

# Informal Female Food Vendors, COVID-19, and Post-Pandemic Recovery in Kisumu, Kenya

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## Abstract

While there is substantial literature on the effects of COVID-19 on formal businesses, limited evidence exists on the impacts of the pandemic on informal female-owned enterprises. Additionally, no studies have explored the role of post-pandemic recovery strategies in meeting the unique challenges experienced by the informal food vendors in secondary cities in the Global South. In this paper, we explore the impacts of COVID-19 and the post-pandemic recovery strategies on female informal food vendors in Kisumu, the third largest city in the western region of Kenya. The study adopted qualitative methods – in-depth and key informant interviews and focus group discussions with women and male food vendors and government and non-government officials to gain a deeper understanding of the impacts of COVID-19 and subsequent recovery strategies. Data analysis reveals that COVID-19 pandemic significantly disrupted the livelihoods of informal female food vendors, leading to reduced sales, income loss, and widespread food insecurity. Participants identified community and family networks as critical financial and social support resources during and after the pandemic. The informal vendors adopted various coping strategies, such as altering their business operations, relying on informal credit networks, and maintaining hygiene practices to retain customers. Participants noted that recovery has been uneven and hindered by inflation, rising transportation costs, and political instability. Additionally, structural changes, including reduced fuel prices, improved agricultural investment, and access to emergency loans, to foster resilience and safeguard against future crises were highlighted as key strategies that could benefit women in informal food businesses in times of emergency. The pandemic-related adverse socioeconomic consequences experienced by these vendors underscore the critical need for targeted policies to support informal economies during crises.

## Keywords

COVID-19, informal female food vendors, food insecurity, gender-based violence, resilience strategies, post-pandemic recovery, economic vulnerability

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## Cover Image

A roadside food stall in Obunga informal settlement, Kisumu City. Photo credit: Silvia Odhiambo



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## Introduction

Food security remains a public health concern affecting individuals and households in most cities. Informal food businesses play a key role in supporting the affected household. While informal food vending constitutes a vital segment of urban food security in resource-poor regions, it supports the livelihoods of millions (Giroux et al., 2021). These small-scale, informal businesses contribute significantly to food security but are also vulnerable to emergencies or disruptions, particularly those owned and operated by female vendors. Women have limited access to financial support from the government, and most rely on daily income to boost their businesses (Adeola et al., 2021).

In the wake of the COVID-19 pandemic, informal businesses led by women were disproportionately affected, making them even more vulnerable (Banu et al., 2023; Hamzeh et al., 2024). In sub-Saharan Africa, like many parts of the world, lockdowns and travel restrictions severely disrupted informal food markets, limiting access to marketplaces and food sources and leading to unreliable supply chains to maintain business operations (Thanh & Duong, 2022). In addition to the income losses, women informal food vendors faced additional pressure to balance household and caregiving responsibilities (Crush & Tawodzera, 2024), rendering them incapable of overcoming shocks (Thanh & Duong, 2022). A study conducted in an informal settlement in Nairobi revealed that 86% of residents experienced complete or partial income loss as a result of the COVID-19 lockdown, and 74% indicated that they ate less or skipped meals due to inadequate income (Shupler et al., 2021).

Urban informal sectors serve as a crucial source of income and play a vital role in local food systems (Kiaka et al., 2021). In Kisumu, Kenya's third-largest city, informal food vending constitutes a significant portion of employment for women (KNBS, 2019). Street food vending, in particular, remains a structural feature of the city despite the growing number of shopping malls (Kiaka et al., 2021). In addition, most families who live in the informal settlements in Kisumu rely on informal businesses for daily necessities (Simiyu et al., 2019a). This sector provides affordable and accessible food options to low-income households, helping to meet the dietary needs of urban and rural populations who cannot afford commercial retail prices (Wertheim-Heck et al., 2019). Moreover, informal vendors significantly reduce food waste by purchasing fresh produce from local farmers, making it accessible in urban markets (Pimentel et al., 2022). Finally, informal food vending is an economic safety net for families, offering flexible income opportunities that help many women support their children's education, healthcare, and other basic needs (Garrity et al., 2024).

Informal food vendors are critical to household food security (Onyango et al., 2021). They provide a variety of affordable food to low-income households, ensuring that even the most vulnerable populations can access basic necessities through the local markets. Many vendors sell fresh produce, grains, and other food items in small quantities, which allows households with limited budgets to purchase what

they need on a daily basis, reducing food waste and promoting cost efficiency (Kimani-Murage et al., 2014). Additionally, informal food vendors often operate in close proximity to residential areas, making food more accessible to families in informal settlements who may lack reliable transportation to larger markets or supermarkets (Kimani-Murage et al., 2014). These vendors often extend informal credit to their regular customers, enabling families to obtain food even during periods of financial hardship and repay later when they have the means (Gewa et al., 2023). By filling these crucial gaps in the food supply chain, informal food vendors play an indispensable role in mitigating hunger and supporting household resilience.

