

Urban Food Markets Dynamics and Livelihoods in the Context of Covid -19 in Harare

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Abstract

The Government of Zimbabwe, similar to other governments across the globe imposed different levels of lockdowns as a way of minimising the spread of the COVID-19 pandemic. The urban food markets' operations were in one way or the other disrupted by these lockdowns. Players in the urban food markets such as food retailers, informal food vendors and households were also affected in various ways. However, little is known about the dynamics that shaped the urban food markets operations during the Covid-19 lockdown period. Focusing on urban food markets in Harare, the study utilised a questionnaire survey administered through Kobo collect, key informant interviews, focus group discussions and observations to collect data from urban food market stakeholders. The findings revealed that all stakeholders that include formal food retailers, informal food vendors and households in the urban food market chain were negatively affected by Covid-19 induced lockdowns. The major effect being shortage of some food commodities resulting in price distortions and uncertainty on the markets. It is therefore recommended that future policy making processes must be inclusive and sensitive as much as possible so that both formal and informal urban food markets operations are not interrupted.

Keywords: Covid-19 Impact, food markets, food transportation, infrastructure, livelihoods, vendors, sustainability

INTRODUCTION

When the World Health Organization declared the Covid-19 virus an emergence on the 30 January 2020 and 26 March 2020, a total of 475,170 cases and 21,358 deaths were recorded worldwide (Mhlanga, 2020). The COVID-19 pandemic created enormous societal disruptions in various countries (Agyei et al., 2021; Cawthorn et al., 2021; Ellison et al, 2021). Though the virus had a public health catastrophe, concerns were also raised on its possible implications on the food markets. The food markets are commercial and social epicenter of communities which reflects their local culture and traditions.

The urban food markets are associated with a lot of dynamics influenced by economic, social, political and environmental forces. The Covid-19 pandemic caused havoc across the world. Normal ways of life were severely disrupted. The UN-Habitat initiated a project to five nation study Covid-19

impacts on transportation of food and related commodities in the urban-rural nexus in selected African countries. Zimbabwe is one of the case study areas with study sites as the City of Harare and its interlinkages with Mutoko and Murewa District. This paper analyses data from fieldwork interviews and Focused Group Discussions (FGD) in on urban food market dynamics in the City of Harare.

The study was based on the Mbare Market and the interlinkages with the neighbourhoods of Kampfinsa 14 km from Mbare, Aspindale 12km and Kambuzuma 10 km away. Kampfinsa is a high-income residential suburb, Aspindale is a middle-income residential suburb and Kambuzuma is a low-income residential suburb. The major aim of the study was to understand how the prevailing dynamics affected the various players in the urban food market supply chain.

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THEORY

Urban markets activities are associated with a lot of economic, administrative, social, political and environmental dynamics. There are many studies focusing on urban food systems and the most frequently studied components include food production, food waste reduction, urban agriculture, nutrition, food security issues and the sustainability of urban food systems (Chigumira et al., 2018; Mutimukuru-Maravanyika, 2022; Winkmaier and Bazan Santos, 2018). Nevertheless, fewer studies have sought to understand urban food markets dynamics in the context of pandemics such as COVID-19 (Simms et al., 2022). Toriro and Banhire (2021) examine Zimbabwe's urban food markets by focusing on the different types of markets that exist in Zimbabwean cities, how each typology operates and the implications on resilience and urban food security. They concluded that, resilient urban food markets can withstand various shocks and stress ranging from social upheavals to natural disasters and economic shocks thus contributing to food security.

Clapp and Moseley (2020), and Zimmerer and Stef de Haan (2020) point out that COVID-19 pandemic triggered the extensive worsening of food insecurity worldwide and threatened to create long-term malnutrition and negative health consequences. Certain policies and interventions by governments also to a certain extent further exacerbated these negative impacts. One major threat was the disruption of formal and informal food chains which also affected how households accessed their daily food requirements. According to Moyo (2021), the pandemic and the imposed lockdown-level restrictions in various countries ultimately reduced access to food. In his study Mhlanga (2020) finds out that due to the various levels of lockdowns in Zimbabwe, hunger widened and deepened as the number of food-insecure people living in urban areas increased from 2.2 to 3.3 million. Rukasha et al. (2021) also notes that, the covid-19 pandemic affected the whole supply chain from the food production systems and input supply, the storage and distribution, processing and packaging as well as the retail and marketing facets.

The pandemic according to Thilmany. et al (2021) accentuated attention on local food systems

with many discussions focusing on food access, affordability and supply chains in the United States of America. As a result of COVID-19, high levels of unemployment, higher food prices, and loss of business sales were also experienced. This then led to deterioration of households' financial status and thus increasing the probability of being food insecure. Ahn and Norwood (2021) found out that in the United States of America households with children constituted a greater percentage of insecure households during the peak of the pandemic. Ellison et al, (2021) observed changes in food expenditures, shopping behaviors, and food values as the pandemic evolved. Their study reveals reductions in food-away-from-home expenditures and increases in online grocery shopping in the United States of America. In India after the government announced a 21-day national lockdown, Narayanan and Saha (2021) found out that the urban food markets were left in disarray with severe supply bottlenecks and restrictions on doing business. Unfortunately, this happened at a time when food prices in India were declining consistently, supply disruptions consequent to the lockdown have reversed the trend on average.

