

INFLUENCE OF COVID 19 LOCKDOWN ON GARRI SUPPLY IN AHOADA WEST LOCAL GOVERNMENT AREA, RIVERS STATE

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ABSTRACT

The study examined the influence of covid-19 lockdown on garri supply in Ahoada West Local Government Area of Rivers State. Specifically, the study describe the socio-economic characteristics of garri dealers, identify the sources of garri supply; determined the effect of covid-19 lockdown on garri supply; and identified the challenges of direct supply. Multi stage sampling technique was employed in selecting the sample size for the study. Data was collected using the structure questionnaire administered to 150 Respondents. Descriptive statistics such as tables, means, frequency and distribution table and percentages were used to achieve objective (i), (ii) and (iv), while likert scale was used to achieve objectives (iii). Result indicate that majority of the garri suppliers fall within the active age range 41-50 with 45.3% regarding sex of the Respondent, female (66.7%) dominated the garri supply business in the study area. Majority (70%) of the Respondents were married upon which they supported their households. Regarding religion, households' size and educational level, majority of the Respondents indicated Christianity (76, 43.3 and 36.7%) respectively. Also, 31.3% of the Respondents had 6-10 years of experience. Finding of the study further shows that majority (43.3%) of the Respondents (garri supplier) sourced their garri from within the local government. Moreso, finding of the study indicated that majority (33%) of Respondents affirmed that garri supply was low as a result of the effect of covid-19 lockdown. The challenges faced by the garri supplier in the study area were fluctuation of price, poor road network, high transportation cost, lack of storage facilities, high cost of the raw materials, climate change and methods of farming as indicated was the major constraints to expanding the scale of their garri supply business as they all had a mean scores that is the criteria mean which is (≥ 2.50). Among others, indicated that Rodents/Pest infestation and market structure or building were not serious, constraints encountered by the garri dealers. The constraints mentioned above were the challenges to garri dealers that were identified. There is need for government to come up with policy reform that will facilitate price stability of garri and other agricultural produce. Basic infrastructural facilities such as good roads network, can fail marketing cost and credit facilities to meet the financial need of the suppliers should be provided to enhance marketing efficiency.

Keywords: Influence, COVID 19 and Lockdown

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INTRODUCTION

The outbreak of Corona Virus Disease 2019 (COVID-19) pandemic which is Severe Acute Respiratory Syndrome (SARS) and measures to control the spread of the disease has disrupted the functioning of food systems in countless ways, with severe health and socio- economic impacts. In Nigeria, the pandemic hit within an existing context of persistent food insecurity and malnutrition where in 2019 alone there were 235 million hungry people struggling to have regular access to nutritious and sufficient food and 66 million people categorized as experiencing acute food insecurity in need of urgent humanitarian and livelihood assistance (Food & Agricultural Organization Regional Conference for Africa 26-28 October 2020). Mobile phone significantly have reduced communication and information costs for the rural people and has provided new opportunities for rural farmers to obtain knowledge and information about agricultural issues, problems and its usage for the development of agriculture. Similarly, use of ICTs in agricultural extension services especially mobile phone services in the agricultural sector has provided information on market, weather, transport and agricultural techniques to contact with concern agencies and department (Aker, 2011).

COVID-19 also poses significant risks to food supply chains, which are comprised of a complex web of interactions involving farmers, agricultural inputs, processing plants, shipping retailers and more. Port closures and internal logistics challenges have disrupted food supply chains profoundly. Since the outbreak of Corona virus (COVID-19) Pandemic disease, many countries

have shut down its economic activities and ordered their citizens to stay at home and observe precautionary measures as advised by World Health organization to curtail the spread of the pandemic disease.

Nigeria grows more cassava than any other country in the world. According to FAO (2007) total cassava output in Nigeria was estimated at 38 million metric tons. Production increased by 22% between 1995 and 2004. Area cultivated also increased by 40% but yields remained relatively stagnant at 10 tons per hectare. The production of cassava is concentrated in the hands of numerous resource poor farmers located primarily in the south and central regions of Nigeria. About ninety percent of cassava grown in the country is consumed as food in several ways, which have broadly been characterized into cooked and uncooked paste, steamed and toasted granules, fermented and unfermented chips and flours (Harry and Otto, 2019).

