)
- IFAD (2009). Federal Republic of Nigeria Country Programme Evaluation. Retrieved from www.ifad.org/evaluation/public-htm/eit/do/country/nigeria.pdf 3/9/12.
- Lateef O. A. and Gabriel S. C. (2018). *The Implication of Covid-19 pandemic on the Nigerian Economy*: CSEA Centre for Study of the Economies of Africa: Nigeria Economic Update. Issue 29
- Onwuemele E. and Kkuase W. (2011) Forum on Global Land Grabbing; How not to Think Land Grabbing Three Critique of Large Scale Investment in Farmland. *Journal of Peasant Studies*. 38(2): 249-279.
- Temple E., (2020). *Covid-19*: Impact on Nigeria's economy. Opinion Article on Business Day. Retrieved from: https://businessday.ng/opinion/article/covid-19-impact-on-nigerias-economy/.