According to Kiaka et al. (2021), urban governance prior to Covid-19 usually entailed the restructuring of public spaces and after the pandemic it seems new governance measures were introduced to intensify the urban restructuring through a series of interventions. These measures derive their acceptability from a global consensus that prevents mass gatherings, reducing mobility, and imposing social distancing and hygiene standards are among the practices to be taken to avert and contain the spread of the pandemic. For central government and local authorities containing Covid-19 became synonymous with implementing urban restructuring policies, legitimizing the demolishing of vending sites, and reorganizing of urban food markets. The execution of Covid-19 measures, blended with urban restructuring, boosted encounters that intensified the contestations, ambiguities, and struggles that take place in urban areas across the globe (Kiaka et al., 2021).

Conceptually, food distribution during Covid-19 was the aim of the study where the researchers dwelt on objectives covering transport mechanism

and Mbare Market food supply; Mbare food market governance and types of markets; food distribution within Harare, and strategies employed by market players to cope with Covid-19; access to food during lockdown and challenges faced in Harare.

RESEARCH METHODS

This study adopted the pragmatic research paradigm that allows the use of quantitative and qualitative data (Dammak, 2015). In terms of research design the study is exploratory, based on achieving new insights into a phenomenon (Akhtar, 2016) and is meant to analyze the different aspects of food delivery during the Covid 19 pandemic. In light of a pandemic, a lot of aspects concerning food distribution are not known considering it being the first of its kind in Zimbabwe with strict regulations on movement.

Sampling

Harare City's Mbare Market was purposively chosen since it is a widely accessible market with a radial route network into the surrounding regions that supply farm products. Three suburban areas were purposively selected on account of activities and marketing facilities available. Kampfinsa was selected among the high-income residential suburbs. Aspindale Park was selected among the middle-income residential suburbs and Kambuzuma among the low-income residential areas.

Data Collection and Analysis

Data was collected using modelled questionnaires that were developed by the ITFCURN UN project for all the country case studies and the questionnaires were loaded on the Kobo collect software which allowed the entry of automated responses. Sixty questionnaires were administered to the residents and food vendors of the three suburbs. The major interest was on how vendors acquired food for selling at their market stalls, the challenges they faced and how they strategized to overcome them. Residents were asked about their food coping mechanisms during the pandemic. Thirty questionnaires were administered to food traders at Mbare Market on sources of food products they sold, transport and supply issues, management of the Market and challenges they are facing. Observations were also a critical part of the study as a method to record activities that were taking place within the various marketplaces.

Observations also helped in identifying farm produce and some irregularities that were eye catching as the study was being administered. During the movement around the residential areas and Mbare Market, observations were also made on infrastructure, space allocation, vehicle movement and food products on sale. Data was analysed using descriptive statistics and thematic narratives with graphs and tables used to present the data.

RESULTS

The distribution of food from the Mbare Market to the neighbourhoods in Harare during the pandemic was governed by strict Covid-19 protocols. While other secondary urban food markets are emerging within Harare which include Mabvuku, Machipisa in Highfields, and Chikwanha in Chitungwiza. However, farmers prefer to conduct their trade at Mbare Market as this market is central within Harare and has a large client base. The pandemic unveiled critical actors in food distribution at Mbare Market. The key player at the Market was pointed out to be the farmer as various institutions such as traders and middlemen survive on the continuity of the farmer coming to the market. The local authority was also pointed out as crucial in food distribution as it is the custodian of the Market. It is responsible for providing the necessary market space where buyers and sellers interact. The existence of the middlemen within the market was pointed out as important especially in the wake of the pandemic as this player's activities were strengthened by the coming of the pandemic. Retail traders and informal vendors were also pointed as critical players within the market as they are the main clients.

Market Space and the Proliferation of the Middlemen

The proliferation of middlemen activities within the wholesale Market was pointed as a stumbling block for most farmers as they disrupted the way products are sold within the market. This intensity in their activities were traced to the emergency of Covid-19, with focus groups discussion tracing it to the economic down-turn within the country. Historically, farmers would sell their products without hindrance and make a significant profit after paying the market fees. Middlemen were there at that time; however, they were strictly

controlled by Market officials from the Local Authority who would remove the activities of middlemen from the market. A transporter from Murewa District mentioned that the intensified activities of the middlemen within the market at this juncture was attributed to Zimbabwe's economic downturn which rendered many residents jobless. The middlemen bully farmers into accepting their terms negatively on the overall earnings of the farmer. The middlemen illegally own significant spaces within the market. Due to this illegal ownership, even when the farmers pay market service fees to the local authority, the middlemen still demand US\$5 for the space occupied by the farmer. This has led to the middlemen doing the trading business on behalf of the farmer by claiming that they own spaces within the Mbare Market.

Transportation of Food Products to Urban Food Markets

The farmers from various rural districts such as Honde Valley, Chihota, Murewa, and Mutoko among others bring their products for trade at Mbare Market and other food markets within Harare. The common markets frequented by the farmers from Murewa and Mutoko are shown in **Figure 1**.

To ferry their products to the markets as mentioned in **Figure 1**, the farmers have an option to hire transportation, use their own transportation, use public transportation, use Mushika-shika is a form of informal paratransit transportation

that is prevalent in Zimbabwe. Unlike kombis or minibuses, these are usually small vehicles, or sell their products to middlemen who source products directly from the farmers. The study also considered the various transportation means that are used by both informal traders and urban retail traders and these are shown in **Figure 2**.

