Agro-Science Journal of Tropical Agriculture, Food, Environment and Extension
Volume 22 Number 3 (July 2023) pp. 9 - 16
ISSN 1119-745

PERCEIVED EFFECTS OF COVID-19 LOCKDOWN ON TAKE-OFF OF FARMING ACTIVITIES IN ENUGU STATE, NIGERIA

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ABSTRACT

The outbreak of COVID-19 and the government policy measures like travel restrictions, lockdowns, and bans on economic and social activities, designed to stop the spread of coronavirus affected the take-off of farming activities in Nigeria. However, few studies have examined the effect of the COVID-19 epidemic on local agricultural production, with a focus on agricultural households. Using cross-sectional data collected from 74 farmers in Enugu State, Nigeria, the study examined the perceived effects of COVID-19 on the take-off of farming activities. Specifically, the paper elicits farmers' perceptions and level of awareness of COVID-19, described the effects of COVID-19 on farming activities and the usage of labour and other inputs, identified interventions and support received by the farmers during the lockdown period. The data collected were analysed using descriptive statistics. Results show that many of the farmers perceived cough as a symptom of COVID-19 and that they could contact it while carrying out their farm work. The level of awareness of COVID-19 was high (96%) and a majority (77%) got information on COVID-19 from radio only. About 51% perceived that COVID-19 affected their farming activities through post-harvest loss. The farmers rarely (8.11%) received any intervention or support from the government during the COVID-19 period. It can be concluded that COVID 19 pandemic had significant effects on the take-off of farming activities by farmers and little was done by government to support the farmers. The study recommends that during any lockdown, government and other development partners like non-governmental organisations (NGOs) should provide input support and short-term credit to farmer to enable them carry out their farming activities.

Key words: lockdown, McNemar test, Nigeria, resource use, pandemic

INTRODUCTION

According to the Nigeria Centre for Disease Control (NCDC), the first verified case of COVID-19 in Nigeria was reported on February 27, 2020. The 36 states of the federation had a total of 207,709 confirmed cases as of October 11th, 2020 (Nigeria Center for Disease Control, NCDC, 2021). The Federal Government of Nigeria (FGN) put forward a few policies to slow the pandemic's spread. The Nigerian Government, at the Federal and State levels enforced a five-week lockdown on March 30, 2020, in phases, affecting all 36 states, including the Federal Capital Territory, Abuja (FGN, 2020). Additional stringent regulations were put in place by the government, including a curfew, a ban on the interstate and international travel, the closure of domestic and foreign airports, land borders, and schools, the suspension of all public gatherings like weddings, funerals, and parties, and restrictions on the operation of food market outlets and outdoor markets (Enete and Onyenekwe, 2021). The lockdown stretched until August 7th, 2020. These actions had an influence on food systems, curtailed economic activity, and restricted labour and population movement. The regulations also slowed down global and domestic logistics and transportation networks.

The epidemic was predicted to have a severe impact on the economy globally and notably in sub-Saharan Africa (SSA). This is because of the weak support system and the slow-paced economic development (Enete and Onyenekwe, 2021). In 2020, the Economic Commission for Africa (ECA) forecasted that the SSA would see a 2.6% economic contraction while the global economy would decline by 3% (Economic Commission for Africa, ECA, 2020; International Monetary Fund, IMF, 2020). This prediction was confirmed by Kakaei *et al.* (2022) who reported that economies went into recession as a result of the pandemic. Farmers in Africa are already battling the negative impact of extreme climatic occurrences including droughts and flood events, desert locust plague in East Africa (World Economic Forum, 2020; Food and Agriculture Organization, FAO, 2021a), regional insecurity and conflict which threatens agricultural livelihoods and worsens food insecurity status (Phillipson *et al.,* 2020). The COVID-19 pandemic has introduced a new risk that will make the already precarious situation much more severe. Farmers in Nigeria face dangers during each farming season, including limited rainfall, volatile prices, mounting indebtedness, and inadequate government programmes

