

**ASSESSING THE ECONOMIC IMPACT OF THE COVID-19 PANDEMIC
ON YOUTHS IN AGRIBUSINESS, A CASE STUDY OF
MUTOKO DISTRICT, ZIMBABWE**

THESIS

By

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**MASTER OF AGRIBUSINESS STUDY PROGRAM
FACULTY OF ANIMAL AND AGRICULTURAL SCIENCES
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**As One of the Requirements for Obtaining an Agricultural Master's Degree
in Master Program in Agribusiness
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FACULTY OF ANIMAL AND AGRICULTURAL SCIENCES
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STUDY OF MUTOKO DISTRICT, ZIMBABWE**

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STATEMENT

I declare truthfully that the thesis I have compiled as a requirement for obtaining a Master's degree from the Master Program in Agribusiness is entirely my own work and has never been submitted as a fulfillment of the requirements for obtaining a Master's degree from Universitas Diponegoro or other universities. As for certain parts of the thesis writing that I quoted from the work of others, the source has been clearly written in accordance with the norms, rules and ethics of scientific writing.

Hereby declare as follows:

1. **Titled Thesis** : Assessing the Economic Impact of the Covid-19 Pandemic on Youths in Agribusiness, A Case Study of Mutoko District, Zimbabwe.
2. I also admit that this final project can be completed because of the full guidance and support of my supervisors, they are: **Siwi Gayatri, S.Pt.,M.Sc.,PhD.** and **Dr. Komalawati,S.P., M.Phil.**

If in the future it is found that all or part of this thesis is not my own work or there is plagiarism in certain parts, I am willing to accept the revocation of my academic degree and other sanctions in accordance with the applicable laws and regulations.

Semarang : August 2023

Takudzwa Ignatius Kutoka

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PREFACE

I want to honour God for the enablement and capacitation to complete the writing of a Thesis Proposal entitled “**Assessing the Economic Impact of COVID-19 Pandemic on Youths in Agribusiness, a Case Study of Mutoko District, Zimbabwe.**”

I am also writing to express my heartfelt appreciation to Universitas Diponegoro for making the Undip Scholarship a reality. I was elated to learn that I had been chosen for this award, and I am grateful for the support I have received since then.

The author wishes to express profound gratitude to everyone who has provided unwavering help and support to bring this proposal through to completion, especially the following:

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4. Lecturers and Master of Agribusiness Program staff members who have stretched my abilities over a year to develop agriculture systems through research for human development purposes.
5. Finally, to my brother, uncle, sister, fiancée and friends, I am confident in your support and belief in my abilities. More blessings in your endeavours.

August 2023

TAKUDZWA IGNATIUS KUTOKA

SUMMARY

Takudzwa Ignatius Kutoka under supervision of Siwi Gayatri and Komalawati has worked the thesis entitled: “Assessing the Economic Impact of the Covid-19 Pandemic on Youths in Agribusiness, A Case Study of Mutoko District, Zimbabwe.”

The main objectives of the thesis were to evaluate the impact of Covid-19 on sales, income, input and marketing of young individuals in agribusiness, to identify challenges facing the youths in agribusiness occasioned by the Covid-19 pandemic and to examine the actions taken by the Government of Zimbabwe to help the youth in agribusiness to be sustained during and after Covid-19 economic shocks. The thesis employed a mixed methodology whereby quantitative data was collected through questionnaires with young farmers and qualitative data was collected through interviews with agriculture extension workers and farmer representatives (key informants). The research was carried out in the Mutoko district, in Zimbabwe. Young farmers were sampled through cluster sampling whilst key informants were purposively sampled. The primary data was also triangulated with secondary data from journal articles, book chapters, policy briefs, and situational reports. Quantitative data was statistically analysed through Microsoft Excel whilst qualitative was analysed by the use of themes drawn from the responses. The main findings from the study were that COVID-19 had a negative impact on the sales, income, input and marketing of agribusiness. Youth farmers in the district faced challenges in their farming business induced by the closure of agro-processing plants, restricted movements, decreased labour supply and closed borders, among other shortcomings. The government reacted by cushioning the farmers by stabilizing the pricing systems, provisioning the presidential farming input scheme, local fruit plant commissioning, and partnering with NGOs for sustainable agriculture aid projects. Overall, the study has shown that agricultural output and business have suffered as a result of the lockdown measures implemented to combat the pandemic.

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CHAPTER I

INTRODUCTION

1.1. Background to the Study

In addition to being a health disaster, COVID-19 has also been an economic one. The pandemic's effects are being felt globally throughout operations in ways that are challenging to analyse and evaluate. COVID-19 surely has an impact on people's lives and way of life all across the world. Preliminary signs indicate a deteriorating economic scenario in Zimbabwe, a nation already struggling with macroeconomic issues, particularly in rural areas where the majority of households are dependent on agriculture. Concerns about the epidemic are not only ruining the stock market but they are also significantly affecting the global economy in most countries as they continue to spread (FAO, 2020).

In general, respiratory droplets that are normally expelled when an infected individual sneezes or cough are the main way that SARS-CoV-2 is transmitted from one person to another. People should keep at least 2 metres between them to reduce the possibility of transmission because droplets often fall within a few metres (Gandhi et al., 2020). As a result, many nations implemented lockdown policies to limit human contact and lower the danger of transmission. The implementation of lockdown restrictions brought with it several difficulties, notably the interruption

of supply systems worldwide. Access to marketplaces and farming inputs have all been impacted by the national lockdown and transit restrictions.

According to an FAO assessment from 2020, even though the pandemic is a worldwide issue that affects livelihoods, international food trade, and food supply chains, nations that are already experiencing humanitarian crises are extremely vulnerable to the COVID-19 pandemic's consequences. The epidemic is still developing, which makes it difficult to make a definitive judgement about how it might affect society. Farmer households may be adversely impacted when any of these income sources are reduced. However, it is still entirely unknown how much the COVID-19 shutdown has affected agricultural production, food hunger, livestock revenue, and daily salaries for farmers. Understanding this impact is crucial for planning for subsequent agricultural seasons, distributing emergency food aid to those who need them most, and re-establishing an agri-food system which is more resilient, productive, and egalitarian.

The investigation will concentrate on the Mutoko neighbourhood, which is 148 kilometres from Zimbabwe's capital city of Harare. The best producers of fruits and vegetables for Harare are the rural farmers of Mutoko. Since their primary source of income depends on daily or weekly excursions to Harare's Mbare Musika (market) to sell fruits and vegetables, their regular operations were disrupted by the COVID-19 travel restrictions implemented by the Zimbabwean government beginning in March 2020.

In areas like the Mutoko district, smallholder farming systems are frequently less shock-resistant and have fewer support systems in place to lessen the damage

and speed up the rate of recuperation due to shocks (FAO, et al., 2019). Such shocks as COVID-19 will likely cause disruptions on both the supply and demand sides due to production-related issues like outages to input supply, labour availability, food losses and food wastage due to a lack of storage facilities and a slow shift in transportation. Workers' income will be lost, tourism and restaurant activity will decrease, and there will likely be a reduction in both (Le Nestour et al. 2020). The effects of COVID-19 on agriculture will also be felt in the socioeconomic areas, such as access to labour, markets, or swift changes in demand, as well as the biophysical areas, such as production and input availability. Not all COVID-19 effects may be believed to be detrimental; for instance, labour migration from urban to rural areas owing to lockdowns is likely to have boosted agricultural activity and output (Le Nestour et al. 2020). As a result, there is an urgent need to employ a farming systems approach to collect information on how COVID-19 is believed to affect smallholder farmers across a range of agricultural, environmental, economic, social, and human dimensions (Stewart et al. 2018). Additionally, it will be helpful to apply participatory methodologies (Middendorf et al., 2020) to comprehend the reactions and requirements of researchers, decision-makers, donors, and smallholder farmers. In light of this, this study aims to investigate the financial effects of COVID-19 on young farmers in the Mutoko district.

1.2. Formulation of the Problem

The research on COVID-19 is still in its early stages, and the content that is currently available mainly focuses on epidemiology. The likely impact on various economic sectors, financial stability, and the livelihoods of vulnerable segments of societies is not well understood (Ndungu, 2020). Investigating the impact, the virus has on Zimbabwe's agribusiness sector's performance is necessary for a similar vein. The agricultural supply chain continues to be severely impacted by the lockdown measures implemented worldwide in response to the COVID-19 epidemic (Aday and Aday, 2020). The pandemic has generally had an impact on all element of the supply chain, including food production systems, input supply, storage and transport, processing and packaging, and retail and marketing (Rukasha et al., 2021). However, it is rarely clear how significant the impact is or will be in the future. The actual influence of Covid-19 on youth agriculture in Zimbabwe, particularly in the Mutoko district, has not, as far as the researcher is aware, been studied.

Zimbabwe was chosen as a case study for this investigation because of how much the COVID-19 pandemic has impacted production levels in the agricultural economy, especially among young people active in agribusiness. Due to Zimbabwe's extremely high unemployment rate, several young people rely on agriculture as their primary source of income. Hence, the central question that this thesis address is: What are the economic impacts of the COVID-19 pandemic on agribusiness youths?

1.3. Study Purpose

The general objective of this study will be to assess the economic impact of the COVID-19 pandemic on youths in agribusiness, a case study of Mutoko District, Zimbabwe.

The research seeks:

1. To evaluate the impact of Covid-19 on sales, income, input, and marketing of young individuals in agribusiness.
2. To identify challenges facing the youths in agribusiness occasioned by the Covid-19 pandemic.
3. To examine the actions taken by the Government of Zimbabwe to help the youth in agribusiness to be sustained during and after Covid-19 economic shocks.

1.4. Research Benefits

Consultation of this study will be very beneficial to many different stakeholders. These include, among others, the Zimbabwean government, international organisations, and small and medium-sized businesses (SMEs) in the agriculture sector. The researcher will emphasise how the aforementioned

stakeholders would think it is valuable to consult this study. In addition, the study will introduce a fresh perspective on public procurement as a critical issue that must be addressed before it can be accepted by the government and society.

The Zimbabwean government and its departments could learn more about enhancing risk management capabilities at various levels, from smallholder farmers to other supply chain participants to consumers (people who require dependable and secure food supplies) and finally for the government to cope with natural phenomena. It is envisaged that the research will greatly assist the government in developing a proactive and comprehensive risk management strategy appropriate for the existing agricultural sector structure, focusing in particular on youth as well as other vulnerable groups.

By embracing disaster risk and risk reduction, international organisations and other multilateral institutions may well be equipped to know how they can help set the foundation for future development and food security.

The study's findings may be used by SMEs, young people, and other farmers in agriculture to create a framework for ensuring that agribusiness assures that its services and activities are not affected when calamities like COVID-19 occur. This study offers a perspective for analysing COVID-19's effects on young people engaged in agriculture in rural Zimbabwe and other African transitional nations.

The study will make significant contributions to academic theory. Some academics with an interest in this field will find the research useful. This study was conducted to add to the body of knowledge previously available on physical disability. Therefore, any scholar anywhere in the world who might become

interested in this particular field of study is required to glean some information. The proposed research' findings are essential to the knowledge base because they will close knowledge gaps regarding the coronavirus's economic effects on young people involved in agriculture and will pave the road for future dangers like COVID-19 to be mitigated.

To the researcher, the purpose of the study was to give her a better, comprehensive understanding of the account of economic effects of COVID-19 on agriculture. The study also helps the researcher to fulfil the requirements of acquiring a Master of Agribusiness Study Program and helps in the illumination of other scholars on the above question.

CHAPTER II

LITERATURE REVIEW

2.1. Agribusiness overview in Zimbabwe and emerging COVID-19

The agriculture industry, which employs 70% of the population, is the bedrock of Zimbabwe's economic success (Zimbabwe Agricultural Society, 2019). The majority of industrial businesses rely heavily on agricultural products and raw materials (Zimbabwe Agricultural Society, 2019). The majority-black smallholder farms in Zimbabwe's dual agricultural system are combined with historically owned large commercial farms by minority-white settlers. Over 15 million acres of land were farmed in 1980 by about 6,000 farmers, practically all of them were white. Zimbabwe's main food production is corn. Zimbabwe's maize harvest for the promoting year 2022–2023 is predicted to be 1.6 million metric tonnes, which is 43% less than the 2.7 million metric tonnes produced in the showcasing year 2021–2022, according to a June 2022 Unfamiliar Horticultural Help (FAS) Grain and Feed Yearly report. The agricultural sector accounts for about 18.5% of Zimbabwe's GDP, also known as the Service of Grounds and Horticulture (Service of Terrains, Farming, and Provincial Resettlement).

The Intergovernmental Panel on Climate Change (IPCC) asserted that rainfall losses and increased variability across the majority of Southern Africa, in addition to COVID-19 (IPCC, 2007). Recurrent droughts, especially mid-season droughts,

have been occurring in Southern Africa recently, and these experiences, along with other extreme climatic phenomena, are projected to rise (Twomlow et al. 2008; Muzerengi and Tirivangasi, 2019; Nyahunda and Tirivangasi 2019). Climate change projections for Southern Africa show that the region will encounter more difficulties as a result of anticipated climate changes (Maponya and Mpandeli 2013). Climate change is expected to increase food insecurity and rates of poverty in rural populations in Southern Africa that depend on subsistence agriculture (Turpie and Visser 2013). In addition to forecasts that do not take climate change into account, such an influence on agricultural productivity would directly affect food security in nations that rely on subsistence farming, such as Namibia, Zimbabwe, and South Africa, leaving 600 million people at risk of hunger by 2030. (FAO 2016). The poor are most impacted by climate change because they are the least adaptable and depend on natural resources like agriculture, fishery, forestry, and other natural resources for their livelihood (Cherotich, Saidu and Bebe 2012). Because the effects are adversely affecting subsistence agriculture in rural populations who are more vulnerable to natural disasters, attempts to deal with climate change are insufficient to halt future climate changes (Tirivangasi 2018; IPCC 2013).