From **Figure 2**, different types of transportation used to ferry products to the market are open to both food traders and informal vendors. 71% of the informal vendors use hired transportation, with 52% of the informal food vendors using public transportation. The mentioned modes of transportation are the main modes used to ferry food products by these two groups respectively.

It was also critical to assess the various products that were sold by various traders within the urban food market. This enabled the researchers to determine the variety of food products available to the clients, key products that were not readily available for trade and finally identify which products are being sold the most. **Figure 3** provides a summary of food products that are traded by urban traders during our fieldwork.

The Distribution of Food within Harare during the Covid-19 Pandemic

Farmers would come to the market to sell their various products during the Covid-19 pandemic, however because of movement restrictions, their client base was greatly reduced. Coming to the market the traditional times to trade at the market was adjusted to suite the Covid-19 protocols.

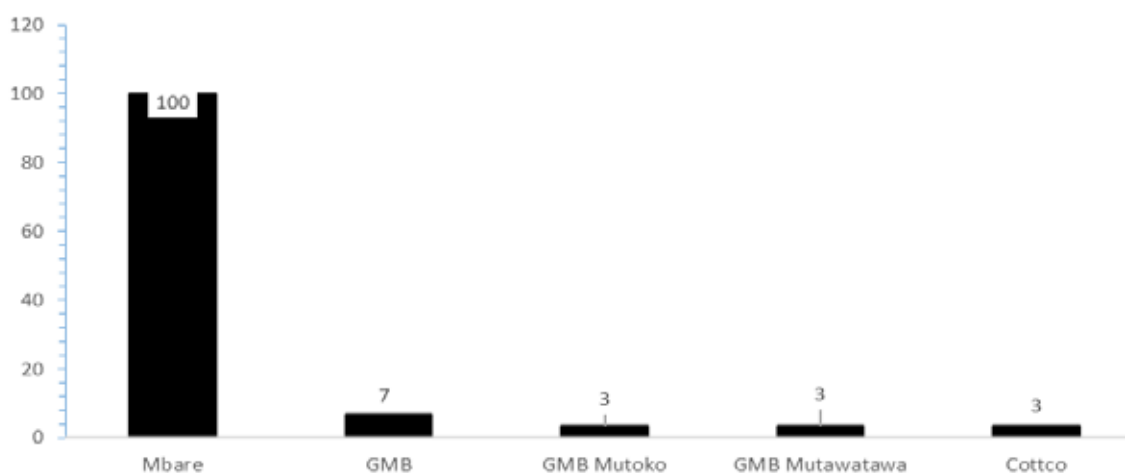


FIGURE 1

Markets normally visited by farmers as a percentage

Source: Authors, 2022

Notes: N=30

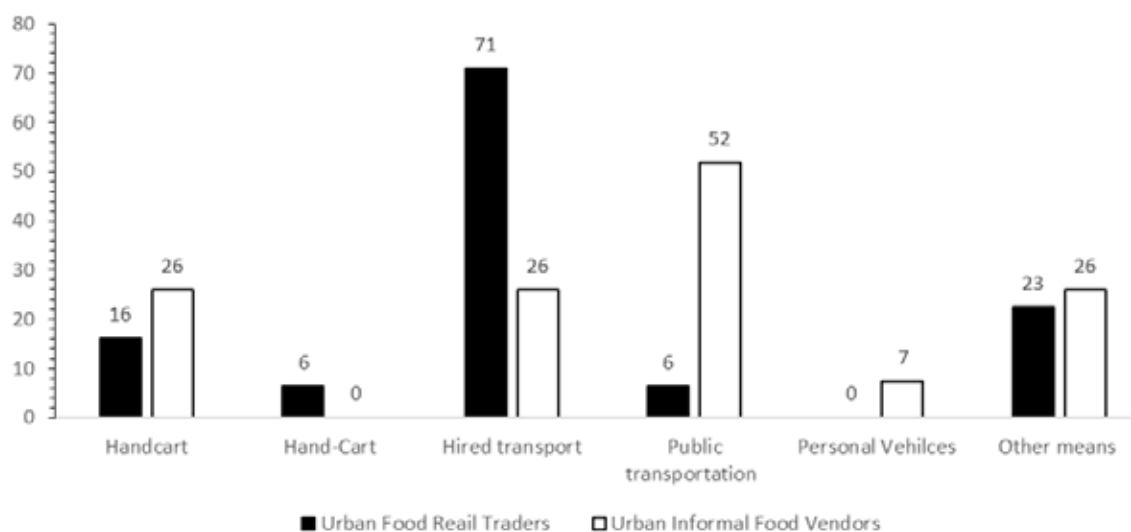


FIGURE 2
 Transportation used for urban food as a percentage of respondents
 Source: Authors, 2022

