**EFFECTS OF COVID-19 PANDEMIC ON THE LIVELIHOOD ACTIVITIES OF IWO INHABITANTS IN OSUN STATE.**

**Akanbi M.O & Olalekan H.M**

**Department of Urban and Regional Planning, Federal University of Technology, Minna, Nigeria.**

**Correspondent email: m.akanbi@futminna.edu.ng**

**ABSTRACT**

Recently, the world has been confronted with unprecedented global pandemic which has resulted in many deaths, fears, shocks and effects on people’s livelihood. In Nigeria, the measures taken to curtail the spread of the Covid-19 during the lockdown affected means of livelihoods undertaken by people. This study measured the effects of Covid-19 pandemic on the livelihood of farmers and business owners of Iwo inhabitants in Osun State. The study also examined the challenges posed by the pandemic and assessed the effects of government's strategies implemented for the disease control on the livelihoods of the farmers and business owners. A total number of 200 well structured questionnaires were administered to the respondents in the study area using snowball sampling technique. The questionnaires were all returned amounting to 100% response rate. Data was analyzed using descriptive method with the aid of SPSS. Findings revealed that Covid-19 negatively affected the lives of people, ranging from suspension of businesses and other daily activities that requires physical contacts, travel ban effects on business, inflation in price of goods and services, suspension of farming activities, increased cost of labour and agrochemicals amongst others. It was observed that diversification into other business interest is among the reasons why some of the respondents survived during the Pandemic. The study recommends that measures taken to curtail the effects of Covid19 through vaccination be adhered to for prevention of cases that may warrant further shutdown of activities which may hamper livelihoods engagement.

Key words: **Business Owners, Covid-I9, Farmers, Pandemic, Livelihoods, Lockdown**

**1.0 INTRODUCTION**

The world has been grappling with unprecedented pandemic which spread to various countries over the first half of 2020. The pandemic was identified as a new corona virus (severe acute respiratory syndrome corona virus 2, or SARS-CoV-2), and later named as Corona virus Disease-19 or COVID-19 (Qiu *et al.,* 2020). The pandemic evidently originated from the city of Wuhan in the Hubei province of China in 2019 and it has spread rapidly across the world, resulting in millions of deaths and tremendous economic damage. To curtail the spread and flatten the curve, countries across the world adopted different public health measures such as the wearing of face mask, hands sanitizing, social distancing amongst other measures intended to prevent its spread(Fong *et al.,* 2020).To prevent the rapid spread of the disease, the decision to adopt the lockdown and other containment measures resulted in multifaceted impacts ranging from disruption of the food supply chain and other vital economic activities across the globe (Alvi *et al*., 2021; Pu & Zhong, 2020; Swinnen& McDermott, 2020). The covid-19 pandemic posed challenges on food security and sustainable livelihoods particularly in developing countries (Rasul, 2021). More effects emanate from the disease control measures which has weakened the livelihoods of vulnerable people (Gerard *et al*., 2020 Kassegn & Endris, 2021; Ouko *et al*., 2020).

It is noteworthy that due to high rate of unemployment at the level of public sector, a significant proportion of African workers are employed in the informal sector in different cities. The survival of informal sector workers depends mainly on daily earnings from outside the home, with these being factors that inevitably necessitate constant and regular movement and interactions (Duerksen, 2020). The challenges posed by the pandemic includes of losses of jobs and businesses require the people to learn new skills and diversify their income and resources into multiple streams of investments. Urban area by nature is believed to be highly monetized and people particularly survive through various livelihood strategies. The spread of Covid-19 across the globe including Nigeria has threatened the survival of livelihood as people took a break from their livelihood activities for safety of life. Studies about impact of covid-19 such as (Adam *et al* 2020, Akinyoade et al., 2020.,) mainly focused on food insecurity, poverty, mobility restriction amongst others with no emphasis on the pandemic’s impact on livelihoods of business owners and farmers whose services were considered essential when the pandemic was at its peak. To fill this gap, the study sought to establish empirical evidence of Covid-19 pandemic on livelihoods of farmers and business owners in Iwo town, Osun State. This study intended to assist policymakers, planners and other stakeholders in decision making relating to pandemic and livelihoods security.

