

The intersection of COVID-19, poverty and food insecurity: A challenge to the health and well-being of urban households in Zimbabwe

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Abstract

This paper demonstrates the intersection of COVID-19, poverty and food insecurity. COVID-19 affected many households in Plumtree town of Zimbabwe following the government-imposed lockdown restrictions. The study answers the following questions: a) What is the impact of COVID-19 pandemic on the poverty of urban households? b) How did the COVID-19 pandemic affect the food security of urban households? c) What challenges to the health and well-being of urban households emanate from the COVID-19 pandemic? d) What responses were adopted to improve the welfare and food security of urban households? This qualitative study investigated 70 households. Results were that COVID-19 exacerbated the dimensions of household poverty. Besides, the pandemic worsened food insecurity of many households. Hence, COVID-19, poverty and food insecurity complicated the lives of urban residents. The pandemic is a threat to development and the Sustainable Development Goals. The responses to the pandemic were not effective, as they worsened food insecurity. Ways should also be found, to improve household food security following the outbreak of deadly pandemics. Also, responses towards pandemics should look beyond just addressing the pandemics. This study attempts to inform policy and practice. Government, practitioners and academia can benefit from the study.

Keywords: COVID-19; Food security; Poverty; Health and well-being; SDGs

1. Introduction

The coronavirus disease of 2019 (COVID-19), is a global disaster that surprised the world with its widespread and devastating impact. In December 2019, the virus initially detected in Wuhan city, in China (Chakraborty and Maity, 2020; Lai *et al.*, 2020), where it had caused illnesses and deaths to the citizens. Since then the pandemic spread with a tremendous rate, that the entire world was soon affected (Huang *et al.*, 2020). A World Health Organisation (WHO) report indicated that by the second week of September 2020, more than 28 million confirmed cases with more than 20.5 million recoveries and more than 900 thousand deaths had been recorded globally, with the United States of America recording the largest number, followed by India, Brazil and Russia (WHO, 2020). This indicates that the disaster was not just a disruption to the development and health endeavours of nations, but it caused devastation beyond imagination. Disasters in the form of pandemics are reported to have caused more deaths in the past century, far more than the major armed conflicts occurring around the world (Adda, 2016). However, some have argued that the pandemic disaster in the form of COVID-19 was not a major surprise, since the world had previously experienced outbreaks of

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pandemics like Spain flu, Polio, HIV, Severe Acute Respiratory Syndrome (SARS), Zika, the Middle East Respiratory Syndrome (MERS), and Ebola in Africa (Saqr and Wasson, 2020).

Since its discovery in December 2019, COVID-19 pandemic has been getting worse daily, with interruptions in human activities, a huge death toll, and a direct hit on the global economy (Workie et al., 2020). The pandemic has altered the lives of many communities so that people have found it difficult to cope with its devastating effects. As such, the pandemic has impacted on the lives of the poor in many societies, as well as affecting the food security situation of many nations. Estimates show that poverty and food insecurity could grow dramatically as COVID-19 spreads (Laborde, Martin and Vos, 2020). This means that the dimensions of poverty and food insecurity within societies are likely to be prolonged problems due to the COVID-19 disaster. The World Food Program (WFP) has projected that about 265 million people could suffer food insecurity by the end of 2020, suggesting growth in figures from the 135 million people projected before the COVID-19 disaster (Food Security Information Network, 2020). This study regards the COVID-19 pandemic as a disaster because the pandemic has severely impacted the functioning of the communities the world over, causing serious disruption of the functioning of nations and the communities. The United Nations Office for Disaster Risk Reduction (UNDRR) defines a disaster as is “a serious disruption of the functioning of a community or a society at any scale due to hazardous events interacting with conditions of exposure, vulnerability and capacity, leading to one or more of the following: human, material, economic and environmental losses and impacts” (UNDRR, 2017). The COVID-19 disaster has resulted in a massive loss of human life beyond proportions, such that many of the affected nations, especially those in less developed regions, have not been able to cope with the virus without international support. Besides, COVID-19 has affected all facets of life, including informal settlements, slums and migrant workers as these suffer exclusion from the mainstream disaster response and recovery programmes (Raju and Ayeb-Karlsoon, 2020; Wilkinson, 2020). Therefore, some groups in societies have experienced more poverty levels and food insecurity compared to others, as a result of the COVID-19 impact. Hence, this study is about the intersection of COVID-19, poverty and food insecurity. The study argues that when these three social problems intersect, health and well-being of the people is severely compromised. A compound disaster is created since the COVID-19 disaster can worsen or lead to the other two social problems.

