



ABSTRACT

Agricultural produce mainly grains (millet, guinea corn and beans/cowpea) harvested at the end of the years 2019 and 2020 cropping seasons, Administrators, Dealers and Marketers of grains Marketing Association of Nigeria, Potiskum Chapter in Yobe State were used for the study, before, within and after the lockdown regulations embarked by the federal

THE POSITON OF CORONAVIRUS (COVID-19) ON DISTRIBUTION OF AGRICULTURAL PRODUCE DURING THE LOCKDOWN REGULATIONS PERIOD THROUGH GRAINS MARKETERS ASSOCIATION OF NIGERIAN, POTISKUM CHAPTER IN YOBE STATE

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Introduction

Coronavirus (Covid-19) has since been known as novel-corona virus (2019-ncov) which was believed to be a transmissible and communicable disease which affects both human and animals. It causes severe syndromes with a variety` of symptoms ranging from cough, fever, difficulties in breathing, shortness in breathing, headache, bronchitis, distress and pneumonia which are more pronounced in infants, elderly people and patients with health problems. (Centre for disease control prevention CDC January 10, 2020). The pandemic was first noticed and recognized from pneumonia patients in Wuhan- China in December 2019 (Zu et al 2019). The disease got spread so rapid that it affected almost all parts of the world especially in the developed Nations of the third world like Italy, Spain, and US, having the highest number of



human losses. The rapid spread of the disease called for immediate attentions of the world leaders for emergency declaration of the disease as pandemic in March 2020 by the World Health Organization (WHO). (Cucinotta & Vanelli 2020). According to the world Health organization (WHO) reports 3,664,011 cases of infected patients were recorded across the globe where 257,301 were reported dead, while 982,592 patients were recovered (Data corrected 12:10 UTC 6 May, 2020). In Nigeria the outbreak of the pandemic occurred right at the time when Nigeria was preparing for the declaration of polio free Nation. It was at that time when Nigeria began to experience the effects of the corona-virus (Covid-19) which was recorded in February 2020 with an increasing number of infected patients daily with fatality ratio of 0.03 as at April 2020. However, the current situation of the Health System in Nigeria could not afford to control the menace effectively due to high needs of the already affected patients waiting for admissions in to the intensive Health Care units for diagnosis and treatments of the pandemic (SARS Cov-2). The provisions of the quarantine or isolation centers with adequate diagnosis kits for fast and reliable

government of Nigeria after the breakout of the pandemic in march 2020. Data were collected from the inventory records kept in the office of the grains marketers Association of Nigeria Potiskum Chapter. Monthly average records in number of trips of long vehicles (Trailers) used for the distributions of the agricultural produce were considered. The data collected were subjected to analysis of variance using (χ^2) Chi-square test at ($\chi^2_{\alpha 0.05}$) five level of significance was used for the study to determine the significance of the results for judgment. Challenges and recommendations were also provided to be used as guides and measures to control the menace of the pandemic.

Keywords: Coronavirus, Distribution, Agricultural Produce, Lockdown, Regulations.



testing of the pandemic seemed to questionable and challenging.

MATERIAL AND METHODS

Harvested farm produce 2019 and 2020 cropping seasons mainly millet, guinea corn and beans/cowpea Administrators, Dealer, Farmers, Customers and long vehicles (trailers) were used for this study. The study was conducted at Grain market in Potiskum, Potiskum Local Government Area, Yobe State Before, Within and After the coronavirus (covi-19) lockdown regulations Nationwide. Survey Research Design was used through oral interviews, discussions and interactions to determine the opinions, attitudes, preference and reactions towards coronavirus (coved-19) pandemic. Data were collected from inventories in the office of the Secretary of the grains marketers Association of Nigeria Potiskum Chapter in Potiskum Local Government Area of Yobe State, where weekly records in number of trips of long vehicles (Trailers) loaded with the foodstuff were evacuated and distributed to the main Grains Market Centers Nationwide and beyond. The Grains Market Centers include Lagos, Ibadan, Enugu, Port-Harcourt, Sokoto, Kaduna and Kano.