Please cite as: Amaechina E.C., Onyenekwe C.S. and Chukwuone N.A. (2023). Perceived effects of COVID-19 lockdown on take-off of farming activities in Enugu State, Nigeria. *Agro-Science*, **22 (3)**, 9-16. DOI: https://dx.doi.org/10.4314/as.v22i3.2

(Esiobu, 2020). However, the current COVID-19 pandemic concerns are posing new difficulties for agricultural livelihoods, which are already in grave danger. This can worsen the food insecurity that is currently being experienced globally. According to Food and Agriculture Organization, FAO (2021b), because of pre-existing shocks, an estimated 113 million worldwide were already living in chronic food insecurity even before the COVID-19 emerged.

Farmers must choose strategies to combat the pandemic's detrimental effects on their production in order to overcome this new threat (COVID-19). There are, however, few studies that have addressed the impact of the COVID-19 epidemic on local agricultural production, with a focus on agricultural households (Obayelu *et al.,* 2021). Most studies in this field have addressed how the epidemic has affected various national and global economic indices, including global poverty, government spending, GDP growth, and budget deficits (Andam *et al.,* 2020; Nicola *et al.,* 2020; Sumner *et al.,* 2020). In Nigeria, studies on effects of COVID-19 on agriculture focused on food loss, food security, and dietary intake based mainly on rapid data collection from respondents (Ilesanmi *et al.,* 2021; Obayelu *et al.,* 2021). To the best of our knowledge none of the studies on COVID-19 examined the farmers' perceived effects of COVID-19 to the take-off of farm activities. Because of this knowledge gap, it is extremely difficult, if not impossible, for the government or other interested parties to know what measures should be taken to support farmers to lessen the impact of the COVID-19 or other pandemic on agricultural production. Understanding these effects will aid in developing resilient and sustainable agri-food systems and in preparing for future cropping seasons. The purpose of this study was to systematically address this issue by assessing the perceived effects of COVID-19 on agricultural production at the local level. The study's specific objectives are to: ascertain farmers' perceptions of COVID-19 and their level of awareness of it; describe how COVID-19 affects farming activities and the use of labour and other inputs; and identify interventions and support received by the farmers during the lockdown.

Theoretical Framework

Livelihoods consist of people's capabilities, assets at their disposal and activities they engage in to make a living (Chambers and Conway, 1992). A hazard such as the COVID-19, can cause livelihoods to be disrupted, thus making people vulnerable. Vulnerability, which is capacity to be affected by some forms of hazard, has been shown to be a function of exposure, sensitivity and adaptive capacity (IPCC 2001; McCarthy *et al.,* 2001). In the case under consideration, the first component, exposure comprise the risks, shocks and stress which includes the health implications, and the cessation of activities due to the lockdown which was experienced. Sensitivity refers to the extent to which a system is affected by perturbations or stressors (Adger, 2006). In this study, usage or non-usage of farm resources during the COVID year was envisaged as a sensitivity issue for farming households. Adaptive capacity is the ability of a system to adjust to accommodate or cope with stress (Turner *et al.,* 2003; Füssel and Klein, 2006). This is a prerequisite for adaptation to occur and it involves the ability to harness a set of available assets to cope with stress. Assets are a set of livelihood resources that individuals harness to build their livelihood adaptation strategies (Scoones, 1998). Adaptive capacity is similar to the concept of resilience (Nelson *et al.,* 2007).

In other words, vulnerability of the household is a function of their exposure to stressors in terms of magnitude, frequency and duration, their sensitivity to the stress which is dependent on the human and environmental condition; and their adaptive capacity (capacity to cope with the stress) which is a function of the assets at the disposal of the households. This study also draws on the sustainable livelihood framework to explain the effects of the COVID 19 pandemic on agricultural livelihood.