**2.1. LITERATURE REVIEW**

This study adopted the concept of Livelihoods to show the link between the COVID-19 and people’s income generating activities. Livelihood concept emanated from the work of Robert-Chambers in the mid-80s as a framework created for understanding of poverty in rural area. It is defined as a set of capabilities, assets, and activities required for a way of living (Chambers & Conway, 1992). The livelihoods framework explains five fundamental pillars which includes vulnerability context, livelihood assets, policies structures and processes, livelihood strategies, and livelihood outcomes. The vulnerability context refers to shocks, seasonality and trends. Natural and/or man-made shocks and stresses severely affect different actors involved in the food supply chain (Bene, 2020). The outbreak of COVID-19 is a shock that has a direct effect on livelihoods and this effects by extension has an impact on the functionality of households. Livelihoods in this context is vulnerable to Covid19 owning to the fact that various forms of restrictions imposed by the government in response to COVID-19 are an example of shocks/stresses that affect the ability of small business owners to engage successfully in their livelihoods (Bene, 2020).The shocks and stresses associated with COVID-19 pandemic worldwide is reported to have resulted in devastating socio-economic disruptions of people placing livelihoods at high risk as thousands of people reportedly lost their income and falling into the trap of impending poverty, as a direct consequence of the economic crisis (Paul *et al*., 2020)

The unemployment increases observed in the US are partly driven by lockdown/social distancing policies (Gupta *et al.,* 2020). Similarly, Bartik*et al*. (2020), conducted a survey in a small number of firms in the US and document that several of them have temporarily closed shop and reduced their number of employees compared to January 2020.The global pandemic is recorded to have hit minorities and people at the bottom of the socioeconomic spectrum extremely suffer more from pre-existing conditions due to more exposure to risks, economic difficulties, and limited access to services ([Wade, 2020](file:/C:/Users/user/AppData/Local/Temp/Documents%20new%20one.docx" \l "bb0465)&[Duggal,2020](file:/C:/Users/user/AppData/Local/Temp/Documents%20new%20one.docx" \l "bb0155)). Formal sector employees, particularly the lower middle class that has limited savings, have been significantly affected by the pandemic as thousands were laid off, some were sent home with unpaid leave as businesses strive to stay afloat (Demeke &Kariuki, 2020). Informal sector employees who basically often survive on daily hand-to-mouth wages are most affected by COVID 19 response measures such as stay home orders, closures of markets and shutdowns in many sectors (Demeke &Kariuki, 2020). It was also observed that COVID-19 pandemic is likely to have confrontational effects on agrarian households and loss of job amongst rural wage labour (Wieser *et al.,* 2020; Kassegn & Endris, 2021).

The link between Covid-19 (Independent variable) and Livelihood activities (Dependent variable) could be explained from the livelihood framework modified by Rakodi, (2002) who opines that the sustainability of livelihood depends on its ability to cope and recover from sudden shocks and stress imposed by disease, disaster and government policies/intervention while maintaining and enhancing its capabilities and assets. The fear and shock created by Covid-19 means that the livelihood activities of people are susceptible. The outbreak of Covid-19 and government’s intervention through various means to flatten the curve has a direct impact on livelihoods of people. Business activities and agricultural value chain are vulnerable to Covid-19 pandemic (Morton 2020)

**3.1. RESEARCH METHODOLOGY**

The study adopted quantitative research leading to the administration of a total number of two hundred (200) well-structured closed ended questionnaires to respondents selected from Oke-Adan and Gidigbo wards of Iwo local government using snowball sampling technique. This technique also regarded as the “chain method,” is considered highly efficient and help reduces cost to access people who would have been difficult to reach. The first procedure required is for the researcher to ask the first few samples usually selected through convenience sampling to indicate if they are acquainted with anyone with similar view or opinions that can participate in the research (Polit-O’Hara & Beck 2006). This method was helpful because there was no record of sample comprising the population of categories of the respondents investigated (Farmers and Business owners). Nevertheless, the identification of the larger respondents was made easier through the help of the first few participants that filled the questionnaires who further involved others. The questionnaires contained various questions applicable to each group based on their livelihood activities. The respondents identified constituted farmers and business owners who were carefully selected based on observable characteristics. In the end, the questionnaires were all returned amounting to 100% response rate. The data were analyzed with the use of statistical package for Social Sciences (SPSS) for presentation of data in tables, bar charts, pie charts.