Each long vehicle (trailer) used to contains four hundred (400) bags of 100kg (kilogram) 14 tones. The grains were obtained from farmers within and outside Yobe State, like Bauchi, Borno, Gombe, Jigawa, Kano, Adamawa and Taraba State respectively. However, the number of trips of the vehicle used for the distribution of the foodstuff vary from place to place according to the demands supply, seasons and social vices. For the stability of study only monthly average number of rips of long vehicle loaded for distribution of each the foodstuff were considered Before, within and After the periods of the lockdown regulations. The data collected were analysed using inferential statistic of chi-square test at ($\chi^2_{\alpha 0.05}$).to determine the level of significance of the result obtained.

RESULTS

Table: I number of trips of long vehicles before the coronavirus (covid-19) lockdown regulations at Potiskum Grains Market in Yobe State 2020.

GRAINS	LAGOS	IBADAN	ENUGU	SOKOTO	PORT-HACOURT	KADUNA/KANO	TOTAL
Millet	6 ⁽³⁾	6 ⁽¹⁰⁾	4 ⁽⁸⁾	30 ⁽¹⁵⁾	4 ⁽¹⁰⁾	30 ⁽²⁷⁾	80
Guinea corn	5 ⁽⁶⁾	2 ⁽⁵⁾	3 ⁽⁴⁾	3 ⁽⁷⁾	7 ⁽⁵⁾	20 ⁽¹³⁾	40
Beans cowpea	/ 16 ⁽⁹⁾	14 ⁽⁷⁾	10 ⁽⁶⁾	0 ⁽⁷⁾	10 ⁽⁷⁾	10 ⁽²⁰⁾	60
	27	22	17	33	21	60	180



$$\chi^2_{\alpha 0.05}, \chi^2_{\alpha \text{ tab}} = 7.185, \chi^2_{\alpha \text{ cal.}} = 68.8$$

SOURCE: Potiskum Grains Market Yobe State 2020.

Table I above showed monthly average number of trips of long vehicles (trailers) loaded for evacuation and distribution of foodstuff mainly millet, guinea corn and beans / cowpea before the coronavirus (covid-19) lockdown regulations at Potiskum Grains Market in Yobe State 2020. The table indicated that about eighty (80) trips amounting to three hundred and twenty thousand (320,000 bags) / 320 tone with each bag costing thirteen thousand naira (N13,000.00) were distributed to various Market centers Nationwide. Kaduna, Kano and Sokoto centers got the highest number of thirty (30) trips amounting to one hundred and twenty thousand 120,000.00 bags / 120 tones each, followed by Port Harcourt and Enugu centers with the list number of four (4) trips amounting to one thousand and six hundred (1,600.00 bags) / 16 tones each.

Similarly, forty (40) trips amounting to sixteen thousand (16,000) bags / 16 tons of Guinea corn were also distributed. Kaduna and Kano centers got the highest number of twenty-four (24) trips amounting to ninety-six thousand (96,000 bags / 96 tones) costing eleven thousand naira N11,000.00 each bag. followed by Port Harcourt with ten (10) trips amounting to forty thousand (40,000) bags / 40 tones each. Sixty (60) trips amounting to twenty-four thousand (24,000) bags / 240 tons of beans / cowpea were distributed with Lagos having the highest number of eighteen (18) trips amounting to seven thousand two hundred (7,200) bags / 720 tones with each bag costing eighteen thousand naira (N18,000.00). Kano and Ibadan centers got fifteen (15) trips amounting to sixteen thousand 6000 bags / 60 tones each, while Port Harcourt got the list number of ten (10) trips amounting to four 40,000 bags / 40 tones. The finding revealed that there have been high demands for Millet and Guinea corn in Kaduna, Kano and Port-Harcourt than beans / cowpea, while beans / cowpea has the highest demand in Lagos than any town of the federation.

Table II: number of trips of long vehicles (trailers) within/ during the coronavirus (covid- 19) lock down regulation periods at grain market Potiskum in Yobe State 2020.