For this study, the concepts of poverty and food security are defined. In general terms, poverty is understood as the deprivation of basic needs such as water, shelter, food, clothes, education, and a clean environment. To a certain extent, it is the deprivation of freedoms and choices, power and security. Hence, African societies are said to be experiencing widespread poverty, that includes the deprivation of shelter, clothes, food, clean water and clean environment, freedoms and choices, amongst others (Dube, 2019). As such, the situation of the poor in societies seems to be getting worse at both the global and local stages (Mtapuri, 2008). The various views about poverty, and the lack of a single universally recognised definition, has led scholars and practitioners to view poverty as a multidimensional concept. As such, poverty has been regarded as consisting of many ‘poverties’ because of its multidimensional aspect (Dube, 2019; Gasper, 2007). Poverty is a social problem that can impede any nation to community’s endeavours to achieve development goals. For instance, extreme poverty can also limit a community’s capacity to undertake development initiatives, as well as hinder the implementation of risk reduction strategies (Dube, Mtapuri and Matunhu, 2018; IFRC, 2000). However, this study argues that it is the responsibility of governments to deal with poverty and food insecurity problems during the COVID-19 lockdown restriction. For instance, governments can reduce poverty levels in societies, using funds collected through taxation and from facilitating humanitarian aid (Matunhu, 2012). It is, however, important to note that poverty and food insecurity are closely related to social problems. Hence, this study analyses how the COVID-19 pandemic disaster intersects with the two problems.

Whilst poverty is about the deprivation of essential basic needs, it is, therefore, clear that poverty also entails the lack of access to food since food is a basic human need. Food insecurity is the result of poverty, and poor health of the household members (Perez-Escamilla and Segall-Correa, 2008). Hence, there is a link between poverty and food (in)security. Food and Agriculture Organisation (FAO) defines food security as the situation in which all people, and at all times, have physical and economic access to sufficient, safe, and nutritious food to meet their dietary needs and food preferences for an active and healthy life all the time (FAO, 2010; FAO, 2002). For any nation or

community to be regarded as food secure, the four dimensions of food security, namely: food availability, food access, food utilisation and food stability, should exist. The COVID-19 policy responses, including lockdown and social distancing measures, had immediate negative effects on food security (Cariappa et al., 2020; European Commission, 2020). It has been argued that these pillars of food should exist along with food safety and sanitation concepts considerations (Summerton, 2020; Peng and Berry, 2019). Otherwise if one of the pillars or dimensions is missing, a nation or community cannot be said to be food secure – instead, it would be having food insecurity. Hence, food insecurity is the direct opposite of food security. Hence, the study argues that COVID-19 is most directly and severely impacting all four pillars of food security (Laborde et al., 2020). The impact of this disaster can be felt on food availability (since food transportations are affected by lockdown restrictions), food access (since people are restricted to move from one place to another), food utilisation (since people can get the virus during food preparation), and food stability (as the continuous supply of food is affected by movement restrictions).

To achieve its aim, this study is guided by the following research questions: a) What is the impact of COVID-19 pandemic on the poverty of urban households? b) How did the COVID-19 pandemic affect the food security of urban households? c) What challenges to the health and well-being of urban households emanate from the COVID-19 pandemic? d) What responses were adopted to improve the welfare and food security of urban households?

1.2. Statement of the problem

Following the rapid spreading of the COVID-19 virus globally, Zimbabwe detected its first infection in March 2020, which had resulted in one fatality. As the rate of COVID-19 infections and deaths increased around the world (Workie et al., 2020), and in Zimbabwe, the government of Zimbabwe responded by employing restrictive measures to reduce disaster impact. The measures employed included the enactment of new legislation to enforce lockdowns, social distancing and the wearing of face masks. This move meant that people's movement and access to social services, including food, was restricted. The government deployed the police and soldiers to enforce the measures. The author argues that the response to the COVID-19 pandemic impacted heavily on the poverty situation and food security of many citizens in the country. Some communities in Zimbabwe are already experiencing high levels of poverty and food insecurity, hence the restrictive measures worsened their situation. The restrictive measures imposed by the government also impacted heavily on the daily lives of urban residents in Plumtree town, in Matabeleland South Province. The food security of many households was affected due to the movement restrictions, leading to worsening poverty levels. The author argues that this scenario affected the progress towards the attainment of the Sustainable Development Goals (SDGs), especial SDG 1 of '*No poverty*', SDG 2 of '*Zero hunger*' and SDG 3 of '*Good health and well-being*' (United Nations Development Programme (UNDP), 2015). The residents were also denied access to regular meals since some were surviving on food aid supplied by donor organisations. All donor-funded programmes in the country were temporarily suspended, hence impacting heavily on the goals to fight poverty, end hunger and to provide good health and well-being. Already, projections have been made that the two food security dependent goals of SDG 1 and SDG 2, will be affected most during the lockdown period imposed by governments to curtail the spread of the virus, particularly in developing countries (Workie et al., 2020).

This study, therefore, argues that the measures adopted to deal with the COVID-19 pandemic in Zimbabwe, though necessary, affected the access to basic needs including the food security situation of many households. Whilst the lockdown and other measures were a necessity, it seems no measures were put in place to safeguard the welfare and food security of the citizens. Ways to support local poor people during the COVID-19 pandemic should be identified (Xiao et al., 2020). If there are no measures put in place, urban households are like to suffer the same problem when confronted by future pandemics. The poor people's welfare and livelihoods depend more on fewer assets hence, their health is always at greater risk (Hallegatte et al., 2017). By impacting on the welfare and food situation of the Plumtree town residents, the impact of COVID-19 is reflected as beyond the viral infection. Hence the impact resulted in limited access to resources such as money, food, education, healthcare, and job flexibility, making disadvantaged communities fail to fulfil the endeavours (Ferdinand and Nasser, 2020). If the situation created by responding to the COVID-19, is not saved, the disadvantaged

households in Plumtree town would continue to deprivations. There is a need to advance their welfare and food rights in line with development goals, when implementing measures to respond to disasters, such as pandemics.