1.3 Objectives of the Study

The main objective of this study is to determine the influence of covid-19 lockdown on garri supply in Ahoada west local government area.

Specific objectives of the study were to:

- i. describe the socio-economic characteristics of the garri dealers in the study area.
- ii. identify the sources of garri supply.
- iii. examine the effect of COVID-19 lockdown on garri supply and profit margin and
- iv. ascertain the challenges of covid19 on garri supply in the study area

LITERATURE REVIEW

Theoretical Framework

Theory of Demand and supply

The theory of demand and supply is a central concept in the understanding of the economic system and its function. The quantity demanded of a good or services is the amount that consumers plan to buy during a particular price. Hence the law of Demand States that other factors being constant, price and quantity of demand of any goods and services are inversely related to each other. This means that when price of the product increases, the demand for the same product will fall and vice versa.

Many factors affect demand when drawing a curve, economist assume all factors are held constant except the price of the product itself (ceteris paribus assumption theory). This assumption allows us to isolate the effect of one variable on the other variable.

Willingness and ability to supply goods determine the seller's action at higher price, more of the commodity will be available. Supply is the quantity of output brought for sale in the market at a certain price. This is because the suppliers will be able to maintain a profit level despite the higher cost of production that may result from short term expansion of their capacity. Looking at how they react to control the market, buyers and sellers react in opposite ways to a change in price. When price increases, the willingness and ability of buyer to purchase goods will reduce. Hence market will reach equilibrium when the quantity demanded and the quantity supplied is equal.

Conceptual Framework

Processing of crops into forms convenient and acceptable for use is as old as human history. The various methods of processing food crops came up as a result of necessity; mainly because some food crops cannot be consumed the way they are harvested nor be kept long. The dictionary of agriculture defined processing as one of the marketing services which deal with the conversion of produce into a more finished condition before sale or consumption (Somani and Tikka, 1994).

Effect of COVID-19 lockdown on Garri Supply

The first case of COVID19 in Nigeria was reported on February 28, 2020. Six months after, only 53477 cases and 1011 deaths related to COVID 19 have been reported, compared to countries such as USA (6,096,235 cases), Brazil (3,812,605 cases), India (3,461,240 cases) and South Africa (620,132 cases). The Nigerian Government implemented several measures to contain the spread of the disease, some of which negatively impacted the livelihoods of many low-income households. This study makes an

early assessment of effect of lockdown on the supply of garri in Ahoada west local government area of Rivers State Nigeria Nigeria.

Empirical Literature

Roseline, *et al.*, (2020) in their study, Assessment of the impacts of COVID-19 pandemic outbreak on organizational functionality in Nigeria. Using phenomenology design found out the experience of the respondent with organization in each industry.

Inyada-Aladi Evelyn(2014)in her study, Economic s of processing cassava into Garri and pellets in Kogi State, Nigeria Using Descriptive Statistics.

From the study, it was found that most of the respondents were women in their active working age.

Chuma *et al.*, (2014) in their study, the effect of quality on garri price in Nigeria: A hedonic analysis using Data and survey Method. Garri is the widely consumed cassava- based food in Nigeria.

Peter, (2020) in his study, COVID-19 pandemic and economic crisis: Nigeria experience and structural causes. Description analysis was used. This paper analyzed the recent economic crisis in Nigeria.

Kuye, *et al.*, 2017) in their study, socio-Economic determinants of informal savings for small scale cassava production in Abi LGA, Coss River State, Nigeria. Descriptive statistics was used. Majority of the farmers were male, middle- aged men and women, had mean house household.

Omoregee, *et al.*, (2013) in their study, Empirical analysis of cassava farmers socio- economic characteristics and their access to agricultural information in delta state Nigeria. Multi- stage sampling technique was use. The finding from this study shows that accessibility of cassava farmers to agricultural information in delta state is generally low (65.75%).

Aboajah, *et al.*, (2018) in their study, socio- economic determinants of cassava production in Benue State, Nigerian. Data was analyzed with both descriptive and simple multi regression statistics. The result of the multiple regression analysis shows that the linear functional form largely explained the variations in the quality of cassava produced in the study area.

Adibie *et al.*, (2021). In their study, Economic Implications of Covid-19 Lockdown on Fish Suppliers in Port Harcourt City, Rivers State, Nigeria. Using Descriptive Statistics, it was found out those more educated married female adults that were involved in the business.