Notes: N=31 for informal food vendors and N=29 for the urban retail food vendors

Agricultural Products that were sold by Informal Traders

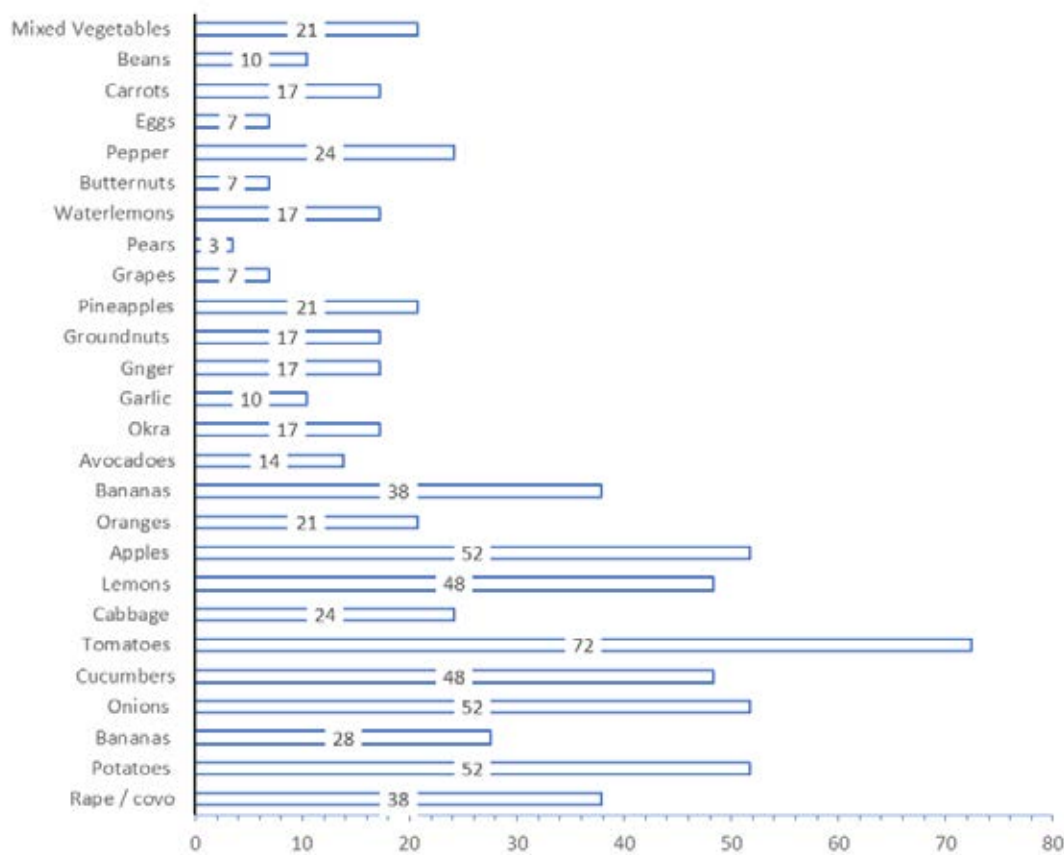


FIGURE 3
 Food products that were traded by urban informal food traders as a percentage of respondents
 Source: Authors, 2022

Notes: N=29

TABLE 1

A summary of the costs that are incurred by the farmers at the market

A summary of the Transportation Costs Borne by the Transporters and Farmers during Covid-19					
Transportation to the market	Cost of services Fee for selling produce at the Market	Cost of off-loading	Cost of transporting the farmer back to the rural areas	Carrying containers back to the car	Toll fees
This normally depends on the product as follows, \$2-\$3 per sack, \$ 1 per box, 50 cents for a bundle of covo or rape	This cost is flat across every vehicle and is pegged at \$US16 at Mbare Market	Cost of offloading is 50cents per each unit be it a box, a bundles or a sack of product	The cost of transporting the farmer back to the rural areas is 3-5 USD	It cost \$5USD to ferry boxes from the market to the transporter's vehicle	These are pegged at an equivalent of USD\$2 upon a single entry

Source: Authors, 2022

With less consideration for the storage requirements for the bulk of the produce on sale, this meant that the quality of the products would deteriorate significantly, fetching low prices on the market. Farm products that were mainly affected are green vegetables such as rape, broccoli, covo, ripe tomatoes, spinach, among many others of which the marketing channels for these products at the Market were carried out traditionally without consideration for the need for storage as they would be harvested to be sold the next day.

Increased Cost of Trading at Mbare Market

Increased cost of trading products under the premises of the local authority was noted by most farmers in the wake of the Covid-19 Pandemic. Previously overlooked costs became more apparent during Covid-19 as it was a period of low turnover. A summary of the costs that are normally borne by the farmers are summarized in **Table 1**.

From the **Figure 3** it shows that tomatoes are sold the most with 72% of respondents selling this product. Onions and cucumbers follow in raking with 52% of the respondents selling this product. Products such as pears, grapes and beans had the lowest presence on the market with, 7%, of the traders selling these products.

Government Policy on Market Management during Covid-19

Regarding the management of markets during the Covid-19 era, the government has no policy in place, but instead, put in place measures to ensure health and sanitation is maintained. The government deployed health workers at the markets during the period when the spread of Covid-19 was at its peak. These were meant to check temperature for market users before entering the market and ensuring that the Covid-19 restrictions are followed. The government also ensured that all markets have running water for washing hands.

Strategies Employed by Traders to Combat the Spread of Covid-19

The Covid-19 pandemic required that various players within the urban food supply chain device ways to combat the spread of the pandemic. Some of the strategies that were adopted were mandatory and supervised by policing agencies. With strict enforcement, players within the food industry were forced to abide by the Covid-19 regulations or risk arrest. Covid-19 preventative measures such as physical distancing, wearing of mask, washing of hands, and use of sanitizer were strictly enforced. Thus, it became popular that either one adheres to the Covid-19 regulations, or without adhering to these regulations, one fails to

access the market or the worst-case scenario, risk arrest. It is however important to understand the degree to which the Market stakeholders played in reducing the spread of Covid-19.