MATERIALS AND METHODS

The study was carried out in Enugu State, Nigeria. According to the Enugu State Agricultural Development Programme, ENADEP (2009), Enugu State is situated between latitudes 5°56'N and 7°6'N and longitudes 6°53'E and 7°55'E of the Greenwich meridian. The State has a population of 4,284,000 and a land area of about 8,022.95km^2 (Worldometer, 2021). The State is divided into six agricultural zones, namely Nsukka, Enugu Ezike, Enugu, Agbani, Awgu, and Udi zones. The State is made up of 17 local government areas (LGAs).

Eighty respondents were selected for the study using a multi-stage sampling procedure. Nsukka and Enugu Ezike were the two agricultural zones (out of a total of six) that were randomly chosen for the first stage. From the Nsukka agricultural zone, 2 LGAs (Nsukka and Uzo-Uwani) and from Enugu Ezike agricultural zone, 1 LGA were randomly chosen for the second stage. From the Nsukka, Uzo-Uwani, and Igbo-Eze LGAs, proportionate random sampling was used to select 3, 3, and 2 communities, respectively, for the third stage. In the final stage 10 farmers were selected from the 8 communities giving a total 80 respondents for the study. However, six observations were dropped after data cleaning due to inconsistencies and missing variables. Also, focus group discussion was conducted in two of the LGAs.

The United Nations (2005) sample size formula (see equation 1) was used to determine the number of farmers selected for the study:

$$N = \frac{[(z^2)(r)(1-r)(f)(k)]}{[(p)(n)(e^2)]} \qquad (1);$$

where N is sample size, Z is confidence interval (95% level is 1.96), r is estimate of key indicators being measured (default value is 0.5), f is sample design effect (has a default value of 2), k is multiplier accounting for non-response (1.1), p is proportion of the total population accounted for by the target population (0.4), n is mean of household size (5), and e is precision level (10% precision level equals 0.01r)

Primary data were collected using questionnaire between July and August, 2021. The data collected included the socio-economics characteristics of the farmers, their awareness of COVID-19 and sources of information. Information was also collected on their knowledge, attitudes, and perceptions of COVID-19, as well as how COVID-19 affected their farming activities. Data collected were analyzed using descriptive statistics like frequencies and percentages. The McNemar test was used to determine differences in farm resources use prior to the outbreak of COVID 19 and in 2020 when the pandemic broke out. The McNemar test is a statistical test used for comparing paired proportions (Caronni and Sciume, 2016; Kavzoglu, 2017), and has been applied in many studies (e.g., Olson, 2005; Hartfield *et al.,* 2013; Luo *et al.,* 2014; McGuirt *et al.,* 2018). Paired categorical levels (Yes/No) for use of the resources in 2019 versus use of the resources in 2020 were analyzed using the equation:

$$x^2 = \frac{(|b-c|-1)^2}{b+c} \qquad (2);$$

The null hypothesis is that there is no statistical difference in the use of the various farm resources prior to 2019 and 2020 COVID-19 years. The result is summarized in a two-way table, where 'yes' and 'no' indicate the use of, or non-use of the resource respectively. A tally of the result is recorded in a two-way table where a is the number of pairs with a "yes-yes" sequence; b is the number of pairs with a "yes-no" sequence, c is the number of pairs with "No-Yes" sequence and d is the number with "no-no sequence". This is shown in Table 2. The b and c are called the discordant pairs and are the values of interest in running a McNemar test.

Table 1: List of sampled agricultural zones, LGAs and communities

Agricultural zone	LGAs	Farming communities
Nsukka	Nsukka	Eziani, Edem, Lejja
	Uzo-Uwani	Opanda, Ogurugu, Adani
Enugu-Ezike	Igbo-Eze	Umuida, Umachi

Source: Author's computation

Table 2: McNemar test to determine differences in resource use before and after COVID-19

		2020		
		Yes	No	Total
	Yes	a	b	a + b
2019	No	c	d	c + d
	Total	a + c	b + d	n

RESULTS AND DISCUSSION

Socio-economic Characteristics of Farmers

Table 3 shows the socio-economic characteristics of the farmers. The results show that about 44.4% of the farmers were 40 years and below. The mean age of the farmers was 43 years. This means that these farmers are still young and energetic and can still engage in farming for a long time. For sex of the respondents, 37.84% were female. Majority, (86.49%) were married and had predominant family size of 6-10 individuals. The average household size was 7. Those that did not have opportunity for schooling were 17.81% while 47.94% had some secondary education and beyond. The mean years of education was 8 years. This shows that they may be predisposed to use innovations in their farms as human capital development through education is viewed to enhance skill acquisition and labour specialization which boosts labour productivity and technological advancement (Huffman, 2001).

