AN ASSESSMENT OF ENTERPRISE DYNAMICS OF WOMEN STREET FOOD VENDORS IN URBAN INFORMAL SETTLEMENTS: THE CASE OF MUKURU KWA REUBEN, NAIROBI, KENYA

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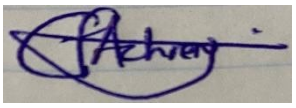
DECLARATION

This research project is my original work and has not been presented for a degree in any other University



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This research project has been submitted with our approval as University of Nairobi Supervisors

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DEDICATION

To my dear parents, Sam and Dorothy Owuor, my sister Kiky, brother Gijs, and conjoined Sharon, Cornel, Steve and Eve, for their support and encouragement throughout my academic journey

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ABSTRACT

The informal food sector is big and persistent in sub-Saharan Africa and provides employment and livelihood opportunities to a large proportion of urban residents. Although feminization of the informal food sector has been recognized, its gendered dimensions have not been fully understood. Most studies have focused on both male and female food vendors with less attention given on those operating in urban informal settlements. As such, this study is an assessment of enterprise dynamics of women street food vendors in urban informal settlements with a specific reference on Mukuru Kwa Reuben in Nairobi, Kenya. The study has four objectives which seek to establish the socio-economic characteristics of women street food vendors; determine their enterprise characteristics and strategies; assess the livelihood opportunities and challenges of their food vending enterprises; and examine how Covid-19 containment measures affected their food vending enterprises. The study adopted the livelihoods framework and tested two null hypotheses, namely, 1) there is no significant difference between year of entry into food vending enterprise and importance of the enterprise to the vendor; and 2) there is no significant difference between the overall effect of Covid-19 containment measures on food vending enterprise and extent of enterprise recovery. To achieve the objectives, data was collected from a sample of 172 women street food vendors in Mukuru Kwa Reuben. For a wider spatial coverage, the study sample was selected using stratified random sampling based on the 12 villages of the settlement. The study utilized both primary and secondary data. Primary data was collected through a questionnaire-based survey, while secondary data collected from review of relevant literature. Data was analyzed through descriptive statistics and chi-square test for hypothesis testing. The results reveal that majority of the women operating street food vending enterprises are migrants to Nairobi (87.2%), youths aged between 18-39 years (72.6%), married (64.3%), and have attained secondary level of education (61.1%). A significant proportion (44.7%) entered into street food vending business more recently between 2020 and 2024, while almost all of them (97.7%) required a start-up capital. The start-up capital was largely drawn from personal savings (62.8%). The vendors sell a wide-range of products, operate from makeshift platforms with makeshift shades (61.6%), source their supplies from wholesale and retail markets in Nairobi, and transport them to their business premises by use of public transport (71.5%). To maintain success of their enterprises, the vendors apply a wide-range of locational, operational, pricing, and stocking strategies. The main strategies include locating near customers (80.2%), extending operation hours at night (89.5%), pricing based on wholesale prices (72.1%), and stocking based on price

of supplies (48.3%). Street food vending enterprises provide the women involved with a number of livelihood opportunities for economic survival. For example, street food vending is the main source of income for almost all the vendors (94.2%), 69.2 percent cannot survive without it, 98.3 percent intend to grow their enterprises, and 55.2 percent have an investment attributed to the enterprise. However, the vendors experience a number of operational, security, and policing challenges, including low levels of organizational structure and access to loans and training opportunities. Lastly, to a number of vendors, the Covid-19 containment measures led, to a large extent, to increased cost of purchasing stock (64.6%), cost of transport (61.1%), and cost of running business (60.2%), including loss, spoilage and wastage of perishable food products (60.2%). On the other hand, the containment measures reduced, to a large extent, the daily number of customers (69.9%), regular daily business hours (66.4%), and daily sales and profits (63.7%). In conclusion, despite the livelihood opportunities that come with street food vending, there is need to reduce the challenges women vendors face and enhance their resilience. The study recommends the enactment of policies, legislative frameworks and governance measures that supports sustainable urban food systems governance, business financing, organization, and training opportunities for women street food vendors, including resilience to external shocks such as Covid-19 pandemic.

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CHAPTER 1: INTRODUCTION

1.1 Background to the Study

Urbanization is a process of population concentration in human settlements designated as urban centres, towns or cities. According to (UN-Habitat, 2022), North America is the most urbanized region in the world with 83 percent of its population living in urban areas. This is followed by Latin America and the Caribbean (81%), Europe (75%), Oceania (68%), Asia (51%) and Africa (44%). In sub-Saharan Africa, urbanization is a function of population increase that is triggered largely by rural-to-urban migration, as well as by urban natural increase and spatial expansion of urban boundaries in time and space. UN-DESA (2018) projected that countries in the global south will experience 95 percent of the urban growth in the next two decades, and that by the year 2030, they will be home to about 4 billion people and will absorb 80 percent of the global population.

Furthermore, Africa and Asia are expected to urbanize more rapidly than other continents in the world. Consequently, most sub-Saharan African countries are experiencing high rates of urban growth and development. In Kenya, the urban population has been increasing over time from 285,000 people in 1948 to 14.8 million in 2019 (KNBS, 2022). Consequently, the share of urban population to the country's total population has also risen from 5.3 percent in 1948 to 31.2 percent in 2019. Currently, Nairobi city leads the urban hierarchy in Kenya with 4.3 million people, rising from 119,000 people in 1948. This represents about 30 percent of the total urban population in Kenya (KNBS, 2022).

The high rates of urban growth in sub-Saharan African countries, including Kenya, comes with significant challenges that needs attention by the city governments and authorities (Owuor 2018). Some of these challenges include increased levels of urban poverty and food insecurity; increased incidences of social and economic differentiation; inequity and exclusion; inadequate and poor provision of services; lack of affordable housing and incidences of informal settlements; unemployment and related crimes; and informalization of the urban economy, among others. Compared to developed countries, these challenges are persistent in sub-Saharan Africa because the region is relatively poor with low levels of per capita Gross Domestic Product (GDP) and investments (Hommann and Lall, 2019). Notably, due to lack of employment or access to formal employment, most of the cities' in-migrants find themselves looking for employment in the informal sector (FKE, 2021; Owuor and Mbatia, 2012).

The informal sector largely consists of the self-employed who control micro enterprises which are unregulated and non-contractual in manner (Etim and Daramola, 2020). The sector, also known as the "shadow economy", employs millions of people across the world (Schneider and Williams, 2013). Furthermore, majority of the unemployed youth resort to informal sector jobs such as street vending. Meagher (2007) noted that Africa had a high share in informal sector activities and that the informal economy accounted for about 60 percent of Africa's labour force in urban areas and offered over 90 percent of new jobs in the continent. More recently, ILO (2018) estimates that about two billion people in the world are engaged in informal sector economic activities. This accounts for or 61 percent of the total employed population. On the other hand, Cunningham *et al*. (2024) estimates that between 56 to 65 percent of the urban workers in sub-Saharan Africa are employed in the informal sector.

The informal economy, which is large and persistent in Africa, has a great potential to trigger economic growth and social wellbeing in the region. As such, the informal economy should not be neglected or underestimated as a temporary phenomenon (Singh, 2020). It provides employment for a large majority of the urban population who cannot access formal employment. It serves as a safety net and a means of survival for the poor urban population, including women. In addition, it is a critical source of means of livelihood, income and food for many urban residents.

In Kenya, employment in the informal sector rose by 4.6 percent between 2021 and 2022, generating a record of 16 million jobs (KNBS, 2023). These informal sector jobs are largely concentrated in wholesale and retail trade, hotels and restaurants, manufacturing (*jua kali*), and in transport (*matatu* and *boda boda*) and construction sectors. The steady growth of the sector in Kenya is associated with the impact of economic reforms and crises that have resulted in a decline in the country's economy, as well as a reduction in the public and private formal sector employment. On a positive note, the informal sector's growth is also associated with strategies for promoting the informal economy (FKE, 2021). For example, the role of the sector as a driver of economic growth, employment creation and poverty reduction, is well outlined in Kenya Vision 2030.

The informal food economy is emerging as one of the integral parts of the informal sector in Africa (Owuor, 2020). Moreover, the informal food economy remains an important component

of the urban food systems in the region. As such, informal food vendors play an important role in urban food supply, urban food security, and in generating urban-based livelihoods (Crush and Frayne, 2011; Battersby and Watson, 2018). Notably, the rapid growth and expansion of the informal food economy in African cities in time and space has attracted increased attention from researchers, academics and policy makers (Owuor, 2020). The focus on women street food vendors is from the fact that women form a large proportion of street food vendors and are exposed to different livelihood opportunities and face different challenges in their enterprises. For example, according to Chege et al. (2021), 61% of the food vendors in Nairobi's slum and non-slum areas are female. This indicates the importance of informal food vending enterprises as a critical source of employment, income and livelihoods to a large majority of women in urban Africa.

1.2 Statement of Research Problem

The informal food sector, and in particular, informal food vendors, play a key role in food provisioning, especially for the urban poor households. It is an important source of income for those involved in the informal food vending enterprises. Informal food vendors operate outside the formal food sector like designated city markets, shops and supermarkets, and normally operate their businesses without legal status and protection (Giroux *et al*., 2021). As such, street food vendors are normally not recognized by the city governments and authorities and are normally chased out of their business premises or face constant harassment from city by-laws enforcers.

Street food vending is a dominant and distinct part of the urban informal food sector, and provides employment to those involved in the activity (Doibale *et al.*, 2019). The sector is rapidly growing because of the low skills and initial capital investment it requires, as well as the ever-changing food demands by the urban dwellers who opt for inexpensive ready to eat foods. Notably, availability and accessibility seem to be the main factors that determine street food consumption patterns among the urban poor households (Muzaffar *et al.*, 2009).

According to Ramasamy (2018), street food vending offers employment opportunities and livelihood sources to women who are more vulnerable to the changing economic conditions and environments. The activity has empowered women in the informal sector to be financially independent and contribute to the household income (Thakur *et al.*, 2017; Singh, 2020). However, women street food vendors face a number of challenges while running their

enterprises. These are access to startup capital and business loans, insecurity (especially at night), fight for urban space, competition, harassment from local government officials, and absence of water and sanitation facilities (Zingkhai and Anand, 2019). These challenges tend to be more severe for food vendors operating in the informal settlements, with female vendors being more vulnerable.

As noted earlier, the rapid growth of the informal food sector in sub-Saharan African cities in time and space has attracted increased attention from researchers, academics and policy makers. There is, therefore, need for more studies to provide adequate data, information and a clearer picture and understanding of all aspects of street food vending and enterprises. Furthermore, although the feminization of the informal food sector has been recognized, its gendered dimensions have not been fully understood.

Moreover, most studies on informal food vendors have focused on city-wide surveys of both male -female food vendors (e.g. Owuor, 2020; Tawodzera, 2019); on smaller cities (e.g. Singh, 2020); on women food vendors in the formal economy (e.g. Nyoni, 2017); on women street food vendors in Central Business Districts (e.g. Ramasamy, 2018); and on women entrepreneurs in general (e.g. Njagi *et al*., 2019). For example, Owuor (2020) and Tawodzera (2019) studies in Nairobi and Cape Town, respectively, provide a city-wide overview of the informal food sector in the context of the urban food system with no specific emphasis on gender analysis or focused discussion on food vending activities in the informal settlements. As such, this study intends to contribute to this debate with a particular emphasis on, and in-depth analysis of, women street food vendors operating in urban informal settlements. This is because women not only dominate street food vending businesses but also due the fact that street food vendors provide relatively affordable source of food to the urban poor living in informal settlements.

1.3 Research Questions

1. What are the socio-economic characteristics of women street food vendors in Mukuru Kwa Reuben informal settlement in Nairobi?
2. What are the enterprise characteristics and strategies of women street food vendors in Mukuru Kwa Reuben informal settlement in Nairobi?
3. What livelihood opportunities and challenges are women street food vending enterprises exposed to in Mukuru Kwa Reuben informal settlement in Nairobi?

4. What are the effects of Covid-19 containment measures on women street food vending enterprises in Mukuru Kwa Reuben informal settlement in Nairobi?

1.4 Research Objectives

1. To establish the socio-economic characteristics of women street food vendors in Mukuru Kwa Reuben informal settlement in Nairobi.
2. To determine the enterprise characteristics and strategies of women street food vendors in Mukuru Kwa Reuben informal settlement in Nairobi.
3. To assess the livelihood opportunities and challenges of women street food vending enterprises in Mukuru Kwa Reuben informal settlement in Nairobi.
4. To examine the effect of Covid-19 containment measures on women street food vending enterprises in Mukuru Kwa Reuben informal settlement in Nairobi.