Women in the informal food business have contributed to families' well-being by offering critical safety nets that support household survival and stability (Downs et al., 2022). Their earnings often provide a reliable source of income for essential needs such as food, education, and healthcare, especially in times of economic uncertainty (Peimani & Kamalipour, 2022). For instance, many women use their income from food vending to pay school fees and purchase supplies for their children, ensuring continued access to education (Solymári et al., 2022). Additionally, these businesses provide financial security during emergencies, helping families manage unexpected expenses like medical bills or household repairs among other needs (Downs et al., 2022).

Research studies have highlighted the multifaceted contributions of women informal food vendors to family and community well-being in Kenya (Nguyen & Mogaji, 2021; Pelto & Armar, Klemesu, 2016; Simiyu et al., 2019). A study in Nairobi found that women street food vendors often serve as the primary breadwinners in their households, using their earnings to cover rent, utilities, and other basic needs (Mutisya et al., 2016). Another study in Kisumu revealed that women engaged in informal food vending are pivotal in addressing urban food insecurity, particularly in informal settlements where formal retail options are limited (Kiaka et al., 2021). These women also play a key role in enhancing food accessibility by operating in underserved areas and bridging gaps in locations where formal markets are absent (Chege et al., 2016).

Despite this vital role, limited studies have explored informal female food vendors' experiences and coping mechanisms during and after the COVID-19 pandemic. In addition, the post-pandemic recovery strategies among informal female food vendors, especially in urban settings, remain under-explored. Therefore, this study aimed to explore the experiences of female informal food vendors during and after the COVID-19 pandemic in Kisumu, Kenya.

## Methods

### Study Area

This study was conducted in five informal settlements within Kisumu City – Manyatta, Nyalenda, Obunga, Nyawita, and Bandani. Kisumu is located on the shores of Lake Victoria and is the third largest city in Kenya, serving as a vital



commercial and transportation hub in the western region of Kenya. Kisumu is home to over 1 million residents. Over the years, the city has experienced growth in its population (KNBS, 2019), which has led to the expansion of informal settlements close to the city centre. Despite its strategic location and resource base, Kisumu faces significant socio-economic challenges. Approximately 60% of the city's population resides in informal settlements, with high poverty rates and limited access to essential services (Wagah et al., 2018). The prevalence of HIV/AIDS is a significant concern, with over 15% of the population infected with the virus (Owuor et al., 2025).

Kisumu's economy is primarily based on fishing activities on Lake Victoria, agriculture (particularly rice and sugarcane cultivation alongside other crops), and trade. However, the use of outdated technologies and environmental challenges, such as the water hyacinth infestation in Lake Victoria, have hindered the full potential of these industries. Informal settlements like Manyatta and Nyalenda have experienced significant growth over the years, accommodating a diverse population ranging from low-income earners to the unemployed, with some mid-income residents. These areas often lack adequate infrastructure and services, contributing to sanitation, water access, and housing challenges. The Municipal Council of Kisumu has struggled with poor revenue collection and the exclusion of shantytown communities from urban decision-making processes (Simiyu et al., 2019).

Kisumu has a large population of female informal food vendors whose businesses serve as household primary income sources and contribute to local food security. These informal settlements have grown for decades, and the residents of these informal settlements range from low-income to the unemployed, with a few scattered mid-income earners also living in the informal settlements. The study area was selected because most food vendors in informal settlements operate in contexts of minimal regulatory and policy support. Understanding their socio-economic context is crucial for developing effective strategies to support their recovery, especially in the aftermath of large-scale crises like the COVID-19 pandemic.

### Study Participants

To provide a gendered analysis of the impact of COVID-19 and the challenges facing informal food vendors in the informal settlements, we recruited 67 women and 13 men active in the informal food businesses in Kisumu. A local community partner, Pamoja Community Based Organization, which has worked in the Kisumu region for nearly two decades, led the recruitment exercise. We adopted purposive and snowball sampling to identify and recruit participants who lived and operated an informal food business in Kisumu during the COVID-19 pandemic.