The major occupation of the respondents was farming as indicated by 87.84% of the respondents. Farm enterprises owned by the farmers were mainly crop enterprise (70.27%). The respondents used family labour (68.92%) and hired labour (90.54%) for their farm work. Amongst the respondents, 81.08% produced for household consumption and for sale. This bolsters the argument made by Liverpool-Tasie *et al.* (2021) that it is erroneous to believe that few African farmers participate in crop markets because there is little marketable excess.

Perceptions of Symptoms and Risk of Contracting COVID-19

The results of the perception of the respondents of COVID-19 were presented in Table 4. The results show that the major symptom the farmers could identify was cough (50%) followed by fever (27.03%). This agrees with findings by Nwagbara *et al.* (2021) which states that fever and cough were among the major symptoms identified as COVID-19 symptoms in sub-Saharan-Africa. In terms of their perception of risk of contracting the virus, 55.41% of the farmers felt that they may contract the virus, while carrying out their farm activities.

Awareness and Sources of COVID-19 Information

The role knowledge plays in containing disease is important. As stated by Nwonwu *et al.* (2020), awareness and good perception are good predictors of adoption of preventive measures to disease infection. Access to information is important for acquisition of knowledge. The farmers access to information and the sources from which they obtained information was ascertained and presented in Table 5. The results show that 95.95% have heard of COVID-19. Majority (77%) obtained their knowledge from radio only, while other sources they got their information from was through friends and television (68.91), while for a few (13.51%) it was when they visited banks that they got information about the virus.

Table 3: Socio-economic characteristics of farmers

Characteristics	Frequency	Percentage	Mean	Standard deviation
Age				
20-30	14	19.44		
31-40	18	25.00		
41-50	23	31.94	42.97	12.06
51-60	11	15.28		
61-70	5	6.94		
71-80	1	1.39		
Total	72	100		
Sex				
Male	46	62.16		
Female	28	37. 84		
Total	74	100		
Marital status				
Married	64	86.49		
Single	7	9.46		
Widowed	3	4.05		
Divorced	-	-		
Total	74	100		
Household size				
1-5	27	36.49		
6-10	40	54.05	6.60	3.28
11-15	7	9.46		
Total	74	100		
Years of education				
None	13	17.81		
1-6	25	34.25	7.90	5.77
7-12	27	36.99		
13 and above	8	10.95		
Total	73	100		
Major occupation				
Farming	65	87.84		
Trading	4	5.41		
Civil service	5	6.76		
Total	74			
Farm enterprises				
Crop farm	52	70.27		
Animal farm	-	-		
Fishery	-	-		
Crop and fishery	22	29.73		
Animal and fishery	-	-		
Total	74	100		
Source of labour*				
Family	51	68.92		
Hire	67	90.54		
Type of production				
For sale and household consumption	60	81.08		
For consumption only	14	18.92		
Total	74	100		

Note: *multiple responses indicated. Source: Field Survey, 2021

Table 4: Perceptions of symptoms and risk of contracting COVID-19

COVID Symptoms and risk perception	Frequency	Percentage
Fever*	20	27.03
Cough*	37	50.00
Aches and pain*	9	12.16
Sore throat*	12	16.22
Diarrhea*	10	13.51
Conjunctivitis*	1	1.35
Headaches*	3	4.05
Loss of taste*	4	5.41
Rash on skin*	5	6.76
Difficulty breathing*	7	9.46
Chest pain*	2	2.70
Loss of speech*	2	2.70
Perception of risk	41	55.41