**4.1. RESULTS AND DISCUSSION**

The information in the Table 1 below consists of data showing the gender representation and marital status of the respondents in the two wards (Oke-Adan &Gidigbo). Majority of the respondents (115) which represented 57.5% were male while the rest number of respondents (85) which represented 42% were female. Data about the marital status shows that majority of the respondents consisting 60% are married, 29% are single and 11% are divorced.

**Table 1:** Gender and marital status of the respondents

|  |  |  |  |
| --- | --- | --- | --- |
| **Gender** | | **Frequency** | **Percentage (%)** |
|  | Male | 115 | 57.5 |
| Female | 85 | 42.5 |
| **Total** | **200** | **100** |
|  | **Marital status** | **Frequency** | **Percentage (%)** |
|  | Married | 120 | 60 |
|  | Single | 58 | 29 |
|  | Divorced | 22 | 11 |
|  | **Total** | **200** | **100** |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |

**Level of education of the respondents**

The level of educational attained by the respondents was investigated to ascertain if they are knowledgeable enough to answer the questions useful for the study. The data in Table 2 below shows that 12.5% of the respondents acquired primary school education, 22.5% of the respondents have secondary school certificate, 18% are holders of ND/NCE certificate, 33.5% holds HND/ university degree certificate while 13.5% of the respondents are postgraduate degree holders. There exists educational attainment amongst the respondents in the study area.

**Table 2: Level of education of the respondents**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Level of education** | | **Frequency** | **Percentage (%)** |  |
|  | Primary school | 25 | 12.5 |  |
| Secondary school | 45 | 22.5 |  |
| ND/NCE | 36 | 18 |  |
| HND/University degree | 67 | 33.5 |  |
| Postgraduate | 27 | 13.5 |  |
| **Total** | **100** | **100** |  |

**Source: Author’s field survey (2021)**

The Table 3 below showed that a total number of 100 business owners who represented 50% of the respondents also provided responses to questions regarding challenges encountered in their businesses during the peak of the pandemic. The data collected to investigate the effect of pandemic on business as analyzed in Table 3 below shows that 14% of the respondents experienced loss of customer/clients, 10% revealed that some of their un-purchased product got expired, 56% affirmed there was increase in the price of goods leading to low patronage, 20% of the respondents were unable to order for more goods due to travel ban. It was recalled that travel ban affects businesses of those into essentials. This data indicates that the sudden emergence of the pandemic affected businesses of the respondents.

**Table 3: Challenges encountered by business owners**

|  |  |  |  |
| --- | --- | --- | --- |
| **Experience of business owners** |  | **Frequency** | **Percentage (%)** |
| Loss of customer/clients |  | 14 | 14 |
| Expiration of some products un-purchased |  | 10 | 10 |
| Increase in price of goods and low patronage |  | 56 | 56 |
| Travel ban affects business |  | 20 | 20 |
| **Total** |  | **100** | **100** |

**Source: Authors field survey (2021)**

**Effects Of Covid-19 Pandemic on Farmers.**

Farming is one of the means of generating income of the respondents, hence the farmers were asked questions about decline participation in farming activities due to pandemic. The data in Table 4 revealed reasons for declination in farming activities; 6% of the respondents agreed they did not feel safe to go to farm, 28% were scared of being infected, 25% revealed that hired labourers were not available to help with the farming activities. This therefore implies that covid-19 at a point resulted in suspension of farming activities in the study area. This agrees with the finding made by Aromolaran *et al* (2021), that the outbreak of Covid-19 reduced availability and increased cost of farm labor, which in turn, resulted in a decline in land area cultivated.

The study went further to ascertain challenges encountered by the farmers and Table 5 revealed high cost of labour by 18% of the respondents, 46% of the respondents agreed that one of their major challenges was that Agro chemical product which foster the growth of crop plants and yield buoyant harvest became highly costly; 11% of the respondents suffered from unavailability of agricultural extension while 25% low sales of farm produce. This analysis agrees with a similar finding that ‘farmers are among the vulnerable groups who might be restricted from working on their farm land, accessing markets to sell their products, or to even buy seeds and other essential inputs needed for the plants’ (Food and Agriculture Organization of the United Nations (FAO, 2020).