1.3. Theoretical framework of the study: Sustainable Development Goals

The United Nations SDGs was used as a theoretical framework for the study. In 2015, the United Nations (UN) adopted a set of 17 development goals, with the view to build a future that is free from poverty, hunger and climate change by 2023 (OECD, 2016).

The SDGs are part of the UN's development agenda and are meant to guide and help nations and communities achieve development. Hence, Zimbabwe as a member of the UN and a signatory to the Goals is expected to foster development by putting the goals into practice. Hence the study argues that the SDGs (SDG1, SDG2 and SDG3) in Zimbabwe' plumtree town can be achieved through addressing issues of poverty and food insecurity. Addressing poverty and hunger or food insecurity would ultimately lead to the achievement of SDG3, that of good health and well-being. It is, therefore, upon this commitment to attain the SDGs by the UN member nations, that the author views the lockdown restrictions as an impediment towards eliminating poverty and hunger in for urban households in Plumtree. Besides, the restrictions retarded the realisation of good health and wellbeing of urban households.

The set of 17 SDGs, agreed on and adopted by the United Nations are as follows (UNDP, 2015):

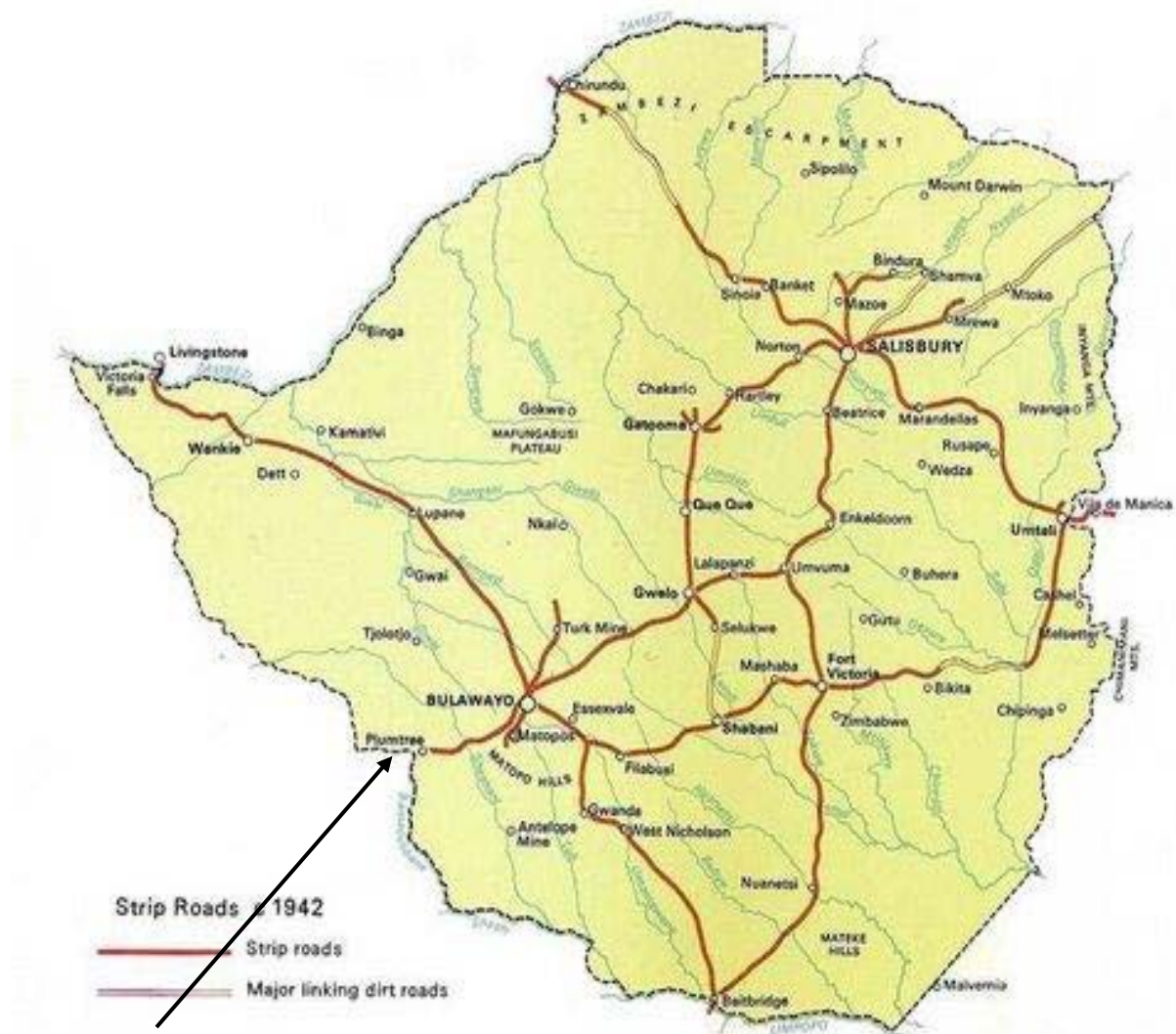
- *Goal 1. No poverty:* End extreme poverty in all forms by 2030.
- *Goal 2. Zero hunger:* End hunger, achieve food security and improved nutrition and promote sustainable agriculture.
- *Goal 3. Good health and well-being:* Ensure healthy lives and promote well-being for all at all ages.
- *Goal 4. Quality education:* Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.
- *Goal 5. Gender equality:* Achieve gender equality and empower all women and girls.
- *Goal 6. Clean water and sanitation:* Ensure availability and sustainable management of water and sanitation for all.
- *Goal 7. Affordable and clean energy:* Ensure access to affordable, reliable, sustainable and modern energy for all.
- *Goal 8. Decent work and economic growth:* Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.
- *Goal 9. Industry, Innovation and Infrastructure:* Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.
- *Goal 10. Reduced inequalities:* Reduce inequality within and among countries.
- *Goal 11. Sustainable cities and communities:* Make cities and human settlements inclusive, safe, resilient and sustainable.
- *Goal 12. Responsible consumption and production:* Ensure sustainable consumption and production patterns.
- *Goal 13. Climate action:* Take urgent action to combat climate change and its impacts.
- *Goal 14. Life below water:* Conserve and sustainably use the oceans, seas and marine resources for sustainable development.
- *Goal 15. Life on land:* Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.
- *Goal 16. Peace, justice and strong institutions:* Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.
- *Goal 17. Partnerships for the goals:* Strengthen the means of implementation and revitalize the global partnership for sustainable development.