1.5 Hypotheses

1. H_0: There is no significant difference between year of entry into food vending enterprise and importance of the enterprise to the vendor.
   H_1: There is significant difference between year of entry into food vending enterprise and importance of the enterprise to the vendor.
2. H_0: There is no significant difference between the overall effect of Covid-19 containment measures on food vending enterprise and extent of enterprise recovery.
   H_1: There is significant difference between the overall effect of Covid-19 containment measures on food vending enterprise and extent of enterprise recovery.

1.6 Justification and Significance of the Study

The continued growth and importance of the informal food economy in sub-Saharan African cities call for sustainable regulatory frameworks that can minimize the inherent risks and challenges associated with the sector, while at the same time maximizing the opportunities that the sector provides to those involved in the activity and to the large population that depend on the food provided by the sector. As such, there is need for data-driven and evidence-based decision-making processes in order to achieve a sustainable informal food economy that thrives together with, and compliments, the formal food economy such as the supermarkets. The evidence-based data generated from this study will, therefore, be valuable not only to the national and local (county) government policy makers and planners, but also to the non-state actors in the field of urban informal food sector.

Given that women comprise a larger percentage of those involved in the informal food economy, this study provides an in-depth analysis of women street food vendors operating in urban informal settlements. This is premised on the fact that informal settlements in sub-Saharan African cities house the largest percentage of informal food economy with inherent challenges despite playing an important role in food availability to the urban poor population. Moreover, less is understood about women-led street food enterprises in urban informal settlements since most related studies have been city-wide surveys, more often than not, focusing on both male and female food vendors (see for example, Owuor (2020) and Tawodzera (2019).

Data generated from this study is important in tracking the progress towards the achievement of global and national development goals related to the informal food economy. For example, Sustainable Development Goal (SDG) 8 on decent work and economic growth encourages entrepreneurship and creation of jobs among individuals, productive and decent work for all women and men, promotion of youth employment, and safe and secure working environments for all workers. Women are known to face particular hindrances in attaining decent work and may be vulnerable to a number of challenges in their places of work. Addressing these challenges will encourage more women entrepreneurs, create jobs and improve their work environments. On the other hand, SDG 2 on zero hunger intends to end hunger and achieve food security, which can be achieved not only from food production, but also from food distribution and consumption. Moreover, SDG 5 on gender equality advocates for equal opportunities for women in the labour market and eliminating all forms of discrimination against women.

The Nairobi City County Food Systems Strategy of 2022 advocates that a stable food supply system and stable incomes is one of the roads towards affordable, accessible, nutritious and safe food for all in Nairobi. Furthermore, good governance of the urban informal street food vendors and their activities can improve livelihoods of those involved, as well as improving availability and access to food by urban households. Scientifically, the study contributes to the debate on the role of street food vendors in the urban informal food economy. Moreover, the results provide data and information on inclusivity of the urban informal sector, which is important for urban food systems planning and governance. In addition, an understanding of women street food vending enterprises in urban informal settlements is important for gendered

spatial planning practices and policies. For example, Mukuru is a special planning area in Nairobi and needs evidence-based data for planning purposes.

1.7 The Scope and Limitations of Study

This is an assessment of enterprise dynamics of women street food vendors, and as such, is not a comparative analysis of male and female vendors. The focus on women street food vendors assumes that women form a large proportion of street food vendors and are exposed to different livelihood opportunities and face different challenges in their enterprises. In addition, they are more likely to be vulnerable to the changing economic environment and pandemics such as Covid-19, and are more likely to experience relatively poorer socio-economic conditions. Thematically, the study has focused on four aspects of women street food vendors, namely, their socio-economic characteristics, enterprise characteristics and strategies, livelihood opportunities and challenges, and effect of Covid-19 prevention measures on their enterprises. Geographically, the study covers women street food vendors operating in urban informal settlements using Mukuru Kwa Reuben as a case study. Besides being part of the second largest informal settlement in Nairobi after Kibra, Mukuru Kwa Reuben was chosen because it provides an opportunity for policy uptake and influencing change, especially in collaboration with the federation of slum dwellers in Kenya (*Muungano wa Wanavijiji*). The federation advocates for "inclusive cities" and works with autonomous slum-based groups on issues that affect their settlements with the aim of improving their living conditions and access to basic services.

The major limitation is that the study was carried out when there was political and security tension in Mukuru Kwa Reuben due to the government's order on demolition of houses in riparian areas and river banks as a result of the impact of flooding. However, the researcher worked closely with community leaders and avoided areas where demolitions were going on and areas of intense tension between the community and law enforcement officers. As such, the data collection exercise was not adversely affected.

1.8 Operational Concepts and Definitions

- **Food environment:** The physical, economic, political and socio-cultural context of the places and spaces where food is produced, sold, prepared and consumed (HLPE, 2017).

- **Food security:** Food security exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life (FAO, 2010).
- **Food System:** The range of actors and activities involved food production, aggregation, processing, distribution, consumption, and disposal (FAO, 2018).
- **Informal sector:** An economic sector that consists of economic activities that fall outside the purview of official regulations, either because the regulations do not apply to the activities or due to weak enforcement of, and adherence to, the existing regulations (Brown and McGranahan, 2015).
- **Informal settlement:** Unplanned settlement where households suffer from one or more of the following: lack of access to improved water sources, lack of access to improved sanitation facilities, lack of sufficient living area, and lack of housing durability and security of tenure (UN-Habitat, 2015).
- **Street food:** Foods sold by vendors operating on a public street, sidewalk or by the roadside. These foods include, but not limited to, vegetables, fruits, cereals, cooked and dried foodstuffs (FAO, 1998)
- **Urban food economy:** Part of the urban economy that focuses on food production, distribution, processing, marketing, consumption and waste (FAO, 2018).

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

This chapter starts by giving theoretical perspectives on urban growth and challenges, as well as the informal sector and economic development, with a special emphasis on sub-Saharan Africa. The chapter proceeds by reviewing empirical studies on informal food vendors and the urban informal food economy; informal food trade enterprise characteristics and strategies, livelihood opportunities and challenges of women street food vending enterprises; and effect of Covid-19 on street food vending enterprises. It is on the basis of these empirical studies that the research gaps are advanced. Lastly, the chapter discusses the theoretical and conceptual frameworks.

2.2 Urban Growth and Challenges

The global share of the urban population has increased from 25 percent in 1950 to about 50 percent in 2020 (UN-Habitat, 2022). However, much of the global urban growth will occur in countries and cities of the global south with a number of challenges that will require sustainable urbanization and sustainable urban development. Subsequently, sub-Saharan African countries are witnessing high urban growth rates despite the fact that their levels of urbanization are relatively low compared to other continents (UN-DESA, 2018).

The proportion of people living in cities in sub-Saharan Africa has increased from 27 percent in 1990 to 40 percent in 2018, and is projected to be 58 percent by the year 2050 (UN, 2019). Kenya has an urban population of 14.8 million people, accounting for 31.2 percent of the population, with an urban growth rate of 2.1 percent (KNBS, 2022). Notably, poverty, inequality, food insecurity and unemployment will continue to remain the most intractable challenges facing cities in sub-Saharan Africa (UN-Habitat, 2022). Other emerging global challenges that will also negatively impact cities in the region are economic crisis, climate change and pandemics such as Covid-19. In other words, cities in sub-Saharan Africa are hot spots for risks and negative impacts associated with global crises, economic reforms, pandemics, and climate change. Moreover, a large proportion of the urban population live in urban informal settlements that witness a high severity of the urban challenges (Ouma *et al.*, 2024).

As the urbanization process continues, food security will continue to be a major challenge in sub-Saharan African cities. Food security encompasses physical, social and economic access to not only sufficient, but safe and nutritious food, that is capable of meeting the dietary needs and food preferences for all people at all times, for an active and healthy life (FAO, 2010). While production may be the starting point of food security, accessibility and consumption are equally important (Drimie and McLachlan, 2013). Food security depends on food availability, access and quality over time. However, the availability and access to food are determined by food distribution channels such as the informal food vendors. These food vendors facilitate the availability of food, especially to the large majority of urban poor households (Ahmed *et al.*, 2014).

Urban dwellers who have migrated to the cities in search of employment are more likely to experience food insecurity, and consequently, will largely depend on the informal food systems. As such, street food vendors become important to their food needs and food security situation. Murage *et al*. (2014) noted that about half of the slum households in Nairobi slums were severely food insecure, as determined by their household sizes, level of income and sources of livelihoods. Such severely food insecure households cope by reducing the number and frequency of meals per day, as well as the quantity of food intake per day.

2.3 The Informal Sector and Economic Development

According to Brown and McGranahan (2015), the informal sector or economy largely consists of economic activities that fall outside the purview of official regulations, either because the regulations do not apply to the activities or due to weak enforcement of, and adherence to, the existing regulations. Notably, they discern four key features that make the informal sector important to attract attention of researchers and policy makers. These are: (1) the informal sector is not only growing, but it is also large in terms of employing a large number of urban dwellers; (2) the relationship between those in the informal sector and the urban authorities is often strained and dysfunctional; (3) the informal economy displays a great diversity in environmental performance; and (4) the informal sector is not only important to the urban poor, but it is also highly gendered.

Whereas the informal sector is important in the economy of most countries in the global south, it is seldom recognized. In fact, Thornton (2000) noted that the informal sector does not receive any support from the government or urban authorities because their activities are perceived to

be illegal. Moreover, individuals and households operating informal sector activities are normally underestimated and unaccounted for, compared to their formal sector counterparts. In addition, the sector is a crucial source of non-agricultural employment in Africa (Crush and Frayne, 2011). Furthermore, the sector generates employment and livelihood opportunities for a majority of urban dwellers and households, in addition to generating revenue for local governments (Singh, 2020).

Entrepreneurship development is one of the features that has been influenced by the informal sector at large. This is a feature that is greatly connected to the economic development of any nation. In fact, it is estimated that the informal sector activities and enterprises contributes up to 60 percent of the Gross Domestic Product (GDP) in developing countries (Musara and Nieuwenhuizen, 2020). In Kenya, it is estimated that informal sector employment has increased from about 10 percent of the total employment in the country in 1974 to about 83 percent in 2019, with a sharp rise in the 1990s (FKE, 2021). As such, the informal sector serves as an acceptable option for a majority of job seekers who have lost hope in the formal sector employment by taking the initiative to set up and run their own businesses as a way of earning a living (Meagher, 2007; FKE, 2021).

Bearing in mind that most of the informal sector enterprises require less initial capital, it is easy for most unemployed youth to start small business enterprises in the sector (FKE, 2021). The informal sector is able to influence individuals to use their entrepreneurial traits and embrace self-employment as a way of earning income for the basic reason of survival. Furthermore, the informal sector caters for basic needs of low-income earners through provision of goods and services that they can easily access and afford (Abuodha and King, 1991). The informal sector not only provides affordable goods and services, but also affordable food and food items, especially to the low-income segments of the population. In fact, transactions in the informal economy continue to be an important contemporary aspect of overall production and consumption in many countries across the globe (Horodnic *et al.*, 2022).

2.4 Informal Food Vendors and the Urban Informal Food Economy

Informal food vending is an essential part of informal sector activities and has a significant role in the city's informal food system and economy. According to Singh (2020), street food vendors in Methu Town of Ethiopia offer a variety of foods, from vegetables to cooked foods, to the town's populations, as well as to those living in the informal settlements. This not only

makes food available to the urban poor, but also makes food accessible and affordable to a wider segment of the city's population. In addition, the study found out that most of those involved in street vending businesses were young people aged between 18-40 years old, indicating a source of employment for the youth who are unemployed. However, the study was carried in a relatively smaller city, 600 kilometres from Addis Ababa, unlike the present study that is situated in an informal settlement of Kenya's capital city.

In South Africa's Cape Town, Tawodzera (2019) found that food vendors in the city facilitate food distribution to a majority of the city dwellers and provide jobs to most of the unemployed. Cape Town, like any other city in sub-Saharan African countries, suffers from high rates of unemployment. However, street food vending offers employment and a source of income to the unemployed in the city. Food vendors themselves also offer employment opportunities to the many people that they employ in their business enterprises. The study noted that despite some vendors seeking assistance in terms of engaging a worker or a relative, they do not engage many employees. However, this was a city-wide survey of both male and female food vendors with no particular emphasis on women food vendors and/or those operating in urban informal settlements.

Nirathron (2006) studied the significance of street food vending on the city's economy and poverty alleviation through entrepreneurial development in Bangkok, Thailand. The survey found that improved livelihoods among those practicing street food vending had a great impact on the economy because it provided a means of income generation, hence an opportunity to fight poverty. Many of the people who were underprivileged ended up depending entirely on street trade, once out of options in the employment sector. As such, the study recommended a change of attitude by the government towards street food vending as well as recognizing the diversity among food vendors.