Grains	Lagos	Ibadan	Enugu	Sokoto	Port Harcourt	Kaduna/Kano	Total
Millet	10 ⁽¹⁸⁾	13 ⁽¹⁸⁾	6 ⁽¹¹⁾	35 ⁽¹⁸⁾	6 ⁽⁹⁾	40 ⁽³⁶⁾	110
Guinea corn	10 ⁽⁹⁾	10 ⁽⁹⁾	5 ⁽⁵⁾	5 ⁽⁹⁾	5 ⁽⁵⁾	20 ⁽¹⁸⁾	55
Beans/cow pea	20 ⁽¹³⁾	17 ⁽¹³⁾	13 ⁽⁸⁾	0 ⁽¹³⁾	10 ⁽⁷⁾	20 ⁽²⁶⁾	80
	40	40	24	40	21	80	245

$$\chi^2_{\alpha=0.05}, \chi^2_{\alpha=tab} = 7.185, \chi^2_{\alpha=cal} = 92.93$$

The above table II showed the number of trips of long vehicles used for the distributions of Agricultural produce (foodstuff) mainly millet Guinea Corn and Cowpea within/ during the coronavirus (Covid -19) lockdown regulation periods at grains market Potiskum in Yobe State. The results revealed that monthly average number of one hundred and ten (110) trips amounting to 44,000bags / 440tones of millet with each bag costing eighteen thousand Naira (N18,000.00) were distributed to various grains market centers nationwide. From this amount, Kaduna and Kano got the highest number of forty (trips) amounting to fourteen thousand (14000) bags/140 tons, while Enugu and Port-Harcourt got the list number of six (6) trips amounting to two thousand and four hundred 2,400 bags / 240 tones each, respectively.

Fifty-five (55) trips amounting to twenty-two thousand (22,000) bags / 220tones of guinea corn, each bag costing sixteen thousand Naira (N16,000.00) were also distributed. Kaduna and Kano center got the highest number of twenty (20) trips amounting to eight thousand 8000bags/ 80tones followed by Lagos and Ibadan centers with ten (10) trips amounting to four thousand 4,000 bags/ 40tones each., while Enugu, Port-Harcourt and Sokoto got the list number of five (5) trips amounting to two thousand 2000 bags/ 20 tones each. Eighty (80) trips amounting to thirty-two (32) thousand (32,000) bags / 32 tons of beans /cowpea each bag costing twenty-four thousand Naira (N24,000.00) were distributed to various grains market centers across the country. Kaduna, Kano and Lagos got the highest number of twenty (20) trips amounting to eighty thousand bags 8,000 bags/ 80 tones each, followed



by Ibadan and Enugu with seventeen (17) trips amounting to six thousand eight hundred (6,800) bags / 680 tones and thirteen (13) trips amounting to five thousand and two hundred (5,200) bags /520 tones each. While Port-Harcourt and Sokoto got the list number of ten (10) and Zero (o) trips amounting to four thousand (4000) bags /40 tones and zero (o) bags / tones each. Sokoto center has none probably it is a beans /cowpea producing state and has adequate.

Table: III Number of trips of long vehicles after coronavirus (covid-19) lockdown regulations at Potiskum. Grains Market of Yobe State 2020.

Grains	Lagos	Ibadan	Enugu	Sokoto	Port-Harcourt	Kaduna/Kano	Total
Millet	8 ⁽¹⁴⁾	12 ⁽¹⁵⁾	5 ⁽⁹⁾	35 ⁽¹⁸⁾	5 ⁽¹⁾	35 ⁽³⁴⁾	100
Guinea corn	5 ⁽⁷⁾	3 ⁽⁷⁾	3 ⁽⁵⁾	5 ⁽⁹⁾	10 ⁽⁶⁾	24 ⁽¹⁷⁾	50
Beans/cowpea	18 ⁽¹⁰⁾	15 ⁽¹⁰⁾	12 ⁽⁶⁾	0 ⁽¹³⁾	10 ⁽⁸⁾	15 ⁽²⁴⁾	70
	31	30	20	40	25	74	220

$\chi^2_{\alpha=0.05}$, $\chi^2_{\alpha \text{ tab}}= 7.185$, $\chi^2_{\alpha \text{ cal}}= 63.3$