Both large-scale and smallholder farmers make it to Zimbabwe's agricultural sector. Small family farms contribute up to 80% of the food consumed in Asia and Africa, demonstrating the importance of smallholder farmers to the food supply chain (ActionAid, 2020). In Zimbabwe, small - scale farmers are crucial to food and nutritional security, producing the majority of the nation's food, according to an

FAO assessment from 2020. These farmers are primarily found in rural parts of the nation. Being in a rural place sounds preferable to being in a large city when it comes to the current worldwide COVID-19 pandemic, which is the case with a disease that is highly contagious. This is not the situation in Zimbabwe, where farmers frequently have lower access to healthcare and are older than average, making them more susceptible to the virus.

The availability of labour and, thus, the output is harmed by inadequate health facilities. Furthermore, labour availability will be constrained by limits on movement. In many nations, particularly those with periods of peak seasonal labour demand or labour-intensive production, there are existing labour shortages in the agricultural industries as a result of continuous border restrictions (Organisation for Economic Co-operation and Development (OECD), 2020). Due to the recently enacted travel limits within the European Union as well as the closing of the Schengen Area, the impact of the decreased worker availability is already felt in the fruit and vegetable business in numerous European countries.

A labour shortfall might result in production losses and market shortages since many products in the northern hemisphere are about to enter the harvesting season (OECD, 2020). The majority of farmers in Zimbabwe are smallholders who depend on family labour and locally obtained hired labour, which presents special issues as a result of the epidemic. The Zimbabwe Farmers Union (ZFU) contends that to maintain social distance, farmers must restrict the number of labourers engaged in a particular task at any given moment. This results in a longer turnaround time for activities, which raises production costs and strains cash flows. A similar

issue has also been highlighted for fish farmers in Kenya who confessed to a loss in production because social distancing policies only permit two people in a boat at a time, according to a report by Zimbabwe Environmental Law Association (ZELA) (2020).

The ZFU claims that because smallholder farmers in Zimbabwe depend so heavily on domestic labour, farm operations could be disrupted by household infections, which could result in food insecurity and truncated livelihoods. Being a labour-intensive occupation, farming necessitates the involvement of the powerful and vivacious. However, COVID-19 affects all societal groups, although various age groups have varying probabilities of developing severe symptoms that necessitate hospitalisation or critical care. Children and young adults are probably safe from death, but the risk is greater for the elderly, with those 80 years of age and over accounting for 20% of all fatalities (European Centre for Disease Prevention and Control, 2020).

2.2.Overview of Youth in Agriculture

The majority of sub-Saharan African young individuals who engage in agriculture have faced several difficulties. They were not immune to the effects of global warming, a protracted drought, tropical cyclones, or a difficult economic environment. Since they have limited other options, the few people still working in the industry are those participating in lucrative agricultural, like tobacco growing

and horticulture (Dube et al., 2016). The past ten years have seen considerable maize import expenditures from neighbours to feed the population of Zimbabwe, long known as Africa's breadbasket (Mutyasira, 2020). This hypothetical situation serves as an example that basic problems in our agriculture necessitate a bottom-up solution to profit from the present national policy.

According to studies, more young people are working on projects in Zimbabwe. Among the most prevalent are beekeeping, fishing organisations, poultry farming, and sewing endeavours (Chazovachii., et al, 2013). Bomani, et al. (2015: 12) assert that the state's attempts to fund SMEs have run into many difficulties. These include cash shortages, hyperinflation, high loan interest rates, and natural disasters like floods and droughts (both local and foreign currency). A crucial perspective on the elements of economic empowerment gained from the informal sector is provided by Mago's 2013 study. This sector, it was noted, "is characterised by firms that lack legal status, lack permitted business locations, lack standard forms of collateral security, are limited in size, and engage in risky economic operations" (Mago, 2013:5). These studies challenge the research to consider the resilience techniques employed by young people and how their emancipation is achieved through business ventures. They are important for comprehending the current investigation.

2.3.Economic Effects of Covid-19 Pandemic on young farmers

COVID-19 had a significant impact on farmers' income in two key areas: wage earnings and agricultural income. Income growth and farmers' income are two related, frequently used words (Rukasha et al., 2021). First off, COVID-19 has affected farmers' migratory work, which has decreased their pay revenue. Some white-collar workers in urban areas can continue to receive pay while working remotely during the quarantine. However, since most blue-collar workers in rural areas are unable to work from home, they cannot be compensated. According to reports, practically everyone in rural locations had stopped working, either as an off-farm worker in their local county or working as a migrant labourer in a metropolis (Ndungu, 2020). Farmers are compelled to halt working due to transit limitations and job closures. Second, it was challenging for migrant workers to locate lodging, and many were concerned about being placed under a second quarantine at work. Thirdly, farmers' local agricultural practices cannot continue and the agricultural goods cannot be marketed owing to quarantine and transit constraints, indicating a drastic reduction in agricultural income for a full year.

According to research by the Zimbabwe Environmental Law Association (ZELA), the youth have been most negatively impacted by the limited access to markets, which has led to a significant loss of jobs for farmworkers. 150 employees were put on prolonged unpaid leave at RD Flower Farm as a result of the reduced availability of markets and disposal income, according to the ZELA report. In other

farms, fixed-term contracts were also not renewed due to difficult operating conditions. On most farms, young people make up the majority of the workforce, particularly in the lower-paying positions in most value chains. Due to the casualization of labour in the agricultural industry, farmworkers are not receiving any wages and are suffering greatly from the lack of access to markets.

There is a need to review employee benefit programmes in the agriculture industry to ensure that workers receive a fair part of the enormous advantages that the agriculture sector generates when it is booming and when farmers bear the burden of its negative effects (Ndungu, 2020). Due to limited market access further down the supply chain, most retailers have reduced demand, which has led to an accumulation of surpluses, put pressure on storage facilities for perishables, and increased food losses. Demand-side declines are aggravating supply-side interruptions for some products, particularly foods frequently consumed away from home and luxury goods (Musasa, 2023). Demand-side declines are aggravating supply-side interruptions for some products, particularly foods frequently consumed away from home and luxury goods (Musasa, 2023).

Smallholders in Zimbabwe may become more susceptible to the pandemic as a result of the country's neoliberal policy, which is forcing them to prove their worth by producing more or risk losing their land to more productive neighbours. Due to further restrictions on the movement of persons and products, the COVID-19 epidemic may potentially have an impact on the availability of crucial intermediate supplies for farmers. For instance, after production units were shut

down as a result of the outbreak, the output of pesticides drastically decreased and only gradually resumed (OECD, 2020).

Inputs like insecticides may be hard to come by or expensive, which might have an impact on crop yields and productivity in 2020 and 2021, especially in developing nations. Border restrictions or delays in transboundary seed transportation might potentially affect seed supply chain operations and timely delivery, which would have a severe impact on agriculture, feed, and food production during the coming season and into the future. Most fertilisers and pesticides are imported into the Zimbabwean environment, and limits on the flow of products across borders are already having an impact on the supply of inputs and agriculture markets (Nyagadza, 2019). Farmers still encounter difficulties when using locally produced inputs since local transportation is constrained and several agro-supply stores remain incapable of operating at full capacity. This is already impeding winter production preparations and is probably going to result in lower winter crops.

Moving restrictions may make it difficult for farmers to reach markets, leading to food waste. Farmers were unable to sell their goods in local markets or to nearby businesses like schools, restaurants, bars, hotels, and other places of entertainment because of the tight COVID-19 regulations, which were temporarily closed. Farmers in Zimbabwe already were having trouble getting their products to market before the widespread COVID-19 pandemic because of poor post-harvest procedures, insufficient infrastructure, low production levels, and inconsistent supplies. The pandemic's start has made an already difficult situation worse because

of travel restrictions that limit farmers' market access to buy supplies and sell their goods.

Fresh produce was building up at farms, causing food loss because the lockdown tactics prevent the majority of informal markets from operating. The closing of informal markets has far-reaching effects on a nation with, per a report by the International Monetary Fund (IMF), the second-largest informal sector worldwide (Medina & Schneider, 2018). The study found that the informal sector makes up more than 60% of Zimbabwe's economy, and Bolivia in South America is the only other nation with a greater informal sector (Medina & Schneider, 2018). Additionally, the local government ministry utilised the first lockout as a cover to obstruct consultation and demolish the informal traders' selling cabins and booths (Mashingaidze, 2020).

Although the majority of people struggle to get food, the police seized and destroyed tonnes of fresh fruit and vegetables. The 2014 Ebola outbreak in West Africa demonstrated the risks of limiting informal trading there by upsetting the agricultural market chains there, which resulted in food shortages and price rises. There had a detrimental impact on the already fragile rural-urban food network as fewer middlemen entered farming areas to buy. This is demonstrated by the sharp decline in the number of stores selling fresh food as well as the decline in the number of sellers in the regulated market areas.

2.4. COVID-19 related challenges to youth in agribusiness

Due to reduced output and consumption all around the world, the COVID-19 pandemic, according to the World Trade Organization (2020), constitutes an unprecedented interruption to the international economy and world trade. Sub-Saharan African states that rely significantly on imported food are expected to be disproportionately at risk via supply chain breakdowns, particularly as a result of closures of border crossings brought on by the Covid-19 outbreak (FAO, 2020). According to the Organization for Economic Co-operation and Development's (OECD) March 2020 interim economic outlook report, global economic growth will fall from 2.9% to 2.4% (OECD, 2020). Direct and indirect connections to the global economy, particularly those with China and European Union (EU) nations, were predicted to harm Zimbabwe's exports of goods, mostly primary commodities, which were estimated to account for 22% of GDP in 2018. (UNDP, 2020). Given the previous administration's adoption of the Look East Policy, Zimbabwe has established extensive ties with China. Zimbabwe's exports, particularly tobacco, which was projected to suffer from that nation's economic decline, continue to be crucial to China.

The COVID-19 outbreak and its propagation in Zimbabwe occurred during the country's 2020 tobacco marketing and selling season. One of the main sources of foreign exchange for the nation is tobacco, with export revenues of US\$142, 2 million for the 2019 season, up 122% from US\$63, 5 million in the comparable time

in 2018. (Global Trade Statistics, 2019). Sadly, COVID-19 has disproportionately affected the main importers of flue-cured tobacco, including China, South Africa, and a few European nations. Therefore, the slow recovery and poor demand in these nations will probably affect Zimbabwe's export revenues. Other agricultural exports, particularly horticulture exports, which have Europe as their primary market, are also subject to the same difficulties.

A downturn in China's economy will also have an indirect impact on Zimbabwe because it is that country's principal commercial partner as well as a significant source of intermediate goods in both South Africa and Zimbabwe (UNDP, 2020; Nyagadza et al., 2021). In addition to its implications on farmers' exports, COVID-19 will also have a significant impact on imports, particularly the cost of inputs. COVID-19 has a significant impact on the price of imported inputs and, consequently, production in economies like Zimbabwe wherein farmers rely more on supplies from other nations. Many African nations are net food importers, according to the UNCTAD (2020), which estimates that the continent spent 65 USD billion on food imports in 2017.

The presence of COVID-19 poses a hazard in this direction even if there is no data to support it having an impact on food imports. Trading with nations that lack effective health systems and that do not take significant action to reduce the COVID-19 pandemic is another expected danger related to the pandemic as it relates to international trade. For instance, goods from nations that do not sufficiently combat COVID-19 will not reach other nations because those nations will be unable to accept the goods due to concerns over the epidemic. Countries like

Zimbabwe and the majority of third-world nations, where it is unclear what steps are being made to tackle this virus, will be most affected by this. Global trade and policies are put in danger over the long term by this.

Measures taken to stop or slow the spread of COVID-19 also interfered with the efficiency of the food supply systems (Schmidhuber, Pound and Qiao, 2020). Particularly concerning are the effects on the labour force. The food industry will be exposed to the COVID-19 outbreak's negative effects on the workforce (workers who are unwell or isolated) and will incur higher production and distribution expenses as a result of the health and safety precautions taken to lessen the exposure of their employees (Liu et al., 2020). Two distinct ways for a virus to spread include people working nearby, and (ii) persons touching infected surfaces, even if the virus's transmission processes are not fully understood. The way food is distributed and processed needs to alter right now to manage these dangers. Many of these improvements are already in motion, but they may be challenging to put into practice shortly due to issues locating masks and other worker safety gear. More likely to be impacted than cereal and prepared food markets are those that sell perishable goods (Rozelle et al., 2020). The workforce is in danger of getting illnesses due to the cramped workplace conditions in packaging and processing plants. COVID-19. Even as customer demand in supermarkets rises, expenses are rising and production capacity is being reduced due to the necessity to meet social distancing criteria, such as when packing and sorting fruit and vegetables and processing livestock goods.