**Table 4: Reasons for declined participation in farm during the lockdown.**

|  |  |  |
| --- | --- | --- |
| **Declined participation in farm activities** | **Frequency** | **Percent (%)** |
| Uncertainty about safety on the farm  Fear of being arrested by security personnel | 15  12 | 15  12 |
| Fear of being infected | 28 | 28 |
| Unavailability of labourers to work on the farm | 45 | 45 |
| **Total** | **100** | **100** |
| **Table 5: The challenges encountered by the farmers during the peak of lockdown** |  |  |
| **Major challenges** | **Frequency** | **Percent (%)** |
| Increased cost of hiring labourers | 18 | 18 |
| Increased cost of Agro-chemicals products | 46 | 46 |
| Suspension of Agricultural extension which aid farming production | 11 | 11 |
| Low sales of farm produce | 25 | 25 |
| **Total** | **100** | **100** |

**Source: Authors field survey (2021).**

Restriction of movement as one of the strategies to control the spread of Corona-virus affected people’s business in different ways. The data in Table 6 shows that 35% of the respondents affirmed to reduced business profits, 11% revealed that goods ordered online were not delivered, 28% of the respondents affirmed that closure of business affected daily expenditure while 26% lost interest in embarking on their business activities due to the location. The study confirmed that people were unable to do their daily businesses which requires physical contacts and therefore the restriction imposed on people affected the respondents in the category of business owners. This agrees with the study of Asegie *et al* (2021) in their research titled ‘The effects of Covid-19 on livelihoods of rural households in Ethiopia’. Findings revealed that in order to reduce social gatherings, certain business activities were banned by the government; some businesses are devoid of necessary inputs and customers due to movement restrictions, and others crippled due to financial shortage.

**Table 6: Restriction of movement and effects on Business**

|  |  |  |
| --- | --- | --- |
| **Effects of movement restriction on business activities** | **Frequency** | **Percent (%)** |
| Reduced business profits | 35 | 35 |
| Goods ordered not delivered | 11 | 11 |
| Closure of business affects daily expenditure | 28 | 28 |
| Loss of interest in the business due to location | 26 | 26 |
| **Total** | **100** | **100** |

**Source: Authors field survey (2021).**

People are expected to save for daily expenditure through income generated from livelihood activities hence the respondents were asked question about their experience regarding savings for daily expenditure in the peak of the pandemic. The figure 1 below shows the data analysis of how individual dealt with their savings for expenditure during pandemic. 47% of the respondents affirmed that they could rarely save during lockdown, 30% agreed they could easily save while 23% of the respondents agreed to low savings compared to how it was before the emergence of the pandemic. This agrees with the study conducted in Pakistan by Ali *et al* (2020) which focused on socioeconomic impact of COVID-19. The study confirmed that the income for about 64% of respondents decreased due to the outbreak of covid-19

**Figure 1: Dealing with savings for daily expenditure during pandemic**

**Source: Authors field survey (2021).**

The data gathered on the field to find how farm produce were affected by the pandemic was presented in figure 2 as follows; 25% of the respondents revealed that they were able to preserve their farm products, 19%revealed that perishable farm produce was wasted, 56% observed that people were afraid to come to the market and buy farm produce. This implies that farmers faced the challenges of low patronage of their farm produce in other way there was low cash inflow for them.

**Figure 2: Effects of pandemic on farm produce/sales after harvest.**

**Source: Authors field survey (2021).**

To cushion the effects of covid-19 on livelihoods, a total of 75 respondents out of 200 which constituted 37.5% revealed they opted for additional source of income to cope with the economic challenge posed by the pandemic. The data in Table 7 below revealed that 10% of the respondents engaged in the sale of nose mask from house to house, 15% adopted online business while 10% ventured into production of handwash learnt through YouTube videos. 10% of the respondents also involved in home delivery of some essential local made products and food items. This analysis is evidence that some of the respondents survived due to additional source of income they embarked on during the restriction measures imposed by the federal government.