Johnbosco *et al.*, (2021. In their Study, Covid-19 Lockdown influence on price Dynamics of Cow meat in Port Harcourt Local Government Area Rivers State, Nigeria. Using descriptive Statistics, The results showed that the business is lucrative with 57% earning above N70, 000 monthly.

RESEARCH METHODOLOGY

Study Area

The study was conducted in Ahoada West Local Government area of Rivers State Nigeria. its coordinates are 5° 5' 9" North and 6° 28' 15" East Ahoada West is a Local Government Area of Rivers State, Nigeria, located northwest of Port Harcourt. It was extracted in 1996 from the old Ahoada Local Government that makes up the present Orashi Region of Rivers State. Its seat is in the town of Akinima.

The Local Government Area comprises the Ekpeyes (Ubies and Ibuduyas), Engenni and Ogbogolo communities. Thus there are three (3) distinct languages namely Ekpeye, Engenni and Ogbogolo.

The Orashi River criss-crosses the entire Local Government area and its vegetation is mainly a high dense rain forest. Thus the occupations of the people are mainly farming, fishing, and hunting.

The Local Government Area is bounded by Ogba/Egbema/Ndoni Local Government Area, Abua/Odua Local Government Area, Ahoada East Local Government Area on the east we have Besini and Yenagoa both of Bayelsa State on the North and West respectively. The boundary between Rivers and Bayelsa states from the west is located at Engenni.

Population of the Study

The population of the communities is of a large population which data would then be determined by random sampling because it won't be possible to get the entire population to answer the questionnaire, the resident of Ahoada west Local Government area would be given the questionnaires to answer (i.e. Garri sellers), The population of 240 for this study is drawn from the total garri union (2021).

Sampling Procedure and Sample Size

The process of selecting a portion of the population to represent the entire population is known as sampling. Cost and time were saved by selecting random sampling techniques of different communities in Ahoada west Local Government Area rather than attempting to study the entire area population which would have been impossible to achieve. The number of registered crop farmers in the study area is given as 150. Three (3) clans namely Ekpeye, Engenni, Ogbogolo were randomly selected. Two (2) communities were selected, each from the two selected clans which will summed up six (6) communities. The number of questionnaire to be distributed for each clans is fifty (50). A sample chosen randomly is meant to be an unbiased representation of the total population.

Table 1: The Table below Shows the List of selected Towns and Villages in Ahoada and the Number of Respondents Selected

Selected Clans	Selected Communities	Selected Respondents
Ekpeye	2	50
Engenni	2	50
Ogbogolo	2	50
TOTAL	6	144

Method of Data Collection

Primary data consist of information obtained from field work which can be of different means but for the purpose of this study, the method to be used will be through the use of questionnaire which will be shared for the community residents who accommodate students for the purpose of living. The questionnaire which was a structural type of questionnaire obtained from the responds of the respondent will be used to analysis the data needed for this study.

Method of Data Analysis

The data collected was subjected to descriptive and The data from respondents was analyzed using descriptive statistics which are frequency, mean, percentage etc. furthermore, the 4 point Likert Scale such as strongly disagree, disagree, agree and strongly agree will be applied and the ANOVA statistic was used to test the research hypothesis.

RESULTS AND DISCUSSION

Socio-Economic Characteristics of the Respondents

In this chapter, socio-economic characteristics of the respondents are presented in a tabular form.

Socio-Economic Characteristics

Gender/Sex of the Respondents

From table 2 below, the result reveals that majority (66.7%) of the Garri sellers were female, while (33.3%) were male. This could be as a result of the fact that men are involved in cultivation of cassava rather than supplying. This finding conforms with Ndubueze, et al., (2015) who carried out similar study in study in Ughelli Delta State and found out that majority (78.6%) of the respondents involved in garri processing were female. Also Nwaneri et al., (2015) confirmed that the populations of garri processors are dominated by females.