Infections in processing facilities have disrupted supplies in addition to reducing demand at the farm level (Jiang, Yang and Guo, 2020). Key food safety, quality, and certification checks, including those necessary to promote trade, including physical inspections of commodities to certify adherence with sanitary and phytosanitary requirements (SPS), are being affected by lockdowns and restrictions on people's freedom of movement (ibid). Additionally, extra inspections might be necessary following the sector's new biosecurity policies that were put in place in reaction to COVID-19. The question of whether the goal of such measures is to safeguard home industries or to promote health and safety raises some concerns when standards are loosened to suit domestic food demands.

Transport and logistics services are experiencing delays and disruptions as a result of the measures taken to stop the spread of COVID-19. Perishable goods being transported have been delayed and congested as a result of border closures, extra processes, and checks. For instance, social distance rules have decreased the number of import and export inspectors at borders, lengthening the time required for customs processing (Liu et al., 2020). The export of higher-value perishable food items, such as fish, fruit, and vegetables, is facing substantial challenges as a result of aeroplane groundings, rising international freight costs, and a dearth of commercial passenger flights (Ndungu, 2020).

Access to inputs required by enterprises in the food sector is likely to be hampered by transportation limitations and quarantine regulations. For instance, there are claims that some suppliers' disruptions of fertiliser production due to a lack of staff have made it difficult for the producers of CO₂ and, consequently, the

food business (Rozelle et al., 2020). Different food uses use CO₂ (carbonation of drinks, freezing, and conserving products in a controlled atmosphere, such as packaged meats, allowing consumption deadlines to be postponed). This is a problem for the food industry, especially for the producers of fizzy beverages and the major dairy cooperatives (Schmidhuber, Pound and Qiao, 2020). In the long run, the food industry may discover better ways to control inventory, and consumers may evaluate their purchasing and consumption patterns to cut waste.

All facets of the food supply chain, such as the logistics involved in food handling and delivery, have been disrupted by the COVID-19 pandemic (Mutyasira, 2020). The movement of agricultural inputs, outputs, and services associated with agriculture are all made possible by logistics, which includes all necessary activities like transportation, warehousing, purchasing, packaging, and inventory management. Logistics and transportation issues can harm food's quality, freshness, and safety as well as on market availability and pricing (FAO, 2020). Limited distribution choices are a significant barrier to food security (Ndungu, 2020). Even when food stocks are available, there are obstacles in the way of getting them to consumers, especially because of movement restrictions put in place to stop the illness from spreading (Ndungu, 2020). The livelihood of workers in these industries is threatened by the restrictions or closure of ports and borders by regional and international nations, which results in the lockout and disruption of many businesses in trade, transportation, and logistics, those working on the transport systems through which supply chains pass (Zimbabwe Congress of Trade Unions (ZCTU), 2020).

Trading has decreased in the agricultural sector as a result of the national lockdowns implemented by several governments in southern Africa and the virus aversion measures implemented by local and national governments. For the majority of agro-producers, trading takes on greater importance during moments of crisis such as COVID-19 when hard currency is required to acquire treatment. The COVID-19 travel restrictions, however, have reduced these farmers' capacity for trading. Trading has all but ceased due to a mix of logistical problems brought on by movement restrictions (Blanke, 2020). The COVID-19-related road closures across the nation may severely restrict farmers' ability to make a living. The curfews have had a significant impact on the transport industry, which has hurt domestic trade.

According to a report by the Zimbabwe Poultry Association, the poultry industry had a 13% decline in output after generating an average of 16.95 million-day-old chicks in the first quarter of 2020. By April 2020, the intake of chicks had decreased by 4.1 million as a result of the installation of travel restrictions and a lack of transportation. 1,4 million chicks also were destroyed in April as a direct consequence of small and medium producers not having access to transportation or being denied permission to obtain feed and other input from agro-dealers situated in central business districts of urban cities (NewsDay, 2020). The entire agro-supply chain is affected when there is a disturbance at the producer level.

Such activities had catastrophic effects, as was seen when Ebola struck West Africa. A crippled transportation system directly caused a significant decline in farmers' client base, and interruptions were felt across the entire supply chain,

resulting in shortages and higher agro-product prices (FAO, 2014). According to the FAO report, market closures, roadblocks, and quarantines almost always result in price increases. In Zimbabwe, the COVID-19 effect on the road system is preventing people from moving between areas and preventing them from taking part in activities that can assure food supply within homes. All the other types of capital necessary for sustainable farming in relocated areas would also suffer as a result of this.

2.5. Agribusiness Development Strategies Taken by Governments

The majority of national policy responses to the disaster have taken the shape of short-term social countermeasures to sustain the working people and financial support for agricultural firms. There is a need to close the policy gap that exists between the application of labour standards in the industry and the encouragement of social discussion for the creation of policy responses.

Farm Credit in Canada's loan capacity has been boosted by \$5 billion, with \$100 million set aside for national, regional, and local groups to assist food security all across the country. Workers who are unable to work due to medical reasons and have minimal or no paid leave benefit through their employers can apply for up to 15 weeks of employment benefit for up to 55% of their salary, or CAD 573 per week, under the Canada Emergency Response Benefit.

In China, the People's Bank of China expanded low-interest re-lending and re-discounting facilities by 500 billion Chinese renminbi (RMB) to help MSMEs (CGTN, 2020). The re-lending rate for rural areas, agriculture, farmers, and small companies was also reduced to 2.5%. To improve food security, the Ministry of Agriculture and Rural Affairs issued many notes to facilitate the restart of operations in feed, slaughtering, and meat processing firms, as well as advice for crop field management and labour shortage relief (People's Daily Online, 2020). Many regional measures, like the 300 RMB temporary living allowance subsidies for farm labourers in Hubei province and the 3000 RMB fund transfers for migrant population retention in Wuhan, are advantageous to the agricultural workforce (World Bank, 2020).

The two-year moratorium on the tax law about agricultural land in Egypt has been extended. Additionally, the Ministry of Social Solidarity intends to enhance payments for women and leaders in rural areas to 900 Egyptian Pounds (EGP) and include another 100,000 families in current social assistance programmes. For registered informal employees, a one-time payment of EGP 500 is envisaged (Egypt Today, 2020). 80 million dollars will be given to El Salvador through the Emergency Fund to boost the agricultural industry and guarantee food security. Additionally, a cash transfer of \$300 has been made to 1.5 million households participating in the informal sector who lack a safety net (ILO, 2020).

An agricultural response plan for Fiji comprises a new farm support programme to help growers of short-term crops by supplying them with tools and seeds. A one-time relief payment of \$150 is included in the COVID-19 Response

Budget for persons employed in the unorganised sector (Fiji Village, 2020). In Germany, the government has temporarily increased the "70-day rule" for seasonal farm labourers' ability to work up to 115 days without contributing to social security. This change is effective through the end of October 2020. Additional income ceilings have been established for farmers' pensions as well as short-term worker compensation. Additionally, paid sick leave has been changed so that, in cases when the Infection Protection Act is in effect, the amount received is initially equal to the employee's net salary and later equivalent to the sick leave benefit (ILO, 2020).

A one-time payment of EUR 600 has been made available for vulnerable workers, especially agricultural workers, in Italy as part of the Cura Italia stimulus programme. Qualifying requirements for unemployment compensation for agricultural workers have also been loosened. Employees who must be present at work and make less than EUR 40,000 annually are entitled to a tax-free one-time benefit of EUR 100. (ILO, 2020). The Economic Stimulus and Relief Package in Namibia contains 200 million Namibian Dollars (NAD) in loan guarantees for farmers and agricultural enterprises, particularly cashflow-constrained farmers and agricultural SMEs that have suffered a large loss of revenue. All unemployed formal and informal workers will get a one-time Emergency Income Grant of NAD 750.

A fiscal package worth 27.1 billion Philippine pesos (PHP) in the Philippines comprises support for severely impacted industries including tourism and agriculture as well as social security for the most vulnerable workers. 18 million low-income households engaged in the informal sector would receive PHP 5,000 to

8,000 per month for two months under the Emergency Subsidy Programme. Additionally, the Overseas Workers Welfare Administration has given money to Filipino workers abroad who have been impacted by travel restrictions (ILO, 2020).

In light of the Covid-19 pandemic, the Government of Zimbabwe (GoZ) has created a draught National Youth Policy (2020–2025). (Tshuma, 2021). The proposal identifies employment, entrepreneurship, and skill development—particularly in agriculture—as significant areas of assistance. The National Youth Policy, which was created in 2000 and updated in 2013, serves as the foundation for Zimbabwe's Youth Empowerment Policy. Given Zimbabwe's youthful population (a broad-based demographic pyramid) and the issues associated with youth unemployment, government policies and development programmes across all sectors place a strong emphasis on the socio-economic empowerment of youths. The 2013 Constitution's Section 20:1c mandates that youth must have access to work opportunities and other means of economic empowerment (National Youth Policy, 2013).

The government has introduced the Youth Business Starter Pack (YBSP) through Empower Bank (The Chronicle, 14 July 2021). A product called YBSP is intended to help young business owners launch their ventures more quickly. The YBSP programme was developed to provide choices in value-added chain uptake SME initiatives in the fields of agriculture, mining, tourism, the arts, and sports. Tshuma (2021) claims that the YBSP was established in July 2021 and that Empower Bank will provide \$120 million in financial loan support for youth-led start-up companies (The Chronicle, 14 July 2021). Along with financial support,

the YBSP also provides technical aid in the form of tools for starting a business, producing identification, access to professional expertise, value chain uptakes, and project monitoring. The Youth Business Starter Pack, as stated by Mrs Rudo Kumirai, vice-chairperson of Empower Bank, as cited by Tshuma (2021), "addresses the main challenges the youth were yelling of collateral and high-interest rates, as well as the tenure of a starter pack, is 18 months with a loan facility of up to US\$5,000 at 44 per cent interest per annum. It will support initiatives across all industries (The Chronicle, 14 July 2021).

2.6.Research Gap

However, no study has yet experimentally explored how COVID-19 or its immediate responses affect Zimbabwe's youth agriculture. The difficulties that Zimbabwe's agricultural industry encountered under COVID-19 were only briefly qualitatively examined in a few studies. For instance, Rukasha et al. (2021) noted that COVID-19 had some negative effects on Zimbabwe's development of grain planting, cattle breeding, the seed industry, leisure agriculture, the processing of agricultural products, the vegetable, fruit, and flower industries, among other industries. Additionally, Musasa (2023) investigated how rural women could preserve their livelihoods amid COVID-19. The effects of COVID-19 on agricultural systems, supply chains, and basic livelihoods in rural areas were also studied by Mutyasira (2020).

In general, these researches suggested certain solutions to lessen the negative effects, such as installing processing plants in the district and intensifying rural industrialization to provide sources of income other than agriculture. The literature mentioned above gave us a critical grasp of the effects of this unique virus on Zimbabwe's agribusiness and the rapid mitigating actions taken by the Zimbabwean government. These studies, however, primarily employed qualitative research techniques with modest sample numbers and weren't particularly focused on young farmers. No research has been done specifically on the district of Mutoko. Additionally, due to the small sample sizes, conventional research methodologies can only capture the state of affairs at a specific time and cannot capture the dynamic effects of COVID-19 on Zimbabwe's youth agriculture. These limitations of the literature are transcended by this study. A balanced mixed strategy using both qualitative and quantitative approaches will be used in this investigation.

CHAPTER III

METHODOLOGY

3.1. Research Methodology / Research Approach

A research methodology can be defined as a way to systemically answer the questions in a particular research problem. Through the methodology, researchers study the various steps they use in studying a particular research problem and the underlying logic behind such steps (Saunders et al. 2016). The methodology can be either qualitative or quantitative or both (where a mixed methodology is adopted). This study employed both the quantitative and qualitative research methodology (mixed methodology).

A **mixed methods** research design is a procedure for collecting, analyzing, and “mixing” both quantitative and qualitative methods in a single study or a series of studies to understand a research problem (Creswell, 2013). Alvi (2016) argued that the combination of qualitative and quantitative approaches provides a better understanding of research problems than either approach alone. Saunders et al. (2016) explained that while quantitative research provides high levels of precision through statistical figures, the researcher's biases are seldom discussed, and the voices of participants on the phenomenon under study are seldom heard. Also, while

qualitative research understands the context or set of people, they are deficient in the personal interpretations made by the researcher. Henceforth, a combination of these designs will offset the weaknesses of each design.

3.2. Research Design

Yin (2014), describes a research design as a plan that pronounces how, when and where data are to be collected and analysed. This is done to increase the valid answers to the research question. The purpose of research design is to select and define the overall structure and methods of intended research that enabled answering the initial research question effectively and efficiently. Under quantitative methodology, the study used a descriptive research design in the form of a cross-sectional survey due to its conclusive nature and providing results that can be used in decision-making. On the other hand, in qualitative methodology, a case study research design was employed.

A **Cross-sectional descriptive design** is the research approach that will be used to explore the economic impacts of the Covid-19 pandemic on youth in agribusiness in the Mutoko district because it is the most successful way of obtaining descriptive information. According to Cresswell (2018:175), a cross-sectional design can be ideal for descriptive analysis, "...if we simply want to describe the characteristics of a population, their attitudes, their voting intention or

their buying patterns then the cross-sectional survey is a most satisfactory way of obtaining this descriptive information.”

