



## LIVELIHOOD ACTIVITIES OF RURAL HOUSEHOLDS' POST COVID-19 PANDEMIC IN OKEHI LOCAL GOVERNMENT AREA OF KOGI STATE, NIGERIA

<sup>1</sup>Pelemo, J. J., <sup>2</sup>Ajibola, B. O., <sup>3</sup>Arowolo, K. O., <sup>4</sup>Aledare, M. E., <sup>5</sup>Etim, E. J., <sup>1</sup>Lawal, A. T. and <sup>1</sup>Obamero, B. K.

<sup>1</sup>Department of Agricultural Technology, Kogi State Polytechnic Lokoja (Itakpe Campus)

<sup>2</sup>Department of Agricultural Extension and Rural Development, Federal University of Technology, Minna

<sup>3</sup>Department of Agricultural Technology Federal College of Freshwater Fisheries Technology New Bussa

<sup>4</sup>Department of Agricultural Education, Kogi State College of Education Technical, Kabba

<sup>5</sup>Department of Agricultural Economics and Farm Management, Federal University of Technology Minna

Correspondence contact details: jacobjide1986@gmail.com

### ABSTRACT

The aftermath of COVID-19 lockdown had great consequences on the livelihood status and wellbeing of rural households in Nigeria. The study examines the livelihood activities of rural households' post COVID-19 pandemic in Okehi Local Government Area of State, Nigeria. Three-stage sampling procedure was used in selecting 125 rural households. Structured questionnaire complimented with interview schedule was used for data collection. Data collected were analysed using mean, percentage and frequency distribution and Livelihood Activities Index. The result shows that the mean age of rural households was 37 years with 15 years mean of farming experience. Sponsoring of wards to school (87.2%) and procurements of farm inputs (73.6%) were the most affected rural household activities due to COVID-19 pandemic. Crop farming (88.0%) and agricultural marketing (84.0%) were the most livelihood activities of rural households after COVID-19. Also, 59.2% of rural households had low livelihood activities. The most coping strategies used in cushioning the effect of Covid-19 pandemic were sale of asset ( $\bar{X}$  = 3.46) and collecting loans and credit facilities ( $\bar{X}$  = 3.28). It is recommended that rural households should diversify into other viable livelihood activities to address their low livelihood status. Also, rural households insured their farms and other investments to absorb the shock and uncertainties.

**Keywords:** Post COVID-19, Livelihood activities, Rural, Households

### INTRODUCTION

The outbreak of Corona Virus (COVID-19) disease in late 2019 in Wuhan Region of Eastern China devastated the entire globe, and mortality around the world (Cucinotta and Vanelli, 2020). As a way to stem the tide of the viral disease, not only was the disease declared a global pandemic by the World Health Organisation (WHO) but also recommended a total lockdown, whereby human movement was restricted across the globe. Consequently, the lockdown and /or the disease had adverse effect on the global economy. Reflecting one of the adverse effects, the International Labour Organisation (ILO) estimates that during the first three quarters of 2020 the number of working hours worldwide declined by 17% relative to that in the last quarter of 2019; a drop equivalent to a loss of almost 500 million full-time jobs (ILO, 2020). In Nigeria, the International Food Policy Research Institute (IFPRI) estimates a 38 % drop in the Gross Domestic Product (GDP) during a week lockdown from late March to early April 2020, and an 18% decline in agri-food GDP. The challenges affecting the agricultural sector have been exacerbated by the pandemic, causing food price and inflation limiting households' purchasing power, disrupting food distribution and supply chains, depleting food stocks, and resulting in loss of income and livelihood opportunities (Andam *et al.*, 2020). In attempt to improve the food security threatening situation, people working in the agricultural sector and other essential services were exempted from the lockdown; and as such it was possible for farmers to go to farm and vehicles to transport food crop. This notwithstanding, productivity and livelihood status