### Study Design

This study employed a qualitative approach to gather information to understand the post-pandemic recovery experiences and challenges faced by urban informal female

food vendors in Kisumu City, Kenya. This approach was suitable for this study because it allowed for a comprehensive exploration of the participants' perspectives, experiences, and coping strategies within their socio-economic context (Creswell & Poth, 2016).

### Data Collection Techniques

Trained qualitative research assistants fluent in local languages using different qualitative techniques, including Focus Group Discussions (FGDs), In-Depth Interviews (IDIs), and Key Informant Interviews (KIIs) collected data for this study. We conducted four FGDs consisting of 10 participating female food vendors, each totalling 40 participants. FGD sessions lasted approximately 2-3 hours and were audio-recorded with participants' consent. Our FGD guide explored group-level themes such as shared recovery strategies, peer support networks, and perceptions of external assistance. These sessions allowed participants to share and discuss their experiences jointly, revealing common challenges and group-level dynamics such as shared recovery strategies and peer support networks. We also explored female vendors' personal experiences during the pandemic and discussed the community support strategies they adopted. This method provided an understanding of how food vendors collectively responded to and coped with disruptions at the community level during the pandemic.

Additionally, we conducted 20 KIIs with representative government officials, non-government organizations, and community leaders to understand better the pandemic's impacts on business activities, the health and well-being of people in the informal food sector and their household food security status, policies implemented to address the challenges, and prospects and challenges for post-pandemic recovery. The KIIs aimed to explore the broader policy context, state support systems, and structural challenges affecting the economic recovery of informal vendors. These perspectives were essential for documenting systemic barriers and opportunities to build informal vendors' resilience.

Lastly, we conducted 20 in-depth interviews with 16 female and 4 male participants to gain a deeper understanding of the personal effects of COVID-19 and the subsequent recovery strategies of these selected participants. We sought to capture detailed accounts of experiences and the complexity of individual resilience and adaptability.

### Data Analysis

The fieldworkers transcribed the interviews conducted in the main languages of Luo and Swahili and translated them into English. The research team reviewed all the transcriptions for verification. The main themes were identified through reading the transcripts alongside the coding used to create the themes and sub-themes. These themes were used to develop a coding framework imported into Atlas.Ti software for qualitative data analysis. The two lead authors (second and fourth author) reviewed the themes and coding to ensure consistency. Quotes supporting the key themes were identified. Some important quotes are included in the paper.

## Ethical Considerations

Ethical approval was obtained from the University of Alberta Research Ethics Board (REB # Pro00138854) and Amref Health Africa's Ethics and Science Review Committee (ESRC) (REF: AMREF ESRC P1670-2024) in Kenya. All study participants provided written informed consent before conducting the interviews to ensure that they understood the purpose of the study, their rights and willingness to participate voluntarily. Confidentiality was maintained by assigning participants unique numbers which could not link them to their information. Interviews were conducted confidentially at places preferred by participants. The participants' information has been securely stored and kept on a password-protected computer until the project's duration and for five years thereafter.

## Results

### Demographic characteristics of participants

A total of 80 participants with an average age of 40.3 years took part in this study. Most of the participants were married, had children and engaged in informal food businesses to support the basic needs of their households including provision of food and income. 84% were female, with at least one child and some level of education. While 75% of the KIIs had tertiary education, only 10% of the IDI and KII

participants had gone beyond secondary education (Table 1).

## Analytic Themes

Our analysis of the transcripts revealed several striking transformations in the operation of informal female owned food vending businesses in Kisumu city during the COVID-19 pandemic (Table 2).

### COVID-19 Market and Household Transformation

#### Changes in market dynamics and consumer behaviours

The COVID-19 pandemic negatively impacted the livelihoods of female food vendors in informal settlements. Participants reported a significant decrease in their sales due to the public health measures the Kenyan and Kisumu City's governments put in place, especially the curfews lockdowns that happened countrywide. In addition, Kisumu had put restrictive measures in the markets, including the closure of major markets, that limited food vendors from accessing the markets and operating their businesses as usual. Participants reported drastic changes in sales and the supply of commodities required for their businesses. Two participants discussed these common difficulties in the focus group discussions:

Table 1: Demographic Characteristics of Study Participants

Characteristics		All (n=80)	KIIs (n=20)	IDIs (n=20)	4 FGD (n=40)
		Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)
Education	Primary or less	42 (52.5)	2 (10)	14 (70)	26 (65)
	Secondary	17 (21.2)	3 (15)	4 (20)	10 (25)
	Tertiary	21 (26.3)	15 (75)	2 (10)	4 (10)
Marital status	Single	10 (12.5)	0	5 (25)	5 (12.5)
	Married	49 (61.2)	14 (70)	12 (60)	23 (57.5)
	Divorced/separated/widowed	21 (26.3)	6 (30)	3 (15)	12 (30)
Age categories	18-29 years	8 (10)	0	4 (20)	4 (10)
	30-49 years	58 (72.5)	14 (70)	14 (70)	30 (75)
	50+ years	14 (17.5)	6 (30)	2 (10)	6 (15)
Sex	Female	67 (83.8)	11 (55)	16 (80)	40 (100)
	Male	13 (16.2)	9 (45)	4 (20)	0

Table 2: Analytic Themes Illustrating the COVID-19-related Transformations in the Operation of Female-led Informal Food Businesses

Analytic themes (Themes)	Description (Sub-themes)
COVID-19 market and household transformation	<ul style="list-style-type: none"> <li>Changes in market dynamics and consumer behaviours</li> <li>Changes in household food access and security</li> <li>Poverty-induced displacement</li> </ul>
COVID-19 gender-specific transformations	<ul style="list-style-type: none"> <li>Changing caregiving and breadwinner responsibilities</li> <li>A new face of gender-based violence</li> <li>Reinforced male patriarchal behaviours</li> </ul>
Overcoming COVID-19 transformations through individual agency and community resilience	<ul style="list-style-type: none"> <li>Survival through self-resilience</li> <li>Survival through community-resilience and support</li> </ul>
A note on post-pandemic recovery pathways and perceived progress	<ul style="list-style-type: none"> <li>Rising inflation and increased cost of transport limit recovery</li> <li>Political unrest/protest is affecting recovery</li> </ul>

*There was difficulty in sales. There was a curfew, which began at 7 p.m., and being that at that particular time is when customers would buy many goods. So, we had to run around. When there was no curfew, I could sell till around 10 p.m. so you see we had a lot of problems because when those people arrived and it is curfew time, you had to shut down your business. So that was the main problem that we had during corona (FGD 1-P2).*

### **Changes in household food access and security**

Income losses inevitably led to a deterioration in vendors' household food security. Many participants reported increased food insecurity in their households. Their families were forced to consume one meal a day and the reduced food quantities were insufficient for all household members. Household food insecurity also worsened because of increased food demand since their children and other family members were at home during the lockdown.

*I have five children who are eating and schooling. So, when my children were just at home, not going to school, they were just there. So, we were really suffering and were only able to eat once a day. Sometimes we could have supper but lack breakfast and lunch and vice versa. So that is how we have been surviving. There was a time we even wished to go back to the village (IDI-02).*

*We cannot lie to each other. For me, I could forgo food during the day, and let the children have tea, and in the evening, they have ugali [corn meal] say with tossa jute [a type of leafy vegetable], cowpeas or even sardines. The next day, same thing. There is no enjoyment at home (FGD 1-P1).*

Many participants reported running into debts, which they were unable to pay back, to buy essential necessities for the entire family since their businesses were not making profits. Sometimes, they were forced to use their business food stock to feed their family, which also led to their businesses collapsing.

*Selling was a problem, you could go to the market and yet there were no buyers to make purchases, it was like a loss, you ended up consuming the commodities for domestic use, and there were no outside sales. You end up consuming your goods. The next day if you wanted to do the same business, you could not since you lack the capital and you already made no profits (FGD-P3).*

### **COVID-19 and Poverty-Induced Displacement**

Due to the economic hardships, many women were unable to pay their house rent, forcing some to relocate to their rural homes or cheaper accommodation. In addition, household income dropped sharply, leaving women to carry the financial burden since most of their partners/spouses lost their jobs during the pandemic.

*I was selling chapati and beans next to the roadside. COVID-19 affected me, until there was a time I was not able to pay for my house rent, we could not get food to eat, my children could not go to school so they were forced to stay at home. When my children were at home, I was forced to move from where I was currently staying to a different house. I used to pay rent of 3000 shillings and moved to a different house where I'm paying 2000 shillings. I was not able to get a cheaper house rent of 1500 shillings. (IDI-02)*

### **COVID-19 Gender-Specific Transformations**

#### **Changing caregiving and breadwinner responsibilities**

The pandemic brought into focus the unequal gender responsibilities within households and increased the burden on women. Women continued to balance the multiple duties of household chores, caregiving, and their food businesses. In addition, women had to assume the financial responsibility for their families. As indicated previously, most participants reported that their partners lost their jobs during the pandemic, but due to the societally assigned gender roles, the spouses did not help with the household duties and chores, as reflected below:

*...I can say that women, actually women, are overburdened. Sometimes, I even wonder how they get that extra time to do the business. Because, okay, a woman wakes up at 5 a.m., they prepare the children for schooling. Then once they have done that, there are other house chores, which they also do, like washing the dishes and then preparing for the husband. Maybe milking, milking for those who are in the village, milking the cows, fetching water, fetching firewood, preparing meals again, lunch for the children. For the children and husband. By then, the husband is at the center playing [Ajua] Luo board game or gossiping (KII-10).*

#### **A new face of gender-based violence**

Women participants faced increased gender-based violence, as male partners were often unhelpful or resentful, leading to conflicts within the household. Some of the gender-based violence occurred because of intensified economic strains during the pandemic. In addition, some participants reported that they personally experienced high levels of stress and frustration. Their children and even parents had to bear the brunt of this difficult situation through increased verbal and physical altercations. This heightened tension was due to their many increased responsibilities, which were a burden to them, and because they had no one to share their life's challenges with. Some participants revealed that these elevated pressures contributed to family break-ups – separation and/or divorce.

*Lack of money in the house led to marital feuds. I know women who quit marriages because their husbands' vented frustrations on them (KII-04).*

*There were arguments, as money is what causes peace. Without money, there is no peace. This caused my separation from my husband. And at that particular time, I had a daughter who was to sit for her form four exams but could not go to school as I could not afford to pay her fees and so she argued with me as well. We had also had an altercation with the father so he could not help. The child has never gone back to school to date. There were a lot of arguments, and my daughter ended up running away and so was my husband (FGD 3-P5).*

One participant admitted that she hit her daughter and nearly attacked her mother when she tried to intervene.

*There was an incident when I beat up [my] girl in grade six till she was taken away from me, it was a trigger that the father is doing well and capable of providing for them but is not doing so. I had beaten the child, kicked her and a neighbor came to her rescue. At that particular time, my mother had also gone to look for some income. When she got back, I was still upset and almost raised a hand on my mother. I had to cool off, go somewhere and sit. I have heard wild thoughts about my children, whether to kill them or what can I do because life had become unbearable (FGD 3-P4).*

### **Reinforced male patriarchal behaviours**

Conversely, male participants provided a contrasting perspective by emphasizing the enormous pressure they felt to act as the sole breadwinners for their families. Some men reported facing acute personal stress as they struggled to provide for their families during a period of reduced and disappeared incomes. For example, a male participant reported that he had to find an alternative construction job after losing his primary source of income during the pandemic and paying for his family's needs.

*[I was in] security. I was a bouncer. Clubs closed and I got back home. Challenges were that I could not provide for the household as before and so I had to make earnings on my own. It forced me to join odd jobs such as construction work. That is what helped us then, but it was difficult especially if you had a wife and children and you were the provider as the wife was not working. At times we would go hungry and eat the next day. That is how we survived until after COVID (IDI-16).*

Like their female counterparts, male food vendors highlighted the challenges they faced in sustaining their businesses amidst the pandemic and the increased costs of supplies. One respondent noted the difficulty in balancing business expenses with household needs. They also sacrificed their meals to ensure their families were fed.

*Yes, I would give money to my family but not enough sometimes. And it depended on how much I made on my daily sales. So, she would be forced to just buy the food and see how to serve the children and*

*then share the rest of food. We eat in the same plate and the food would just be enough for all of us (IDI-17).*

*I would go to the gym, train and my brain would be calm, I would then get home and sleep the little that is there is what we would feed on (IDI-16).*

Men also discussed household responsibilities, with some indicating a traditional division of labour where their spouses managed domestic chores. However, a few men mentioned that they stepped in sometimes to support when their wives were unwell or overwhelmed due to the COVID-19-related added care responsibilities. One respondent expressed his willingness to take on more domestic tasks in the future if needed, recognizing the importance of shared responsibilities during difficult times.

*When she is sick, I can look for someone to help her out because, with my work, I get injuries on my hands, though such responsibilities should be shared. So, if I get someone to help her also helps (IDI-16).*

The pandemic highlighted gender inequalities in the division of labour within households, showing how men struggled with their roles as primary providers and the need to diversify income sources. For women, it emphasized the importance of support systems to ease the combined pressures of caregiving and earning a living.

## **Overcoming COVID-19: Survival through self and community resilience**

### **Survival Through Self-Reliance**

Participants discussed the various coping mechanisms they adopted to ensure that their businesses operated despite the challenges they faced during the pandemic. The majority of the participants changed how they ran their businesses. They sourced the goods for sale early in the morning to have a more extended sales period during the day. This changed pattern worked out for some participants since there were restrictions on the duration of market operation with curfews and lockdowns. Other participants shifted to selling less perishable goods, from selling tomatoes or cooked food to selling other items such as cereals.