Age of the Respondents

The result on table 2 below, reveals that majority (43.3%) of the garri dealers fell within the age range of 41-50years; Followed by (21.3%) which fall between the age group of 31-40 years; (19.3%), (9.3%) and (6.7%) are between the age group of 51-60, <30 and >61 years respectively, with the mean age of about 36.4 years old. This is in the variance of Nweke (1994) in a study carried out in Ivo, Ebonyi state whose findings revealed that the mean age of garri processors was 52.10. also, Ijigbade *et al.*, (2014) who noted that the older the producers, the less adoptive he becomes to innovation which negatively affects the efficiency. Also, Yakubu (2002) agreed with the findings, based on his assertion that farmers are willing and able to take risk with the expectation of a large report profit than older farmers.

Marital Status of the Respondents

Table 2 below, showed that majority (46.7%) were married while singles were (30.7%), divorced (12.0%) and widowed (10.7%). It can be inferred that married people constitute the largest population and with the findings of Bello et al., (2008) who in their study on rural women processing cassava in Doma local Government Area of Nasarawa state found out that 55% of the respondents were married.

Religion of the Respondent

The results on table 1, also indicated that majority (76%) of the respondents practiced Christian religion while (16.7%) and (7.3%) were traditional worshipers and Muslim all things remaining equal. Nwankwoala (2017) made similar observation in his study on wood charcoal.

Experience of the Respondents

Majority of the garri sellers (31.3%) had business experience of 6-10 years, followed by (26.7%) and (12.0%) which had experience of 11-15 years and 16-20 years; while others (11.3%), (10.7%) and (8.0%) had an experience of 1-5 years, 21-25 years and >26 years respectively with a mean experience value of 15.5 years this implies that garri dealers with experience are likely to be more efficient in business. This study is similar Abu et al., (2011) were they reported that farming experience is a determinant of the ability of the farmer to make good farm management decisions effectively.

Household size of the Respondents

Table 2 below revealed that majority (43.3%) of garri dealers were having between 4-6 members of household sizes, followed by (26.7%) which had between 1-3 members of household sizes; while others (19.3%) and (10.7%) had between 7-9 and >10 members as their household sizes with a mean household size of 5.5. this implies that there is less availability of family labour. However, this study complements a similar study on fishing that the lower the size of family dependents on marketer the better the market performance because less time is spent on family issues and more on marketing (Madugu and Edward). Though Unongo, (2010) concluded that family size is associated with availability of labour were larger families are likely to be more effective.

Educational Level of the Respondents

Respondent's educational levels on table 1, revealed that majority (36.7%) had primary education followed by no formal education which had (32.0%); secondary education (18.0%) and tertiary (13.3%). This shows that many of the garri dealers can read and write in the area. Which go contraly to Okpeke *et al.*, (2015) who reported that cassava processors are illiterates.

Income of the Respondents

The results on table 2 below, further indicated that majority (38.0%) of the respondents had income level of N120,001-N240,000, followed by (30.0%) which had an income level of N60,000-NN120,000. Respondents with (19.3%) and (14.0%) had income range of N240,001-N480,000 and N480,001 and above with a mean income of N124,000 in the business.

Variables	Category	Frequency	Percentage	Mean
Gender	Male	50	33.3	36.4
	Female	100	66.7	
Age	<30	14	9.3	
	31-40	32	21.3	
	41-50	65	43.3	
	51-60	29	19.3	
	>61	10	6.7	
Marital Status	Single	46	30.7	
	Married	70	46.7	
	Divided	18	12.0	
	Widow/widower	16	10.7	
Religion	Christian	14	7.6	15.5
	Muslim	11	7.3	
	Others	25	16.7	
Level of Experience	1-5	17	11.3	
	6-10	47	31.3	
	11-15	40	26.7	
	16-20	18	12.0	
	21-25	16	10.7	
	26 and above	12	8.0	
Household size	1-3	40	26.7	5.5
	4-6	65	43.3	
	7-9	29	19.3	
	>10	16	10.7	
Educational level	Not educated	48	32.0	
	Primary	55	36.7	
	Secondary	27	18.0	
	Tertiary	20	13.3	
Income range (N)	60,000-120,000	45	30.0	124,000
	120,001-240,000	57	38.0	
	240,001-480,000	29	19.3	

Table 2: Summary of Response on Socio-economic Characteristics of the Respondents

480,001 and above	21	14.0
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Table 1: Socio-Economic Characteristics of the Respondents

Sources of Garri Supply

The level of farmer's awareness towards mobile phone use is presented in Table 3 below. The respondents agreed to the following awareness; Mobile phone is used to source for improved farming practices ($\bar{x} = 3.06$), Mobile phone helps to build up market linkage ($\bar{x} = 2.08$), Mobile phone helps to get agricultural information that will increase productivity or yield ($\bar{x} = 2.83$); Mobile phone saves time due to timely procurement of inputs ($\bar{x} = 2.83$) and improves social relationship among farmers and business community (2.37).