Since poverty is a multidimensional concept (Angelsen and Wunder, 2006; Onwuka, 2006) the deprivation of most of the aspects mentioned in the goals also amounts to fuelling poverty. hence, the study used the SDGs framework to strengthen the argument on the intersection between COVID-19, poverty and food security. The study understands that the impact of the COVID-19 disaster on urban households can be reduced if the interventions for the pandemic also consider achieving then SDGs. To provide a logical flow, coherence and direction, the study is organised into the following main headings: Introduction, Methods, Results, Discussion, Conclusion, Acknowledgments, and References cited.

2. Methods

This section discusses the research methods that were adopted to answer the research questions informing the study. The description of the study area, the research approach and design, as well as the sampling procedures and data collection methods are all discussed in this section.

2.1 Study area description



The study was conducted in Plumtree town (Fig. 1) of Matabeleland South Province in Zimbabwe. The town which has an estimated population of 11 626 people (Zimstat 2012), is in the South-West of Zimbabwe and located at the port of entry to Botswana. Many residents of Plumtree town survive mainly on informal trading of goods, selling of food commodities, fuel and lubricants. They can easily

get these commodities from Botswana due to the town's proximity to the Zimbabwe – Botswana border post. Apart from the Central Business District, the Plumtree town consists of locations that include Dingumuzi, Mathendele, Hebron, Garikai, and the Plumtree border post, amongst others. Figure 1 below is the map of Zimbabwe, showing the position of Plumtree town on the map:

2.2. Research approach

This qualitative study was based on both primary and secondary data sources. The qualitative approach helped the researcher understand people's feelings, opinion and experiences (Crang, 2002). Both sources of data helped to highlight how the COVID-19 pandemic intersect with the problems of poverty and food insecurity. The secondary sources of data consisted of journal articles, books, book chapters and online sources. These provided the relevant literature about the COVID-19 pandemic. Most of the publications on the COVID-19 were the current sources published in 2020. The 2020 publications were considered more relevant as they provided with the current and best information available about the novel COVID-19 disaster. The secondary sources of literature were also consulted to explain the two concepts of poverty and food insecurity.

2.3. Sampling and data collection procedures

Primary data were collected from a sample of 70 research the participants chosen through the snowball sampling procedure. Snowballing is a qualitative study technique that requires research participants to find other potential respondents (Dube, 2015). Initially, a few participants were chosen from a Plumtree town WhatsApp group due to the COVID-19 lockdown movement restrictions. Using the WhatsApp group platform, the chosen participants then identified others who they thought their poverty and food insecurity situations were affected by COVID-19. All the snowballed group members were household heads in Plumtree town. The researcher was also conscious that some households had more than one member in the WhatsApp group. Hence, in such instances, the senior member represented the household. Having chosen the study participants, collected data through mobile phone semi-structured interviews. In circumstances where the participants were not easily reachable to respond to the interview questions, the questions were asked via the WhatsApp platform. The participants also responded to the questions using the same WhatsApp platform. The sample of 70 participants was reached through the saturation method when the study could not obtain information with new ideas. A thematic analysis was adopted to come with the relevant themes. The following themes emerged from the analysis and were used in the discussion of the results: COVID-19 is more than just a pandemic – it is a biological disaster; COVID-19, poverty and food insecurity intersect to make human life more complex; COVID-19 poses a threat to the achievement of development goals; and, that responses to COVID-19 should look beyond addressing the pandemic impact.