Note: *Multiple responses were recorded. Number of respondents is 74. Source**:** Field Survey, 2021

Table 5: Awareness and sources of information on COVID-19

Attribute	Frequency	Percentage
Ever heard of COVID	71	95.95
Source of information on COVID-19*		
Radio	57	77.02
Telephone	21	28.37
Television	22	29.72
Friends	29	39.19
Church	20	27.03
Bank	10	13.51

Note: *Multiple responses were recorded. Number of respondents is 74. Source**:** Field Survey, 2021

Perceived COVID-19 Effects on Farming Activities

The farmers' perceptions of the effect of COVID-19 on farming are presented in Table 6. The results show that 50.68% perceived that COVID-19 affected their farming activities. The key aspects that COVID 19 affected in their farming processes and activities were that it led to post harvest loss (49.32%), poor market access (38.36%), labour availability (35.62%), and high cost of farm input (35.62%). The respondents normal timing for purchase of farm inputs were also ascertained and presented in Table 7. The results show that majority (53.52%) of the farmers purchased farm inputs just when they are about to start farming activities and when money was available. Due to the ban or restriction on movement in Nigeria, access to input was greatly reduced and this created problems for the farmers.

Perceived Effects of COVID-19 on Labour Usage and other Farm Inputs

After land, labour is the second most important resource in farm production (Olayide and Heady 1982). The labour requirements for the various farm activities ranging from land clearing to harvesting are quite considerable in tropical countries (Olayide and Heady 1982; Johnson, 1990). Adhering to the COVID-19 pandemic protection guidelines may mean limited access to labour. The usage of farm inputs in normal farming plan (such as prior COVID-19) and during COVID-19 (i.e., in 2020) was ascertained from the farmers and the results presented in Table 8. From the data, it can be seen that McNemar test was statistically significant at ($p < 0.05$) for the use of all farm resources across the two years. This implies that the difference in usage of the resources before and during the COVID year could be attributed to the factors prevalent within the COVID period. The results show that there was a decrease in number of people using the various inputs. From the focus group discussion, the main reason was due to cash unavailability because of lack of market for their products. As at the time of the pandemic, most local suppliers had already stocked their shops in these farming areas, so most inputs were available either within the community of the farmers or in nearby markets, but apart from restricted movement, their main challenge was lack of money. The major input that most farmers could not access was fertilizer. The farmers who used poultry to supplement fertilizer in production were also affected, because most depended on poultry manure from far away farms. In Uzo-Uwani LGA, most of the farmers sourced their poultry droppings from Anambra State, thus the movement restriction was a major problem. There was no way to get to the poultry farms where they sourced poultry manure. Only those who purchased ahead of the closure of movement or were able to source from the few poultry farms around them were able to use it. For labour, the respondents stated that usually youth who were students in higher institutions close to them, supplied labour for farming to earn money for their education, but due to the restriction and fear of contraction of the virus, many did not come to the farming communities during the planting season.

Challenges to Input Usage during COVID-19 Pandemic

The challenges encountered in usage of these farm inputs were ascertained and presented in Table 9. For manure, scarcity during the pandemic was stated by (29.58%) of the farmers respondents; high cost of the input (14.08%); high cost of transport (23.94%) and lack of money during the period (46.48%) as major challenge encountered in usage of farm inputs.

Table 6: Effects of COVID-19 on farming activities

Characteristics	Frequency	Percentage
COVID affected farm activities	37	50.68
Aspects affected*		
Labour availability only	26	35.62
Poor market access only	28	38.36
High cost of farm input only	26	35.62
Post-harvest loss only	36	49.32
Change in farm calendar only	10	13.70
Finance only	28	38.36

Note: *Multiple responses were recorded.
Number of respondents is 74. Source**:** Field Survey, 2021

Table 7: Time for purchase of farm inputs

Time for purchase of inputs*	Frequency	Percentage
Just before farming season	38	53.52
During farming season	23	32.39
Immediately after harvest	10	14.08
Purchase as money is available	38	53.52