Table 3: Responses of the Respondents on the sources of Garri Supply during COVID - 19

Sources of Garri Supply	Frequency	Percentage
Within the local government	65	43.3
Across the Local Government	40	26.7
Within the State	29	19.3
Outside the State	16	10.7

Effects of Covid-19 Lockdown on Garri Supply

Table 4 below shows that majority (32.0%) of respondents affirmed that the supply of garri was very low as a result of the Covid-19 lockdown. This was followed by (24.7%) of the respondent who attested that low garri supply was influenced by Covid-19 lockdown. (22.7%) of the respondent agreed that garri supply was influenced by Covid-19 was moderate. While the last category of respondents were only (20.7%) who rated the supply of garri high. This implies that Covid-19 lockdown adversely affected agriculture and more especially garri supply activities in several ways. For example, Covid-19 can disrupt the supply and distribution of inputs and outputs, creating price shocks and massively displacement of labour.

Table 4: Responses of the Respondents on the effects of COVID – 19 Lockdown on Garri Supply

Effects of Covid-19 on Garri Supply	Frequency	Percentage
High	31	20.7
Moderate	34	22.7
Low	37	24.7
Very low	48	32.0
Total	150	100

Challenges of Garri Supply

Table 5 below showed that price fluctuation, poor road network, high transportation cost, lack of storage facilities, high cost of raw materials, climate change, method of farming were the major constraints of garri supply in the study area as they had a mean value that is greater than the criterion mean (≥ 2.50). The mean value of each constraint to the whole were used to rank or order the response. The table revealed that price fluctuation is the major constraint due to insatiable market and channels involves in marketing, price fluctuates because of many factors such as fuel price, supplier cost and future expectation. The next on the list was bad road with a mean value of 3.61 and high cost of transportation cost with a mean value of 3.34 which was third on the list. High in price of fuel coupled with the poor road networks contributed immensely to the high cost of transporting garri from the farm gate. Similar result was reported by Olutumise (2020) on the study on transportation system and output market participation in Ondo state, Nigeria. Lack of Storage facilities was noted as fourth on the list followed by

high cost of raw material was observed in the study area. Climate change method of farming were also a major constraints. Rodent/pet infestations, market infrastructure/buildings were not seen as a major constraints in the area as they both had a mean value that lower than the criterion mean.

Table 5: Responses of the Respondents on the challenges of garri supply

Challenges	Mean	Result	Remark
Function of price	3.98	>	Agree
Poor road network	3.61	>	Agree
High transportation cost	3.34	>	Agree
Lack of storage facilities	2.92	>	Agree
High cost of raw materials	2.75	>	Agree
Climate change	2.68	>	Agree
Method of farming	2.55	>	Agree
Rodents/pest infestation	2.30	<	Disagree
Market Structure or Building	2.27	<	Disagree

CONCLUSION

The study has examined the influence of Covid-19 on Garri supply in Ahoada Local Government Area of River state, Nigeria. The finding of the study shows that garri was source from within the local government during covid-19 lockdown. Finding of the study (showed) that the supply of garri was very low as a result of covid-19 and this has a negative effect in the supply there by creating price shocks. Furthermore, price fluctuations, poor road network high transportation cost, lack of storage facilities, facilities, climate change method of farming were major constraints of garri supply in the study area.

RECOMMENDATIONS

Based on the above Conclusions, the Recommendations for the study include:

- Government should come up with policy reforms that will facilitate price stability of gain and other agriculture products. This will further encourage stability of investment in the enterprise consequently expending it potential for economic empowerment.
Government should form a regulatory board that will ensure cost of rent (monthly) the free of garri tax payment
- Government and non-governmental organization and agencies should assist in educating the garri dealers through effective extension needs of garri supply techniques. Therefore extension needs of garri supply should be given urgent attention.
- Basic infrastructural facilities such as good road network to curtail marketing cost and credit facilities to meet the financial needs of the suppliers should be provided to enhance marketing efficiency.

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