**Table 7: Additional source of income ventured by the respondents during the pandemic**

|  |  |  |
| --- | --- | --- |
| **Additional source of income adopted** | **Frequency** | **Percent (%)** |
| Sale of face mask | 20 | 10 |
| Online business | 15 | 7.5 |
| Home delivery of local made products and foods  Production of hand wash through YouTube training | 20  20 | 10  10 |
| **Total** | **75** | **37.5** |

**Source: Authors field survey (2021).**

The emergence of Covid-19 came with a threat to life hence the need to ask the respondents about their experience as seen in the Table 8 below. 51% of the respondents entertained the fear of contracting the disease, 40% had the fear of staying idle, 9% feared that the rate of criminal activities will increase. It was deduced from the responses that the emergence of Covid-19 was a threat to life of the respondents.

**Table 8: Covid 19 as a threat to life.**

|  |  |  |
| --- | --- | --- |
| **Perception of covid as a threat to life** | **Frequency** | **Percent (%)** |
| Fear of contacting the disease | 102 | 51 |
| Fear of been idle | 80 | 40 |
| Fear High crime rate | 18 | 9 |
| **Total** | **200** | **100** |

**Source: Authors field survey (2021).**

According to the livelihood framework adopted for this work, feeding is one of the crucial aspects of human capital which can also be threatened in times of shocks and disease outbreak. This section explained the experience perceived on feeding during the pandemic as stated in Table 9 below. It is evident that the thought of contracting the disease through contact with people affects the ability for food purchase as agreed by 30% of the respondents. Inflation on food items greatly affected the respondents as indicated by the majority which constituted (52.5%) while 17.5% of the respondents agreed to have experience absence of food items.

**Table 9: Feeding experience during the lockdown**

|  |  |  |
| --- | --- | --- |
| **Feeding experience** | **Frequency** | **Percent (%)** |
|  |  |  |
| Availability of food items at high cost | 105 | 52.5 |
| Availability of food but fear of going out  Absence of food items | 60  35 | 30  17.5 |
| **Total** | **200** | **100** |

**Source: Authors field survey (2021).**

**Effects of pandemic on price of commodities**

Figure 3 below shows that 19.2% perceived that there was reduction in the quantity of goods but still sold at the same price, 19.4% perceived increase in the price of food and goods were double weekly while 61.4%perceived that the inflation associated with covid19-pandemic affected price of commodities as they agreed to sporadic increase in price of goods on daily basis. This result is similar with the findings of Gu and Wang (2020) & Minten *et al* (2020), which revealed that covid 19 pandemic has a great impact on marketing and price of commodities in Shanghai, China adding that lockdown strategy as precautionary measure against covid-19 also resulted in disruption of trading particularly perishable goods such as vegetables.

**Figure 3: Effects of pandemic on price of commodities.**

**Source: Authors field survey (2021)**

Household property and livestock are examples of physical asset that people sometimes dispose to cushion the effects emanating from economic hardship, disaster or shocks. The respondents in the study area were examined to see if due to covid-19 pandemic, people had at any point consider disposing their property or livestock to cope. The data in Table 10 below explains the condition of respondent’s physical assets during the peak of the pandemic. The Table revealed that only 2% sold valuable properties, 47% claimed none of their properties were disposed, while 21% sold some of the respondents sold livestock owning to hardship imposed by the pandemic while 30% of the respondents never sold livestock. This implies that people were able to cope without disposing their properties or livestock.

**Table 10. Sale of household Property or livestock owing to hardship caused by the pandemic**

|  |  |  |
| --- | --- | --- |
| **Sales of property or livestock** | **Frequency** | **Percent (%)** |
| Sold valuable properties | 4 | 2 |
| No valuable property disposed | 94 | 47 |
| Sold live stocks  Live stocks not sold | 42  60 | 21  30 |
| **Total** | **200** | **100** |