Observing Covid-19 Preventative Measures within the Market

Urban food market places in Harare during Covid-19 became sacred with strict adherence to popular Covid-19 preventative protocols as submitted in the preceding section. However, policy enactment and policy adherence are two different elements and to understand the synchronization between the two, there is need to undertake research. Most traders who took part in this study revealed that the Mbare Market had strict adherence to covid-19 rules across its various sections. Some of the rules signposted at the market included no entrance without a mask, sanitizing before entering the market, and washing of hands. Farmers, traders and customers were not allowed into the market, without adherence to these guidelines.

To further elaborate on the adherence of the Market place to covid-19 it was important to understand the degree to which urban market traders adhered to these protocols and the following is a summary of the various responses by urban informal food vendors and urban retail food vendors alike.

Covid-19 Movement Restrictions

Observation of curfew was one of the critical elements considered by various governments to reduce the spread of Covid-19. The study results show that the food traders observed the covid-19 protocols. 61% of formal food traders observed the curfew protocol while 69% of informal traders observed the curfew protocol as well. The national lockdowns were a movement restrictive measure that was administered by the national government to reduce the spread of the Covid-19 pandemic. 90% of the formal urban food traders adhered to the lock-down protocol while the figure was 59% for informal traders. At Mbare Market, physical distancing measures were designed to promote public health and hygiene as well as minimize the spread of Covid-19. 71% of the formal urban food traders observed physical distancing and this number was lower among the informal traders at 38 %. About 3% of the formal urban food traders pointed that they never adhered to the Covid-19 physical distancing guidelines.

Effect of Covid-19 on Regular Business

The limited movement was a hindrance to most traders as it had implications on their ability to buy the farm products for sell. Moreover, ensuring their sustenance during the pandemic presented difficult times economically. About 90% formal urban traders and 93% informal traders noted that Covid-19 affected business operating hours. Traditionally, the operating time for the Wholesale (Farmers Market) at Mbare was 5 am every day, however, this was adjusted to 9 am and closing at 1 pm. The opening times for the Retail Market was adjusted from 6 am to 9 am to close at 3 pm, and a lot of time to sale agriculture products was lost.

The investigation also extended to understand how Covid-19 affected the running of the food business. The formal urban food traders had 90 % of the respondents highlighting that Covid-19 affected the costs of running their business. This figure was however lower for the informal food traders where 67% of the respondents were affected. Only 10% of the formal urban food traders' businesses were not affected by the Covid-19 protocols at all. This number increased to 34% among the informal traders.

Wholesale pricing is a critical aspect of the delivery of food produce. It was important that the study investigate the variation in the prices of wholesale of agricultural produce. The result on this enquiry shows that both formal urban traders (77%) and informal traders (75%) felt that the wholesale and retail prices of food was affected by the Covid-19 pandemic. The movement restrictions also limited the activities of farmers who were selling at the market. The erratic food deliveries by farmers negatively affected the variety of food products sold at the market. About 39% of the formal urban food traders and 38 % of the informal traders complained that the variety of food products traded was reduced with domino effect on the food sold to customers.

Challenges that Encountered by Urban Food Traders as a result of the Covid-19 Containment Measures

The study also tried to understand the challenges that confronted urban food traders and informal food traders alike. These are summarized in **Figure 4**.

The issue of police demanding bribes for traders selling outside the gazetted hours was highlighted as the most significant challenge by food traders. About 25% of the formal food traders complained police harassment and demand for bribes affected their business operations. Furthermore, the police presence to enforce the Covid-19 guidelines disrupted their business operations especially for informal traders that normally operated outside the law. Lack of transportation to go to the market was mentioned as another challenge by 21% of the respondents. Many food traders in neighbourhoods such as Kamfinsa, Aspindale and Kambuzuma in Harare used illegal public transport, the mshikashika and kombis. Banning of these transport modes for non-adherence to Covid-19, guidelines, during the lockdown, left traders with no transport options. 14% of the food traders pointed to police harassment during the

lockdown. The police resorted to confiscation of food products from traders. Further, some trader believed that the police diverted these confiscated items for personal use.

Relaxation of Covid-19 Rules

With the relaxation of the Covid 19 protocols, it was important to investigate the degree to which the food traders had recovered from losses incurred during the Covid-19 lockdowns. Overall, the lockdown reduced the trading hours affecting businesses. There were mixed reactions on how relaxation of the Covid-19 protocols was viewed. 10% of formal urban food traders and 23% of informal food traders had not recovered from the Covid-19 lockdowns related losses. However, 21% of the formal urban food traders and 19% informal food traders had recovered from the losses and were trading to again.