SOURCE: Potiskum Grains Market of Yobe State 2020

Table III above showed the number of trips of long vehicles (trailers) used for distribution of foodstuff after the period of coronavirus (covid-19) lockdown regulations at Potiskum Grains Market of Yobe State 2020. The results indicated that after the period of lockdown regulations an average of monthly average number of trips of long vehicles used for distribution of foodstuff mainly millet, guinea corn and beans/cowpea were taken and recorded. After the period one hundred (100) trips of millet grains amounting to fourty thousand 40,000 bags / 200 tones costing sixteen thousand naira ₦16, 000.00 per bag have been distributed every month to different centers all over the country. Kaduna and Kano obtained the highest number of fourty (40) trips amounting to one hundred and sixty thousand 160,000 bags / 160 tones followed by Sokoto Centre with thirty-five (35) trips amounting to fourteen thousand 14,000 bags 140 tones and Ibadan with thirteen (13) trips amounting to



five thousand two hundred 5,200 bags / 52 tones. While Enugu and Port Harcourt had six (6) trips amounting to two thousand four hundred 2,400 bags / 24 tones each.

Fifty (50) trips of guinea corn amounting to twenty thousand 20,000 bags / 200 tones, each bag costing fourteen thousand naira (N14,000.00) were distributed within Kaduna and Kano Centers having the highest number of twenty (20) trips amounting to eight thousand 8,000 bags / 80 tones, followed by Lagos and Ibadan with ten trips amounting to four thousand 4,000 bags/40tones each, while Enugu and Port Harcourt centers had the list number of six (6) trips each amounting to two thousand, and four hundred 2,400 bags / 24 tones. Seventy (70) trips amounting twenty-eight thousand 28,000 bags / 280 tons of beans/cowpea with each bag costing nineteen thousand naira (N19,000.00) were distributed. Kaduna, Kano and Lagos centers got the highest of twenty (20) trips amounting to eight thousand 8,000 bags / 80 tones followed by Ibadan with seventeen (17) trips amounting to six thousand, eight hundred 6,800 bags / 68 tones while Enugu had thirteen (13) trips amounting to five thousand two hundred 5,200 bags / 52tones respectively. It was observed that after the period of the coronavirus (covid-19) lockdown regulations the demand supplies and prices of foodstuff were still high but not as during the periods of the lockdown regulations.

DISCUSSIONS

The findings of the study revealed that the coronavirus (COVID-19) lockdown regulations had significantly affected the distributions of foodstuff at Potiskum Grain Market of Yobe State at all phases of the study. It was observed that even before the lockdown regulations embarked by the Federal Government, In Nigeria, in the first quarter of year 2020. The prices and supplies of Foodstuff in Potiskum in particular and Yobe State in general were significantly high due to seasonal variations and social vices.

During the years of 2018 and 2019 cropping season there have been drought spelt out which affected most farmlands in the state as well as neighboring states like Borno, Bauchi, Gombe and Adamawa respectively. In the year 2020 cropping season there were floods which



destroyed many farmlands particularly grain crops like maize, guinea corn, millet and beans cowpea which resulted in reductions of food availability and shortages which led to an increase in the prices and supplies of foodstuff in the state. The activities of insurgency operating which has long been in existence is still going where billions of tons of foodstuff, livestock and human resources are always on destructions which made foodstuff unbearable and unfordable by the common man. Within the period of the coronavirus (covid-19) regulation which occurred at the time when farmers were preparing their farmlands for cultivations were forced to abandoned if not completely stopped farming activities throughout the cropping seasons in the state. Consequently, prices and supplies of foodstuff became so high to the extent that the under prevailed could hardly secured one square meal daily. This is the first global crisis that seriously affected agricultural sector which resulted in to high mobility and mortality rates in many parts of the world. (CNN news 2020). Another Area of concern is the perishable agricultural products where eighty percent (80%) to ninety percent (90%) of the products were damaged to the extent that even animal could not consumed. In some places people were forced to operation crisis gardening at their back yards to grow foodstuff that were quick growing and maturing to minimize the extent of hunger. (Huffing post April 2020) it was also revealed that the pandemic made marketing of agricultural product difficult and unpredictable due to distortions in marketing channels. However, even after the coronavirus (covid-19) lockdown regulation were lifted the prices and supplies of foodstuff at Potiskum Grains Market have not significantly reduced this was perhaps due to the fact the it has been the tradition of the marketing system in Nigeria, that one there is a chance for an increase in prices of any commodity the price never come down. Global records indicated that Nigeria has been rated better if not best among African Nations in the preparedness to response to the cases of coronavirus (Covid -19) outbreak in the first quarter of the year 2020. (Nigeria Center for Disease Control April, 2020). It was recoded that about 118.000 household cases of infections with the coronavirus (COVID-19) in two (2) days were reported in Lagos, where 119 cases identified were confirmed positive. Many clinical activities were reduced or halted in order to control the



transmission of the pandemic beside the health facilities provided to combat the disease. What confused people were that there were no evidences to ascertained whether the disease can be transmitted through human to animal and vice versa. (Galankis C. M Foods 2020).