of the farming households remain at stake as access to other production support services, such as agro-inputs, farm labour and transportation of farm produce was limited. The aftermath of post COVID-19 pandemic has affected the livelihood activities of farming households in Nigeria. The consequences and the economic lost from the Novel Virus on the rural farming households can never be over-estimated. A quite number of farming households have not fully recovered from the negative effects of the pandemic despite the resumption of economic activities all over Nigeria. The post COVID-19 pandemic has taken a negative swift by affecting farmers' output, sponsoring of wards to schools, inputs acquisition and other rural households' income generating activities (Adam *et al.*, 2020). Also, the post COVID-19 has been marred by skyrocketing prices of goods and services needed by the farming households for sustainable livelihood. Based on this, the question that needs to be answered is: how was the livelihood activities of the rural households post in COVID-19 pandemic in Okehi Local Government Area? The specific objectives were therefore to:

- i. describe the socio-economic characteristics of rural households in the study area.
- ii. examine rural households' activities affected by COVID-19 pandemic.
- iii. determine the livelihood activities of rural households after COVID-19 pandemic; and
- iv. examine the coping strategies adopted to cushion the effect of covid-19 pandemic.

**METHODOLOGY**

This study was carried out in Okehi Local Government Area of Kogi State. It is in Kogi Central Senatorial District, the LGA shares boundaries with Adavi, Lokoja, Akokoedo and Kabba-Bunu local governments. It has an area of 661 km<sup>2</sup> and a population of 199,999 at the 2006 census (National Population Commission (NPC), 2006). The area mostly populated by the Ebira ethnic group. Okehi is located between Latitude 7° 33' and 7° 35'N and Longitude 6° 10' E and 6° 14'E of the equator (Kogi State Ministry of Information, 2016). The major economic activities of the people in this study area include farming, fishing, crafting, trading and food processing. Three-stage sampling procedure was used in selecting the respondents in the study area. The first stage involved random selection of two districts out of three (3) districts in the LGA. The second stage involved random selection of four villages from these districts making a total number of eight villages. The third stage was proportional selection of 10% from one thousand two hundred and fifty (1250) sampling frame, giving a total of one hundred and twenty-five (125) sample size. Household heads were selected for this research.

Data were analysed using descriptive statistics such as a mean, frequency distribution and percentages and livelihood activities.

The livelihood activities were measured by asking questions on livelihood activities of rural households after COVID-19 pandemic. The livelihood activities considered were (crop farming, livestock farming, civil servant, transporter, processors, artisan, trader, remittance, renting of farm tools, farm labourer and agricultural marketing). Eleven (11) livelihood activities were used to compute the livelihood activities score. The livelihood activities range from 1-11, in which the list score is 1 while the highest score is 11.

**RESULTS AND DISCUSSION**

Results in Table 1 shows that majority (72.0%) of the respondents were below the age of

40. This implies the farmers in the study are young and actively involved in farming. This finding agrees with Adefehinti and Adebo (2020) submission that majority of farmers by in Oyo State of Nigeria were between 31-60 years. Table 1 further reveals that majority (84.8%) of rural households had formal education, with secondary education (42.4%) being the most attained formal education. This implies high literacy level and is expected to expose rural households to livelihood opportunities. This finding agrees with Usman *et al.* (2021) report that educated households tend to be more innovative because of their ability to access information more quickly that will improve their livelihood status. Mean farming experience of respondents in the study area was 15 years while the standard deviation is 10.1 years. This implies increased in years of farming could indicates enormous and substantial practical knowledge acquired over a long period of time that have tendency of improving rural household livelihood status. This finding concurs with Adeoye and Ugalahi (2017) report of high farming experience among smallholder farmers in Ogun State of Nigeria. About half (53.6%) of the respondents had a farm size within the range of 1.1 to 2.0 hectares; suggesting that majority of the farmers are small scale farmers. This category of farmers produces for consumption and surplus for selling. The result agrees with findings of Okidim *et al.* (2021) that larger proportions of farmers in Enugu State of Nigeria are smallholder farmers. Majority (69.2%) of the respondents earned above N 400000 naira with a mean annual income of N 571,248, implying low farm income. Also, majority (96.8%) of the respondents did not have access to extension agents. This could lead to low knowledge of modern farming techniques and low adoption of modern agricultural technology. This result agrees with the findings of Obianefo *et al.* (2021) report that poor extension service delivery inhibit adoption of new practices in Nigeria.