2.4. Ethical considerations

The research adopted the case-study design, with Plumtree town (Figure 1) used as the case study. Hence, the use of the secondary sources of data was complemented with primary data collected from the field in Plumtree town during the period from August to October 2020. Since the data were gathered during the lockdown period, research ethics in line with the safety procedures of the COVID-19 were observed. Such ethical considerations included complying with the government's lockdown pronouncements, staying home, minimising movements, and avoiding public gatherings. In addition to COVID-19 ethics, the researcher also followed ethics for the protection of the participants. All the participants were advised that they would not suffer any physical or psychological harm by participating in the study. Besides, the participants were informed that their involvement in the study was voluntary and that no rewards were to be offered. Hence, informed consent of the participants was sought and given before their involvement in the study. The participants were also assured of their anonymity, and that all their responses were to be treated with the utmost confidence. Any participant was at liberty to withdraw from the study at any time, if they so wished, without any restrictions.

3. Results

This section presents the results of the study using data that was obtained from the field. The results are based on the COVID-19 experiences of Plumtree urban households. To keep the readers on

track, and as a way of emphasis, the research questions are repeated in this section: a) What is the impact of COVID-19 pandemic on the poverty of urban households? b) How did the COVID-19 pandemic affect the food security of urban households? c) What challenges to the health and well-being of urban households emanate from the COVID-19 pandemic? d) What responses were adopted to improve the welfare and food security of urban households?

3.1. Impact of COVID-19 on the poverty of urban households

Results from the field showed that the disaster in the form of COVID-19 worsens poverty levels of many households in Plumtree town. According to the respondents, many deprivations that include freedom of movement due to the restrictions, children's education, food commodities, medical care and a clean environment were experienced. Such deprivations were felt most during the 21 days of the first phase of the lockdown. Since poverty entails the deprivation of the important basic needs and necessities to human beings, this study regarded the COVID-19 induced deprivations as 'poverties'. These constitute the dimensions of poverty suffered by the Plumtree town residents. Table 1 illustrates the different dimensions of poverty that were worsened by the COVID-19 lockdown:

Table 1: Dimensions of poverty suffered by households due to COVID-19

Poverty dimension	Effect of deprivation	Frequency	Percentage
Food poverty	Households suffered from hunger	25	36%
Education poverty	Children not going to school	16	23%
Medical care poverty	Various illness not treated	10	14%
Socialisation poverty	Feeling of anxiety and loneliness	10	14%
Freedom poverty	Restricted movement	05	07%
Environmental poverty	Fear to contract COVID-19 virus	04	06%
Total		70	100%

Source: author's construction

As can be observed, the participants (36%) were of the view that food was the most important basic need that they were deprived of following the COVID-19 lockdown. Food deprivation resulted in many households suffering from hunger, as they experienced food poverty (Table 1). This deprivation was followed by the lack of access to education (23%) as all primary and secondary schools were closed. The closure of schools by the government in response to the COVID-19 lead to children experiencing education poverty, as they were deprived of this special basic need. Due to the fear of being arrested by law enforcement agents, the respondents (14%) indicated that some residents with minor ailments could not visit hospitals or health centres. This meant that the ailments, though minor, had the potential to complicate the lives of many people if not treated early. Hence, many residents suffered from medical care poverty (Table 1). Socialisation poverty is another dimension of poverty that affected urban households. According to the respondents (14%), urban households could no longer socialise with relatives, neighbours and friends due to the restrictions in movements. For the lack of socialisation, the respondents stated that they suffered from anxiety and loneliness. Freedom poverty (7%) was also experienced by urban residents. According to the respondents, the urban dwellers were deprived of the freedom to move from one point to another. Further, the respondents (6%) stated that they now lived in fear as they felt that their environment was compromised. They indicated that the COVID-19 pandemic deprived them of a safe and clean environment due to the fear of contracting the coronavirus. As such, it was now difficult for them to interact with their relatives and friends. From the respondents' narrations. It can be seen that the COVID-19 disaster negatively impacted on the urban household, thereby causing or worsening their poverty status.

3.2 COVID-19 and food insecurity of urban households

The COVID-19 restrictive measures did not only affect the dimensions of poverty existing in Plumtree town. Instead, COVID-19 left a permanent mark on the food security status of the urban households. the government of Zimbabwe first announced the 21-day lockdown, characterised with the restriction in movement and the closure of all businesses. During this period, the respondents indicated that their food security was heavily compromised. Thirty per cent (60%) of the respondents

indicated that they suffered from food insecurity because households no longer had stable sources of income to buy food commodities. This was because people were no longer going to work and few organisations paid employees during the lockdown. Some indicated that they depended on informal trading and vending as their source of income.