Challenges That Affected Informal food Vendors

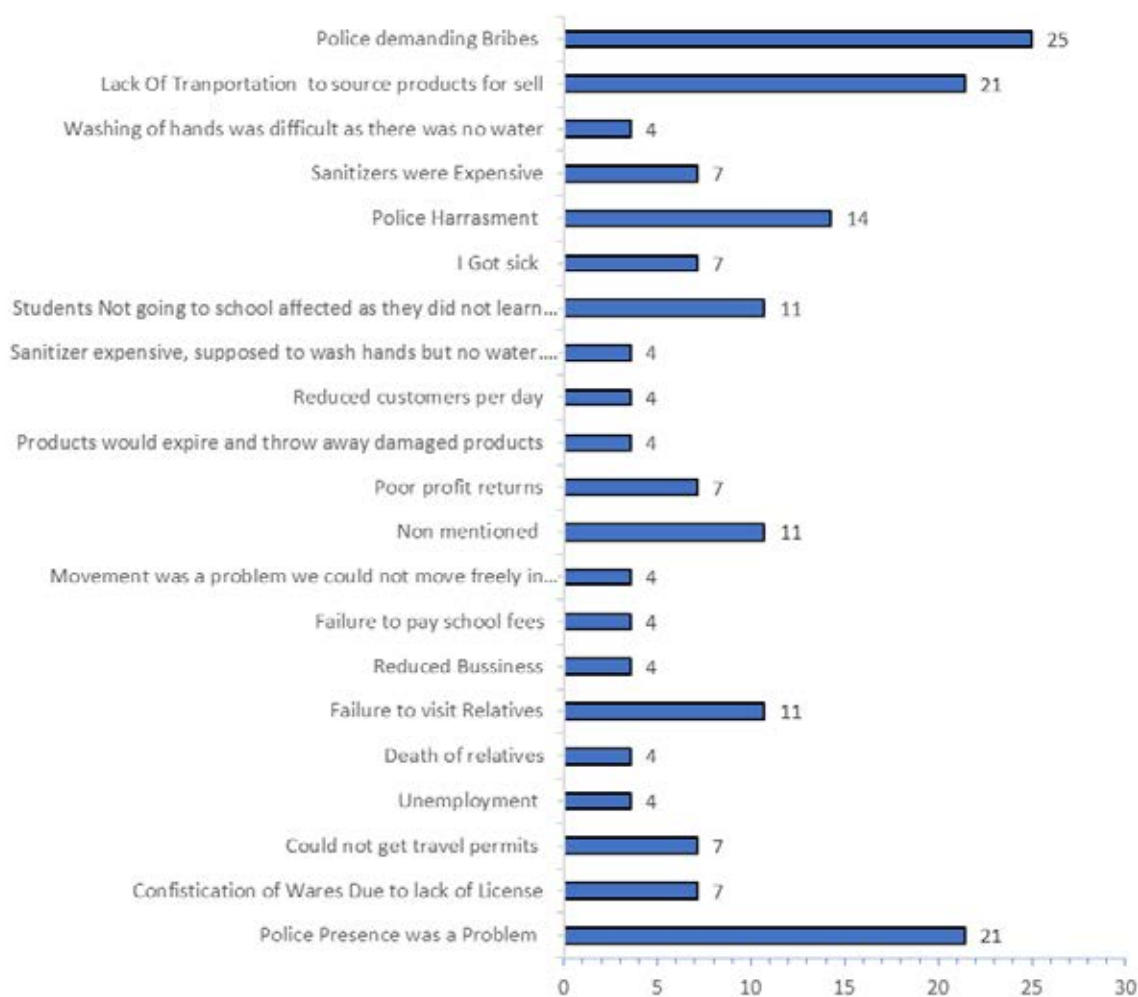


FIGURE 4
 Challenges that affected informal food traders as a percentage
 Source: Authors, 2022

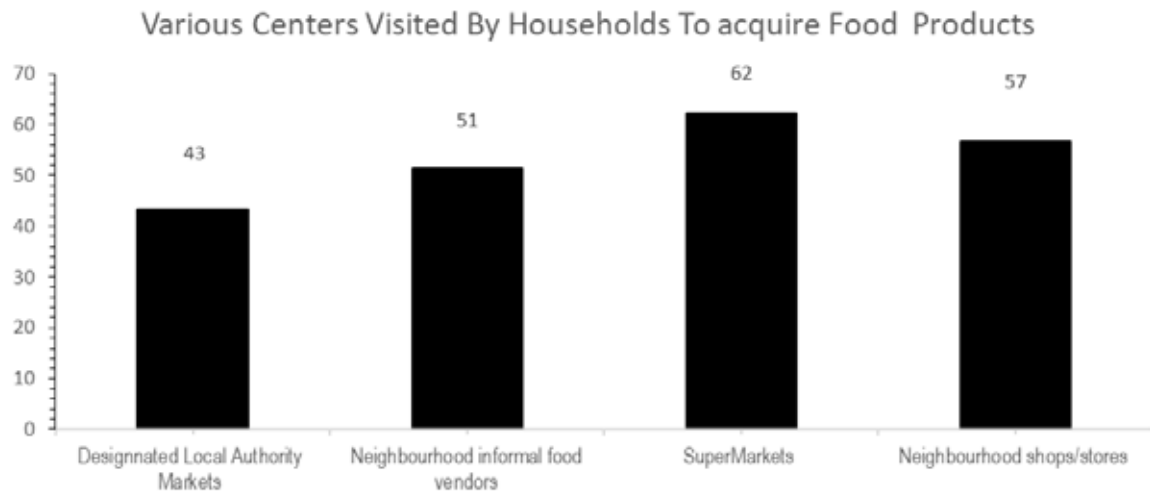


FIGURE 5

Various centers visited to acquire food stuffs by household as a percentage

Source: Authors, 2022

Households and Food Activities during Covid-19 Pandemic

The study went on to try and understand where urban households buy their food products to understand the supply chain of food from the transporters to the final consumers during the Covid-19 pandemic. **Figure 5** provides a summary of the results.

57 % of households source their products from neighborhood shops. 43% from food markets designated by the local authority. 51% of residents sourced their various products from informal food vendors and 62% o from supermarkets.

Food and rural relatives

The final consumers in the food value chain are households. Rural-urban linkages became a source of movement of food between relatives to their urban counterparts became important in the wake of the Covid-19 pandemic. 30% of the households received food regularly from their rural relatives, while 37 % rarely received food parceled from rural areas. 30 % of the respondents had never received food stuffs from rural areas.