Note: *Multiple responses were recorded.
Number of respondents is 74. Source**:** Field Survey, 2021

Table 8: Usage of farm inputs prior COVID-19 and during COVID (2020)

Usage of farm input*	Normal usage (Prior COVID)	Percentage	Usage in 2020	Percentage	Parametric p-value**
Organic Manure	52	73.24	40	56.34	0.002
Pesticide	65	91.55	55	77.46	0.002
Fertilizer	68	95.78	35	49.29	0.000
Herbicide	66	92.96	57	80.28	0.002
Hired Labour	67	94.36	61	85.92	0.033

Note: 3 responses were dropped; *Multiple responses were recorded ** Based on McNemar test. Source: Field Survey, 2021

Table 9: Challenges to input usage during COVID-19 pandemic

Farm Input	Challenges	Frequency	Percentage
Manure	Scarcity	21	29.58
	High cost of the input	10	14.08
	High cost of transport	17	23.94
Pesticide	High cost	24	33.80
	High cost of transport	22	30.99
	Lack of money	41	57.75
Fertilizer	High cost	21	29.58
	High cost of transport	25	35.21
	Lack of money	42	59.15
Herbicide	High cost	22	30.99
	High cost of transport	22	30.99
	Lack of money	35	49.30
Labour	Scarcity	32	45.07
	High cost	39	54.93
	Fear of virus	11	15.49
	Lack of money	24	33.80

Note: *Multiple responses were recorded;
No of respondents is 71. Source: Field Survey, 2021

Amongst challenges associated with usage of pesticide, high cost was indicated by 33.80%; scarce transport by 30.99% and scarcity of money by 57.75%. For fertilizer usage, the challenges respondents indicated were high price (29.58%), scarcity of transport facilities (35.21%), scarcity of money to purchase (59.15%). For the usage of herbicide, the respondents indicated high cost (30.99%), scarce transport (30.99%), scarcity of money (49.30%). In terms of labour usage, the challenges identified by the respondents were labour scarcity (45.07%); high labour cost (54.93%); fear of virus (15.49%), scarcity of money to hire (33.80%). Apart from high cost and inability to travel to procure input, a major effect of COVID -19 was that many farmers did not have enough money to purchase farm inputs.

Perceived Effects of COVID-19 on the Type of Crops Grown

The study ascertained if the farmers made changes in crops grown during the pandemic, as the lockdown order coincided with the onset of rainy season in the state. The crops that were grown in the 2019 and 2020 cropping year were ascertained and presented in Table 10. Usually, farmers grow same crops over years and only change if soil characteristics like fertility and structure change and affect crop yield, or if a new crop, which they feel is profitable is introduced within the neighborhood and they want to try it out. The farmers had multiple crops, with differing planting dates and activities such that when each matured and is sold, the income fetched is plugged into the farm business for purchase of the inputs for the next farm enterprise.

The results from the Mcnemar test showed that there was no significant difference between the type of crops grown in the 2019 and that grown in 2020. Only 21.62% of the farmers stated that they changed their crop plans in 2020. This could be because the COVID sit at home directive and its attendant challenges took effect after they must have made their farming decisions and plans. Further questioning revealed that for those who changed cropping plan, the major reason they changed was due to high cost of farm inputs (12.16%) for crops they usually cultivated. It is also noteworthy that the respondents grew vegetables during the pandemic. During the focus group discussion, the vegetable farmers lamented the loss they incurred during the harvest period as there were few buyers for their produce and the vegetables, being perishable crops, were left to rot.

Intervention and Support during COVID-19

The support received by the respondents during the pandemic was ascertained and presented in Table 11. The results show that only 8.11% received input support from Government during the pandemic. These were farmers involved in the Agricultural Transformation Agenda Support Programme (ATASP) sorghum production. They received seeds for the planting season, though the farmers stated that getting seed is part of the programme support in sorghum, so it is not as a result of COVID intervention.