On the other hand, a **case study design** is an in-depth study of a research problem rather than a sweeping statistical survey or comprehensive comparative inquiry (Saunders et al., 2016). It is often used to narrow down a very wide-ranging field of research into one or a few easily researchable examples. Yin (2014: 62), further described a case study as “an empirical inquiry that investigates a contemporary phenomenon in depth and within its real-life context, especially when the boundaries between phenomenon and context are not evident.” More importantly, a case study research design is a suitable technique where little is known about an issue or phenomenon, and it was chosen for this reason, since, there is no study known to the researchers that have the assessment of the economic effect of Covid-19 pandemic on youth agribusiness in Mutoko district and Zimbabwe at large. Above all, this approach outshines other designs by bringing the researcher to an understanding of a complex issue through detailed contextual analysis of a limited number of events or conditions and their relationships.

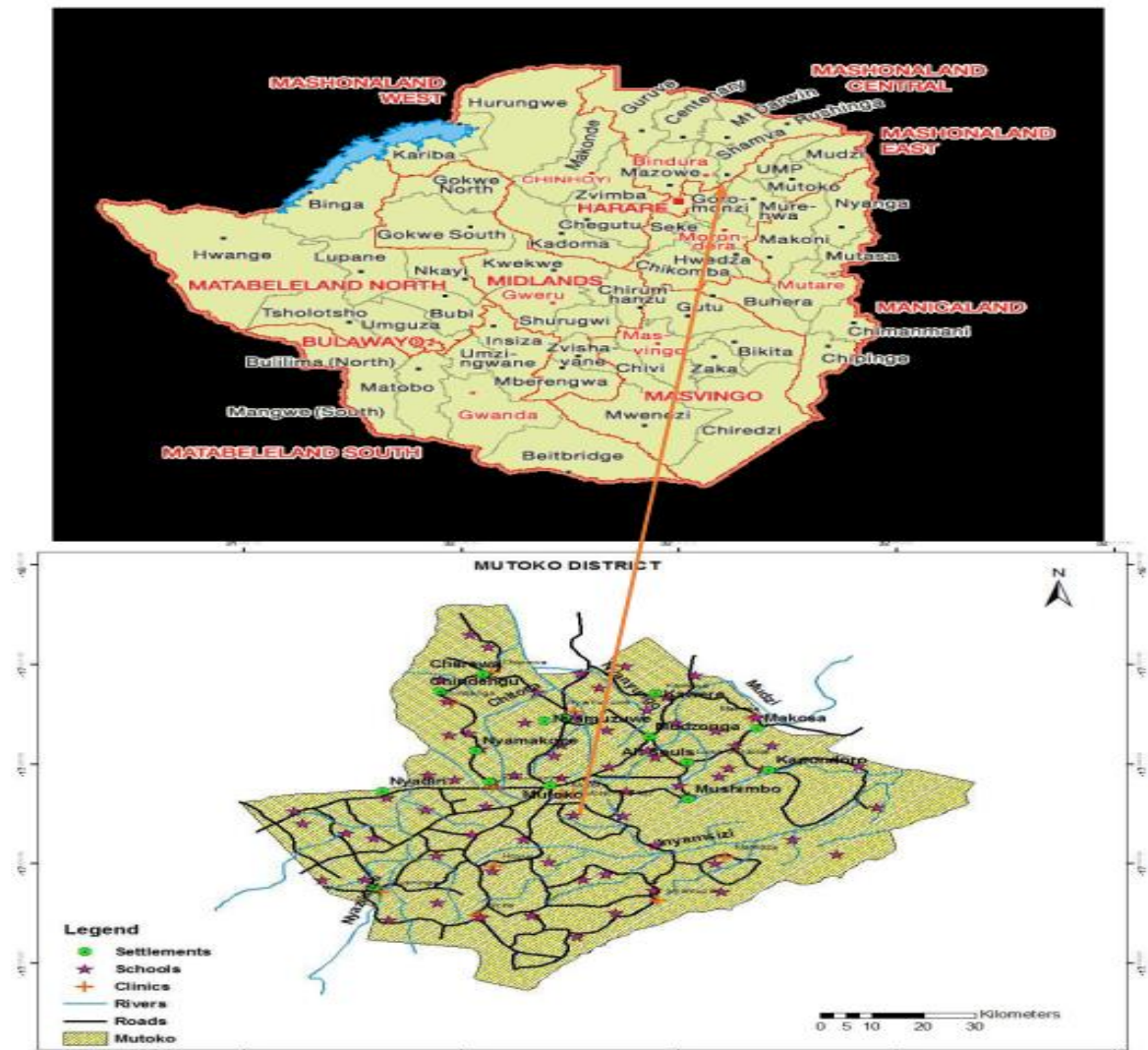
3.3.Scope of Research

Geographically, the study was confined to the rural settlements of Mutoko district, Zimbabwe. In its scope, the study was restricted itself to the economic effects of the Covid-19 pandemic on youth agribusiness. In its methodology, the

study utilized both quantitative and qualitative research approaches. The research period is limited from April 2020 to December 2021 when strict Covid-19 restrictions were in place.

3.4. Research Location

The sample of the study was drawn from the youth and agricultural extension workers in the villages of the Mutoko rural community to collect quality and reliable data. Mutoko district is an area in Mashonaland East Province, about 148 km from the Zimbabwean capital city, Harare. Despite the rural farmers being well known for being the best fruit and vegetable suppliers to Harare (tomatoes and mangoes), the farmers appear to remain subsistence, living from hand to mouth because of the nature of their farming practices (Bhatasara, 2018). Also, the normal operations of the farmers were interrupted by the COVID-19 movement restrictions effected by the Zimbabwean Government from March 2020, since their main livelihoods depend on daily or weekly trips to Harare's Mbare Musika (market) to sell fresh fruits and vegetables. Below is the map of the Mutoko District below:



Picture 1: Mutoko District.

Source: Adapted from Bhatasara (2018)

3.5. Population

Population in this research means that it is a target group chosen for this research. Therefore, a population can be defined as a large group of people from

which a sample is selected. This study targeted a population that consists of youth in agribusiness in the Mutoko district and the agriculture extension workers and farmer representatives in the area. The population appears to be appropriate for the study as it comprises members who have first-hand information and those who are directly involved with them. This information that is going to be obtained from these people is going to be generalized to the rest of the people in rural areas of Mutoko District and Zimbabwe at large. The sample size is to be calculated from the (target) population drawn from all the settlements in the district.

Sample size refers to the number of elements to be included in the study (Scotland, 2012). Appropriate sample size was calculated and a representative sample size with known confidence and risk levels was selected, based on the work of Yamane (1967) formula. An appropriate response rate (sample size) was determined. In determining the youths' sample size in this study, the researcher used Yamane (1973) formula which states that the desired sample size is a function of the target population and the maximum acceptable margin of error is referred to as the sampling error. The study used a 5% margin of error. The target population of youth farmers in agribusiness in the district is estimated at 1020. The formula used to generate the sample size as provided by Yamane (1973) is as follows:

$$n = N / 1 + N e^2$$

Where, n = the sample size

N = the target population size

e = the acceptable sampling error which is 5% (95% confidence interval)

(Source: Yamane, 1967)

$$n = 1020 / 1 + 1020 (0.05)^2 = 280$$

Therefore, the sample size for the study is **280** youth.

Alvi (2016), defined sampling as the process through which a sample is extracted from a population. The major elements of the sample are that it should be representative and generalizable. As this study was using a mixed-methods research design, it includes the ability to have a sample that produced a meaningful survey, while at the same time also taking just enough participants to allow for in-depth phenomenological inquiry. The study employed a probability and non-probability sampling method. The methods implied that every element of the population has an equal chance of being included in the sample. The investigator adopted cluster sampling and purposive sampling for probability and non-probability sampling, respectively.

In **cluster sampling**, the target population is first divided into mutually exclusive and collectively exhaustive subpopulations or clusters. Then a random sample of clusters is selected, based on a probability sampling technique. For each selected cluster, either all the elements are included in the sample or a sample of elements is drawn probabilistically. If all the elements in each selected cluster are included in the sample, the procedure is called one-stage cluster sampling. If a sample of elements is drawn probabilistically from each selected cluster, the procedure is two-stage cluster sampling (Denzin, 2015). The population was divided into clusters of settlements across the Mutoko district, and from the groups; agribusiness youth will be randomly selected to be in the sample. Utilizing cluster sampling was ensured that all groups concerned are fairly represented in the sample.

It also increased the chance of getting more precise information about the variable under study. Scotland (2012) supports the use of cluster sampling because it ensured that the population is truly represented unlike using simple random sampling.

In contrast, non-probability sampling techniques were employed in this study. The participants for the interviews were selected using **purposive sampling**. Purposive or judgemental sampling as defined by Latham (2016) is a non-representative subset of some larger population and is constructed to serve a very specific need or purpose. According to Cresswell (2016), the purposive sample is one in which the researcher identifies certain respondents as being potentially able to provide significant data to the study. In this case, the researcher will choose Agriculture extension officers in the district. Ten key informants will be chosen for the study.

3.6.Type and Source of Data

The sources of data in the study were classified as primary and secondary.

Yin (2014) defined primary sources of data as sources of original information that have never existed before. Under primary source, emphasis was put on the collection of data directly from field surveys via the administration of the questionnaire, and interviews. Quantitative and qualitative data was gathered through questionnaires and interviews respectively. Primary data will be collected on the age of respondents, gender, educational level, agribusiness income, size of land holding, price of agricultural inputs, sales, and marketing services among other

relevant variables from the sample respondents. The primary data was provided reliable and accurate first-hand information relevant to the study about the economic effects of the Covid-19 pandemic on youth agribusiness in Mutoko District.

The research also employed the use of secondary sources to draw examples and comparisons of the effects of Covid-19 on sales, income, inputs and income on agriculture in rural Zimbabwe and abroad. Secondary sources present an argument, interpretation, conclusion, or summary based upon information found in primary sources in the areas in which the scholars conducted the research. For this study, secondary data was collected online through journal articles, book chapters, policy briefs, and situational reports from various authors and organizations. Physical and soft data resources was also be in the form of statistics and reports obtained through agriculture extension officers.

3.7. Research Instruments

A research instrument is defined by Saunders et al (2016), as a measurement tool that is designed to obtain data on a specific topic of interest from the researcher's subject. Data collection for hybrid studies involves the use of tools that collect statistical as well as qualitative data. In this study, questionnaires and interviews was utilised as research tools as described in the following section.

A questionnaire is a simple and rapid tool for collecting data in less time and effort. The survey was developed based on a literature review that was conducted concerning the economic effects of Covid-19 on agribusiness.

A total of 280 self-administered survey questionnaires will be distributed. The questionnaire consists of five sections. The first section consists of demographic questions. This will gather data regarding youth background that include: respondents' age, gender, income and size of land holding. The second part will provide data for farming agribusiness systems. The third part had farmer perceptions towards COVID-19 challenges on agribusiness. The fourth part had farmer support systems that were available during COVID-19. The last section included farmer coping mechanisms during and after the COVID-19 pandemic. Saunders et al. (2016) stated that there are two kinds of questionnaires, open-ended and close-ended questionnaires. In this research, the researcher used both open-ended and closed-ended questionnaire designs.

Reliability is the consistency of responses; the degree to which an instrument measures, in the same way, each time under the same conditions. Reliability is used to ensure internal consistency and to achieve a high degree of homogeneity between questionnaire statements (Alvi, 2016). Whilst, validity measures the research tool's soundness; it ensures that the research tool is measuring what researchers attend to measure or want to measure (Creswell, 2013). There are three methods to measure the validity of the research tool, which are: content validity, criterion-related validity, and construct validity.

To achieve reliability and validity, the questionnaire was designed in such a way that it will be understood by all participants. The researcher guaranteed the respondents' and their responses' privacy, anonymity, and confidentiality in the questionnaire's introduction. This was done so that they do not falsify facts or attempt to conceal valid knowledge that could have otherwise impeded the declared research aims.

There was content validity, as the researcher developed questions based on the material provided in the literature. Using Cronbach's Alpha, reliability was also be evaluated. An alpha of 0.7 was used as a standard for testing the reliability of the questionnaire items. The researcher will accept items with an alpha of 0.7 or above.

The research made use of semi-structured interviews as a data collection instrument. According to Kothari (2018), an interview comprises an interviewer, who coordinates the process of the conversation and asks questions, and an interviewee, who responds to those questions. They can either be conducted face-to-face or over the phone. In this research face to face, interviews will be conducted with key informants (agricultural extension workers and farmer representatives). Latham (2016) highlighted that interviews are instrumental in getting the story behind participants' experiences. This research had ten interviews in total. During this research, the researcher made use of themes and questions that allowed the research participants to have an unrestricted discussion with the researcher. The interviews were conducted with respondents at times and places of their convenience.

Interviews were chosen for this research because they allowed the researcher to capture verbal and non-verbal responses which are body language and facial expressions. The researcher had the opportunity to rephrase some of the questions in ways that are best understood by the respondents. St Pierre and Jackson (2014), argued that regardless of the words' aptness to the research question, respondents' words are important. Sometimes vernacular language was used as a way to help them understand.

To ensure the quality of results from interviews, the researcher will strive to adhere to the principles of trustworthiness throughout the research. Trustworthiness of data addresses issues of credibility, transferability, dependability and conformability, which in quantitative research design are equivalent to internal validity, external validity, reliability and objectivity, respectively (Guba & Lincoln, 1994). Trustworthiness is a method of ensuring rigour in qualitative research without sacrificing relevance.