The study went on to investigate the degree to which food stuffs received from the rural areas is /contributed significantly to urban households needs. The following submissions were made, 17% of the households noted that food stuffs from rural areas were important to them, while 28% pointed that it was slightly important.

Challenges that confronted households during the Covid-19

The study also established the challenges that confronted by households during the Covid-19 pandemic. The food related challenges that affected residents included non-availability of food and no-income to buy food and send kids to school. The low-income levels translated into poor incomes to buy the required food stuffs. Furthermore, the shortage of food stuffs in households was traced to manufacturers who failed to produce required quotas for the market. The study also disaggregated the centers where households purchased their products during the course of the pandemic. The findings are shown in **Table 2**.

There was variation among the centers that were most frequented by households from the three neighbourhoods. 100% of the middle-income groups, the most frequented source of food was the food market. The second most important source of food was the supermarkets where 40% of the respondents purchased their food. The high-income earners acquire their food products from the supermarkets as pointed out by 47% of the respondents. Residents from the low-income neighbourhood of Kambuzuma (59%) acquired their food stuffs from neighborhood shops.

TABLE 2

Source of food stuffs food markets were households

The Percentage of People Who Source Products at A Particular Center by Residential Area			
Centers where people sourced food Products	Aspindale	Greendale	Kambuzuma
Neighborhood shops	20	27	59
Designated local authority	100	40	12
Neighborhood informal food vendors	60	47	41
Supermarkets	40	27	76
Total number of respondents	5	15	17

Source: Authors, 2022

How Covid-19 Affected Households Access to Food Supply

The study further investigated how the pandemic affected households access to food supply. 62% of the respondents highlighted that the Covid-19 containment measures affected access to food with 38% pointing that they were not affected at all. About 57% of the respondents indicated that the Covid-19 containment measures affected their regular availability of food. However, 41% of the respondents' food supply was not affected by the Covid-19 pandemic. The study also assessed whether the Covid-19 outbreak affected the variety of food that was available to households. There were mixed reactions on this issue. 54% of the respondents pointed that the Covid-19 outbreak did not affect the variety of the food consumed by their households. 46% of the households agreed that the variety of the food they consumed within their household was greatly affected. It was also important for the respondents to highlight how they observed the different Covid-19 containment measures as these measures had an implication on how they acquired food from different sources. **Table 3** presents the responses. 57% of the respondents wore masks. About 59% of the households observed social distancing. 75% of the respondents washed their hands. The high compliance rate was also witnessed with regards to observing curfews as 76% pointed to observing curfews. Lockdowns had the highest compliance rate as 81% of the respondents agreed to observing this protocol with 19% occasionally observing this protocol.

DISCUSSION

The study interrogated the transportation dynamics between Mbare Market and surrounding

suburbs on the distribution of food. Before the Covid-19 pandemic, the transportation of farm products from Mbare Market to the suburbs was mostly by public transport, such as kombis and conventional buses. During the first two weeks of Covid-19 lockdown, the market was shut down disrupting the whole food supply chain in Harare. The transportation gap that developed as a result to banning of informal transporters led to a new distribution network where food vendors in the three suburbs made arrangements with food suppliers to deliver suppliers directly by-passing Mbare Market. This was an interim measure which is not sustainable but worked for that troubled period. Chari (2022) noted that Covid-19 disrupted the food supply chain throughout Zimbabwe. Efficient food distribution network requires good food handling infrastructure which includes roads, sheds and storage facilities, and handling equipment. Covid-19 exposed the poor infrastructure at the Mbare Market. Health protocols are not easily applied where there is a shortage of trading space. The Mbare Market does not have refrigeration facilities forcing those trading in perishables to sell their products, if possible, within a day or incur heavy losses if the product stays longer. Limited trading time during Covid-19 exacerbated the storage problem. The challenges of infrastructure for food markets confirm Akkoyunlu's, (2015) study that observed the need for refrigeration and the use of storage technologies and well-developed transport connectivity from farms to urban markets to support access of food to urban consumers. Grebitus et al. (2013) also identified that less attention was paid towards preservation of perishable goods during transport and storage.

TABLE 3

A summary of how households responded to covid-19 containment measures

How Households adhered to different Covid-19 Containment measures														
Wearing of Masks			Social distancing			Washing of Hands			Curfews			Lockdowns		
Always	Sometimes	Never	Always	Sometimes	Never	Always	Sometimes	Never	Always	Sometimes	Never	Always	Sometimes	Never
57	33	10	59	41		75	22	3	76	24	0	81	19	0

Source: Authors, 2022

Residents of Harare understood the need to go by the Covid 19 preventive measures. On average about 75% of the different targeted groups observed the preventive measures put in place. These people did not have much choice because fellow vendors or residents in some cases demanded it, especially when deaths started to occur. Informal traders were the ones who complied less and this may be because of the nature of their job involving moving around at times whilst shouting to market their goods. Covid 19 had serious impact on the livelihoods of farmers, vendors and the residents of the three residential areas that were studied. The cost of paying bribes to enforcement agencies, increased cost of fuel, and increased cost of distributing the farm produce temporarily to suburbs could not be wholly passed on to the consumer who is eking a living below the poverty datum line. Because workers had stopped going to work, there was little disposable income. The food vendors with no vehicles were the biggest losers in that transporters with pickup trucks turned them into mobile vendor stations selling food. Some food vendors travelled around the neighbourhoods selling farm produce. In general, the Covid-19 restrictions showed the importance of Mbare Market in the food supply chain in Harare.