In Harare, Zimbabwe, Njaya (2014) concluded that street vending thrived in the city not just because of creating employment opportunities but also because of providing the city residents with inexpensive and a variety of foods. The study also observed that those involved in street food vending had improved livelihoods because their incomes helped meet and cater for most of their family needs and requirements. The study argued that street food vending is an important component of the urban food systems and economy despite being illegal and unexplored constituent of food and nutrition. The study recommended the recognition of the

sector and putting in place supportive regulatory frameworks. Whereas the study concentrated on the high-density areas of Harare, the present study on Nairobi will draw more knowledge on women-led street food vending enterprises with a specific focus on informal settlements.

In Nairobi, Kenya, Owuor (2020) noted that informal food vendors supply and distribute affordable food in most residential neighbourhoods of the city. In addition, vending of food creates employment opportunities and generates income to those involved in the enterprises. Further, the study found that the proportion of women engaged in food vending enterprises was slightly higher (51%) compared to their male counterparts. Notably, 67 percent of the food vendors are youth, aged below 35 years old. This is an indication that there is a large proportion of unemployed youth in Nairobi that engage in informal sector activities. As such, entry into informal food vending enterprises is largely motivated by the need for economic survival. However, this was a city-wide survey of both male and female food vendors with no particular emphasis on women food vendors and/or those operating in urban informal settlements.

2.5 Enterprise Characteristics and Strategies

City-wide studies in the global south cities have enumerated a number of characteristics of informal food-based enterprises. For example, Si and Zhong (2019) observed that most small-scale food vendors in Nanjing China were recent entrants into their businesses; paid rent to operate in their premises; used personal savings to establish their enterprises; sold all kinds of food products; and sourced most of their supplies from wholesalers and formal markets. In Kingston, Jamaica, the main motivation of entry into informal food trade were noted as being for income, employment and survival purposes, besides other intrinsic and altruism motivations (Kinlocke and Thomas-Hope, 2020). However, Kingston's food traders had operated their businesses for the last two decades.

In Bangalore, India, most of the informal food vendors were motivated by the need for greater financial security, running their own enterprises, and the need to just survive (Honasoge *et al*., 2020). Moreover, majority had run their businesses for over 20 years, and operated from permanent business structures without business licenses. In a study of seven markets in Maputo, Mozambique, Raimundo *et al*. (2020) found that food vendors in the city were driven into their business enterprises because of economic survivalist factors, their entrepreneurial orientation, and the need to build their social capital. Most of them used their personal savings as start-up capital and sold a variety of food products.

A series of studies in developing countries have concluded that food vendors employ a number of strategies in order to maximize their profits. For example, Honasoge *et al*. (2020) found that most of the vendors in Bangalore, India, located near the residential neighbourhoods where they live and negotiated with their suppliers for low prices. In Nanjing, China, food vendors located near their homes, added a standard price mark-up, and oscillated the price of food sold to cope with both changes in availability and prices of food (Si and Zhong (2019). In Kingston, Jamaica, most of the food vendors offered credit facilities to their customers and extended their business hours (Kinlocke and Thomas-Hope, 2020), while in Maputo, Mozambique, most of the food vendors located in places with greatest number of customers, negotiated with customers and suppliers for fair prices, and extended their operating hours (Raimundo *et al*., 2020). In Nairobi, Kenya, most of the informal food vendors located in places with the greatest number of customers as well extending their hours of business operations (Owuor, 2020). However, these were city-wide studies that covered all types of male and female informal food vendors.

2.6 Livelihood Opportunities and Challenges of Women Street Food Vending Enterprises

2.6.1 Livelihood Opportunities

In India, Zingkhai and Anand (2019) found that 93 percent of women street food vendors in Ukhrul town were driven into food vending activities to get an extra income and provide for their family needs. The vendors had low education background and got into the food vending enterprises while already married. They were also motivated by the low capital investment that the businesses required for startup. In addition, the women food vendors reported that one main business strategy was to value and nurture their relationship and trust with their customers. As such, women food vendors engage in food vending enterprises to improve their families' food and income security, and also to have some degree of financial independence from their spouses.

Thakur *et al.* (2017) studied the socio-economic status of female food vendors in Delhi city, with a particular emphasis on their incomes, expenditure as well as saving patterns. According to the results, the women food vendors recorded very low incomes and savings compared to their expenditures. This is despite the high potential of savings among the women food vendors. They attributed their low incomes to the non-strategic location of their business enterprises, as well as the habit of selling similar products, high transport costs, and the limited items sold in

the market. A few of them saved their daily incomes on a regular basis and that the savings helped them in cases of emergencies and also for their household needs. However, this was a study of an "exclusive ladies' market" operated by a non-governmental organization and may not have captured the informal settlement context of the present study.

Ramasamy (2018) studied the opportunities of women vendors in Penang, Malaysia. One of the opportunities for women food vendors is that when they take up this activity, it acts as a source of survival. Furthermore, the activity offers employment opportunities to women, enabling them to generate income from the business. With the income that is generated, the women can provide for their household needs and cater for the educational needs of their children. The study called for improving the working environment and conditions of women street food vendors and their enterprises. It also advocated for social protection and life skills development to improve the women vendors' sources of livelihoods and survival. However, the study was qualitative and focused on the Central Business District of Seberang Parai in Penang.

According to Tillerman (2012), female food vendors in Dar es salaam, Tanzania, had relatively low levels of education and skills and had entered into the sector as a survival strategy and to improve their household income. In some cases, the women vendors were widows or their spouses were not in employment. As such, these women vendors had to enter into food vending businesses in order to earn some income for supporting their families. This is an indication that women food vendors juggle their roles as caregivers and business women. As such, the low level of skills that is required together with the low financial capital has driven women to participate in food vending enterprises in order to survive in the city. However, this was an exploratory study based on qualitative interviews with only 16 women vendors.

In Kenya, Githiri *et al*. (2016) found that vendors in the informal settlements of Nairobi's Korogocho and Viwandani play a vital but overlooked role. The study argued that food vending in the informal settlements is an attractive source of livelihood and income to those involved. The women involved in the activity are able to, at the same time, take care of their children due to their location near their homes and save on transport costs – compared to locating in the Central Business District (CBD) or in another location or market.

2.6.2 Challenges of Women Street Food Vending Enterprises

Women street food vendors experience various challenges with their enterprises, including financial constraints, insecurity, space limitation and damage of goods. In India, Zingkhai and Anand (2019) found that women street food vendors face a number of challenges while running their food vending enterprises. However, the major challenge that were faced by the women food vendors in their daily operations was unavailability of basic facilities such as public toilets, and even if they were available, there was no water in these facilities. Moreover, the toilets were left uncleaned and remained dirty for use and compromised the dignity of female users. Harassments from the authorities were also indicated as a major challenge.

In a study of women vendors in Penang, Malaysia, Ramasamy (2018) also noted that women vendors face a number of challenges. Notably, the results of the study discussed four major challenges. These are (1) financial problems, including start-up capital, credit and cash-flow; (2) social security, largely for health, education, accidents, occupational hazards, welfare and other benefits; (3) damage of goods and storage problems, largely due to harsh environmental conditions, perishability, and selling in open spaces with no permanent stalls or shelter; and (4) encroachment of public spaces. However, the study was qualitative and focused on the Central Business District of Seberang Parai in Penang.

Similarly, Amsale (2017) found that street food vendors in Addis Ababa, Ethiopia, face four major challenges, namely, financial constraints, poor working environments, social security and environmental issues. This is in addition to frequent conflicts and confrontations with the local authorities over payment of licenses, operating in undesignated public open spaces, and hindering smooth flow of vehicular and pedestrian movements in the city. Confrontations with the local authority enforcement officers often leads to injury and loss of the items that they sell, and therefore loss of income. The study recommends protecting vendors' right to livelihoods, providing space for the vendors, and having regulatory measures to facilitate their operations.

Nyoni (2017) investigated the challenges women engaged in food vending enterprises face in Harare, Zimbabwe. The study paid particular attention to those aspects that may influence the general performance of female-based food vending enterprises, as well as motivations for starting up the food vending businesses. Some of the factors that influenced the performance of the female-based food vendors that were recorded in the study and acted as the challenges were lack of own operating space, competition from other women food vendors, waste disposal

issues, pressure of childcare and source of finance to operate the business. The study called for regulations and policies that recognize the key role of street vendors in local and national economic development. However, this was a study on women food vendors in the formal sector and who were registered as micro and small enterprises. The present study focusses on women food vendors in the informal food economy.

Owuor (2020) noted that Nairobi's informal food vendors face challenges such as inadequate infrastructure and services around their business premises, limited access to formal loans facilities, increasing costs of operations, business competition and rivalry, and frequent harassment from the Nairobi City County authorities. These challenges not only affect the informal food vendors' operations but also weakens the efficiency and optimal functioning of the urban food system. The present study continues with the discourse but as an in-depth analysis of women street food vendors in an informal settlement.

In a study focusing on women entrepreneurs in Mukuru Kwa Njenga informal settlement in Nairobi, Kenya, Njagi *et al*. (2019) found that women in the informal sector who engage in small-scale businesses by the roadside experience a number of challenges. These are lack of business financing, domestic violence, lack of access to affordable health care, corruption by law enforcement officers and community cartels, insecurity, and poor working environment, especially drainage and sanitation. The study noted that women entrepreneurs in the informal sector are likely not to grow their businesses because they do not have assets that can be liquidated as capital, they lack access to business financing, and that the daily profits they get are utilized in other child-caring or home-caring responsibilities that they have. However, this was a general study all women entrepreneurs in Mukuru Kwa Njenga. The present study focuses on women street food vendors in the informal sector but also in an informal settlement context.

2.7 Effect of Covid-19 on Street Food Vending Enterprises

To curb the spread of Covid-19, containment measures were enforced by governments in almost all countries of the world with the aim of restricting movement of people and limiting physical contacts (UN-Habitat, 2023). Some of the measures that were imposed to mitigate the spread of coronavirus included curfews and lockdowns, as well as adoption of preventive and safety measures of wearing face masks, handwashing and social and physical distancing. These measures had a negative effect, particularly on the operation of food vending businesses, as

well as on the lives and livelihoods of those operating the food vending enterprises. The restriction of movement, especially lockdowns and curfews, inhibited the proper functioning of food supply chains and reduced sales significantly (Barman *et al.*, 2021).

In the informal sector, street vendors were among the most vulnerable and affected groups of people for they operate on the streets and solely depend on their daily sales for income. It was even harder for food vendors to operate their businesses because they were required to follow strict hygiene guidelines because of handling food and frequent contacts with their customers (Sai *et al.*, 2023). Street food vendors therefore had an option of either complying with the containment measures to stay in business or closing their businesses temporarily or even permanently for some. Furthermore, as compared to men, women street food vendors were the most affected during the pandemic because of their vulnerability (Guha, *et al.*, 2021).

A study by Thanh and Duong (2022) in urban Vietnam emphasized that Covid-19 had severe effects on women street vendors in terms of reduction in their business activities and income. They noted that women street vendors were most vulnerable to the negative impacts of Covid-19 because they not only lacked resources and skills to overcome such shocks, but also lacked coping strategies to sustain their business enterprises. The study noted that the business enterprises of immigrant women were affected more compared to the impact on local vendors. They highlighted the need for enhanced social policies to cushion the vulnerable groups such as women vendors. The present study will continue with this discourse but from the perspective of female vendors in informal settlements.

A similar study of women street food vendors in Bengaluru in India by Guha *et al.* (2021) noted that Covid-19 had a double burden on the women in that they had to take care of both their deteriorating businesses and economically impoverished families at the same time. This, according to the study, added on to the women street food vendors precarity because they had to struggle with many economic and social responsibilities against their dwindling income and savings. However, the study was a qualitative survey and narratives of 23 women street food vendors in Bengaluru.

Another study in India by Rajkhowa and Kornher (2022) reported that during Covid-19 period, retail and wholesale prices increased immensely for non-perishable food items whereas there was a reduction in the retail and wholesale prices of perishable food items in most markets.

The food vendors increased prices of non-perishable items due to the fact that there was a higher demand amongst consumers for food items with longer shelf life. This was also attributed to hoarding and panic buying. On the other hand, due to the perishable nature of certain foods such as vegetables and fruits, most food vendors reduced the prices of these items in order to make quick sales. However, the focus of this study was formal retail and wholesale urban markets in India.

In Latin America, Marchiori and Assis (2021) revealed that despite the fact that some countries in the region initiated pandemic containment measures that were favourable to the operations of street vendors and market traders, they were limited and failed to produce the intended results. For example, the designated food retailing points such as markets and supermarkets excluded the street vendors. Moreover, in some instances, the cost implications of adhering to health and safety measures were prohibitive to the street vendors. However, this was a broader study in Latin America that relied more on secondary data from various sources.