However, following the government ban on these business ventures, the income of the households got diminished. Apart from those running informal business losing the source of revenue, also the households who depended on buying from informal traders suffered food scarcity. According to the respondents (30%), the closure of food outlets such as restaurants also meant that single-member households who depended on such food outlets were affected. Those who depended on receiving remittances from abroad were also affected as the money transfer agents also suffered the same fate of closure. Underprivileged groups within the urban society, who depended on government assistance, humanitarian food aid and aid from Non-governmental organisations (NGOs) were also affected as the government initially suspended all such operations. Respondents further stated how the food situation of those households, survived through buying commodities from Botswana was affected. Most women survive on buying foodstuffs from Botswana and the closure of the Zimbabwe – Botswana border post in response to COVID-19 harmed many households. The following excerpt encapsulates one female respondent's lived experience:

I buy goods from Botswana every week and sell the goods here in Plumtree for survival. I also buy my food commodities in Botswana so that I look after my family. However, since the closure of the Zimbabwe – Botswana border post here in Plumtree, I am no longer able to go to Botswana. Hence, my source of income has been severely affected and my family now suffer from hunger (Female resident, 54 years, Mathendele, Plumtree).

Respondents (60%), further indicated that before the advent of COVID-19, some households were already food insecure. Hence, COVID-19 worsened the already existing food insecurity status of many households. However, it should be noted that COVID-19 did not only worsen food insecurity of those in the informal sector and permanent workers. The pandemic also affected food production processes. For instance, the respondents highlighted that the production of food through urban agriculture was also severely impacted. Due to the restrictions on movement, those with pieces of land in the urban area could no longer work on the land. This meant that their crops suffered from weeds as no-one could take care of them. Some respondents also indicated that they could not manage to secure farming inputs as the supplying chains for the inputs were interrupted.

3.3. Health and well-being challenges brought by COVID-19 pandemic

Since the urban households had limited access to food, proper medication, clean and safe environment, it is evident that the Plumtree town residents had many challenges to their health and well-being. The continuous derivation of food, especially nutritious and dietary food meant that urban residents could eventually suffer from ill-health. Hence, the lack of access to food compromised the health and wellbeing of urban households. Further, the health and wellbeing of the urban households were affected as they lacked access to proper medication due to the COVID-19 movement restriction. For any nation or community to develop, there is a need for health personnel so that development goals are realised. A nation or community that is characterised by poor health would hardly achieve the development goals. The health and wellbeing of the households were also compromised by the continued existence of the poor environment. People were deprived of a clean environment as their movements were limited to their yards, owing to the 'corona virus-contaminated' environment in the streets, locations and central business district.

3.4. Response mechanisms adopted to COVID-19 for urban households welfare

When the impact of the COVID-19-induced measures became more severe and apparent to the authorities, the government introduced various mechanisms as part of the response. Provision of essential services such as water, electricity and the opening of shops (though with early closure) were authorised. In addition, the respondents mentioned that the NGOs were also allowed to operate in town so that the underprivileged members of the community can get the necessary assistance. Whilst this was a move in the right direction as it contributed to the welfare of many, it did not effectively

address the issues of poverty and food security for many urban households. The respondents indicated that the introduced mechanisms were not effective since the shops were closing early at 1500 hours every day. Besides, they felt humanitarian agencies and NGOs should be allowed to operate at full-scale.

Despite the government efforts to ease the COVID-19 lockdown measures, urban residents in Plumtree also adopted their several survival strategies to cope with the pandemic. Due to the lack of food availability and access, the respondents narrated how they resorted to eating anything to keep their stomachs full. They indicated that they were no longer choosing the type of food to eat since food availability and access were compromised by the lockdown. Also, they ate traditional foods for their survival and dietary needs. They indicated that some shifted the focus on traditional relishes such as 'umfushwa' and 'ibhobola' (dried traditional vegetables). Further, they indicated that some households survived on 'amacimbi' (mopane worms), which they harvested for food and sale. One respondent from Dingumuzi township shared his experience:

Every day I go out in the nearby bush about 10 kilometres from Plumtree town, to harvest 'amacimbi' for relish and sale. So far, I have managed to raise 3X50 kgs of dried 'amacimbi' and I hope to sell the bulk of them to the shop-owners (Male, 44 years, Dingumuzi township, Plumtree).

Although some households resorted to traditional food, they indicated that the food was also not enough to feed their families. The traditional food is usually shunned by many people who often regard it is outdated, hence the food was not available in abundance to feed many people. However, the respondents acknowledged that such food was very nutritious and dietary, thereby contributing to their food security situation.

4. Discussion

This section discusses the results of the study. The results are discussed in line with the research questions and research the themes developed from the analysis of data. the themes that emerged from the data analysis are as follows: COVID-19 is more than just a pandemic – it is a biological disaster; COVID-19, poverty and food insecurity intersect to make human life more complex; COVID-19 poses a threat to the achievement of development goals; and, that responses to COVID-19 should look beyond addressing the pandemic impact.