Yin (2014) argues that credibility is an element of trustworthiness that entails ensuring that the data is a true reflection of the realities in the study settings and the perceptions, attitudes, traditions or beliefs of the population. In this study, credibility was achieved by utilising data source triangulation, where the researcher utilised several sources of data such as youth and agriculture extension officers from Mutoko District. The study also utilised methodological triangulation, whereby the researcher will utilise questionnaires and interviews.

Saunders (2014) opines that dependability is an aspect of trustworthiness that is a measure of the extent to which if the study were to be replicated, it would

yield the same results. Therefore, dependability is reliant on consistency, logical chronology and clarity in the steps that are taken to acquire, transcribe and interpret results. In this study, dependability will be ensured by providing a clear and informative explanation of the steps taken in carrying out the study.

According to Denzin (2015), Transferability is an element of trustworthiness that refers to the extent to which the results of a study can be applied or generalised to other, similar contexts or settings. In this study, transferability was ensured by a comprehensive description of the study setting and sample. This is so that the reader or consumer of the study can pick out of himself or the similarities or differences between that particular study and its setting to other settings or similarities.

Yin (2016) argues that confirmability is another aspect of the trustworthiness of data. This is the degree to which the findings are the product of the focus of the inquiry and not of the biases of the researcher. In this study, confirmability was ensured through a Confirmability audit trail, that is, an adequate trail was established to enable the researcher to determine if the conclusions, interpretations, and recommendations are traceable to their sources and if they are supported by the inquiry.

3.8.Data Analysis Techniques

Analyzing the quantitative data entails looking over what was gathered during the survey, as well as generating conclusions and judgments. The gathered data will be organised to ensure orderliness and edited to remove inaccuracies to identify any issues that may have arisen as a result of the use of the questionnaire. With the aid of Microsoft Excel software, the quantitative data in the investigation was examined using descriptive statistics. To identify trends and interdependencies between variables, descriptive statistics like means, frequencies, standard deviations, and percentages was used to analyse the data. Charts and comparative tables with percentages and frequency breakdowns was used to convey the data.

On the contrary, qualitative methods of analysing data was also be adopted since this study was partly qualitative. Denzil and Lincoln (2015) describe qualitative data analysis as working with data, organising it, breaking it into manageable units, synthesising it, searching for patterns, discovering what is important and deciding which could be learned and imparted to others. Qualitative data collected through the interviews and themes was analyzed manually. The researcher will provide narratives based on the results. The investigator also used Braun and Clarke's (2006) thematic data analysis method of analysing data whereby the analysis commenced with: a) reading or familiarising myself with the data obtained from interviews, b) then generating codes for the participants for confidentiality purposes so that I can be the only one who can identify them, c)

searching for themes, reviewing the themes, and then defining and naming them and e) lastly, producing the final report.

3.9. Ethical Considerations

This research tried to address the ethical issues that the current investigation can pose. All participants will formally consent to their participation in the research by signing a Consent and Briefing Letter. Additionally, a Debriefing and Withdrawal Letter for this research was signed by its representative participants. Additionally, the letters will serve to reassure the participants that they are not required to participate in the study and may withdraw at any time if they find it uncomfortable. All participants was also provided with clear instructions on how to contribute to the study's objectives and assurances that their answers was kept confidential and used only for research. No one involved in the study, other than those already named, is anticipated to abuse or damage anyone physically or mentally. Instead, the researcher tried to create and maintain a calm environment.

CHAPTER IV

RESULTS AND DISCUSSIONS

4.1. Introduction

This chapter focuses on quantitative and qualitative data which was gathered through questionnaires and interviews and will be presented, interpreted, and discussed. As outlined in Chapter 1, the purpose of this study is to assess the economic impact of the COVID-19 pandemic on youths in agribusiness in the Mutoko District of Zimbabwe. This chapter also interprets the data and explains the findings. During the research, various issues were discussed and opinions were provided. During data collection, the researcher found that there were a plethora of recurring themes that were raised in interviews. These were then described and explained based on extracts from participants' statements that explained the meaning of the content generated. On the other hand, the data provided from the questionnaires was equivalent enough to answer the research questions of this study, quantitatively.

4.2. Socio-demographics

This chapter describes the research participants' characteristics. The description offers an idea of the participant's demographics and farming systems.

Table 1: Farmers' Socio-demographics Summary

Variables	Categories	Frequency n=280	Frequency (%)
Sex	Male	67	23.7
	Female	213	76.1
Age (in years)	18–23	77	27.5
	24-29	115	41.1
	30-35	88	31.4
Highest Level of Education	Primary	11	3.9
	Secondary	268	95.7
	Tertiary	1	0.4
Size of Land	< 1 ha	61	21.8
	1 - 2 ha	175	62.5
	2 – 3 ha	36	12.9
	> 3ha	8	2.9
Main Livelihood Source/ Occupation	Animal Husbandry	11	3.9
	Crop Production	141	50.4
	Market Gardening	58	20.7
	Poultry	70	25
	Diversified Crops, Vegetables & Livestock	96	34.3
Which best describes your farm?	Primarily Crops	40	14.3
	Primarily Horticulture	112	40
	Primarily Livestock	32	11.4

Source: Primary Data Analysis (2022)

The study selected 280 villagers who are farmers in the district as participants of the study, and all 280 responded. As shown in Table 1, of the 280 that responded 76.1% were females whilst 23.7% were males. The huge variation between females and males was deliberate since women are the backbone of the development of rural and national economies, according to FAO (2011). In Africa, 80% of agricultural

production comes from small farmers, who are mostly rural women. Women comprise the largest percentage of the workforce in the agricultural sector but do not have access to and control over land and productive resources (FAO, 2011). Most respondents (41.1%) were between the age of 24-29 years, followed by 30-35 years and 18-23 years with 27.5% and 31.4% respectively. All the respondents attended school and the majority had gone to secondary as their highest level of education (95.7%). This meant that the respondent was literate enough to understand the questions in the questionnaire, hence this further made this investigation reliable and valid. The respondents owned or rented land of different sizes. Those with land measuring between 1 hectare and 2 hectares dominated the sample with 62.5%, followed by those with less than 1 hectare (21.8%). Respondents with land above three hectares were the fewest (2.9%). Prior to that, the young farmers have indicated that they are using drip irrigation. Its efficiency in water usage, precise control over watering, and positive impact on crop yields make it an attractive option for farmers in the District. This explains that the majority of the farmers smallholder farmers have recognized the potential of drip irrigation to enhance their farming operations. The farmers were fairly represented in different agricultural sectors that is; animal husbandry at 3.9%, crop production at 50.4%, market gardening at 20.7% and poultry at 25%. Maize crop production dominated the sample.

The study selected 10 key informants as in-depth interview participants. The respondents included five farmer representatives and five agriculture extension officials. For anonymity, they were coded from KI 1 to KI 10. Participants KI 1 to

KI 5, were farmer representatives, whilst, KI 6 to KI 10 were government officials (agriculture extension officers) from the district under the Ministry of Lands, Agriculture, Fisheries, Water and Rural Development.

This study was conducted by interviewing 10 key informants. Every single person participated in the respective interviews gave a 100% response rate. On the other hand, 280 youth who were sampled all responded, giving a percentage of 100% questionnaire response rate, as shown in the table below:

Table 2: Response Rate

	Sample	Response	Rate
Interviews	10	10	100%
Questionnaire	280	280	100%

Source: Primary Data Analysis 2022

This high rate was made possible since interviews were conducted under the researcher's careful observation, making it possible to conclude the project. A large percentage of respondents suggest there is enough information to conclude the economic effects of the Covid-19 pandemic on youth agribusiness. This high rate was achieved since interviews were administered under close supervision of the researcher thus satisfactory to make conclusions about the project.

4.3. The Impact of Covid-19 on Youth in Agribusiness

Respondents were asked to reflect on their perceptions of the economic effects of Covid-19 on the youth in agribusiness. To do this the researcher further required the respondents to indicate their level of agreement with statements given in the tables below by filling out a 5-Likert scale, where 1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4=Agree, and 5 = Strongly Agree. Mean and standard deviation were computed to show the distribution of the response based on the data collected.

Table 3: The Impact of Covid-19 on Youth in Agribusiness (N: 280)

Variable	Response		Mean	Std. Dev.
	Agree	Strongly agree		
Reduce my access to inputs	202	78	4.279	.449
Reduce my ability to sell farm production	32	248	4.886	.319
Reduce my ability to get financing support for farming season operations	182	96	4.336	.488
Reduce the level of my usual yields	161	118	4.416	.501
Reduce my ability to hire labour for farming operations	57	222	4.789	.417
Reduce my access to agriculture extension services like training	164	116	4.414	.493
Reduce my access to markets	116	164	4.586	.493

Source: Primary Data Analysis 2022

As presented in Table 4, overall, the respondents agreed with the statements that reflected a negative impact of Covid-19 on the youth's agribusiness. This implies that the respondents affirm that Covid-19 reduced their potential to excel in agribusiness. Thus, agribusiness, like many other industries, was impacted by the COVID-19 pandemic in several ways. Labour shortages as a result of the pandemic made it difficult for farmers to harvest, process, and distribute their products. This led to reduced production and higher costs for farmers. The pandemic also led to restrictions on trade, which had a significant impact on the agricultural market. The pandemic also led to a decline in demand for certain agricultural products, particularly those that were primarily consumed in restaurants, hotels, and other food service establishments, this is also supported by Ndungu (2020). With many of these businesses closed or operating at reduced capacity, farmers and agribusinesses saw a decline in sales.

To augment the understanding of issues related to the impacts of Covid-19 related to youth agribusiness sales and income, the survey included a question that asked about the average income estimate for the farmers before and during the pandemic. The responses are illustrated in Table 4 below:

Table 4: Average income estimate before and during the pandemic

Income	Average income estimate before the pandemic		Average income estimate during the pandemic	
	Frequency	Percentage	Frequency	Percentage
Below \$500	11	3.9	265	94.6
\$500-\$1000	245	87.5	14	5.0
\$1000-\$2000	16	5.7	1	0.36
\$2000-\$3000	6	2.2		
\$3000 & above	2	0.7		

Source: Primary Data Analysis 2022

The young farmers reflected that Covid-19 highly affected their income and sales as the majority (94.6%) noted that they were able to receive an income below \$500 during the pandemic. This was due to poor sales during the period. Agricultural produce sales were poor during the lockdown for several reasons. The lockdown measures restricted the movement and transportation of goods, which made it difficult for farmers to transport their products to markets. This led to a decrease in demand for fresh products and a surplus of unsold products.

To further understand the reduction in income during the pandemic, the survey asked about the percentage decrease in agribusiness income during the period. This is depicted in Table 5 below:

Table 5: Percentage Reduction in Income

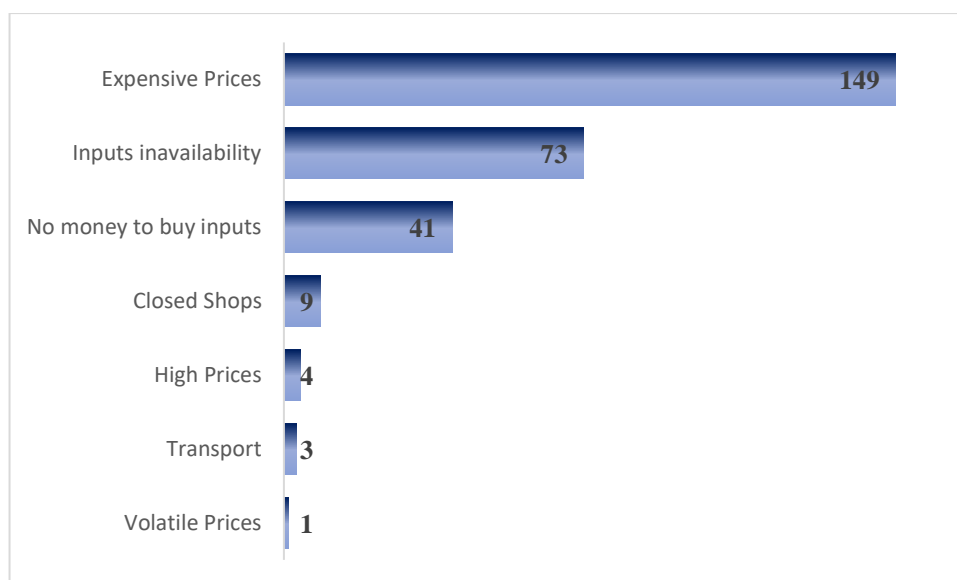
Percentage Decrease in Income	Frequency	Percentage
0-25%	10	3.6
26-50%	26	9.3
51-75%	237	84.6
76-100%	7	2.5

Source: Primary Data Analysis 2022

The data shows that 3.6% of the respondents highlighted that their incomes were reduced by less than a quarter (0-25%), whilst 9.3% and 2.5% of the respondents noted that they lost less than half and more than three-quarters income respectively due to the pandemic. The majority (84.6%) of the respondents however highlighted that they incurred a more than half income loss due to the effects of Covid-19 on agribusiness. According to Nyagadza (2021), the COVID-19 pandemic has had a significant impact on the livelihoods of farmers around the world. As the pandemic has disrupted global supply chains, causing fluctuations in demand for agricultural products and leading to price volatility. In the current study, the farmers have also faced logistical challenges in getting their products to market due to restrictions on movement and transportation. In many cases, the pandemic has led to a decrease in farmers' income. Farmers in Mutoko who relied on selling their produce to restaurants, and other hospitality businesses have suffered significant losses due to the closure of these establishments during lockdowns. Also, the farmers who produce crops such as vegetables and beans have seen a decline in

demand due to boarding school closures and reduced restaurant sales which are significant customers.