In another study focusing on five cities in Africa (Yaoundé in Cameroon, Nairobi in Kenya, Minna in Nigeria, Dakar in Senegal and Harare in Zimbabwe), UN-Habitat (2021) found that informal food vendors who relied on informal food supply chains and public transport to get their food supplies from the surrounding rural areas and market centres were most affected in terms of their food supply and demand dynamics. However, the study analyzed the impact of Covid-19 containment measures within a broader context of urban-rural linkages and food flows between rural-based and urban-based markets.

In South Africa, Wegerif (2023) found that lockdown and movement restrictions greatly impacted street food vendors in three provinces of Gauteng, KwaZulu Natal and Limpopo. Despite the critical situation, street food vendors in these provinces did not shut down their businesses during the pandemic period. Instead, they adopted coping strategies for the success of their businesses, including pricing strategies, stocking strategies and locational strategies. The food vendors sold their items at substantially lower prices than those in supermarkets and even offered delivery and door to door services so as to attract more customers. This study did not specifically focus on women and/or urban informal settlements.

A comparative analysis of street food vendors in Zimbabwe and Kenya undertaken by Kiaka *et al.* (2021) established that Covid-19 restriction measures had adverse effects on the vendors

businesses. In both cities, business operation hours of the food vendors were drastically reduced because of curfew measures. This resulted in low sales and reduced income. The same was observed in another study in South Africa by Donga and Chimucheka (2024). Using an exploratory qualitative approach, they found that women-led food selling enterprises in East London City of the Eastern Cape Province faced a number of challenges during the Covid-19 pandemic period. The major challenges were largely reduced customers, demand, income and lack of government support. Besides being a comparative study, the study was carried out on both male and female vendors.

In Kenya, Kunyanga *et al*. (2023) noted that the Covid-19 outbreak impacted the businesses of food vendors in Nairobi's Kangemi, Kawangware and Wakulima markets with regards to supply chain disruptions, types of foods mostly sold, and changes in commodity prices. The study revealed that most of the vendors had limited access to their regular food supplies (from rural areas) and food suppliers due to the travel restrictions and lockdown. In terms of changes in commodity prices, there was an increase in the prices of certain food staples such as rice, maize and beans and a decrease in other foods such as cabbages and tomatoes. The price changes are argued to have been attributed to the food supply shortages that were as a result of disruptions in transportation of food commodities and panic buying behavior of consumers.

Afifu *et al.* (2021) carried out a study to understand how women in the informal sector in Kenya were affected by the Covid-19 prevention measures. Evidence presented in their report shows how women operating in informal businesses during this time suffered with financial struggles and reduced income. The uptake of mobile phone-based digital loans by women was also reported to have increased with others relying on their informal savings groups (*chama*) for loans in order to support themselves and their families. Despite being a gendered analysis on women workers in the urban informal economy, the study was a Kenya-wide policy analysis based on secondary data.

Using a cross-sectional study design, Joshi *et al*. (2022) found that during Covid-19 pandemic, households in Mukuru and Viwandani informal settlements in Nairobi, Kenya, experienced losses in employment and businesses, reduced access to water, and lower levels of hygiene. These were associated with lockdown-induced employment and business disruptions, affordability of water, and inability to adhere to the pandemic-related hygiene measures, respectively. However, the study's unit of analysis was households and not specific to women

street food vendors. Another study which was conducted on South Sudanese refugees in Nairobi, Kenya, found out that some of the pre-existing programs which were supporting women-led enterprises were temporarily stopped during the pandemic period because of restrictions in mobility and public health measures that were put in place (Enns *et al.*, 2024).

2.8 Research Gaps

The following four key research gaps emanate from the literature review:

1. Most studies on informal food vendors have focused on city-wide surveys of both male - female food vendors (e.g. Owuor, 2020; Tawodzera, 2019); on smaller cities (e.g. Singh, 2020); on women food vendors in the formal economy (e.g. Nyoni, 2017); on women street food vendors in Central Business Districts (e.g. Ramasamy, 2018); and on women entrepreneurs in general (e.g. Njagi *et al*., 2019). As such, this study intends to contribute to this debate with a particular emphasis on, and in-depth analysis of, women street food vendors operating in urban informal settlements.
2. Existing studies have revealed that street food vendors play an important role in the informal food economy (e.g. Doibale *et al.*, 2019) and that women have a higher likelihood of engaging in informal street food vending enterprises than their male counterparts (e.g. Chege et al. 2021). There is, therefore, need to interrogate and understand the gendered dimensions of street food vending.
3. Little attention has been given to women street food vendors operating in the urban informal settlements (Owuor, 2020). Despite being vulnerable to their social and economic environments, women street food vendors in the low-income urban settlements play an important role in the informal food supply chain and household food security.
4. Whereas Covid-19 containment measures disrupted food supply chains, little attention has been given to its effects on the informal food sector, and specifically to women street food vendors in urban informal settlements. Existing studies, for example, Thanh and Duong (2022) and Guha *et al.* (2021), have not focused on urban informal settlements.

2.9 Theoretical Framework

This study applies the livelihoods framework as its theoretical framework. Generally, the livelihoods framework was originally developed by Chambers and Conway (1991) and later widely used by a number of international organizations (DFiD 2002). Although originally applied to the rural areas, the livelihoods framework is being applied in urban setups to develop an in-depth understanding of sustainable urban livelihoods (Owuor, 2006; Rakodi and Llyods-

Jones, 2002; Farrington, *et al*., 2002). According to this framework, livelihood strategies and levels of well-being depend on assets and resources that are available to the individuals. In as much as livelihood strategies depend on the availability of assets, access to these assets is also an important factor because it depends on one's ability to not only find, but also make use of, the livelihood opportunity in order to attain a sustainable livelihood.

The livelihood approach describes the assets or forms of capital that dictates and influences an individual's pursuit of livelihood. These assets, in relation to women street food vendors operating in the urban informal settlements, are:

1) Social capital: These are networks from which opportunities are drawn collectively in pursuit of livelihoods. Social capital will definitely determine access to resources, goods and information that are vital in attainment of a sustainable livelihood. Women street food vendors rely on their social network to ensure trustworthy relations with their suppliers and customers.
2) Financial capital: Availability and access to monetary income is very essential for the attainment of sustainable livelihoods, especially among the urban poor populations and households. Women street food vendors enter into the food vending enterprises to source for income in order to feed and provide for their families. They also need financial capital to enter into the food vending businesses, as well capital flow to keep their businesses in operation.
3) Physical capital: This asset is important in terms of access to urban space for business and other physical facilities. Space is very important for street food vendors and this is why some opt to operate as mobile vendors while others choose to operate on temporary structures. However, this space of operation is often contested by the city authorities who evict the street food vendors from their locations of operation. In particular, women street food vendors are more vulnerable to harassment and evictions by city authorities.
4) Human capital: This entirely involves knowledge, skills, creativity and experience in running a business in order to attain a livelihood. Women street food vendors are likely to have relatively low levels of education, skills and experience, compared to their male counterparts.

The livelihoods framework is relevant to this study because street food vending is a livelihood strategy among urban dwellers, both male and female. It is a source of employment and income

to a number of urban households, especially those living in low-income urban neigbourhoods. As such, street food vending improves the urban household's income and wellbeing. However, local, regional and national factors all together have an influence on living conditions of individuals and that individuals have to deal with these stresses and shocks in order to offer themselves sustainable livelihood opportunities. The framework has been previously used in urban studies by Mushi (2023) and Tillerman (2012) in their studies of women vendors in Dar es Salaam, Tanzania, respectively; and by Owuor (2006) in a study of multi-spatial livelihoods in Nakuru, Kenya.

2.10 The Conceptual Framework

According to the conceptual framework (Figure 2.1), urban growth in sub-Saharan African countries has led to a number of challenges, including increased urban poverty and persistent growth of informal settlements. As such, city dwellers tend to resort to supplementary income-generating activities and strategies for survival and in their efforts to maneuver through the changes in their economic environments and circumstances. The choice of the livelihood or survival strategy adopted by the urban dwellers and households will depend on their access to various livelihood assets and capitals. These are social, financial, physical and human capital. As such, entry into informal food vending enterprises by women, including success in the business, are likely to be dictated by their social networks (social capital), access to finance and the incomes they make (financial capital), access to an urban space and locational characteristics (physical capital), and their knowledge, skills and experience (human capital).

Access to various combinations of these capitals will definitely affect the women street food vendors' enterprise characteristics and strategies, as well as enterprise opportunities and challenges. The enterprise characteristics include year of entry into food vending business and source of start-up capital, type and premises of food vending business, and sources of stock and mode of transport, while the enterprise strategies include locational and operational strategies, and pricing and business stocking strategies. On the other hand, women street food vendors have opportunities for economic survival, ease of entry into business, employment, income and savings, and business fallback and growth opportunities. However, there are bound to be business operation challenges, security and policing challenges, and low levels of organizational structure and access to loans and training opportunities.

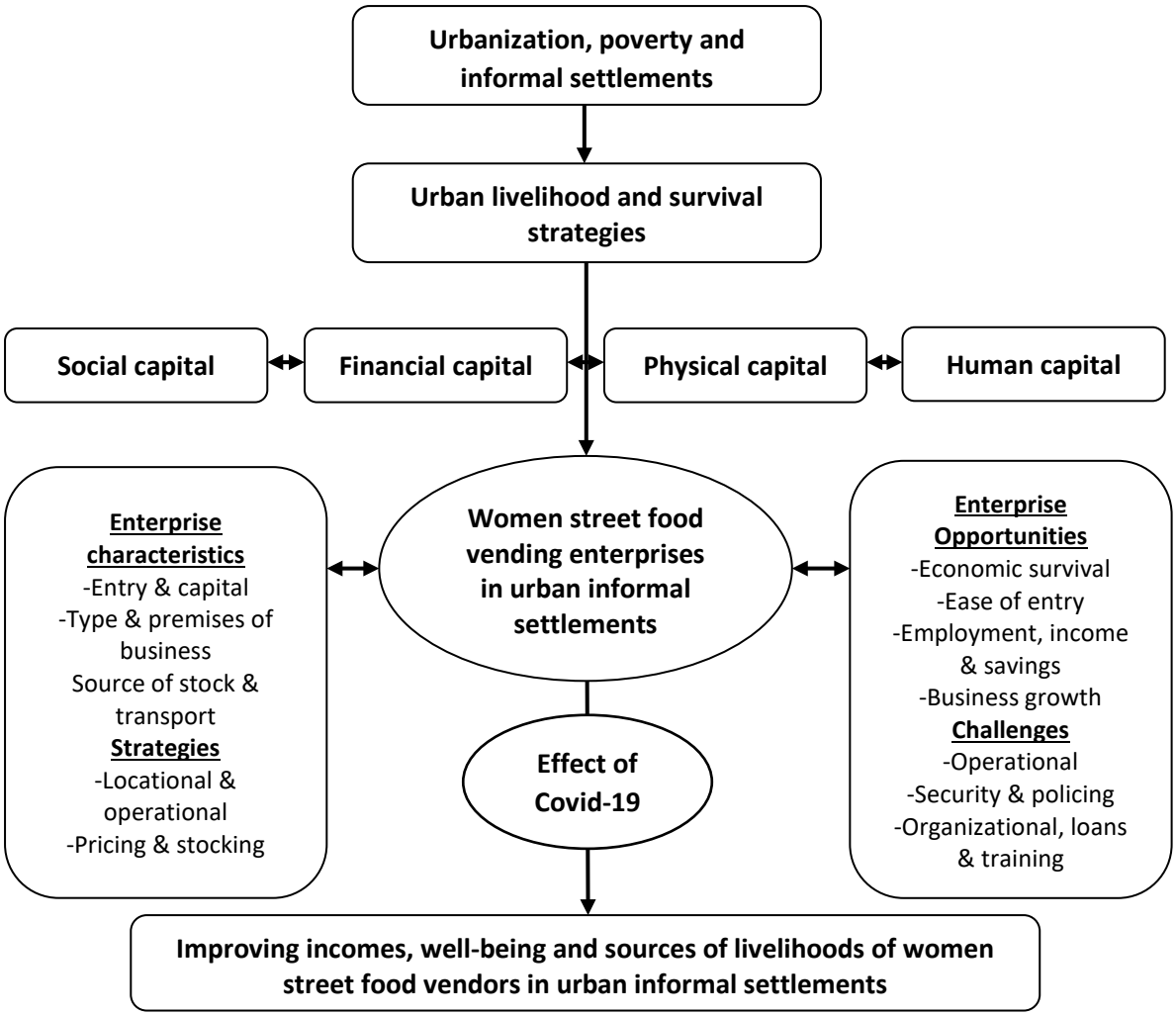

Figure 2.1: The Conceptual Framework
Source: Adopted from DFID Sustainable Livelihoods Framework (DFiD 2002)

Notably, the performance of women-led street food vending enterprises may also be affected by external factors such as Covid-19 pandemic. This study considers the effect of Covid-19 on women food vending business enterprises in terms of effect on business costs and prices of goods; customer base, business hours and sales and profit; business stock; and coping strategies. In this context, a livelihood is sustained when it can cope with and recover from such stresses and shocks. In conclusion, the enterprise opportunities need to be nurtured and enhanced, while the enterprise challenges need to be addressed and reduced in order to achieve sustainable livelihoods, as well as access to affordable food in cities. This will not only enhance food security (availability and accessibility) in urban informal settlements, but will also improve incomes, well-being and livelihoods of women street food vendors.