4.1 COVID-19 is more than just a pandemic – it is a biological disaster

The impact of COVID-19 on the poverty situation of urban households proves that poverty is, indeed, a multidimensional concept. The Plumtree urban households were subjected to the dimensions of poverty in the form of food poverty, education poverty, socialisation poverty, freedom poverty and environmental poverty. Since the study adopted a narrative approach, the impact of COVID-19 suggests that it is not just a pandemic, but a biological disaster caused by a virus. COVID-19 is a biological disaster that has severely disrupted the life of the Plumtree community, resulting in severe poverty situations and food insecurity. As such, the disaster has affected the progress towards the domestication and achievement of the many SDGs. COVID-19 retarded the achievement of the SDGs in Plumtree urban, most notable, SDG1 of no poverty, SDG2 of zero hunger, SDG3 of good health and well-being, and SDG4 of quality education. This study agrees with the results of previous studies, which also found that COVID-19 may impede the implementation of the SDGs (Filhlo et al., 2020). Hence, COVID-19 is more than just a pandemic, since besides causing respiratory illness or problems, it also perpetuates poverty through the derivation of basic needs, including food. The perpetuation of poverty through its various dimensions means that the social problems of the Plumtree town residents are far from being over. Even if COVID-19 is over, the urban households in Plumtree are likely to live with the high levels of poverty for some time. Therefore, any measures towards reducing the impact of the pandemic should also consider dealing with poverty issues of urban households.

4.2 COVID-19, poverty and food insecurity intersect to make human life more complex

When the devastating COVID-19 impacted nations and communities, poverty and food insecurity were already a common feature in some societies. The same applies to Plumtree town, which already had poverty and food insecurity problems. These results concur with the World Bank study, which showed that approximately 113 million people around the world were already chronically food insecure due to other shocks before the COVID-19 pandemic (World Bank, 2020). Hence, in Plumtree town, COVID-19 worsened the already existing poverty and food insecurity problems in Plumtree. Households who survived on informal trading, remittances from outside the country, vending, and buying from Botswana suffered increased food insecurity since their incomes were diminished. The loss of income and subsequent increase in food insecurity means that the poverty situation of many households worsened. These results are similar to a study which found discovered that COVID-19 can threaten food security mainly through losses of income and assets thereby affecting the ability to buy food (Laborde et al., 2020). Another study in Pakistan showed that 64% of the population experienced a fall in their income due to the COVID-19 restrictions (Ali, Ahmed and Hassan, 2020). Hence, the three problems of COVID-19, poverty and food insecurity are shown to intersect to make human life more complex. Besides, by affecting poverty and food security COVID-19 acts against the endeavours of the SDGs of eliminating poverty (SDG1) and hunger (SDG2). When efforts to deal with poverty and hunger have failed, it means that the goal of providing good health and wellbeing (SDG3) also fails.

The suspension of humanitarian assistance in the form of food aid during the first 21 days of the lockdown worsened food insecurity because food availability, food access, food utilisation and food distribution were compromised. This meant that urban residents became more food insecure since no food aid was available. Previous studies have shown that safety nets, including community nutrition programmes have been affected by COVID-19 responses (Hidrobo et al., 2020; Roy, Boss and Pradhan, 2020). The scenario in Plumtree town impeded the realisation of the goals of ‘no poverty’ (SDG1) and ‘zero hunger’ (SDG2) as people continued to suffer poverties and hunger. Some households survived through buying commodities from Botswana. However, the Zimbabwean border with Botswana was closed as a way of controlling people’s movement from one country to another. This move by the government was necessary. The move was necessary as it prevents the spread of the coronavirus from one country to another. In line with the theoretical framework of the study, the closure of the border supports the country’s endeavour to achieve the targets for SDG3. This strategy also indicates that the response to COVID-19 was not limited to national boundaries, but it called for the cooperation of the nations. The suspension of aid assistance to Plumtree urban households resonates with the results of a study in India. In India, COVID-19 has affected public food distribution systems when the closing of schools under the national lockdown resulted in the suspension of school feeding programmes (Laborde et al., 2020). This study reiterates that whilst endeavours are made to eliminate the COVID-19 virus, steps should also be taken to eliminate poverty and food insecurity. When these three social problems intersect, it becomes a challenge to deal with them at once.

However, it should be noted that COVID-19 did not only worsen food insecurity of those in the informal sector and permanent workers. The pandemic also affected food production processes. For instance, the respondents highlighted that the production of food through urban agriculture was also severely impacted. Due to the restrictions on movement, those with pieces of land in the urban area could no longer work on the land. This meant that their crops suffered from weeds as no-one could take care of them. Some respondents also indicated that they could not manage to secure farming inputs as the supplying chains for the inputs were interrupted.