*So, it forced us to wake up at 4:00 A.M so that we could afford to get our daily bread. If I did not go for the daggaa (omena, a small fish sourced from Lake Victoria) and due to Corona, my husband was not employed anymore and the kids also stared at me, so I had to look for money, food, and how kids would go to school (FGD 1-P5).*

Other coping mechanisms included operating the business from their homes or operating as mobile vendors, especially those selling cooked food. This strategy helped them to cut down the rent for their shop and freed them from paying



taxes. Some participants reported paying bribes to the police to continue their business operations beyond the designated daily curfew period.

*Yes, people changed tactics in how they did business. Some changed their locations from Kibuye to within their homes while some even closed down [for some time] (IDI-15).*

*Police had it easy. Police followed me to the house, and since it was a curfew, I had to pay a fine of one thousand shillings. Even the brokers got into it. It was a business they were doing during the pandemic (FGD 3-P5).*

*I would do business in [Mombasa] before COVID-19 and due to the pandemic, I saw fit to change town (FGD 3-P4).*

In order to keep their businesses active and running, women established and used informal credit networks in cooperation with their fellow women or relatives. For their regular customers, they used these trusted relationships to offer those goods on credit and delayed payments. Despite their many challenges, many food vendors maintained good hygiene practices as directed by the Ministry of Health, such as adding handwashing stations next to their business locations, offering sanitizers and using masks, to attract and retain customers.

*Sometimes your regular customers would come to you without any money, and they would want to take the goods on credit because people had challenges during corona. You find that some people would only take my coffee and groundnuts and just call it a night. So, when my regular customers come to me to buy goods on credit, I would not refuse, instead, I would give them (IDI-17).*

*I had washing hands stations and sanitizers; I cannot put on a mask all the time (FGD 3-P9).*

Male participants emphasized the value of strategic financial planning for their households. Many male participants worked closely with their spouses to prioritize essential expenses like food and school fees. This collaborative approach was critical in ensuring survival during the pandemic.

*We could sit down and agree, if I got some money, we could pay school fees and pay electricity and water bills (IDI-16).*

### **Survival through community resilience and support**

Community structures, including local market leaders and Community Health Volunteers (CHVs), played a crucial role in navigating the crisis. For instance, market leaders created specific rules for all vendors during the pandemic to maintain hygiene and safety in their work areas. All food vendors were instructed to add handwashing facilities and waste bins. Customers and vendors were also required to wear masks. Most participants reported reduced diarrheal

cases as the practice of having handwashing facilities picked post-pandemic. In addition, the CHVs provided general health education to food vendors on taking precautions during the pandemic. Most participants appreciated this practice as they received information on how to identify the signs and symptoms of the coronavirus and handle such circumstances.

*During that period, we used to visit them in their houses to assess whether they considered and practiced the health messages that we taught them. We equally assessed to ensure that no sickly trader went about their businesses in the market, wearing masks, and the distribution of masks that were provided by the government. In the distribution of masks, we prioritized the traders because they interacted with a many people (KII-07).*

Some organizations, like Shining Hope for Communities (SHOFCO), a grassroots organization that catalyzes change in urban informal settlements through advocacy and education, offered support during the pandemic. SHOFCO provided water to vendors in the market using water tanks and gave them free soap and other supplies like food. These new forms of support enabled the vendors to comply with the public health hygiene and sanitation requirements during the pandemic introduced by the Ministry of Health.

*SHOFCO was really handy. I am a member, and we received KSh. 3,000 [~USD23.25] monthly on top of soap, flour, rice, maize, cooking oil and beans (IDI-14).*

Food vendors also formed smaller groups to organize added security arrangements during the volatile periods. They achieved these new provisions through collective contributions by the food vendors willing to be part of these groups.

*On the security bit, we would contribute KShs. 10 [~USD 0.08] daily per trader to pay security guards who volunteered to take charge of securing the commodities in the market. It was also my responsibility to ensure that running water and soap was available at every entry point into the market for handwashing (KII-04).*

Notwithstanding the supports they received from the community, participants also highlighted the stark gaps in institutional support, with many expressing frustrations over limited government assistance despite promises of pandemic aid.