CHAPTER 3: STUDY AREA AND METHODOLOGY

3.1 Introduction

This chapter discusses the relevant aspects of the study area and methodology. The study area, Mukuru Kwa Reuben informal settlement, is presented within the context of Nairobi City County, and where data is available, the specific aspects of Mukuru Kwa Reuben are emphasized. On the other hand, the methodology section expounds on the study design; sources and methods of data collection; sample size and sampling procedure; key study variables and indicators; methods of data analysis; and ethical considerations.

3.2 Study Area

3.2.1 Locational Context

Mukuru Kwa Reuben (the study area), Mukuru Kwa Njenga and Viwandani (Map 3.1) are part of the larger Mukuru informal settlements located near Nairobi's industrial area, about seven kilometres south-east of the Central Business District (CBD). Besides being the capital city of Kenya, Nairobi city is one of the 47 counties in the country. Nairobi started as a railway depot in 1899 and later grew to a Township (1900), the capital of Kenya (1905), a Municipality (1919) and a city in 1950 (Owuor and Mbatia, 2012). Nairobi's population has increased over time and has experienced the growth of a number of informal settlements, Mukuru Kwa Reuben being one of them.

Mukuru informal settlement evolved with time when, after independence, migrants to the city started building make-shift homes near the factories and industries in the industrial area that they sought wage employment and continue to do so to-date. As such, Mukuru, which means "valley", "quarry" or "dumpsite", is among the informal settlements in Nairobi besides Kibera, Mathare and Korogocho. The area was initially a stone quarry but the abandoned quarry was eventually turned into a dumpsite before people started using the area as a settlement with temporary structures. Specifically, Mukuru Kwa Reuben is located in Embakasi sub-County of Nairobi City County. Mukuru Kwa Reuben is divided into several villages. These are Gatoto, Mombasa, Bins, Feed the Children, Simba Cool, Rurie, Falcon, Gateway, Wesinya, Railway, Diamond and Kosovo (Figure 3.2). Notably, the villages names embody the history and experience of the Mukuru residents over time (SDI *et al*., 2017).

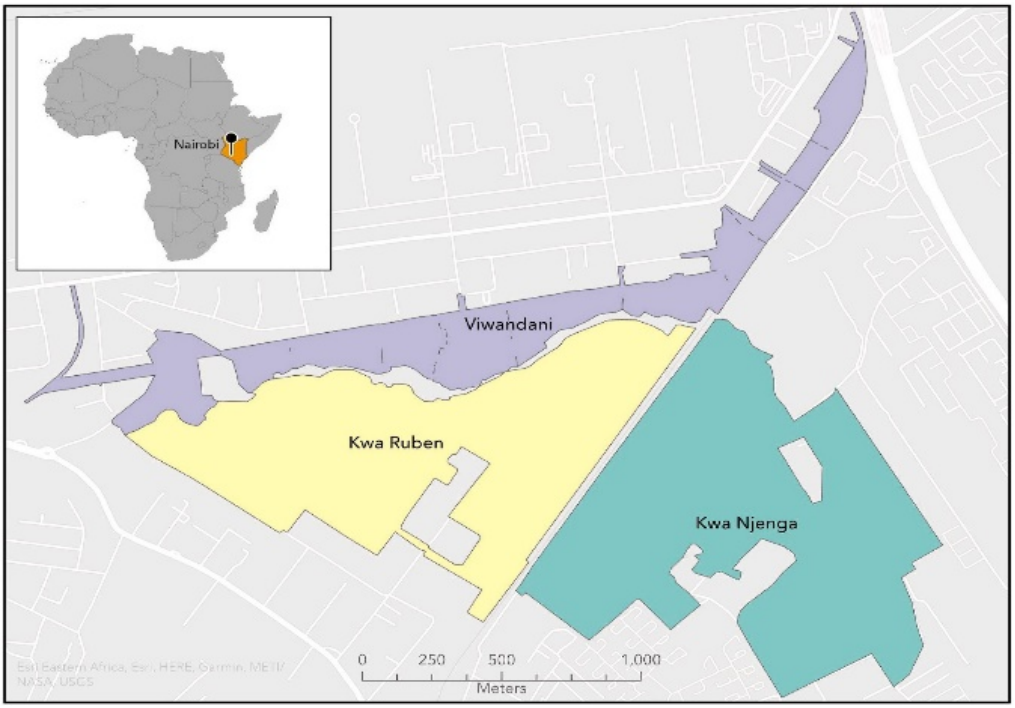

Figure 3.1: Location of Mukuru Kwa Reuben
Source: Joshi *et al*. (2022)

Figure 3.2: Villages in Mukuru Kwa Reuben
Source: https://www.muungano.net/

3.2.2 Physical Characteristics

Nairobi is a terrestrial habitat with a wide-range of biodiversity and ecosystems. It is dominated by high but rugged landscape to the west and a generally low and flat surface to the east where Mukuru Kwa Reuben is located. The climate is cool and wet with annual average temperature

of 13^0 centigrade and annual average rainfall of about 800mm, while the soils are largely black cotton and red soils (Nairobi City County, 2018). The major land use type in Mukuru Kwa Reuben is residential, although it is surrounded by a number of industries. Other main physical features in Nairobi are Nairobi National Park; Karura, Ngong and Arboretum forests; rivers Nairobi, Ngong and Kabuthi; and Nairobi and Jamhuri dams. River Ngong cuts across Mukuru Kwa Reuben and more often is the cause of flooding in the area during heavy rains.

3.2.3 Population Dynamics

Nairobi city leads the urban hierarchy in Kenya with 4.3 million people, representing about 30 percent of the total urban population in the country, with an urban growth rate of 3.5 percent and a population density of about 6,000 people per square kilometres (KNBS, 2022). Nairobi has a total of 1.5 million households with an average household size of 2.9 members. The female population (2,204,376) in Nairobi is slightly higher than the male population (2,192,452). Mukuru Kwa Reuben administrative ward has a total population of 65,691 people comprising 36,402 males and 29,288 females, with 26,699 households (KNBS, 2019). However, SDI *et al*. (2017) estimated that Mukuru Kwa Reuben has a population of 97,833 people with 32,611 households. SDI also estimated that the settlement covers an area of 236 acres with a population density of 425 persons per square kilometres.

Nairobi has experienced dramatic population growth both naturally and through migration flows from the rural areas (i.e. rural-to-urban migration). Migration flows are largely from a youthful population seeking job opportunities in the city (Owuor and Mbatia, 2012). It is this rapid inflow of migrants from the rural areas to Nairobi that limits work opportunities in the city and most of the migrants end up being unemployed. It is then that the migrants choose to operate informal businesses, which require minimal startup capital, as a source of employment. However, according to Kinyanjui (2014), women migrants engage in informal sector enterprises for other reasons, including the desire to be financially stable and for various family reasons like supporting the husband, divorce issues and supporting their children's educational expenses.

3.2.4 Economic Activities and Employment

The major economic activities in Nairobi city are retail and wholesale trade, hotel and restaurants, manufacturing industries, motor vehicle assembly, metal works (*jua kali*) and engineering, tourism, transport and communications, horticulture, construction, financial

services, real estate, and business services. Most of these economic activities are in formal and informal sectors. However, self-employment is largely in the informal sector dominated by small-scale activities such as street food vending. In terms of unemployment, about 15 percent of the people in the labour force bracket are unemployed, with about 20 percent of the females being unemployed, compared to about 12 percent for males (Nairobi City County, 2018).

Most of the residents in Mukuru Kwa Reuben seek employment as casual labourers in the nearby industries that surround the settlement, while others are engaged in various informal sector activities, including small-scale businesses and street food vending. Some of the residents, especially women, work in the up-coming middle-class residential neighbourhoods that are near the settlement. According to SDI *et al*. (2017), the robust informal economy in Mukuru informal settlement generates about Kenya Shillings seven billion annually that supports both the local and wider Nairobi economy. However, the informal jobs are often low paying with job insecurity.

3.2.5 Socio-Economic and Environmental Challenges

Like other informal settlements in Nairobi, Mukuru Kwa Reuben experiences inadequate access to basic public services, infrastructure, facilities and amenities (SDI *et al*., 2017). Notably, lack of adequate provision of water and sanitation, access roads, public hospitals and schools, and poor housing and environmental conditions, among others. In addition, the settlement suffers from such challenges as pollution from the adjacent industries, flooding from River Ngong that traverses the settlement, crime and prostitution as an alternative but illegal source of income, drug and alcohol abuse, and frequent fires.

3.2.6 Food Markets and Food Security

Majority of households in Nairobi have limited opportunities for own food production in the city and tend to rely, almost entirely, on purchasing food from formal and informal markets, as well as from supermarkets (Owuor *et al.*, 2017). The main wholesale and retail markets in Nairobi include Wakulima and Muthurwa. These markets are key suppliers of food products in Nairobi (Owuor, 2020). On the other hand, informal settlements in Nairobi are prone to cases of household food insecurity, especially among children (Owuor *et al.*, 2024). As such, majority of those living in the informal settlements are eating inadequate quantities and low-quality diets. They are also susceptible to diet-related non-communicable diseases.

3.3 Methodology

3.3.1 Study Design

This study adopted the cross-sectional design that analyzes the situation of the population under study at the time of data collection based on a random sample. The use of cross-sectional design enables a researcher to collect data at a single point in time from multiple variables. The study is a component of a wider project on Migration and Food Security (MiFOOD) in selected cities of the global south, Nairobi included. Whereas the Nairobi City MiFOOD Project examines both male and female informal food vendors in four informal settlements (Mukuru Kwa Reuben, Mukuru Kwa Njenga, Viwandani and Mathare), this study is an assessment of enterprise dynamics of women street food vendors in Mukuru Kwa Reuben. As such, the study's target population and unit of analysis is women street food vendors in Mukuru Kwa Reuben informal settlement.

3.3.2 Sources and Methods of Data Collection

The study utilized both primary and secondary data. Primary data was generated from a questionnaire-based survey, while secondary data was generated from review of relevant literature from journal articles, books, book chapters, institutional and government reports, and student theses and project papers. This was complimented by field observations that were recorded on photographs. The questionnaire, extracted from the Nairobi City MiFOOD Project, focused on the thematic areas of the study, namely, socio-economic characteristics of the women street food vendors, their enterprise characteristics and strategies, livelihood opportunities and challenges of the women-led food vending enterprises, and effect of Covid-19 on their food vending enterprises. The questionnaire-based data was collected using DataCollect App.

3.3.3 Sample Size and Sampling Procedure

Since there is no data on the number of women street food vendors in Mukuru Kwa Reuben, the study targeted a sample size of 172 female street food vendors based on the scope of the Nairobi City MiFOOD Project as well as for statistical robustness during data analysis. For a wider spatial coverage of Mukuru Kwa Reuben informal settlement, the study adopted stratified random sampling. Stratification was based on the 12 villages of Mukuru Kwa Reuben informal settlement, namely, Gatoto, Mombasa, Bins, Feed the Children, Simba Cool, Rurie, Falcon, Gateway, Wesinya, Railway, Diamond and Kosovo. Besides a wider spatial coverage, stratified random sampling captures key study population characteristics in the sample.

In each stratum (villages) a random sample of women street food vendors were systematically selected based on their concentration on a certain street or road (Table 3.1). For example, in every identified street or road with a concentration of street food vendors, every third female street food vendor was selected for the study with a random starting point and following the linear pattern of the street or road where the enterprises are located. This was coordinated by the researcher with the help of a community supervisor who understood the area. The low coverage of Mukuru Kwa Reuben villages of Simba Cool and Kosovo was due to security situation because data collection was carried out at a time when the government ordered demolition of houses along riparian areas and river banks of Mukuru informal settlements.

Table 3.1: Sampled Women Street Food Vendors by Village

Village	Sampled women street food vendors	Village	Sampled women street food vendors
Gatoto	16	Falcon	24
Mombasa	7	Gateway	24
Bins	9	Wesinya	7
Feed the Children	15	Railway	27
Simba Cool	2	Diamond	15
Rurie	25	Kosovo	1

3.3.4 Key Study Variables and Indicators

The key study variables and their indicators are presented in Table 3.2. The key study variables are socio-economic characteristics of vendors, enterprise characteristics, enterprise strategies, enterprise opportunities, enterprise challenges, and effect of Covid-19 containment measures.