The outbreak of the coronavirus-(Covid-19) Come at the time when the country was battling with case of Lassa-fever outbreak and the preparations for certification exercise to declare Nigeria a Polio Free Nation. (Adpoju P. March, 2020). During the epidemiological week in April 2020 about 118 cases of death out of 979 cases reported were confirmed. Nigeria Centre for Disease Control (May, 2020). However, the fear of being infected by the pandemic at isolation centers, social distances and the lockdown regulations were no doubt assisted in the limitations to the access of health facilities routinely provided by the WHO which caused disruptions to health services and reductions in the immunization coverage as well as increase in the rates of mobility and mortality rates of infectious diseases in maternal, neonatal and childhood health issues.

The lockdown also affected the springtime which is a critical period for planting and harvesting farm produce (Foodstuff) which farmers could not change because man has no control over time and once the time lapsed can never regains. Panic shopping and stockpiling were rated high because people were forced to buy more foodstuff and stored in their homes due to fear of being lockdown for a long period. In some states government provided free periods within which people are to buy more foodstuff and to do other activities before being lockdown again. In the area of labour supply farmers found it difficult to get workers to do some works on their farms which made farm produce damaged or losses and consumer have to face high prices in due course. (Seasonal workers April, 2020).

There were high rates of redundancies and stagnations of International and Domestic supplies for instant kazakhstari which is the largest wheat exporter in the world banned its shipments for key staple foodstuff temporally as a result of the lockdown regulations. International and Domestic trades were restricted which made farmers, wholesalers, retailers and consumers difficult to transact their businesses especially for products that come from other countries due to climatic variability,



which caused bottleneck to global food supply chains, there were high significant changes in the volume or amount of foods people could cook and consumed at home than in the pre-pandemic periods.

SUMMARY OF MAJOR FINDINGS

It was found that both the prices and the supplies were higher during the period of Covid 19 lock down regulations were higher than before and after the lock down regulations.

CONCLUSION

The outcome of corona virus (covid-19) has imposed a lot of threats and concern on the socio-economic activities of the people worldwide. Human resources that man relied on for survivals were intercepted, and people were left with the options to save or not to save as last resort of their choice. The options to save or not to save as a last resort of their choice. The study was able to captured the views, opinions, decisions, and reactions of farmers, marketers, dealers, administrators and customers involved in the distributions of Agricultural produces (foodstuff) and how they felt on the lockdown regulations. It is a clear testimony that Agricultural Sector has been the backbone of the economy in Nigeria for decades. But today farmers, wholesalers, food processors, retailers, stakeholders and consumers are wondering about the situation and how the sector will be tomorrow. The experience Nigerians have passed through during the period of coronavirus (covid-19). Lockdown regulation have generated a lot of controversies. The lockdown regulations have sterilized all human activities where people were restricted from movements except security agents to avoid social contact between infected and healthy persons. Farming activities were totally stagnated and foodstuff particularly the perishable ones were left on the field got destroyed due to lack of attentions and care. Consumption rates become high since people were forced to remained indoors and consumed what they have with or without supplements, enough or not enough. Sick and disable patients became more affected where clinics and hospitals were closed. Prices of foodstuff became high which resulted in to food shortages, supplies and competitions. The findings considered the magnitudes of the effects the coronavirus



(covid-19) has on the distribution of foodstuff during the periods of the lockdown regulations and provided recommendations for handling the pandemic.

RECOMMENDATION

1. There should be continues liaising between the Government Agencies, food stuff Dealers, Marketers, Wholesalers and Food Processors on food security issues.
2. E-extension services should be provided as a means for making information, ideas, knowledge techniques and decisions reaching foodstuff marketers during and after the outbreak of any pandemic.

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