**Table 1: Socioeconomic characteristics (n=125)**

Variables	Frequency	Percentage	Mean	Std Dev
<b>Age</b>				
<30	49	39.2	37	11.8
31-40	41	32.8		
41-50	20	16.0		
51-60	8	6.4		
>60	7	5.6		
<b>Education level</b>				
Tertiary	13	10.4		
Secondary	53	42.4		
Primary	40	32.0		
Non-formal	19	15.2		



Variables	Frequency	Percentage	Mean	Std Dev
<b>Farming experience</b>				
1-10	62	49.6	15	10.1
11-20	43	34.4		
21-30	9	7.2		
>30	11	8.8		
<b>Farm size</b>				
<1.1	43	34.4	1.4	0.6
1.1-2.0	67	53.6		
2.1-3.0	15	12.0		
<b>Annual income</b>				
<200000	3	2.4	571248	333110
201000-400000	35	28.0		
401000-600000	58	46.0		
>600000	29	23.2		
<b>Extension access</b>				
Yes	4	3.2		
No	121	96.8		

Sources: Field survey, 2022

### Rural households' activities affected by COVID-19 pandemic

Table 2 reveals that sponsoring ward to school (87.2%) and procurement of farm inputs (73.6%) were the most affected because of COVID-19 pandemic in the study area. This occurs because of surge in the school fees and various farm inputs used by farming families. This finding agrees with that of Adeniyi *et al.* (2021) that COVID-19 pandemic has great effect on the economic and lifestyles of rural farming households in Nigeria. Expenditure on cultural/ceremonies (72.0%) and hospital bills 67.2% were also affected. The menace

associated with Covid-19 had greater effect on the cultural activities and prices of medications in the study area. Adefehinti and Adebo (2020) state that COVID-19 affect whole lots thereby making rural households adjust their ways and patterns of living. The least affected livelihood variables in the study area were expenditure for non-food item (53.6%), expenditure for off -farm activities (52.0%) and stable power (34.4%). This could be attributed to the fact that majority of the rural households produced most of the arable crops and do not have to buy agricultural produce.

**Table 2: Rural households' activities affected by COVID-19 pandemic (n=125)**

Variables	Frequency	Percentage
COVID-19 pandemic increases expenditure on the procurement of food items	83	66.4
COVID-19 pandemic increases expenditure for non-food item	67	53.6
COVID-19 pandemic increases selling of household assets	80	64.0
COVID-19 pandemic skyrocket prices of farm inputs	92	73.6
COVID-19 pandemic increases expenditure on non-farm activities	77	61.6
COVID-19 pandemic increases expenditure on off -farm activities	65	52.0
Disposing of livestock assets	70	56.0
COVID-19 pandemic increases expenditure on cultural/ceremonies	90	72.0
COVID-19 increase expenditure on hospital bills	84	67.2
Negatively affect sponsoring ward to school	109	87.2
Reduction in households' ability to save	78	62.4

Sources: Field survey, 2022

### Livelihood activities of rural households after COVID-19 pandemic

Table 3 revealed that 88.8% of the rural households derived livelihood from crop farming after COVID-19 pandemic while 84.0% derived livelihood from agricultural marketing. This finding shows that majority of the farming households engaged in crop farming and marketing of produce as means of enhancing their livelihood after COVID pandemic. This could be attributed to the fact that

crop farming and marketing of farm produce are the major and easiers occupation that could easily cushion the overwhelming effect of COVID-19 pandemic within a short period of time. This finding agrees with Yisa *et al.* (2022) assertion that crop farming and marketing of farm produce are the predominant occupation among rice contract farmers in Niger State of Nigeria. Also, 64.0% and 51.2% of the respondents derived livelihood from farm labourer and trading respectively. Farm

labourer and trading are common occupation among rural households that assist the rural households in satisfying their immediate needs. The least means of

livelihood available for farmers in the study area were renting of farm tools (20.8%) artisan (8.8%).