Table 3.2: Key Study Variables and Indicators

Key variable	Indicators
Socio-economic characteristics of vendors	● Age, marital status and level of education ● Migration profile ● Engagement in other economic activities
Enterprise characteristics	● Year of entry into business and source of start-up capital ● Type of food sold ● Food vending premises ● Sources of stock and mode of transport
Enterprise strategies	● Locational and operational strategies ● Pricing and business stocking strategies
Enterprise opportunities	● Opportunities for economic survival ● Ease of entry opportunities ● Employment creation opportunities ● Fallback business opportunities

	● Business growth opportunities
Enterprise challenges	● Business operation challenges ● Security and policing challenges ● Low levels of organizational structure and access to loans and training opportunities
Effect of Covid-19 containment measures	● Effect on business costs and prices of goods ● Effect on customer base, business hours, sales and profit ● Effect on business stock ● Overall effect and extent of recovery ● Coping strategies
Year of starting business	● "Before 2010"; "2010-2019" and "2020-2024"
Importance of enterprise	● "Important" and "Very important"
Overall effect of Covid-19 containment measures	● "A minor but manageable"; "A major but difficult to manage"; and "A severe effect and near risk of closure"
Extent of enterprise recovery	● "To a small extent"; "To a moderate extent"; and "To a large extent"

3.3.5 Methods of Data Analysis

Data from the questionnaire-based survey was analyzed by use of descriptive statistics and the chi-square test for hypothesis testing. Frequency distribution was used to determine the distribution of observations of the study variables. Frequency distributions, showing the frequency of occurrences of possible outcomes in the sample, were presented using tables and graphs. On the other hand, cross tabulations were done to determine the relationships between variables.

3.3.6 Ethical Consideration

First, the study was done under the National Commission for Science, Technology and Innovation (NACOSTI) License No. NACOSTI/P/24/34510. The License was applied by one of the MiFOOD Network Project co-investigators – on behalf of the Nairobi study. Second, the study sought informed consent of the respondents before commencing the interviews. Thirdly, the researcher guaranteed the respondents of confidentiality with any information and data generated from them.

CHAPTER 4: RESULTS AND DISCUSSION

4.1 Introduction

Based on the study objectives, this chapter provides the analysis of data, results and discussions. First, socio-economic characteristics of the female food vendors are presented in respect of age category, marital status, and education level; migration profile; and engagement in other economic activities. Second, enterprise characteristics and strategies are presented in terms of year of entry into food vending business and source of start-up capital; type and premises of food vending business; sources of stock and mode of transport; locational and operational strategies; and pricing and business stocking strategies. Third, livelihood opportunities and challenges are presented in terms of opportunities for economic survival; ease of entry opportunities; employment creation opportunities; fallback business opportunities; business growth opportunities; business operation challenges; security and policing challenges; and low levels of organizational structure and access to loans and training opportunities. Lastly, the effect of Covid-19 on food vending enterprises is presented in terms of effect on business costs and prices of goods; effect on customer base, business hours and sales and profit; effect on business stock; overall effect and extent of recovery; and coping strategies from effects of the containment measures.

4.2 Socio-Economic Characteristics of Women Street Food Vendors

4.2.1 Age, Marital Status and Education Level of Vendor

Results in Table 4.1 reveals that the youthful female population dominate street food vending business as most of the vendors (72.6%) were aged between 18-39 years. This aligns approximately well with the youth age group in Kenya of between 18 and 34 years old. The youth, who are mostly affected by unemployment are likely to resort to informal sector employment.

In terms of their marital status, about two-thirds (64.3%) of the vendors were married. Partners in marriage have the responsibility of providing for the family, thus the core motivation for female partners to contribute towards family income, food and livelihood sources. However, a number of women who were never married, those separated or divorced, and those widowed also ventured into street food vending business, for the same purpose of earning and income and fending for their families.

Table 4.1: Age Category, Marital Status and Education Level of Vendor

Age category	**Frequency (n)**	**Percentage (%)**
18-28	47	27.3
29-39	78	45.3
40-50	35	20.3
51+	12	7.0
Total	**172**	**100.0**
Marital status	**Frequency (n)**	**Percentage (%)**
Never married	34	19.9
Married	110	64.3
Separated/divorced	15	8.8
Widowed	12	7.0
Total	**171**	**100.0**
Education level	**Frequency (n)**	**Percentage (%)**
No formal education	3	1.7
Primary level	44	25.6
Secondary level	105	61.0
Post-secondary college	19	11.0
University level	1	0.6
Total	**172**	**100.0**

Source: Fieldwork (2024)

Table 4.1 also shows that more than half (61.1%) of the vendors had attained some secondary level of education. Another 11.6 percent had attended post-secondary school college and university. As such, street food vending business attracts people with at least secondary and post-secondary school education and who may be incapable of finding employment in the formal sector. Notably, only three vendors had no formal schooling, while about one-quarter (25.6%) had some primary education. This strengthens the notion that majority of those who have completed school cannot get jobs and are forced into the informal sector.

4.2.2 Migration Profile of Vendor

Twenty-two (12.8%) of the sampled women street food vendors in Mukuru Kwa Reuben indicated that they were born in Nairobi, while the rest (87.2%) were born elsewhere in Kenya (Figure 4.1). As such, the large majority of the vendors (87.2%) migrated to Nairobi from other counties of Kenya. This implies that more women are migrating to the urban areas where they are faced with unemployment and livelihood challenges. Half of the vendors (50.6%) who were *not* born in Nairobi migrated to the city between the years 2010 and 2019, while 8.2 percent can be categorized as recent migrants in Nairobi (Figure 4.1). This indicates the significance of food vending business as a source of employment and income to recent migrants in cities. As such, lack of employment and job searching were considered to be the main reasons of

migrating to Nairobi. Nearly three-quarters (74.7%) of the migrant women street food vendors migrated to Nairobi in search for work, job or employment (Figure 4.1). Additionally, a noticeable group either came with their family to Nairobi (18.7%) or followed their spouse/family in Nairobi (20.7%).

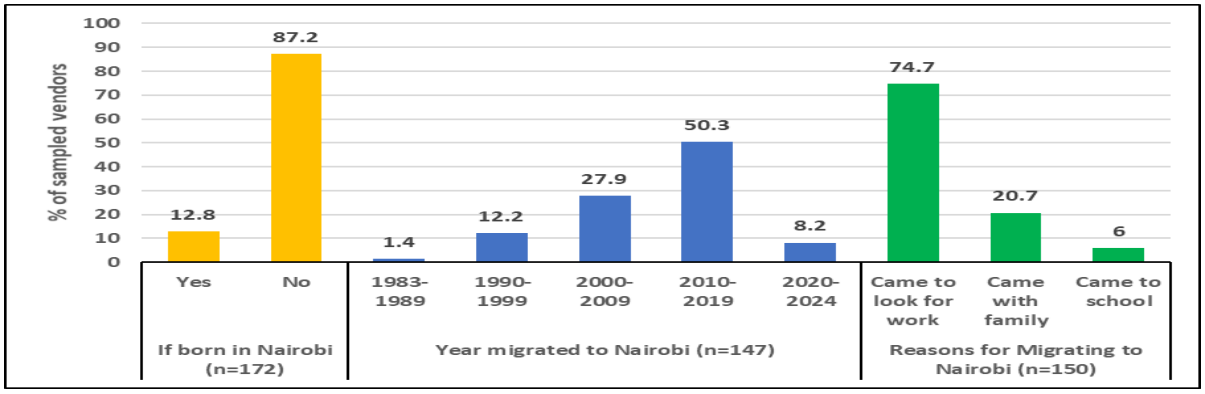

Figure 4.1: Migration Profile of Vendor
Source: Fieldwork (2024)

4.2.3 Engagement in Other Economic Activities

To understand their employment history, the sampled women street food vendors in Mukuru Kwa Reuben were asked whether they had ever been employed or engaged in any other employment or business before starting their food vending business. Less than half of them (47%) were engaged in some form of employment or business before entering into the current food vending business (Figure 4.2). As such, more than half (52.9%) of the vendors took to food vending as their first income-generating activity. Majority of those in some form of employment or business, before their current food vending business, were largely engaged in the informal sector (Figure 4.2), either in informal sector employment (59.2%) or in own informal sector business, but in a different activity (13.6%).

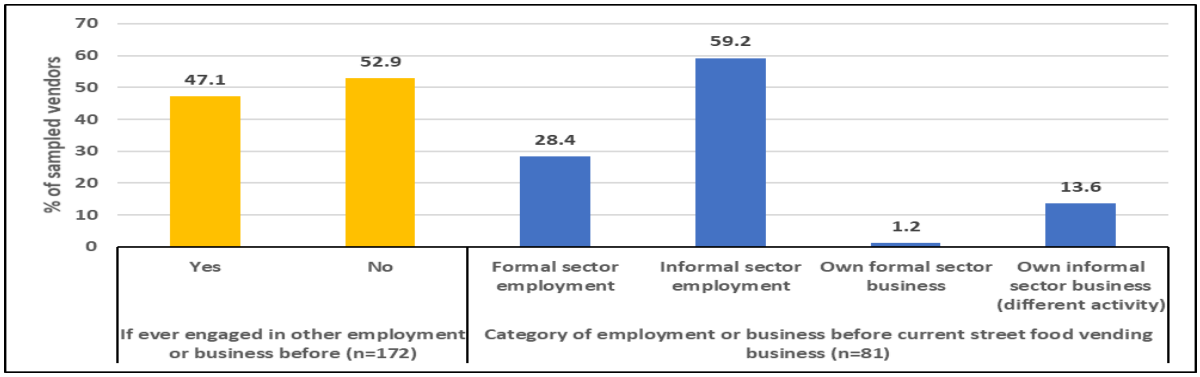

Figure 4.2: Employment or Business Before Current Street Food Vending Business
Source: Fieldwork (2024)

In addition, the vendors were asked whether they are currently engaged in any other business or employment, besides the food vending business. Majority of the vendors (90.7%) do not engage in any other business or employment (Figure 4.3). This implies that food vending business is the main economic activity and livelihood source for most of the women street food vendors. Only 16 of them (9.3%) are engaged in other businesses or employment, the key one being having another informal sector business but in a different activity (10 vendors) (Figure 4.3). The rest are engaged in *formal* sector (4 vendors) or in *informal* sector (3 vendors) employment or are engaged in another *informal* business of the same activity (1 vendor).

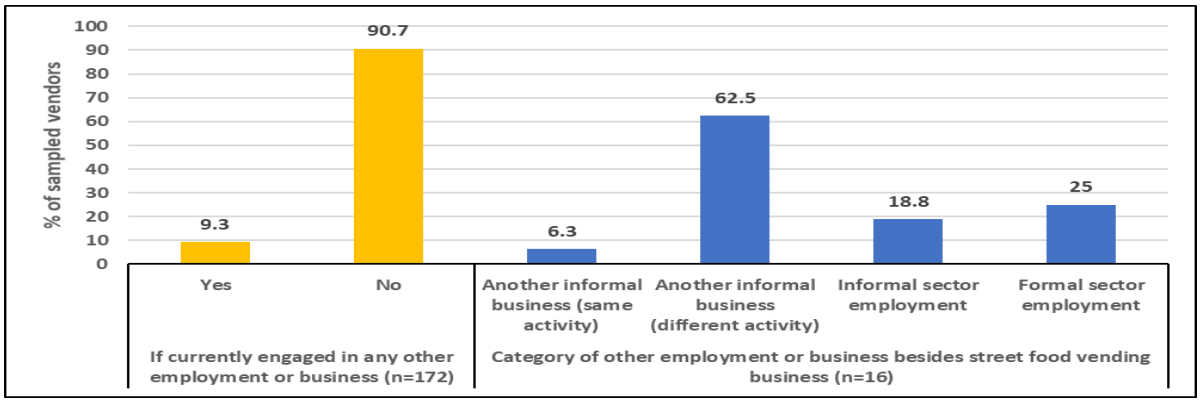

Figure 4.3: Engagement in Another Employment or Business
Source: Fieldwork (2024)

4.3 Enterprise Characteristics and Strategies of Women Street Food Vendors

4.3.1 Year of Entry into Food Vending Business and Source of Start-Up Capital

Table 4.2 reveals that very few women food vendors (7.6%) have been in the same business for over 15 years. Eleven of them have operated from between 2000 and 2009, while only two had their businesses operating from between 1987 and 1992. As such, most of the vendors ventured into street food vending business recently. Most of them started their food vending business between the years 2010 and 2019 (47.7%), and between 2020 and 2024 (44.7%).