## **Post-Pandemic Recovery Pathways**

All study participants noted that recovery has been gradual but uneven across different food vendors. Participants reported difficulties in regaining customers and adapting to inflation. Rising transport costs were also mentioned as one of the key factors contributing to a slower recovery process. Political instability and rising inflation further complicated



the food vendors' recovery process. Our participants indicated that the pandemic causes these new challenges. They advocated for reduced fuel costs, which directly influence supply prices, to sustain long-term recovery.

*To ease the burden of those who are doing business, the price of fuel should be reduced. If the fuel price is reduced, all the prices of goods will also be reduced (IDI-17).*

*Okay, it has not been easy. It has not been easy because... Let us talk of demonstrations. When protests are there, you see now we have to close. It means that that particular day or the days during the protest, we are closed, and we are not making any income (KII 10).*

To prevent or limit similar vulnerabilities, some participants suggested improving local agricultural investment to reduce dependency on external suppliers and ensure resilience against future disruptions.

*It is said that there is a lot of wealth in the soil. We need to invest in farming the returns can be bumpy and can make a difference in our lives (IDI-14).*

Other participants recommended that the government should set aside emergency loans for food vendors help cover the economic shocks for businesses in cases of unanticipated crises like the COVID-19 pandemic.

*I think the emergency loans could help because at times someone has only a little cash and would be praying for anything to boost her so that would be great (FGD1-P4).*

*Just as my fellow women have said, if we could get a body that provided us with a boost, we would grow as now we rely on hand to mouth, we have debts and loans, and at the end of the day, we go back home with two hundred shillings. With the boost, you could save, build a house back home, and even boost your business to grow. That has become impossible as you have to pay debts and also pay rent and other expenses. If we get a body to boost us, we will be able to stand on our own (FGD 3-P2).*

## Discussion

### Socioeconomic Impacts of COVID-19 on Informal Female Food Vendors

Through the FGDs and IDIs with food vendors, we were able to obtain detailed insights into the socioeconomic consequences of the COVID-19 pandemic on informal food vendors in Kisumu. Our study's findings demonstrate how women experienced financial hardships, and their increased caregiving responsibilities magnified these challenges. The marked decline in income was majorly impacted by the lockdown, curfews and market closures, imposed by the Kenyan government as containment measures to reduce the spread of COVID-19. These findings are consistent with the

pandemic-focused studies with women informal vendors in other urban settings in the Global South (Hamzeh et al., 2024; Thanh & Duong, 2022). For example, Thanh & Duong (2022) observed similar economic vulnerabilities forged by the pandemic among women street vendors in Vietnam. Elevated food insecurity in the food vendors' household was another key outcome of the pandemic forcing adult members to drastically ration and skip their meals. This important aspect is consistent with the a study by Shupler et al. (2021), who noted increased hunger in informal settlements in Nairobi.

## Coping Mechanisms and Resilience Strategy

Although these food vendors faced tough pandemic-related challenges, they showed remarkable resilience. Many food vendors adopted various strategies to sustain their business. Some key strategies included temporarily closing the business, adapting their business model by selling non-perishable goods and relocating their business operations to their homes or mobile locations where they were not paying rent. This result mirrors the findings of Wertheim-Heck et al. (2019), who identified some adaptability among urban vendors facing COVID-based disruptions. Other participants shifted to door-to-door sales and relied on informal credit loans to sustain their business, as identified by Kimani-Murage and colleagues (Kimani-Murage et al., 2014). Enhanced hygiene practices, such as setting up handwashing facilities, also helped maintain customer trust during the pandemic. This strategy is consistent with the public health recommendations outlined by Shupler et al. (2021), who suggested an integrated approach to addressing food and water insecurity.

## Gender-Specific Challenges in the Informal Economy

The findings highlight the diverse impact of the COVID-19 pandemic on gender roles and economic dynamics in the informal economy. The pandemic not only deepened pre-existing inequalities but also provided unique circumstances to examine and challenge traditional gender norms. Our study demonstrated that the pandemic intensified gender inequalities within the informal economy. Women faced increased responsibilities and had to balance household chores and caregiving with business operations. Moreover, gender-based violence and distress highlighted the compounded vulnerabilities women experienced. Gender-specific challenges emerged, with women taking on increased responsibilities while continuing to support their households financially. This double burden, as highlighted by Crush & Tawodzera (2024), exacerbated the strain on their physical and emotional well-being. In addition, these findings also align with the findings of Adeola et al. (2021), who emphasized the disproportionate impact of crises on women's mental health and economic stability. These experiences highlight the structural challenges women face, as they are often expected to assume additional roles during crises without adequate support systems.