Table 5 above reflects that the young farmers agreed that Covid -19 reduced their access to inputs. To augment the investigator's understanding of issues related to inputs availability, affordability and accessibility during the pandemic, the respondents were asked about the challenges that made inputs inaccessible during the pandemic. This is expressed in Picture 2 below:



Picture 2: Inputs inaccessibility

The majority (53.2%) of respondents highlighted that inputs were unaffordable due to expensive prices. Also, 26% and 14.6% of the respondents had challenges in accessing inputs due to transport immobility and closed shops respectively. Four respondents faced challenges related to volatile prices. A few (1.7%) reflected solely that transport was unavailable and one respondent revealed

that she has no money and the prices were not constant. This is supported by Kabonga et al., (2021) who averred that COVID-19 has also had a significant impact on the accessibility of inputs in the agriculture sector. This is because, COVID-19 has disrupted markets for agricultural products, making it difficult for farmers to sell their crops. This has led to reduced income for farmers, making it more difficult for them to afford inputs. The pandemic has disrupted global supply chains, making it difficult for farmers to access the inputs they need to produce crops. Border closures, transportation restrictions, and reduced production capacity in some countries have led to shortages of fertilizers, pesticides, and other inputs. The pandemic has also led to increased demand for certain agricultural inputs, such as seeds and livestock feed. This has led to shortages and price increases for these inputs.

The respondents were asked about the marketing channels they used during the Covid-19 pandemic and the majority (98.2%) revealed that they did direct selling. This probably reduced their chances to reach various markets. 1.1 % engaged in digital marketing and only 0.7% were doing both direct selling and digital marketing. From the study, the majority of the farmers depend on direct selling hence the closure of local markets and the shift to online marketplaces made it difficult for small-scale farmers to sell their produce, as they lacked the resources and infrastructure to participate in e-commerce platforms. This is shown in Table 6 below:

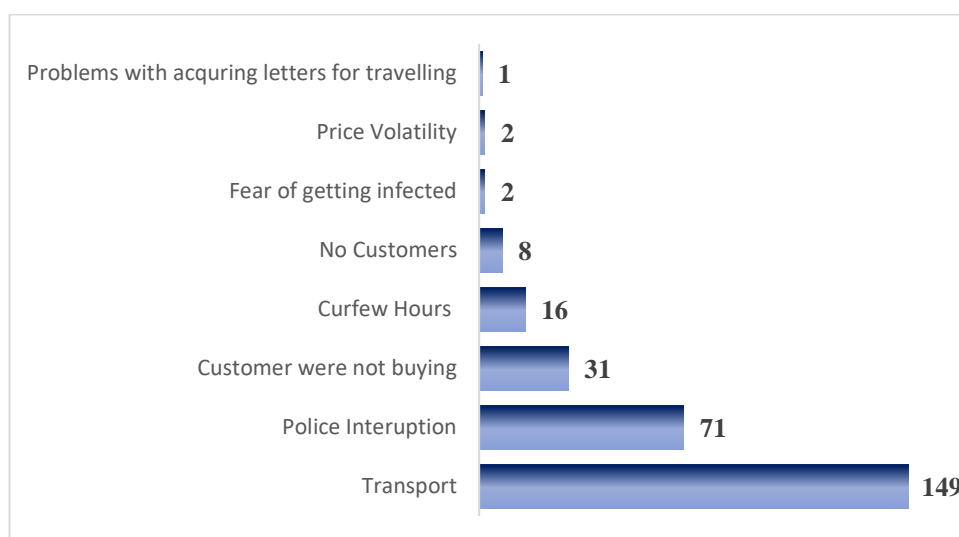
Table 6: Marketing Channels

Marketing Channels	Frequency	Percentage
Both	2	0.7
Digital Market	3	1.1
Direct selling	275	98.2

Source: Primary Data Analysis 2022

However, the results from the study show that the farmers were able to adapt to the new conditions by shifting their focus to local markets and direct-to-consumer sales. This allowed them to bypass some of the supply chain disruptions and continue selling their products despite the restrictions on movement.

Picture 3 below reflects the hindrances in marketing. The majority (53.2%) highlighted that they faced transport challenges to go to the market during Covid-19 period. Followed by those (25.4%) that complained about police interruption. 11.1% noted that the customers were not buying during the pandemic period.

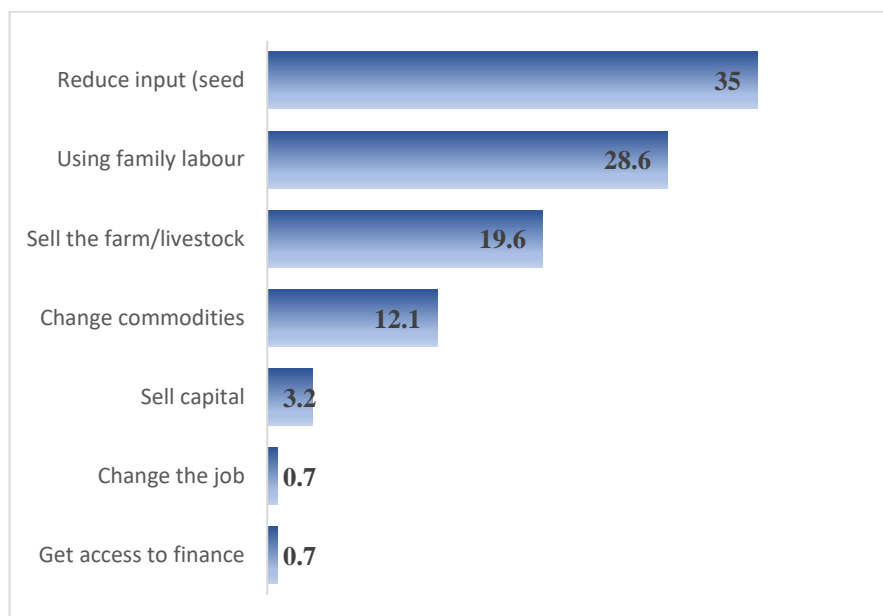


Picture 3: Market Disruptions

The impact of movement restrictions on farmers during lockdown varied depending on the specific context and location. In some cases, farmers were able to continue their work relatively unhindered, while in other cases, they faced significant challenges. The findings from the study show that the movement restrictions made it difficult for farmers to transport their goods to market, and many faced shortages of inputs such as seeds, fertilizer, and pesticides. This led to lower yields and reduced incomes for many farmers. For Zimbabwe, exports of goods, mainly primary commodities, which accounted for an estimated 22% of GDP in 2018 are expected to be adversely affected by direct and indirect linkages with the global economy, mainly China and European Union (EU) countries (UNDP, 2020). Zimbabwe's links with China have been extensive given the Look East Policy that was adopted by the previous administration. China remains an important destination for Zimbabwean exports, especially tobacco, which is likely to be adversely

affected by the economic slowdown in that country. Overall, the COVID-19 pandemic has highlighted the vulnerability of agribusiness markets to external shocks and has underscored the need for more resilient supply chains and a greater focus on food security.

To cope with the ravages of COVID-19, the young farmers employed adaptation and mitigation mechanisms to cater for their agribusiness, livelihoods and social well-being. This question was asked of all respondents regardless of their farming systems, (e.g., crops, livestock, or horticulture). Therefore, the following results represent the data from all 280 respondents. The question needed to understand the main coping strategies used by farmers during COVID-19. A larger percentage (35%) responded that they resorted to reducing input. 28.6% of the respondents pointed out that they adapted to using farming labour. The likelihood of being able to hire labour for planting and harvesting for the upcoming cycle became low. Also, 19.6% of the respondents sold their farms and livestock. 12.1% of the respondents decided to change their usual jobs while 3.2% resorted to selling their capital (assets). A few highlighted that they were saved by getting finances (0.7%), especially from Microfinance and others had to change the crops they were farming (0.7%). The latter farmers indicated that they had to diversify their crops, consider short variety cycles, and intensify their crops in the hopes of increasing production.



Picture 4: Farmer Coping Mechanisms

However, these were their main coping strategies but they mixed several mitigations as they made action plans for the gradual resumption of activities, selling livestock, and approaching banks to obtain funding.

4.4. Agribusiness Youth COVID-19 related challenges

Agro-processing can be defined as a set of techno-economic activities carried out on an agricultural commodity to make it usable as food, feed, fibre, fuel or industrial raw material. According to Mhazo et al. (2012), the agro-processing

value chain encompasses all subsequent operations after the stage of the harvest till the product reaches the final consumer in the desired form, packaging, quantity, quality and price.

The research found that the outbreak of COVID-19 has disrupted food processing industries globally through challenges associated with rules on social distancing, labour shortages due to sickness, and lockdown measures to contain the spread of the virus. This was further supported by one agriculture extension officer who said:

In confined spaces, such as packing plants for fruits and vegetables or meat processing facilities, necessary social distancing measures have reduced the efficiency of operations as there is an overriding need to ensure adequate protection for employees (Interview with KI 8, Mutoko Business Centre).

This is supported by Nyagadza, (2021), who reported that many firms testified high rates of worker absences; for example, staff availability was reduced by up to 30% in meat processing facilities in the country's COVID-19 hotspots. The interviews also revealed that the agriculture manufacturing industry in Zimbabwe was not been spared from the impact of the pandemic. (is there any data support that the agriculture manufacturing industry also got the impact of covid-19? i.e. the number of manufacturing industry closed etc). The COVID-19 pandemic had an impact on the manufacturing industry including those industries that rely on agriculture for raw materials.

The interviews with key informants revealed that the COVID-19 pandemic has interrupted all aspects of the food supply chain, including the logistics related to food handling and distribution. Logistics is a key aspect of food value chains in

Mutoko District and comprises all necessary activities that enable the flow of agriculture inputs, outputs, and agriculture-related services, such as transportation, warehousing, procurement, packaging and inventory management. One agriculture extension officer emphasized that:

Challenges in logistics and transport can negatively impact the quality of food, freshness, its safety, and can delay access to markets and affordability. A major impediment to food security is limited distribution options (Interview with KI7, Mutoko Business Centre).

As Ndungu (2020) noted, even when food supplies are available, there are barriers to it reaching consumers, most especially due to movement restrictions imposed to reduce the spread of the virus. The key informants noted that the restrictions or closure of borders by countries in the region and abroad translates to the lockout and disruption of many businesses in trade and transport and logistics, those working on transport systems through which supply chains pass through, thereby threatening the livelihood of workers in these industries. This was affected by the national lockdowns and the infection aversion measures put into place by the government of Zimbabwe, causing trading to decline in the agriculture sector as well.

From the interviews with key informants, the COVID-19 pandemic created supply and demand shocks affecting all the relevant economic sectors, particularly, agriculture. A farmer representative noted that:

The extent of the effects of COVID-19 could be better appreciated across the value chain, which shows how food flows from the farmer-producers through the processors, distributors, and retailers, and finally reaches the plates of the consumers (Interview with KI2, Ward 5, Mutoko District).

Overall, the food supply chain shows the linkage between supply and demand in an agricultural food system. The mobility restrictions were a result of the imposition of community lockdowns resulting in a quantity reduction in farm labour that would translate to an overall reduction in agricultural output, the key informants revealed.

Reduced agricultural production is also caused by farmers' limited access to farm inputs and to markets to sell products, which may result in profit losses and wastage of farm produce (Interview with KI2, Ward 5, Mutoko District).

This highlights that In the long run, the loss of income and the economic slowdown would also result in a decrease in demand, particularly among the farmers and farming families without safety nets.

The interviews with the farmers revealed that Mutoko District also depended on tobacco farming. However, China remains an important destination for Zimbabwean exports, especially tobacco, which is likely to be adversely affected by the economic slowdown in that country. The interviewees noted that the outbreak and spread of COVID-19 coincided with the country's 2020 tobacco marketing and trading season. This was expressed by one agriculture extension officer who alluded that:

Unfortunately, the major importers of flue-cured tobacco, namely China, South Africa, and selected European countries, among others were among the hardest hit by COVID-19. Thus, depressed demand and slow recovery in these countries had an impact on Zimbabwe's export earnings. The same uncertainties also apply to other agriculture exports, particularly, horticulture exports, whose main markets are in Europe (Interview with KI 4, Mutoko Business Centre).

Furthermore, this corroborated with Kabonga et al., (2021) who reported that China is an important source of intermediate goods for South Africa and

Zimbabwe's main trading partner and, thus, any slowdown in economic activity in China will also affect the country indirectly via reduced trade with South Africa. However, border closures and limited cross-border activity have somewhat impacted income levels despite some continued use of unofficial routes to and from Mozambique which is nearby Mutoko District.

4.5. Government of Zimbabwe actions to sustain young farmers

The interviews reveal that in early April 2020, the government allowed the use of the US Dollar again for local transactions after having banned it in 2019 using Statutory Instrument 142 of 2019. The reintroduction of the USD has led to an increase in the already high parallel market US Dollar to Zimbabwe Dollar (USD/ZWL) market exchange rate. To curb this challenge, the government introduced the interbank rate. The introduction of the interbank market instead of eliminating the parallel market led to a two-tier exchange rate, the interbank rate and the parallel market rate. One agriculture extension officer had this to say:

Businesses complained of failing to access foreign currency on the interbank and end up benchmarking their goods and services using the parallel market rate thus inflating the prices (Interview with KI 1, Mutoko Business Centre).