**Source: Authors field survey (2021).**

**5.1 CONCLUSION**

The study assessed covid-19 pandemic impact on livelihoods of Iwo inhabitants and findings revealed that covid-19 has negatively affected the livelihoods of people, ranging from halt in business and farming activities, low patronage, increased cost of labour, inflation in price of goods and services, diversification into other source of income amongst others. Thus, people’s social lives, activities and income were greatly affected as a result of lockdown order imposed by the Federal Government of Nigeria. It is therefore, concluded that the Covid-19 has an impact on livelihoods of the people of Iwo Local Government. People acknowledge the fact that they ventured into new innovation and skills which is a part of the reasons why they survived aside their businesses and farming activities. The study recommends the need for adherence to precautionary measures so people can beat the spread of the phenomena for livelihood activities to continue uninterrupted. Planning should also encourage public spacing particularly to reduce the contraction of diseases that spreads quickly when people in large numbers come in contact.

**REFERENCES**

Adam, K., Edeh, H., Oboh, V., Pauw , K.,& Thurlow, J. (2020) Impacts of COVID-19 on food system and Poverty in Nigeria. *Advances in food security and sustainability*, 5, 154-173.

Akinyoade, A.,OLasanmi, O.O., & Agbaje, Y.T(2020) Economic Impact of COVID-19 Pandemic on the Sustenance of Service Providers: Commercial Motorcycle Transport Operators in Ile-Ife, Osun State, Nigeria. *The international journal of humanities & social studies,*6(8), 234-230

Ali, A., Ahmed, M., Hassan, N., (2020). Socioeconomic impact of COVID-19 pandemic: Evidence

from rural mountain community in Pakistan. *Journal of Public Affair.*21 (4) 21(4) Doi: 10.1002/pa.2355. Epub

Alvi, M., Barooah, P., Gupta, S., Saini, S., (2021). Women’s access to agriculture extension amidst COVID-19: insights from Gujarat, India and Dang, Nepal. Agric. Syst. 188

Aromolaran, A.B., Muyanga, M., Issa, F.O. & Oladeji, O. (2021) A Multi-Phase Assessment of the Effects of COVID-19 on Food Systems and Rural Livelihoods in Nigeria. APRA COVID-19 Country Report, Brighton: Future Agricultures Consortium, DOI: 10.19088/APRA.2021.042

Asegie, M.A., Adisalem, T.S.,& Eshetu, A.A (2021)The effects of COVID-19 on livelihoods of Rural Households: South Wollo and Oromia Zones, Ethiopia. *Heliyon* 7(12) E08550

Bartik, W. A., Bertrand, M., Zoë, C. B., Glaeser, L. E., Luca, M., and Stanton, T. C. (2020). The impact of COVID-19 on small business outcomes and expectation. *The Proceedings of National Academy of Sciences (PNAS)*. 117, (30)

Bene, C., (2020) Resilience of local food systems and links to food security, A review of some important concepts in the context of COVID-19 and other shocks. Journal of food security 12 (4),805-822

Chambers, R. & Conway, G.R., (1992) Sustainable rural livelihoods: Practical concepts for the 21st Century, Institute of Development Studies Discussion Papers, Cambridge

Demeke, M., Kariuki, J. & Wanjiru, M. (2020). Food and Nutrition Security in Kenya amidst Covid-19 Virus Crises: Assessing Impact and Adequacy of Resources, FAO Policy Brief, May 2020, 1-4

Duggal, R. (2020). Mumbai’s Struggles with Public Health Crises. Kerala’s COVID-19 Strategy, *Economic & Political weekly 55*(21): 17.

Duerksen, M. (2020). Innovations Needed to Prevent COVID-19 From Catching Fire in Africa's Cities. Washington, DC: Spotlight, Africa Center for Strategic Studies. April, 2020

Food and Agriculture Organization of the United Nations (FAO), 2020. Impacts of COVID-19 on food security and nutrition: developing effective policy responses to address the hunger and malnutrition pandemic. In: High Level Panel of Experts (HLPE) Issues Paper: Committee on World Food Security (CFS).