Table 4.2: Year of Entry into Food Vending Business

Year	Frequency (n)	Percentage (%)
Before 2010	13	7.6
2010-2019	82	47.7
2020-2024	77	44.7
Total	**172**	**100.0**

Source: Fieldwork (2024)

The vendors were further asked whether they used any start-up capital when they started their food vending business. Almost all the vendors (168 out of 172) said that they needed a business start-up capital. According to the results presented in Figure 4.4, most of the vendors relied on two sources of capital: personal savings (62.8%) and loan or help from social networks (36%). Notably, there was minimal reliance on formal financial institutions, loan from mobile phone applications, and help from governmental and non-governmental organizations.

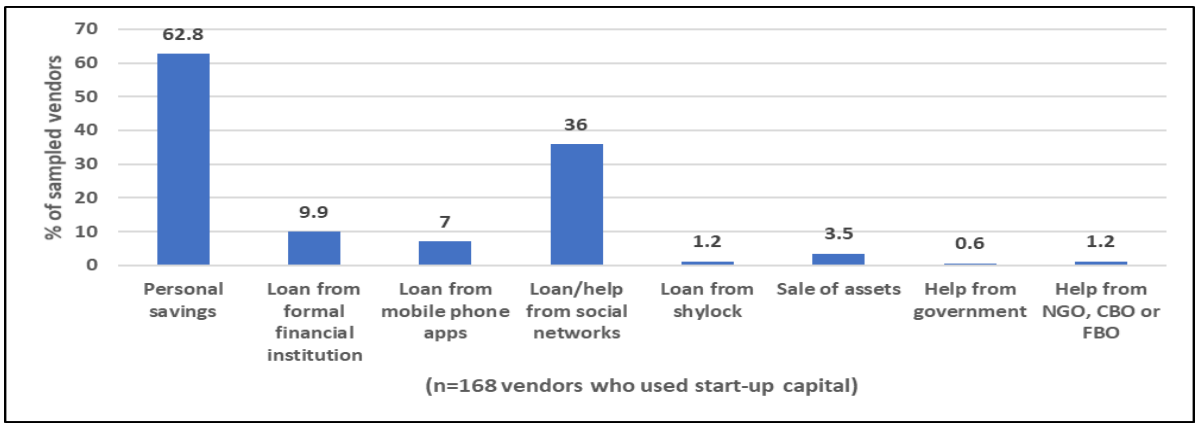

Figure 4.4: Sources of Start-Up Capital
Source: Fieldwork (2024)

4.3.2 Types of Food Sold and Food Vending Premises

The sampled women street food vendors in Mukuru Kwa Reuben sell a wide range of food products. For ease of analysis, the vendors were categorized as (1) fruit vendor; (2) green vegetables vendor; (3) dry cereals and grains vendor; (4) roots and tubers vendor; (5) fresh meat products vendor; (6) fish vendor; (7) cooked food vendor; and (8) processed food vendor. Figure 4.5 indicates that many of the vendors engage in selling fruits and/or green vegetables, which probably are readily available and are in high demand due their daily use in most households. The second most popular are roots and tubers vendors, as well as cooked food vendors. Cooked street foods are becoming a popular option in the informal settlements because of the increasing cost of household cooking energy and also because of their affordability, compared to cooking in the house.

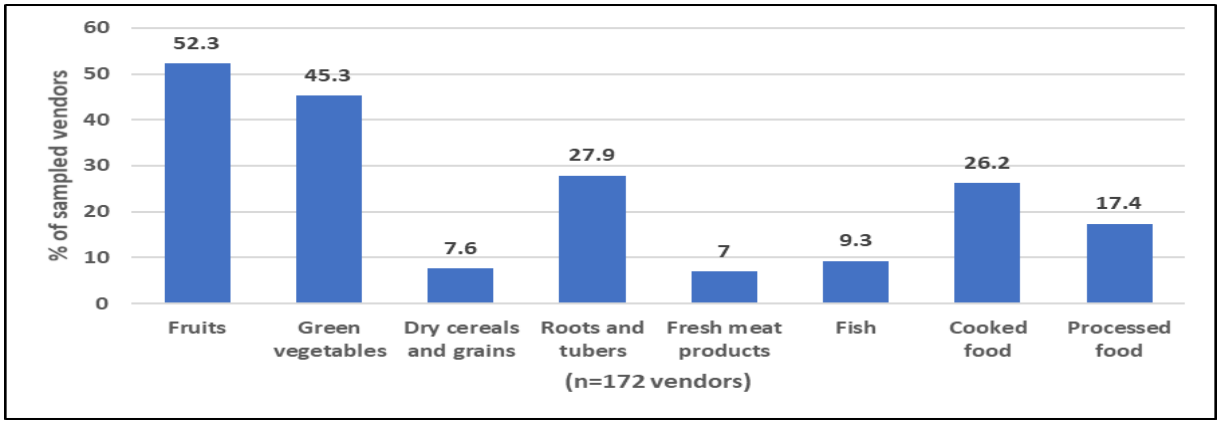

Figure 4.5: Types of Food Sold
Source: Fieldwork (2024)

Photo 1: Types of Food Sold
Source: Fieldwork (2024)

There is no doubt that street food vendors mainly operate their businesses in open public spaces, along the neighbourhood roads or streets. As such, they are exposed to and suffer a lot from harsh weather conditions such as excess heat from the sun, rain, strong winds and dust. For protection against these harsh weather conditions and for food safety, street food vendors have become innovative with the physical set ups of their enterprise premises. Most of them operate their food vending business under makeshift shades using umbrellas and improvised

tents, while some of the cooked food vendors operate from makeshift but enclosed premises (popularly known as *vibandas*).

Table 4.3 presents the results with regard to the premises of food vending business. To display their food commodities, some of the vendors used simple raised platforms, while others opted to display their food commodities on the ground. Notably, over half (61.6%) of the vendors operated their food vending business on a makeshift raised platform with a makeshift shade to protect them from the sun, rain, wind and dust. This is followed by 16.9 percent who display their food commodities on the ground, but with a makeshift shade. Moving carts and containers are also significant amongst food vendors because they give the vendor a chance to move from one place to another in order to find more customers. However, only two women street food vendors in Mukuru Kwa Reuben operated as mobile food vendors.

Table 4.3: Premises of Food Vending Business

Premise	Frequency (n)	Percentage (%)
Makeshift platform with no shade	13	7.6
Makeshift platform with makeshift shade	106	61.6
On the ground with no shade	12	7.0
On the ground with makeshift shade	29	16.9
Makeshift enclosed premises (*Kibanda*)	10	5.8
Mobile food vending container	2	1.2
Total	**172**	**100.0**

Source: Fieldwork (2024)

4.3.3 Sources of Stock and Mode of Transport

The sampled women street food vendors in Mukuru Kwa Reuben were asked about their sources of stock (food products) that they sell. In most cases, the main source is wholesale and retail markets in Nairobi for fruits vendors (81.1%), green vegetables vendors (94.9%), dry cereals and grains vendors (76.9%), roots and tubers vendors (85.4%), fresh meat products vendors (66.7%), fish vendors (56.3%), and cooked food vendors (57.8%). However, the main source of supplies for processed food vendors is from a supplier in Nairobi (60%).

Figure 4.6 shows that the main mode of transporting stock from their various sources to Mukuru Kwa Reuben is by use of public transport. Majority of the vendors (71.5%) pointed out that they transport their stock using public transport such as *matatus* (mini-buses), commuter buses and commuter trains. Other popular modes of transport are by foot, use of motor bikes (*bodaboda*) and handcart (*mkokoteni*) and through delivery by the supplier.

However, only three vendors use own transport (car, motorbike, bicycle) with another five vendors relying on hired transport (including taxi, uber).

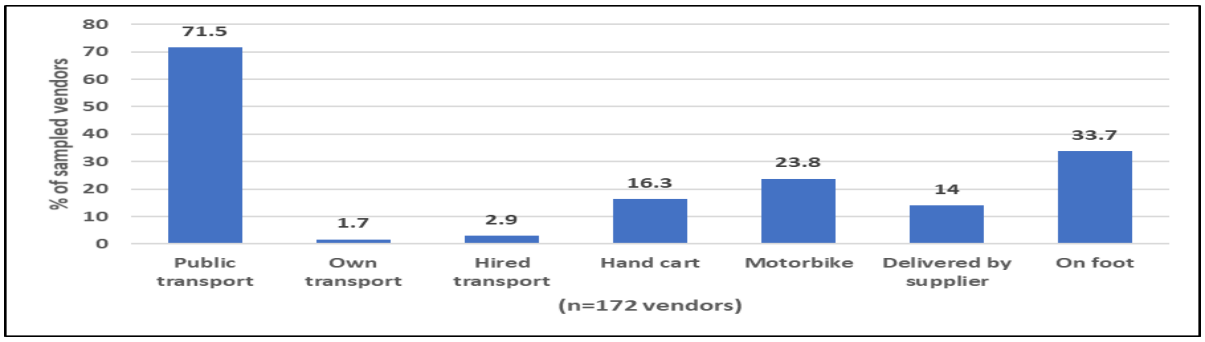

Figure 4.6: Mode of Transporting Supplies
Source: Fieldwork (2024)

4.3.4 Locational and Operational Strategies

Table 4.4 presents the locational and operational strategies adopted by the sampled women street food vendors in Mukuru Kwa Reuben. Access to customers is the most important locational strategy. Most of the vendors (80.2%) locate in spaces where customers are many, including locating close to their houses or residences (43.6%). Other notable locational strategies are access to space for operation and safety.

Table 4.4: Locational and Operational Strategies

Locational strategies	**Frequency (n)**	**Percentage (%)**
Access to customers	138	80.2
Closeness to my house	75	43.6
Adequate space for operation	28	16.3
Safer than other locations	24	14.0
Rents are relatively lower here	13	7.6
No rents are paid here	11	6.4
Access to water	9	5.2
Access to electricity	8	4.7
Own the space	7	4.1
Operational strategies	**Frequency (n)**	**Percentage (%)**
Operate business after 7 pm at night	154	89.5
Respond to regular customers preferences	145	84.3
Offer credit and fair prices to regular customers	142	82.6
Use mobile phone for orders and payments	125	72.7
Frequently assess market dynamics	124	72.1
Open business before 8 am in the morning	107	62.2
Keep written records of business activities	96	55.8
Partner with other food sellers	44	25.6
(n=172; multiple responses)		

Source: Fieldwork (2024)

On the other hand, the most applied operational strategies are extension of business hours beyond 7pm at night when most people are returning home from work; responding to preferences of regular customers; offering credit and fair prices to regular customers; use of mobile phone for orders and payments; and frequently assessing the market dynamics. These five strategies were used by at least seven out of 10 women vendors in their food vending business. Other notable strategies are opening of the food vending business before 8am in the morning to attract people going to work and school going children, and keeping records of business activities. Studies of food vendors in Maputo (Raimundo *et al*., 2020) and in Nairobi (Owuor, 2020) also noted the dominance of access to customers and extending business hours as the most common locational and operational strategies, respectively.

4.3.5 Pricing and Business Stocking Strategies

The pricing and business stocking strategies are presented in Table 4.5. The most commonly applied pricing strategy is considering the wholesale price, noted by 72.1 percent of the vendors. Every vendor wants to make a profit and therefore must sell slightly above the wholesale price. However, in Bangalore, India, most of the vendors were found to negotiate with their suppliers for low prices (Honasoge *et al*., 2020). Other pricing strategies that are taken into consideration are the profit margin, and demand and supply factors. The business stocking strategies also revolve around price of stock (48.3%), including seasonality of the product (43%) and specific demand of regular customers (39%).

Table 4.5: Pricing and Business Stocking Strategies

Pricing strategies	**Frequency (n)**	**Percentage (%)**
Depends on wholesale price	124	72.1
Depends on targeted profit margin	82	47.7
Depends on demand and supply	58	33.7
We set standard prices	21	12.2
Negotiate with customers	20	11.6
Give discount to regular customers	17	9.9
Business stocking strategies	**Frequency (n)**	**Percentage (%)**
Depends on price of stock	83	48.3
Depends on seasonality of product	74	43.0
Depends on specific demand of customers	67	39.0
Depends on general demand and supply	56	32.6
(n=172; multiple responses)		

Source: Fieldwork (2024)

4.4 Livelihood Opportunities and Challenges of Women Street Food Vending Enterprises

4.4.1 Enterprise Opportunities

The enterprise opportunities were deduced from two questions concerning reasons for entry into food vending business and importance of food vending business, respectively. During data analysis, the responses emanating from these two questions were categorized into opportunities for economic survival, ease of entry opportunities, employment creation opportunities, fallback business opportunities, and business growth opportunities as presented in Table 4.6. Generally, opportunities are favourable situations, conditions and circumstances that can be exploited to make it possible to achieve something positive.

Opportunities for economic survival

There is no doubt that most people enter into entrepreneurial activities for economic survival, largely for employment or generation of income. The enterprises were the main income source for nine out of every 10 women street food vendors (Table 4.6). Moreover, over two-thirds of them (69.2%) could not survive without the food vending business for they depend on their businesses for survival. Besides being a key source of income, it is also a source of employment for those unable to find a job (44.8%).