This was also supported by a farmer representative who supposed that:

Most goods and services were increasingly charged in USD, yet most incomes were still in ZWL. Cash, mobile money, and electronic transfer prices were in local currency and were priced above prevailing

parallel market rates taking advantage of the COVID-19 pandemic (Interview with KI 7, Ward 17 Mutoko District).

The interviews further expressed that there was a lot of profiteering among businesses during the Covid-19 pandemic such that when the exchange rate goes down, prices did not go down. Most incomes were very low for poor households to exchange ZWL for USD at the galloping parallel market rates to purchase enough basic food and agricultural inputs in USD to meet their needs. This is corroborated by Rukasha et al. (2021), who hypothesised that the return of the USD has led to a spike in the already high USD/ZWL market exchange rate on the parallel market. To combat this difficulty, the government established the interbank rate. Instead of removing the parallel market, the establishment of the interbank market led to the existence of two exchange rates: the interbank rate as well as the parallel market rate. In addition, businesses lament their inability to access foreign currency on the interbank market, leading them to price their products and services using a parallel exchange rate (Mhlanga, 2020). The majority of prices for products and services have shifted from ZWL to USD, while the majority of incomes remain in ZWL. (how the impact of the government action to farmers' youth in agribusiness? Are they helped?

Given the importance of the agricultural sector in Zimbabwe, the GoZ through the Ministry of Lands, Agriculture, Water and Rural Resettlement on the 8th of April 2020 unveiled new guidelines for the resilient food supply chain system during and after the lockdown. The guidelines recognize the importance of the food supply chain in guaranteeing national food and nutritional security during and after

the lockdown. The importance of this measure was further explained by one key informant:

This was meant to avoid food supply shocks which were caused by the lockdown to guarantee every Zimbabwean an uninterrupted food supply during and after the lockdown period. There was a need to put in place mitigatory measures and strict hygiene requirements throughout the food supply chain given the pronouncement by the President that all farmers and traders must continue to deliver produce to food markets, including those markets that supply cities, towns, and growth points (Interview with KI6, Mutoko Business Centre).

The interviews revealed that food supply chains in Zimbabwe provide a lot of jobs on different levels of the chain including transport services and traders who purchase from the farm gate and sell to retailers in towns and cities. However, the full impact of these guidelines was not recognised according to the interviews and there was great evidence of how the supply chain has been affected since the onset of the pandemic as well as after the lockdown measures were put in place. It is also important to note that these guidelines were functioning against an already challenging context as explained by one key informant:

The supply chains of different agricultural commodities in Zimbabwe are fraught with challenges stemming from the inherent problems of the agriculture sector. The agri-supply chain system of the country is determined by different sartorial issues like the dominance of small/marginal farmers, fragmented supply chains, absence of scale economies, low level of processing/value addition, the inadequacy of marketing infrastructure, etc (Interview with KI 1, Mutoko Business Centre).

Through the qualitative data, the research also learned that the youth in agribusiness in the Mutoko district benefited from the adoption of the government's Climate Proofed Presidential Input Support Scheme. This was in the form of a program called *Pfumvudza*. According to Mavesere & Dzawanda (2022),

Pfumvudza is a Zimbabwean vernacular language term referring to the blooming of new leaves during the spring season signalling the beginning of a new farming season. It used to refer, to the conservation agriculture concept, a crop production intensification approach under which farmers ensure the efficient use of resources on a small area of land to optimise its management. One agriculture extension officer had this to say:

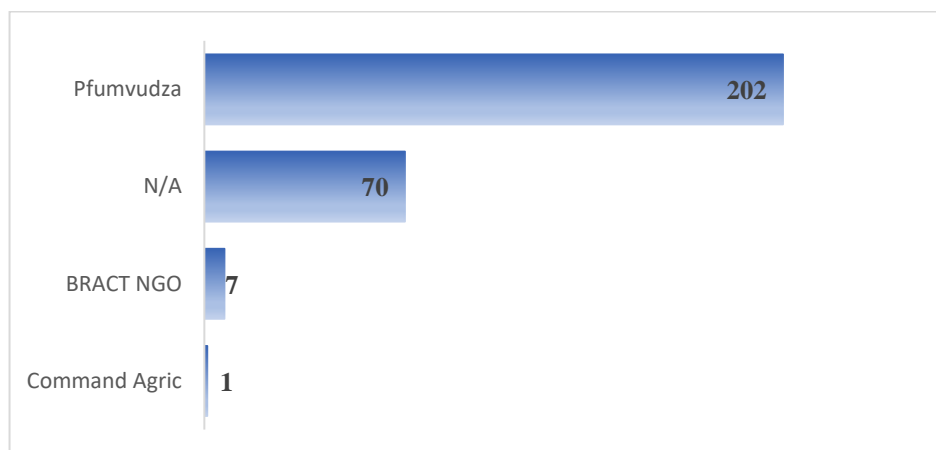
The implementation of *Pfumvudza* in the 2020/21 cropping season during the Covid-19 pandemic in the district was aimed at addressing problems of low yields and making households more resilient to climate shocks to ensure food security (Interview with KI4, Mutoko Business Centre).

The interviews expressed that farmers who practised *Pfumvudza* witnessed an increase in yields compared to previous years hence, the positive role played by *Pfumvudza* as a resilience strategy against drought impacts. To add on, those who did not practice *Pfumvudza* got lower yields than those who practised *Pfumvudza*. However, it was also noted that some farmers continued to experience slightly lower yields due to partial and non-adherence to certain *Pfumvudza* key principles. However, when compared to yields before the introduction of *Pfumvudza*, the *Pfumvudza* yields were higher. This implied that *Pfumvudza* brought remarkable change in yields that was witnessed by farmers hence increasing resilience against climate change-induced drought impacts and economic shocks induced by the Covid-19 pandemic. The development also led to a reduced number of households assisted by social welfare and other non-governmental organizations during the Covid-19 period. One farmer representative acknowledged that:

The *Pfumvudza* concept is a viable resilient strategy that can help rural farmers who depend on rain-fed agriculture to counter the effects of

climate change and increase agriculture production thereby contributing to self-resilience (Interview with KI2, Ward 7, Mutoko District).

The results from the qualitative responses corroborated with quantitative data as the majority (72.14%) highlighted that they received and benefited from *Pfumvudza*. However, (25%) claimed they did not receive any assistance related to their agribusiness in the Covid-19 period. Seven of the respondents noted that they have received aid from BRACT (Building Resilience through improving the absorptive and Adaptive Capacity for the transformation of a risk community). This program has equipped farmers with skills and inputs to start their businesses which will sustain them. The program is funded under the Zimbabwe Resilience Building Fund which is an initiative by the government and other augmenting partners (NGOs) focusing on reducing over-dependence on agricultural income in fragile environments by promoting alternative non-agricultural income sources. Only one farmer highlighted that he has been receiving assistance from the Command Agriculture program to cushion him from the ravages of the COVID-19 lockdown. According to Mabhena (2013), command agriculture is a rural development strategy adopted by the Zimbabwe government as one of several strategies in its broad land reform policy framework. It was said to be geared toward increasing cereal production to boost national food reserves and it was championed by the Zimbabwe National Army (ZNA). Young farmers who have benefited from this state subsidy scheme have on the other reiterated that they are making significant progress since the program was introduced. The result is shown below:



Picture 5: Government Projects Beneficiation

The key informants also opened up that the Zimbabwean President commissioned a US\$1million fruit and vegetable processing plant in Mutoko Business Centre. The processing plant was expected to add value to horticultural produce grown by the local market especially when travelling was restricted. An agriculture extension officer had this to say:

Before the opening of the processing plant, local farmers used to travel to Harare with their farming produce which is over 200 kilometres away. The new plant helped the rural farmers' costs of transport to Harare and also relieved them (Interview with KI10, Mutoko Business Centre).

This was also supported by the farmer representative who avered that:

This has become a ready market for our produce. We used to hire trucks to deliver our tomatoes to Harare. The hired truck owners would charge us a lot of money such that we were left with nothing to expand our farming businesses (Interview with KI5, Ward 22 Mutoko).

According to the interviews the agro-processing plant can produce tomato puree and mango juice. It came at a time when horticulture producers in Mutoko were having post-harvest losses due to a lack of markets induced by Covid-19

lockdowns. Before the institution of the plant, a lot of middlemen were coming here to buy the farmers' produce at low prices. The responses from the research also revealed that the hub also produces capacity-building services for horticulture farmers to enhance their productivity as well as value addition of tomatoes to produce tomato paste. The intervention intensified the horticulture contribution to the area.

NGOs were also reported to be available in the district augmenting government efforts of cushioning the rural farmers from the pandemic as well as climate change. To note the Mutoko District young farmers saw the coming of Christian Aid's Building Resilience through improving the Absorptive and Adaptive Capacity for Transformation (BRACT). This was expressed by a government official, who averred that:

As part of the Zimbabwe Resilience Building Fund (ZRBF), BRACT helps communities prepare and adapt to a changing climate and economic shocks brought about by pandemics such as Covid-19 (Interview with KI8, Mutoko Business Centre).

Vulnerable households that were affected by the recurring shocks that affected farming, were reported to benefit from this initiative. It was also learnt that the aim was to strengthen the communities' ability to transform and adapt particularly focusing on youth and women, developing diversified viable livelihood options adapted to climatic and socio-economic shocks and stresses. The study found that BRACT Programme focused mainly on reducing over-dependence on agricultural income in fragile environments by promoting alternative non-agricultural income sources. One farmer revealed that he was assisted with a 180-egg incubator after the programme acknowledged her ambition in poultry. The

hatchery answered the farmer's challenges and limitations with egg hatching as one agriculture extension worker testified that:

The BRAC project also fostered initiatives in food preservation and livelihood diversification. The beneficiaries also received skills training in bush meal production and business management. The farmers use local tree species to make highly nutritious bush feed for cattle.

4.6. Discussion

First and foremost, the study has shown that agricultural output and business have suffered as a result of the lockdown measures implemented to combat the pandemic.

According to the research, the COVID-19 pandemic may have an impact on farmers' access to essential intermediate inputs due to new limitations on people and goods movement. Following this, the Organisation for Economic Co-operation and Development (OECD), in its 2020 report, noted that after the outbreak, production facilities were forced to close, and pesticide output fell sharply before slowly picking up again. The majority of the research mentioned how inputs like pesticides were volatile, scarcely available, or expensive and how these factors would have an impact on crop yields and production in 2020 and 2021. In the Zimbabwean context, the majority of fertilizers and pesticides are imported, and Nyagadza (2019) claims

that limitations on the movement of goods across borders are already having an impact on the supply of inputs and agricultural markets. As a result, the research's mention of border closures slowed the transboundary movement of seeds and might hinder seed supply chains and timely delivery, which would harm agriculture, feed, and food output over the coming season and into the future. Farmers encountered difficulties when using locally produced inputs because the movement was constrained in the area and some agro-supply retailers weren't operating at maximum capacity. This has already made it more difficult to get set for production and reduced harvests in the following season.

According to the study, Covid-19 messed up supply chains and destroyed the world's food economy. Zimbabwe is not an exception; as border closures, production halts, and export limits restrict supply, demand has risen, driving up prices and affecting the world's poorest and most marginalized people. The research went one step further and examined how the pandemic and subsequent lockdown measures affected Zimbabwe's pricing system as well as its export and import situation. Production and trade flow disruptions caused by COVID-19 supply chain shocks have already been observed in the nation. As a result, there have been unstable market effects, with consequences for both food prices and incomes dependent on the agri-food sector. The respondents also mentioned that agriculture-related earnings are generally below average and meagre. All of this has resulted in fewer producers' customers.

Respondents reported that young farmers had difficulty finding markets for their products. They encounter several difficulties, such as a shortage of

transportation because the lockdown regulations prohibit the majority of transporters from travelling. The majority of livelihood activities were impacted by the prohibition on all public transportation (apart from staff and necessary services), which resulted in little to no free movement throughout the nation or even within communities. Production and commerce flows were reportedly being disrupted by COVID-19 supply chain shocks, as has already been observed in the nation. As a result, there have been unstable market effects, with consequences for both food prices and incomes dependent on the agri-food sector.

CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

5.1. Conclusions

This research sought to determine and assess the economic impact of the COVID-19 pandemic on youths in agribusiness in the Mutoko District of Zimbabwe. Covid-19 has negatively impacted sales, income, inputs, and marketing. Factors, such as hindrances in transport logistics, international trade, and agro-processing were some of the challenges youth farmers faced during the pandemic.

The challenges faced by youth farmers' in agribusiness included inability to access inputs as a result of movement restrictions to the unavailability of adequate labour due to social distancing requirements. For the produced goods, farmers were facing challenges in accessing markets. They were faced with various challenges, including lack of transport as most transporters were not allowed to travel under the lockdown guidelines. The ban on all public transport (except for essential services and staff) affected most livelihood activities with little free to no free movement within the country, even within communities.

Government had given some interventions to help the severe impacts of COVID 19 through several programs such as commissioning of the fruit and vegetable plant at Mutoko Center, the presidential input schemes in the form of

Pfumvudza and the stabilization of the pricing system. The Mutoko farmers welcomed the commissioning of the fruit and vegetable plant, and they praised the decision because it came at a time when the region's horticulture producers were suffering post-harvest losses due to a lack of markets brought on by Covid-19 lockdowns.