An attempt is also made to understand urban-rural linkages in the context of governance. It comes through that the rural farmer decides individually the mode of transport of food to the market. This flexibility is needed because of the large variety of crops grown and the different volumes per farmer. During the pandemic it became a challenge because of the limited hours within which one could operate. On the other hand, Mbare Market is divided into sections for ease management of the complex. The market has two wholesale sections,

the retail section and the vending section. This demarcation of the market for administration, though a noble idea, was disturbed by the middleman (makoronyera). Partly because of the limited storage and trading space, the middlemen have facilitated vending even within the wholesale floors leading to further congestion. The short trading period during Covid-19 made some farmers surrender the products to the middlemen or leave it to rot. The consumer was short-changed in that food would cost more. World Resources Institute (2014) argues for an adequate framework for rural and urban development with well-integrated food systems. Because of Covid-19 movement restrictions, very few farmers delivered their farm products to the market, leading to few food traders on the market and few customers.

Significant numbers of Harare residents started urban agriculture to supplement food supply. Many families and more time at home and turned into their gardens to exercise and also provide food for the household. Many wetlands, river banks and unstable hill sides were turned into crops fields. The massive urban agriculture initiatives in Harare's neighbourhoods significantly contributed toward Sustainable Development Goal state reference on improving access to food and thus contribute to poverty reduction. However, the destruction of wetlands, river valleys and hills contradicted Sustainable Development Goal 11 that promoted inclusive, safe, resilient cities and human settlements. Price for various commodities at Mbare Market are announced almost on a daily basis. The rationale for doing this is to make buyers and sellers to have an idea of what is obtaining at the market and plan accordingly. It also indicated availability of the farm produce. A strategy to attract buyers to Mbare Market.

CONCLUSION

The first conclusion relates to food transportation. From the study, access to food in Harare during Covid 19 was mainly through Mbare Market that had supplies direct from Murehwa-Mutoko and other rural parts of the country like Honde Valley and Chipinge. Harare vendors would get the farm products and produce from Mbare. The pandemic disrupted the distribution chain forcing vendors and even residents to make arrangements for direct supply to the suburbs. The second conclusion is that the middleman's role rose to prominence. They partnered council police and national police to extort from the farmer already weighed down by the Covid 19 containment measures but looking for opportunities to sell farm produce. The pandemic curtailed further the farmer's freedom to market his/her produce.

Thirdly, the capacity of facilities to handle large volumes of food within a short period of about 7 hours per day brought to the fore the inadequacies of the infrastructure available during the pandemic. Worse still, the management structure in place had limited room to accommodate food flow shocks and this left the farmer short-changed. Fourthly, there was no disaster preparedness for a pandemic when it hit. This is seen through the draconian measures that were put in place in the first two weeks of the pandemic in order to control it. Lastly, Covid 19 containment measures impacted the vendor in Harare as food wholesale prices increased, low volumes of sale and limited variety of foods available at any one time leading to poor livelihoods. Residents of Kambuzuma, Kampfinsa and Aspindale found themselves having to do with whatever food was available for sale that day. Food choice was very limited and prices had gone up.

RECOMMENDATIONS

Central government and policy: The Human Settlement Police of 2020 promotes the integration of different forms of planning, i.e., rural, urban and regional, and economic. The pandemic, as narrated by the farmers, vendors and residents, upended their livelihoods. Covid 19 has demonstrated the need to expedite that holistic planning and public participation to minimise pandemic shocks.

Food acquisition and distribution: In the event of another pandemic in future, the City of Harare should move quickly to open temporary food markets in major suburbs that have reasonable infrastructure such as Kampfinsa, Aspindale, Westgate, Mbudzi and Mabvuku. This would improve access to food during lockdown. A reasonable supply chain must, therefore, be maintained to avoid food supply disruptions within the city and from rural areas to the city. Some degree of redundancy in the supply network will promote resilience.

Public transportation: Vendors to and from Mbare generally use public transport as observed for farmers from Murehwa-Mutoko. During a pandemic reasonable public transport should be left to flow so as to sustain food supply unlike the total ban that was instituted at the onset of Covid 19.

Mbare Market Governance: The process of bulk delivery of food from rural areas to Mbare Market promotes the flourishing of middlemen. The City of Harare and national government, because of Mbare Market's importance countrywide, should collaborate with farmers and transporter to find a lasting solution to the governance of the market so that the farmer sells his/her farm products freely direct to the wholesale traders. The management structure that was there at the beginning of the 21st Century may have to be revived. Additionally, the City of Harare should take charge of the market and not to leave it mostly under makoronyera (middlemen). Again, traders who are now doubling as vendors at Mbare Market on the trade floor or just outside the trade floor should be removed.

Mbare Market infrastructure: In terms of physical planning the Mbare Market is overcrowded and needs physical improvement on toilets, removal of muddy selling space, vehicle parking and the provision of sheds for traders in some open spaces. Currently, parts of the area are a health hazard especially where vegetables are sold on muddy floors.

Central government and policy: It is recommended that future policy making processes must be inclusive and sensitive as much as possible to include those in the informal sector

so that their needs and concerns are taken into consideration before decisions are made. Failure to do so may have fatal consequences on the livelihoods of the disadvantaged families who rely on food marketing hence increasing vulnerability and poverty to those dependants on rural urban linkages.

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