The results also show that the majority (95%) of the farmers provided personal protective equipment by themselves. Only 5% obtained from Government, and these were farmers in a special agriculture programme (Agricultural Transformation Agenda Support Programme (ATASP) on Sorghum). It was only face mask they received at that. Face mask was the commonest personal protective equipment that farmers provided. Provision of protective equipment was considered a major factor in the fight to contain the spread of the virus, yet farmers who were considered essential workers were not adequately provided with these.

Table 10: Type of crops grown in 2019 and 2020 farming year

Name of Crop	2019		2020		Parametric p-value**
	Frequency	Percentage	Frequency	Percentage	
Maize	54	72.97	53	71.62	0.654
Cassava	52	70.27	53	71.62	0.654
Rice	25	33.78	25	33.78	1.000
Okra	6	8.11	5	6.76	0.563
Garden egg	17	22.97	20	27.03	0.083
Pepper	31	41.89	33	44.59	0.414
Tomato	13	17.57	15	20.27	0.157
Cucumber	10	13.51	10	13.51	1.000
Cocoyam	15	20.27	12	16.21	0.083
Yam	24	32.43	22	29.73	0.317

Note: *Multiple responses were recorded; The number of respondents is 74. Source: Field Survey, 2021

Table 11: Interventions and support during COVID-19

Attribute	Frequency	Percentage
Input support from the Government	6	8.11
Visit by extension agent in the 2020 crop season	0	0
Personal protective equipment (PPE) from the Government	4	5.41
Purchased PPE by self	70	94.6
Provide face mask by self	72	97.30
Provide handwash by self	17	22.97
Provide overall by self	4	5.41
Provide gloves by self	12	16.22
Provide safety boots by self	8	10.81
Use of PPE	44	59.46

Source**:** Field Survey, 2021

None of the farmers were visited by extension agents during the pandemic. With respect to usage, about 60% of the respondents stated that they used PPE when they go to farm. This follows from their perception of the risk of contracting the virus.

CONCLUSION AND RECOMMENDATIONS

The COVID-19 was declared a global pandemic by the World Health Organization on March 2020 (Nwagbara *et al.,* 2020), and as such countries were advised to take actions to contain its spread. In Sub-Saharan Africa, Nigeria was one of the countries to implement travel and movement restrictions due to the pandemic (Andam *et al.,* 2020). These actions affected overall socio-economic activities including farming and as such an understanding of its effects is important for planning and policy making for emergency conditions. This study identified the effects of COVID 19 on farming activities in Enugu State, Nigeria. The objectives were to identify farmers' perceptions and awareness of COVID 19; describe the effects of COVID-19 on farming activities and on the usage of labour and other inputs and identify intervention and support received by the farmers during the lockdown period. The major symptom of the virus the respondents knew was dry cough. Majority perceived themselves to be at risk of contracting the virus. The level of awareness of COVID-19 was high and many of them got information on COVID-19 from radio. Also, majority of the farmers' perceived that COVID-19 affected their farming activities especially by causing post-harvest loss. It also affected their usage of the various inputs such as manure, fertilizer, herbicides negatively as there was a decline in the use of these inputs. A Mcnemar test showed that the difference in usage of these farm resources was statistically different between the two time periods. This was especially because of lack of funds and restriction on movement. In terms of crop grown between 2019 and 2020, there was no statistical difference observed. This could be because most farmers already purchased seeds and, in some cases, already planted before the lock down period. Thus, decision to plant was not contingent on the COVID-19 associated shocks and risks as it was not envisaged at the onset of farming. The farmers rarely received any intervention or support from the government during the COVID-19 period. Those who did were those involved in the ATASP sorghum production. The study recommends that during such crisis as this government and other development partners like NGOs should provide input support and short-term credit to enable farmers carry out their farming activities. There is also need to direct policies around marketing of agricultural produce to enable linkages between farmers and the rest of the value chain. Policies need to be directed towards logistics related to the transportation of agricultural products such that in emergencies such as this sales or supplies will not be disrupted. For instance, private entities engaged in the transportation of agricultural produce should be registered so that in case of emergencies such as this they can easily be identified and allowed to pass.

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