4.3 COVID-19 poses a threat to the achievement of development goals

By impacting on the welfare and wellbeing of urban households, COVID-19 is shown as a big threat to the domestication and achievement of the development goals. Currently, the development trajectory adopted by member nations is the Sustainable Development Goals (UNDP 2015). By impacting on human life, the pandemic is a threat to all the SDGs because these can be achieved by nations whose people enjoy good health. For instance, researchers have questioned the life of the SDGs in the post-COVID-19 pandemic era (Heggen, Sandset and Engebretsen, 2020). Therefore, a nation can hardly achieve SDG9 to build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation, SDG11 of making cities and human settlements inclusive, safe,

resilient and sustainable, and SDG12 of ensuring sustainable consumption and production patterns (UNDP 2015) if its citizens are suffering from ill-health. Hence by directly impacting on the health (SDG3) of urban households in Plumtree urban, COVID-19 threatened all the other SDGs. The results agree with a study which showed that restrictions on the movement of people due to COVID-19 lockdown had a huge negative impact on the welfare of people, including their food security (Bene, 2020; Resnick, 2020).

However, this study argues that the threat of COVID-19 is not limited to the SDGs. As long as the pandemic stays with the communities, it will continue to be a threat beyond the life of the SDGs. Previous studies also highlighted that COVID-19 will continue to threaten the SDGs (The Lancet Public Health, 2020). Any new development agenda beyond the SDGs is likely to be impacted the same by the pandemic. Hence, the study argues that the pandemic is a threat to the achievement of the development goals, and these are not limited to the SDGs.

4.4. Responses to COVID-19 should look beyond addressing the pandemic impact

When the impact of the COVID-19-induced measures became apparent that they worsened poverty and food insecurity, the government eased the lockdown. Provision of essential services such as water, electricity and the opening of shops were authorised. This study argues that these measures could not contribute to the food security status of urban households in Plumtree. The retail outlets and supermarkets were authorised to operate but food outlets, such as restaurants remained banned. The retail outlets and supermarkets closed at 1500 hours every day. This compromised food security as the food was not available at all times and to 'all people'. Also, the NGOs were allowed to operate in town so that the underprivileged members of the community can get the necessary assistance. This move also did not address the food security issues since the NGOs were not operating at full-scale, meaning that some households continued to experience hunger. A study in Asia also showed that the implementation of each country's strategies to control the spread of COVID-19 affected food security, especially food availability and accessibility (Giap, 2020). Hence, the pillars of food security namely food availability, food access, food utilisation and food distribution severely compromised. These results agree with previous studies, which showed that the impacts of COVID-19 are particularly strong for people in the lower tail of the food insecurity distribution (Smith and Wesselbaum, 2020). The government's response to COVID-19 shows that the intention was mainly to address the pandemic than its associated problems. Hence, the study argues that responses to the Covid-10 pandemic should go beyond pandemic impact. Instead, the response should consider other indirect problems associated with the response measures.

The study also found that urban residents in Plumtree adopted their several survival strategies to cope with the pandemic. the residents eat whatever was available to alleviate hunger. This shows that the issues of food security were not considered as since by anything, they disregarded the dietary needs of an active and healthy life. Therefore, the component of food utilisation was overlooked. Another result of the study is that some households eat traditional foods for their survival and dietary needs. However, it was apparent that the traditional food was considered because the households had no other food options – an indication that they value traditional food less. Despite less regard for traditional food, such food is rich in nutrients and it provides good health to the human body. As such, traditional food has the potential to improve the health and wellbeing of many urban households if it is taken on board. This study, therefore, regards the reliance on traditional food as a step in the right direction towards alleviating poverty (SDG1) and hunger (SDG2) and achieving good health and wellbeing (SDG3).

5. Conclusion

Basing on the results presented and discussed in this study, the following conclusions are provided. COVID-19 is a biological disaster that can negatively affect urban households by worsening their poverty and food security situations. The pandemic, which can result in many dimensions of poverty, is more severe to a household with a single source of income or with limited food sources. The pandemic also affects more those households that depend on buying than producing their food. The study further concludes that COVID-19 is not just a pandemic, but a disaster with severe impact. Further, COVID-19 is a threat to development goals, including UN SDGs. As such, the pandemic

disaster slows progress towards the realisation of the SDGs. COVID-19 intersects with poverty and food insecurity to complicate human life. This gives people little hope as they can perceive life as something that brings misery. Hence, dealing with the COVID-19 disaster requires interventions that also look beyond addressing the spread of the pandemic, but that address the problem associated with it.

The study recommends the government to consider other social problems, especially poverty and food insecurity when pronouncements for the deadly pandemics are made. Besides, ways should be found for improving household food security during lockdown periods following the outbreak of deadly pandemics. lastly, interventions towards pandemics should also focus on rectifying any negative consequences that the interventions may cause.

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List of Abbreviations

COVID-19 - Corona Virus Disease of 2019
 FAO - Food and Agriculture Organisation
 IFRC - International Federation of the Red Cross and Red Crescent Movement
 MERS - Middle East Respiratory Syndrome
 NGOs - Non-Governmental Organisations
 OECD - Organisation for Economic Co-operation and Development
 SARS - Severe Acute Respiratory Syndrome
 SDGs - Sustainable Development Goals
 UN - United Nations
 UNDP - United Nations Development Programme
 UNDRR - United Nations Office for Disaster Risk Reduction
 WFP - World food Programme -
 WHO - World Health Organisation

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