**Table 3: Livelihood activities of rural households after COVID-19 pandemic (n=125)**

Variables	Frequency	Percentage
Crop farming	110	88.0
Agricultural marketing	106	84.0
Farm labourer	80	64.0
Traders	64	51.2
Livestock farming	52	41.6
Processors	39	31.2
Remittance	37	29.6
Transporter	31	24.8
Civil servant	29	23.2
Renting of farm tools	26	20.8
Artisans	11	8.8

Source: Field survey, 2022

**Coping Strategies Adopted to Cushion the Effects of COVID-19 Pandemic**

Table 5 revealed that sales of assets ( $\bar{X}$  =3.46) as the most strategy used to cushion the effect of COVID-19 pandemic. This implies that the negative effect of the pandemic took a twist on the rural farming households livelihood status thereby forcing them to sell households and other assets in order to cushion the effect. Collecting loan and credit facilities ( $\bar{X}$  =3.28) ranked 2<sup>nd</sup>, One of the measures imposed by government after the lockdown was provision of loan and credit facilities available for rural households at affordable interest rate. The finding is in consonance with that of Adeniyi *et al.* (2021) submission that provision of loan is one of the strategies used to cushion the effect

of COVID-19 by poultry farmers in Oyo State of Nigeria. Purchasing items on credit ( $\bar{X}$  =2.89) ranked 3<sup>rd</sup>, signifying purchasing goods on credit among rural households with the intention of paying back when things get better. Eating less preferred food ( $\bar{X}$  =2.69), implying rural households eating their uncommon foods as a result of not having access to their most valued meals due the negative effect of COVID-19 pandemic However, the least coping strategies adopted by the respondents were children eating first( $\bar{X}$  =1.32), spending income( $\bar{X}$  =1.81) and increase in output( $\bar{X}$  =1.85). Coping strategies are used by rural dwellers in order to cope with shock arising from risks and uncertainties associated with their primary and secondary occupations (Usman *et al.*, 2021).

**Table 5: Coping strategies adopted to cushion effects of COVID-19 pandemic (n=125)**

Strategy	Frequently	Occasionally	Rarely	Never	Mean	Rank
Sales of asset	84	27	2	12	3.46	1 <sup>st</sup>
Collecting loan and credit facilities	68	28	25	4	3.28	2 <sup>nd</sup>
Purchasing items on credit	35	45	41	4	2.89	3 <sup>rd</sup>
Eating less preferred food	20	48	55	2	2.69	4 <sup>th</sup>
Skipping of meals	13	41	69	2	2.52	5 <sup>th</sup>
Reduction of food consumption	27	37	25	26	2.36	6 <sup>th</sup>
Increase in off farm activities	10	34	26	55	1.99	7 <sup>th</sup>
Increase in farm input	2	24	57	42	1.89	8 <sup>th</sup>
Increase in farm output	2	29	42	52	1.85	9 <sup>th</sup>
Spending income	14	3	53	55	1.81	10 <sup>th</sup>
Children eating first	4	2	24	95	1.32	11 <sup>th</sup>

Source: Field survey, 2022

**CONCLUSION AND RECOMMENDATIONS**

It can be concluded that most of the respondents engaged low livelihood activities after COVID-19 pandemic. Sponsoring of wards to school, procurements of farm inputs and expenditure on cultural ceremonies were the most affected livelihood indicators due to COVID-19 pandemic. Also, sale of assets and collection of loan and credit facilities were the most coping strategies used to

cushion the effect of Covid-19 pandemic. It is recommended that rural households insured their farms and other investments in order to absorb the shock and uncertainties. Rural households should diversify into other viable livelihood activities for improved livelihood status and also to absorb sudden and unplanned shock.