For men, the increased economic strain and severe income losses undermined social expectations of their gendered roles as the primary providers for their families. They faced significant income instability and had to explore alternative income sources, demonstrating the critical importance of diversifying livelihood strategies to withstand economic shocks. These findings align with the broader literature on the disproportionate economic impact of crises on male breadwinners in patriarchal societies, where societal expectations intensify the pressures of providing for households (Kim & Luke, 2020).

The pandemic underscores the need to re-evaluate and re-allocate household responsibilities. Some men were willing to help with domestic chores during stressful times, but traditional norms often prevented lasting changes in gender roles and duties. This key result points to the need for interventions such as awareness campaigns or community programs to promote gender equity in economic and household responsibilities. These gendered experiences underline the need for targeted interventions to address the specific needs of women and men in the informal economy. In addition, the pandemic highlighted systemic gender inequalities and created an opportunity to mobilize for policy changes.

## Role of Community Support and Collaboration

Our study findings identified community support and collaboration as crucial to surviving the crisis. Community Health Volunteers (CHVs) provided health education, enabling the food vendors to comply with the safety measures introduced by the Ministry of Health. In addition, market leaders organized the maintenance of adequate hygiene and sanitation in the business operation areas. Some organizations, notably SHOFCO (Shining Hope for Communities), provided essential support, such as providing water tanks and soaps in the markets.

Food vendors mentioned forming informal groups that fostered collective security and resource sharing hence. It also demonstrated the importance of grassroots collaboration in mitigating the impacts of crises. Vendors expressed that working together enhanced their ability to withstand economic pressures and navigate uncertainties. These findings align with the study by Pimentel et al. (2022), who emphasized the importance of collaborative initiatives in enhancing food systems' resilience. However, as Giroux et al. (2021) noted, gaps in institutional and state pandemic relief assistance left many food vendors feeling unsupported and unprotected. Despite widespread acknowledgment of the importance of the informal economy, especially in food security, vendors were often excluded from pandemic-focused financial aid, capacity-building programs, and infrastructure investments. The omission of the informal food vendors in the post-pandemic recovery measures could be emanating from the indifference of the state and city institutions that were already hostile to the informality in the sector.

A collaborative stakeholder approach is key to address the social and economic shocks in crises effectively. While

grassroots collaboration has proved effective, integrating these efforts with institutional support can enhance sustainability and equity. Policymakers should prioritize creating formal mechanisms that link informal vendors to social safety nets, affordable credit, and capacity-building opportunities. Expanding the role of community-based organizations can effectively address local needs and strengthen future crisis response and recovery.

## Post-Pandemic Recovery Pathways

As noted by our study participants, recovery from the pandemic has been gradual and uneven among informal food vendors. Challenges such as inflation, political instability and increased transport costs have slowed the recovery progress, reflecting the broader economic changes forged by the pandemic (Banu et al., 2023). Participants recommended access to affordable credit loans and increased investments in local agriculture to strengthen the food system and enhance resilience. These recommendations align with (Garrity et al., 2024), who highlighted the role of local food system investments in mitigating vulnerabilities. Similarly, reducing fuel prices was another critical recommendation, as high transportation costs directly impact the affordability of food supplies and market access. Reducing fuel costs could provide immediate relief to informal vendors while stabilizing food prices for consumers and fostering broader economic recovery.

Gaps in government support remain a significant barrier to recovery. Participants echoed frustrations about inadequate institutional support, limited access to government financial support, and the absence of targeted policies for the informal economy. These concerns are consistent with the argument by Giroux et al. (2021), who highlighted the exclusion of informal workers from mainstream recovery programs, exacerbating their economic precarity and slowing their post-pandemic recovery progress. Policy makers should address these gaps through a collaborative approach involving various relevant stakeholders to ensure a sustainable recovery process. In addition, social safety nets must be strengthened to enhance resilience, and vendors must be provided training on financial management.

## Conclusion

The COVID-19 pandemic exposed the vulnerabilities of informal food vendors in Kisumu County while highlighting their resilience and recovery strategies. The negative socioeconomic impacts experienced by these vendors underscore the critical need for targeted policies to support informal economies during crisis periods. Our study has confirmed that female food vendors not only helped sustain their families, but also contributed significantly to community food security, underscoring their central role in urban food systems. The pandemic served as a wake-up call, highlighting systemic disparities while offering opportunities to re-evaluate gender roles, improve support systems, and build a more resilient informal sector. Policymakers, community organizations, and other stakeholders must collaborate to create sustainable recovery pathways for women food

vendors, addressing both immediate needs and long-term structural issues to ensure the survival and growth of this critical sector.

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