However, evidence from the research showed that the government's intervention was not enough because the majority of the youth were not covered by the input scheme as per the applied distribution index. Findings showed that Pfumvudza produces higher yields, but sustainability and food security concerns is still difficult to address in the face of persistent drought circumstances.

5.2.Recommendations

The researcher hereby recommends that with the unavoidable impact of COVID-19 on farmers, the government must increase its support towards farmers, especially smallholders, as well as all the vulnerable households that directly depend on the land and agriculture-related activities, both for livelihood development and income. The government should expand the fiscal space and offer subsidies to farmers either in the form of loans or inputs and equipment. This can help in stimulating and sustaining farm operations, and ensure that production does not halt as this is the heart of the whole agriculture supply chain. When farmers are

given the necessary financial support in terms of affordable loans, they can resiliently respond to the threats posed by COVID-19.

The growing interest in agriculture needs to be sustained with more targeted capacity-building activities of relevant government agencies and groups to specifically promote and generate more agri-entrepreneurs. Encouraging all sectors' participation, particularly the youth and women, through several systematic education and mentorship programs with well-thought-out and sustained incentives and innovative training modalities backed with social safety net systems will be instrumental to sustain these efforts.

Also, there is a need to establish collection centres closer to producers to reduce the need for mobility. However, this requires an improvement of storage facilities to reduce post-harvest crop losses along the supply chain. This will solve both the logistical challenges and the market access challenges for the producers. This also allows the manufacturers to continue their operations as they will have a central point of collection for either raw materials or produce for value addition.

Furthermore, farmers in Mutoko, Zimbabwe are lagging as far as technological advancement is concerned. There is a need to accelerate the development of e-commerce for farmers to limit the need for in-person transactions, especially in this era of social distancing and movement restrictions. The BRACK project, which aimed to strengthen communities' capacity for transformation and adaptation with a special emphasis on youth and women, was also mentioned as

having been helpful by the respondents but they are only targeting few wards due to resource unavailability.

The experience with COVID-19 further highlights the importance of the agriculture sector in ensuring the achievement of food security, especially during times of crisis. How food security is defined, which in turn becomes the basis of how agriculture programs and projects are designed to achieve it, now further raises an important aspect related to viewing agricultural systems as food systems. Seeing food security as a coordination problem, both the government and private sectors could use this experience with COVID-19 to rethink how food production and consumption could be made more sustainable. Across the agricultural supply chain, the COVID-19 pandemic resulted in movement restrictions for labour and transport of farm inputs and produce, an increase in food prices due to the unpredictable market, and a change in consumer patterns. The interconnections of each of the nodes of agricultural supply chains would therefore be critical in affording a holistic and integrated response to ensuring food security and nutrition at all times, particularly during crisis

The likes of the COVID-19 pandemic have raised the need to support local capacity toward being self-sufficient through well-planned local food production systems. While sustaining the efforts to significantly improve productivity and income among rural farmers, urban communities could be supported by engaging in urban agriculture initiatives at the community and household levels. Supporting more studies on how physical and financial technologies and social organizations

could be better wielded to make these initiatives work and be made more efficient across scales is a priority.

It is paramount to provide more incentives to support innovation studies and activities that significantly improve productivity, reduce production losses, and promote value-adding activities covering both agriculture and related non-agriculture ventures. For Zimbabwe, these would particularly include support activities related to the development of new and relevant crop varieties and livestock breeds; seed and livestock production and distribution of technologies; agricultural systems technologies like water management, pests and diseases management, weather and climate forecasting, etc.; postharvest management like drying, processing, and storage; farm produce transport and logistics systems; facilities supporting food quality, nutrition, and safety maintenance; and diversified farming, as well as support livelihoods complementary to that of major crops and livestock produced, among many others.

As risks and uncertainties arise related to price volatilities, inclement weather, and climate change-related hazards that characterize farm production systems, there is a need to support more studies and activities related to improving the design of financial technologies for farmers and to encouraging wider participation in these financial systems like loans and credit systems and agricultural insurance facilities, among others. Policies and interventions to support institutional and organizational interventions made suitable to the cultural nuances of a group or community would be particularly relevant for Zimbabwe.

Based on this study, the researchers should plan on conducting a follow-up survey and potential in-depth interviews and/or focus groups to better understand the actual impacts of COVID-19, with the hope to identify the characteristics that strengthen smallholder farming systems' resilience to adjust to anticipated and unanticipated shocks, such as COVID-19, to decrease the negative impacts and increase the rate of recovery. In addition, there would be value in evaluating the catastrophic predictions made about the impact of COVID-19 in terms of mortality and morbidity particularly in developing poor countries, such as Zimbabwe. Lastly, it is important to recognize the need to document the policies and approaches implemented by the Zimbabwean government in developing and monitoring structures for the improvement of smallholder resilience, but this was beyond the scope of this study.

It is high time that the general public significantly appreciates the value of agriculture. Consumers are now becoming more aware of the intricate link between what they have on their plates and the quantity and quality of farm production, which could be capitalized on to encourage more programs and budget allocation from governments, as well as private initiatives related to agriculture such as farm-based small-and-medium enterprises. In turn, there is a need for a massive promotion of sustainable and responsible consumption pattern that provides strong signals for agricultural products that support and observe cleaner production, environmental conservation, and social inclusion. At the individual and household levels, massive promotion of information related to healthy diets and lifestyles, agricultural products that are nutritious and rich in micronutrients, food preparation,

and preservation techniques, as well as waste management strategies must be made accessible using various knowledge platforms and modalities.

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Appendixes

I, **TAKUDZWA IGNATIUS KUTOKA**, a Master's student at **DIPONEGORO UNIVERSITY**, Faculty of Animal and Agricultural Sciences, Department of Agribusiness. I am carrying out a study on the **Economic Impact of the Covid-19 Pandemic on Youths in Agribusiness, a Case Study of Mutoko District**. Data collection will be confidential and used for academic purposes only.

Date -----/-----/-----

SECTION A: DEMOGRAPHIC INFORMATION

Mark with an (X) in one box per question to indicate your response where appropriate

1. Gender: Female Male

2. Age in years:

18- 23 years 30-35 years

24 – 29 years

3. Educational Level:

Tertiary Level

Secondary Level

Primary Level

Never Attended School

4. Size of land:

Less than 1ha

Between 1-2ha

Between 2-3ha

3ha and above

4 Main occupation: Poultry

Crop Production

Market Gardening

Animal Husbandry

Small Scale Mining

Others: (specify)

5 Average income before the pandemic:

Below 500 500 – 1000

1000- 2000 2000-3000

3000 & above

6 Average income after the pandemic:

Below 500 500 – 1000

1000- 2000 2000-3000

3000 & above

SECTION B: AGRIBUSINESS SYSTEMS

1. Which best describes your farm?:
- Primarily Crops
- Primarily Livestock
- Primarily Horticulture (vegetables)
- Diversified crops, vegetables & Livestock

2. The anticipated reduction in crops/ livestock/ horticulture yields as a result of the COVID-19 pandemic:

0-25% (Less than a quarter) 26-50% (Less than half)
 51-75% (More than half) 76-100% (More than three quarters)

Specify : ron/kg//hectar/number of cattle

3. What is your major crop?

Note: Respondents that indicated that their farm is “primarily crops” or “diversified crops, vegetables, and livestock” only, could select all applicable crop options.

Maize Tobacco
 Cotton Wheat Other.....(specify)

4. What is your primary livestock?

Note: Respondents that indicated that their farm is “primarily livestock” or “diversified crops, vegetables, and livestock” only, could select all applicable livestock options.

Cattle Poultry Pigs
 Goats Sheeps Other.....(specify)

The number of cattle/poultry/pigs/goats/sheep etc:

5. What is your main vegetable?

Note: Respondents that indicated that their farm is “primarily horticulture” or “diversified crops, vegetables, and livestock” only, could select all applicable vegetable options.

Tomatoes Potatoes Leafy Greens
 Cabbages Onions Beans
 Other.....(specify)

4. How did you sell your product before/after covid 19?

Direct selling

Digital market

Both (Direct Selling & Digital Market)

SECTION C: FARMER PERCEPTIONS ON CHALLENGES BROUGHT BY COVID-19 TO AGRIBUSINESS

1. Please check the statements that most accurately reflect your opinion using the Likert scale provided below (Strongly disagree = 1, Disagree = 2, Neutral = 3, Agree = 4, and Strongly agree = 5). Thinking about your perceptions of what might occur due to COVID-19, please indicate your agreement or disagreement with the following statements. COVID-19 will.....

Item	Scale				
	1	2	3	4	5
Reduce my access to inputs					
Reduce my ability to sell my farm produce					
Reduce my ability to get financing support for farming season operations					
Reduce the level of my usual yields					
Reduce my ability to hire labour for farming operations					
Reduce my access to agriculture extension services like training					
Reduce my access to markets					

2. How much did you lose during covid 19?

Below 500 500 – 1000

1000- 2000 2000-3000
3000 & above

3. Did you have difficulties entering the market during covid 19?

Mention:

.....
.....
.....
.....

4. What were the difficulties related to input suppliers?

.....
.....
.....
.....

5. Please mention the impact covid 19 on volume production, how much:
decrease/increase

.....
.....
.....
.....

6. Did you experience changing food consumption during covid 19?

.....
.....
.....
.....

SECTION D: FARMER SUPPORT DURING COVID-19

1. How did the role of banking finance your farm during covid 19?

.....
.....
.....
.....

2. What was the role of the government to support your farm during covid 19?

.....
.....
.....
.....

3. Are there any other stakeholders to support your farm?

.....
.....
.....
.....

SECTION E: FARMER COPING MECHANISMS

1. As a youth who works in agriculture, what were your coping strategies during COVID-19?

- Change the job
- Change commodities
- Get access to finance
- Using family labour
- Sell you capital
- Sell the farm/sell livestock
- Using family labour
- Reduce input (seed, fertilizer, labour etc)
- Others:(Specify)

THANK YOU

I, **TAKUDZWA IGNATIUS KUTOKA**, a Master's student at **DIPONEGORO UNIVERSITY**, Faculty of Animal and Agricultural Sciences, Department of Agribusiness. I am carrying out a study on the **Economic Impact of the Covid-19 Pandemic on Youths in Agribusiness, a Case Study of Mutoko District**. Data collection will be confidential and used for academic purposes only.

Date -----/-----/-----

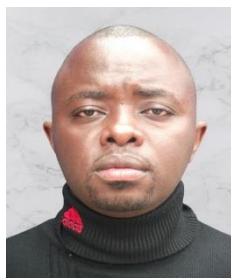
1. For how long have you been operating here in Mutoko District?
2. As an extension officer/ farmer representative, what's your area of speciality?
3. Please describe the primary difficulties and challenges in agribusiness brought on by the spread of the Covid-19 pandemic.
4. Why are those challenges so significant? Why are we having these issues now? Is it affecting their agribusiness operations?
5. How can relevant stakeholders (the government of Zimbabwe) assist the local youth to recover from the effects of Covid-19 from your experiences?
6. Is there anything you think could be done differently to assist the youths in agriculture recover from the effects of Covid-19?
7. What do you think the responsibility of the District Extension Officers is in battling Covid-19? Could you offer some suggestions for enhancing the situation?

THANK YOU

Objective	Research Methodology	Research location	Types of data	of population	Sampling respondents /informants	Tools to collect the data	Data Analysis
To evaluate the economic impact of COVID-19 on young individuals in agribusiness.	Quantitative	Mutoko district	Quantitative	Youths in farming	280 Youth	Questionnaire Survey	Frequency Tables for the main questions. Descriptives Table for the demographic variables showing the mean and standard deviation. Descriptive Analysis. The software will be STATA.
To uncover challenges facing the youths in agribusiness occasioned by the Covid-19 pandemic.	Qualitative	Mutoko district	Qualitative	Agric Extension Officers; Farmer Representatives	10 Agritex officers & Farmer Representatives	Interviews	Thematic Analysis. Assigning different codes and labels to the interview text for examination and the identification of patterns and themes.
To determine the actions taken by the Government of Zimbabwe to help the youth in agribusiness	Qualitative	Mutoko district	Qualitative	Agric Extension Officers; Farmer Representatives	10 Agritex officers & Farmer Representatives	Interviews	Thematic Analysis. Assigning different codes and labels to the interview text for examination and the

Objective	Research Methodology	Research location	Types of population data	Sampling respondents /informants	Tools to collect the data	Data Analysis
<p>ss to be sustained during and after COVID-19 economic shocks.</p>						<p>identification of patterns and themes.</p>

BIOGRAPHY



TAKUDZWA IGNATIUS KUTOKA was born on 26 November 1993 in Harare, Zimbabwe. He entered DIPONEGORO UNIVERSITY since August 2021 in Master Program of Agribusiness. He attended Solusi University from 2013 to 2018 and received an upper second Bachelors in Agribusiness. His project ventures have attracted various grants from international organizations, including the Global Youth Mobilization. He has worked with Caritas Zimbabwe Diocese of Mutare to establish climate resilient food security and agribusiness community projects to restore livelihoods in disaster affected areas. He is also a recipient of the 2022 Impact Toolbox Youth in Development Fellowship Program and as the Founder of Youth Development Network Trust, he aspires to implement community-based food security projects which relies on qualified and competent youth who can work in profitable farming.