## REFERENCES

- Adefehinti, A. D. and Adebo, G. M. (2021). Perceived Effects of Covid-19 Pandemic on Poultry Production in Oyo State. *Proceedings of 30<sup>th</sup> Annual National Congress of Rural Sociological Association of Nigeria (RUSAN) held at Federal University of Agriculture, Abeokuta, 4<sup>th</sup>-8<sup>th</sup> October, 2021*, 156-161.
- Adeniyi, R. T., Adetunji, T. A., Olumoyegun, B. A., Fanifosi, G. E. and Odozi, J. C. (2021). Poultry Farmers Adaptation Strategies to Consequences of COVID-19 Pandemic in Oyo State, Nigeria. *Proceedings of the 26<sup>th</sup> Annual Conference of the Agricultural Extension Society of Nigeria held at Federal University of Agriculture, Abeokuta, Nigeria*, 13-20.
- Adeoye, S. O. and Ugalahi, U. B. (2017). Smallholder Food Crop Farmers' participation in Bank of Agriculture (BOA) Loan Scheme in Ogun State Nigeria. *Agrosearch*, 17 (2), 51-66.
- Andam, K., Edeh, H., Oboh, V., Pauw, K. and Thurlow, J. (2020). Estimating the Economic Costs of COVID-19 in Nigeria. International Food Policy Research Institute (IFPRI). Page 25. <https://www.ifpri.org/publication/estimating-economic-costs-covid-19-nigeria>. Accessed 7th January, 2021.
- Cucinotta, D. and Vanelli, M. (2020). WHO Declares COVID-19 a Pandemic? Retrieved from <https://europepmc.org/article/PMC/756957302-07-222>.
- International Labour Organisation (2020). Covid-19: Stimulating the economy and labour demand. Retrieved from [https://www.ilo.org/global/about-the-ilo/newsroom/news/WCMS\\_740893/lang-en/index.htm](https://www.ilo.org/global/about-the-ilo/newsroom/news/WCMS_740893/lang-en/index.htm). Retrieved on 13/04/2022.
- Kogi State Ministry of Information (2016). *Working Document*. Pp. 1-56.
- Mohammed, U., Umar, I. S., Olaleye, R. S., Pelemo, J. J., Ahmad, B. S., Mohammed, U. and Umar, A. (2021). Effects of Banditry on Income and Livelihoods of Yam Marketers in Shiroro Local Government Area of Niger State, Nigeria. *Journal of Agriculture and Food Sciences*, 19 (1), 163-178.
- National Population Commission (NPC), (2006). Yearbook on Nigeria population data. Report of the NPC. Retrieved from <http://www.jstor.org>. Retrieved on 02/02/17.
- Obianefo, C. A. Osuafor, O. O. and Ng'ombe, J. N. (2021). Challenges Faced by Female Members of Agricultural Cooperatives in Southeast Nigeria. *Journal of Agricultural Extension and Rural Development*, 13 (2), 94-106.
- Okidim, I., Egwue, L., Ekine, D. and Chukuigwe, E. (2021). Rural Households' Food Insecurity and Coping Strategies During Covid-19 Pandemic in Enugu State, Nigeria. *Journal of Asian Rural Studies*, 5 (2), 126-134.
- Usman, N. S., Tsado, J. H., Salihu, I. T., Ajayi, O. J., Aliyu, U., Pelemo, J. J., Alhassan, I. L., Isah, K. H. and Jibrin S. (2021). Assessment of Food Security and Livelihood Status of Rural Households Adopting Improved Rice Varieties in Kwara and Niger States of Nigeria. *Baddegi Journal of Agricultural Research and Environment*, 3 (3), 80-87.
- Yisa, K. M., Tsado, J. H., Mohammed, H. U., Mohammad, U., Lawal, M., Kolo, P. N., Pelemo, J. J. and Adeyemi, O. A (2022). Livelihood Status of Rice Contract Farmers in Benue State of Nigeria. *Fudma Journal of Agriculture and Agricultural Technology*, 8 (1), 364-371.