Fong, M. W., Gao, H., Wong, J. Y., Xiao, J., Shiu, E. Y. C., Ryu, S., & Cowling, B. J. (2020). *Nonpharmaceutical Measures for Pandemic Influenza in Nonhealthcare Settings—SociaDistancing Measures*. *26*(5), 976–984. <https://doi.org/10.3201/eid2605.190995>

Gerard, F., Imbert, C., Orkin, K. (2020) Social protection response to the COVID-19 crisis: Options for developing countries. Oxford. Rev. Econ. Pol, 36(S1), S281-S296

Gu, H.Y., &Wang C.W (2020) Impacts of COVID-19 Pandemic on vegetable production and countermeasures from agricultural insurance perspective. Journal of integr. Agric. 9 (12), 2866-2878.

Gupta, S., Montenovo, L., Nguyen, T., Lozano‐Rojas, F., Schmutte, I., Simon, K., ... & Wing, C. (2023). Effects of social distancing policy on labor market outcomes. *Contemporary Economic Policy*, *41*(1), 166-193.

Kassegn, A.& Endris, E.,(2021) Review on socio-economic impacts of ‘Triple Threats’ of COVID-19, desert locusts and floods in East Africa, Evidence from. Ethiopia: Cogent social science, 7 (1), 1-28

Minten, B., Mohammed, B. & Tamru, S. (2020). Emerging Medium-Scale Tenant Farming, Gig Economies, and the COVID-19 Disruption: The Case of Commercial Vegetable Clusters in Ethiopia. *European Journal of Development Research*  32, (3) 1402–1429 . <https://doi.org/10.1057/s41287-020-00315->7

Morton, J., (2020). On the Susceptibility and Vulnerability of Agricultural Value Chains to COVID-19. World Development, 2020 December, 136:105132. https://doi: 10.1016/j.worlddev.2020.105132.

Ouko, K.O., Gwada, R.O., Alworah, G.O., Onganga, Z.M., Ochieng, S.V., & Ogola, J.R.O.(2020), Effects of COVID-I9 on Food Security and Household Livelihoods in Kenya. Rev. Agric. Appl. Economic 23 (2), 72-80

Paul, R., Arif, A. A., Adeyemi, O., Ghosh, S., & Han, D. (2020). Progression of COVID-19 From Urban to Rural Areas in the United States: A Spatiotemporal Analysis of Prevalence Rates. *The Journal of rural health: official journal of the American Rural Health Association and the National Rural Health Care Association*, *36*(4), 591–601. <https://doi.org/10.1111/jrh.12486>

Pu, M., Zhong, Y., 2020. Rising concerns over agricultural production as COVID-19 Spreads:

lessons from China. Global Food Security. 26.

Polit, D.F. &Beck, C.T. (2006). Essentials of Nursing Research: Methods, Appraisal, and Utilization (6th ed.). Philadelphia, PA: Lippincott Williams &Wilkins

Qiu, Y., Chen, X., & Shi, W. (2020). *Impacts of Social and Economic Factors on the Transmission of Coronavirus Disease 2019 (COVID-19) in China* (Working Paper 494[pre.]).GLO Discussion Paper. <https://www.econstor.eu/handle/10419/215739>

Rakodi, C., Lloyd-Jones, T., & Rakodi, C. (2002). A Livelihoods Approach - Conceptual Issues and Definitions. In Urban Livelihoods: A People-Centred Approach to Reducing Poverty. T. (Eds.) (2002). Urban Livelihoods. Earthscan Publications Limited, London.

Rasul, G. (2021) Twin Challenges of COVID-19 Pandemic and climate change for agriculture and food security in South Asia. *Environmental Challenge*s. 2, (2021) <https://doi.org/10.1016/j.envc.2021.100027>.

Swinnen, J., McDermott, J., (2020) Covid-19 and global food security. *Journal of EuroChoices* 19 (3),26–33.

Wade, L. (2020). “An unequal blow”. *American Association for the Advancement of Science*, 368 (6492), 700-703

Wieser, C., Ambel, A.A.,Bundervoet, T., & Haile, A.(2020) Monitoring Covid-19 impacts on household in Ethiopia, Report No1, Results from a High Frequency Phone Survey of Households. World Bank Group.

Psychological and Livelihood Impacts

of COVID-19 on Bangladeshi

Lower Income People

Psychological and Livelihood Impacts

of COVID-19 on Bangladeshi

Lower Income People

Psychological and Livelihood Impacts

of COVID-19 on Bangladeshi

Lower Income People