In addition, it contributes to the pool of family sources of income, as well as helping the family members back in the rural homes through remittances. In most cases, married women street food vendors are not the primary household income earners. As such, they enter into such business activities to contribute towards the household income and livelihood sources. The findings resonate well with those of Zingkhai and Anand (2019) in Ukhrul (India) and Ramasamy (2018) in Penang (Malaysia). However, Thakur *et al.* (2017) study in Delhi (India) argued that women food vendors record very low incomes and savings compared to their expenditures.

Table 4.6: Enterprise Opportunities

Opportunities for economic survival	**Frequency (n)**	**Percentage (%)**
The business is main source of income	162	94.2
Cannot survive without the business	119	69.2
Was unemployed and unable to find a job	77	44.8
Wanted to contribute to family income	42	24.4
Wanted to be economically busy	30	17.4
Wanted to help family back home	18	10.5
Ease of entry opportunities	**Frequency (n)**	**Percentage (%)**

Did not require any skills to start the business	18	10.5
Did not require much capital to start the business	11	6.4
Was influenced by relative/friend/neighbour	3	1.7
Employment creation opportunities	**Frequency (n)**	**Percentage (%)**
Engaged a relative to help in the business	50	29.1
Engaged an employee in the business	46	26.7
Fallback business opportunities	**Frequency (n)**	**Percentage (%)**
Had another job but pay was low	33	19.2
Had another business but was not doing well	7	4.1
Had a job but was terminated due to Covid-19	6	3.5
Had a business but closed due to Covid-19	4	2.3
Needed additional income due to Covid-19	2	1.2
Business growth opportunities	**Frequency (n)**	**Percentage (%)**
Intend to grow my food vending business	169	98.3
Intend to look for a better job or business	100	58.1
Have an investment attributed to the business	95	55.2
Always wanted to run own business	40	23.3
Saw a business opportunity in the business	16	9.3
(n=172; multiple responses)		

Source: Fieldwork (2024)

Ease of entry opportunities

Contrary to the literature, ease of entry opportunities is not a very prominent factor among the women street food vendors in Mukuru Kwa Reuben. Only 18 of the vendors noted that they did not require any prior skills to start the food vending business (Table 4.6). Likewise, only 11 vendors noted that they did not require much capital to start the food vending business. In fact, it was earlier noted that almost all the vendors (168 out of 172) said that they needed a business start-up capital. According to FKE (2021), most small informal enterprises, including street food vending, are characterized by ease of entry and ease of exit. It argues that a sector has ease of entry if there are no government regulations or other forms of restrictions that may restrict entry into the sector.

Employment creation opportunities

Besides creating employment opportunities to those engaged in the business, street food vending enterprises can also create employment opportunities for other persons. More than one-quarter (29.1%) of the vendors in Mukuru Kwa Reuben engaged a close or distant relative to help in their business. Likewise, another one-quarter (26.7%) engaged an employee in the running of their food vending business (Table 4.6). Tawodzera (2019) noted that food vendors in Cape Town (South Africa) offer employment opportunities to a small but significant number of people that they employ in their business enterprises.

Fallback business opportunities

Street food vending business can be used as a fallback business, especially during or after economic shocks such as loss of a regular job. Some of the women street food vendors in Mukuru Kwa Reuben entered into food vending enterprises because the pay in their previous job was low (19.2%) or they were engaged in another business that was not doing well (7 vendors) (Table 4.6). In addition, some of the vendors noted that they entered into food vending business because their jobs were terminated during Covid-19 pandemic, their (other) businesses were closed during Covid-19 pandemic, or that they needed an additional source of income because of the negative effects of Covid-19.

Business growth opportunities

The women street food vendors in Mukuru Kwa Reuben have ambitions to expand their business operations, increase their revenue, improve their profitability and enhance their market presence. Almost all of them (98.3%) indicated that they intend to grow their food vending business (Table 4.6). This is despite the fact that more than half of them (58.1%) intend to look for a better job or business opportunity. In addition, about one-quarter (23.3%) of them had prior intentions of running their own business. As such, women can be empowered to start and grow their business enterprises. Notably, street food vending has also facilitated investment for more than half (55.2%) of the women street food vendors in Mukuru Kwa Reuben. In a city-wide study of Nairobi (Kenya), Owuor (2020) also found that about three-quarters of the sampled food vendors intended to expand their business enterprises.

4.4.2 Enterprise Challenges

The sampled women street food vendors in Mukuru Kwa Reuben were asked about the major challenges affecting their food vending businesses. Their responses were later categorized into operational challenges and security and policing challenges, respectively. In addition, the section highlights the challenge of low levels of organizational structure and access to loans and training opportunities. Based on the literature review, the challenges facing street food vendors in sub-Saharan African tend to be similar in nature but with varying degrees and contexts.

However, various studies, for example, Njagi *et al*. (2019), Ramasamy (2018), and Brown and McGranahan (2015), have noted that women dominate precarious livelihoods and street food

vending businesses, and are more likely to operate small-scale survivalist informal businesses. In addition, women in the informal food economy face enterprises-related challenges to a greater magnitude than men because of their limited access to capital and credit; limited entrepreneurial skills and work experience; competition and inadequate representation in governance structures; greater exposure to environmental hazards, crime and violence; inadequate business space; and their involvement in secondary socio-cultural roles.

Business operation challenges

Women street food vendors experience a number of business operation challenges as presented in Figure 4.7. Generally, the major business operation challenges noted by over half of the women vendors are spoilage of fresh produce (55.8%) and low sales due to fewer customers (54.7%). Other notable operational challenges include business competition from similar food sellers; high cost of doing business with little profit; non-payment of debts by customers; lack of adequate storage facility; and theft of goods.

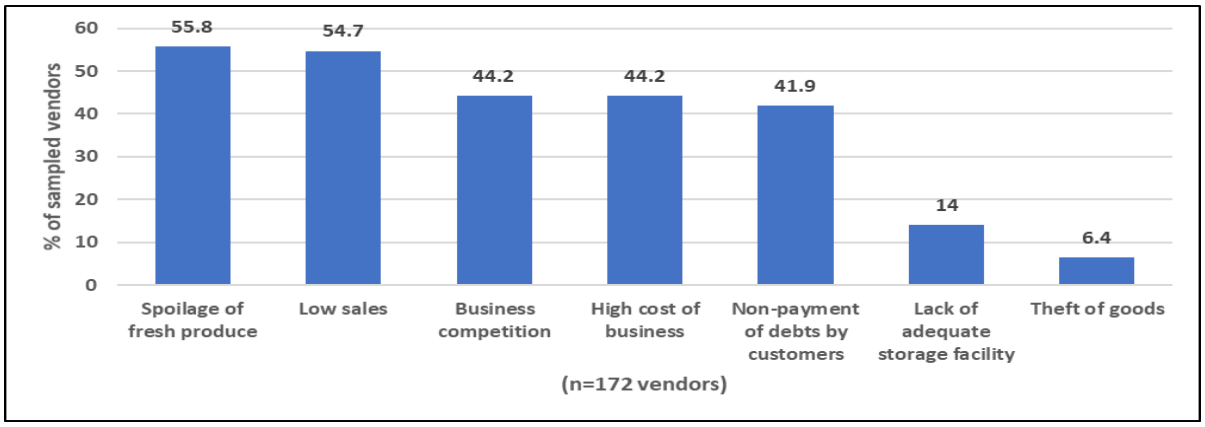

Figure 4.7: Business Operation Challenges
Source: Fieldwork (2024)

Security and policing challenges

Security is important for women street food vendors in urban informal settlements who not only operate in informal open spaces that do not belong to them, but may also operate their business late into the night. In addition, they tend to operate under the mercy of brokers, rent seekers, and city by-laws enforcement officers. According to Figure 4.8, the major security and policing challenges noted by over half of the women vendors are payment of night security fees for the safety of goods (73.8%) and payment of rent, directly or indirectly to location or premise owners, to operate business in current location or premise (68%).

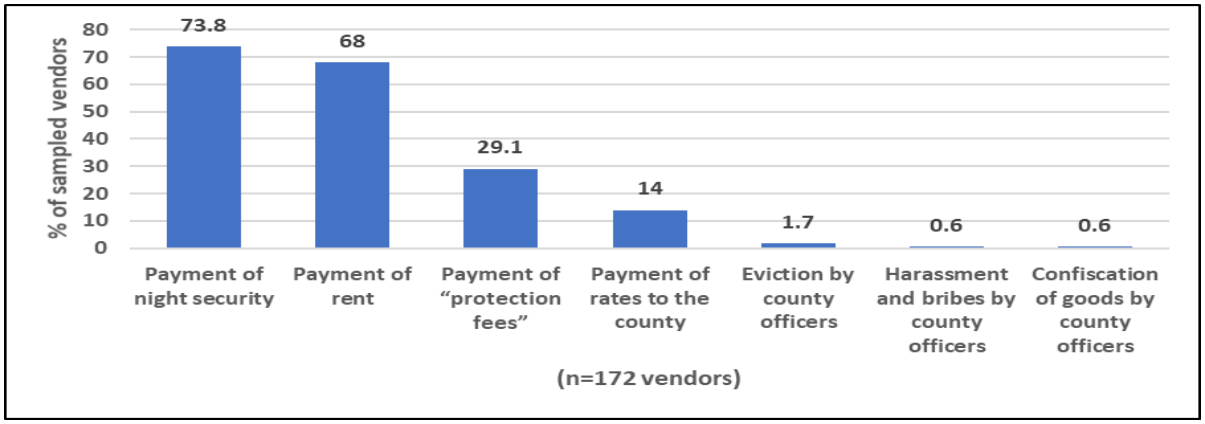

Figure 4.8: Security and Policing Challenges
Source: Fieldwork (2024)

Payment for night security fees (for private security guards) indicates lack of security and safety issues at night for the goods and business premises, while payment of rents to location and premises owners denotes lack of security of operation in current location and premises. Other security and policing challenges include payment of "protection fees" to operate, as well as payment of daily, weekly or monthly rates to the Nairobi City County to operate (Figure 4.8). Notably, eviction from business premises, harassment, bribery, and goods confiscation by Nairobi by-laws enforcement officers seem not to be a major challenge among the women food vendors in Mukuru Kwa Reuben. Generally, these additional fees for security and protection eat into the women food vendors' profit margins and increase their business operation costs.

Low levels of organizational structure and access to loans and training opportunities

Table 4.7 reveals that women street food vendors in Mukuru Kwa Reuben have low levels of association and access to loans and training opportunities. While some of the vendors are members of a social welfare group of fellow food sellers (32.6%), only 28 of them indicated that they are members of an organized association of food sellers in their areas of operation. On the other hand, only 23 of them had at one time applied for and were granted a business improvement bank loan.

Lastly, only 13 of them have ever received training on business from the county or national government, while only 9 have ever received training from a non-governmental organization. Similarly, in Nigeria, Fapohunda (2012) also noted that female food vendors lack access to resources, training opportunities, and leadership and organization that can enhance their businesses and productivity.

Table 4.7: Organizational Structure and Access to Loans and Training Opportunities

Responses	Frequency (n)	Percentage (%)
I am a member of a welfare group (*chama*) of fellow food sellers	56	32.6
We have an association of food sellers in this area	28	16.3
I applied for, and was granted, a business improvement bank loan	23	13.4
I applied for, and was *not* granted, a business improvement bank loan	20	11.6
I have received training on business from the county or national government	13	7.6
I have received training on business from NGO	9	5.2
(n=172; multiple responses)		

Source: Fieldwork (2024)

Other Challenges

The women street food vendors in Mukuru Kwa Reuben also noted "other" challenges. These were lack of public water sources and toilets; cows and goats eating green vegetables from the open stalls; weather (hot sun, rains and heavy winds) challenges; seasonality of fresh food products; lack of capital to keep business running; poor environmental sanitation and waste disposal; lack of enough lighting (electricity) at night; high prices of supplies; low purchasing power from customers; poor roads; and unpredictability of sales.

4.5 Effect of Covid-19 on Women Street Food Vending Enterprises

Restrictions in movement and lockdown measures during Covid-19 had a profound effect on food supply chains and changes in supply and demand of food. This objective provides an overview of the effect of Covid-19 on the women food vending enterprises in Mukuru Kwa Reuben. Specifically, it focuses on 113 (65.7%) women vendors whose businesses were in operation during the peak of Covid-19 containment measures in 2020 and 2021. The rest of the vendors (59 in number) started their businesses between 2022 and 2024. However, before dwelling into the substantive discussions on the effects, Figure 4.9 gives an overview of the how women food vendors in Mukuru Kwa Reuben observed Covid-19 containment measures at their business premises. Generally, majority of the vendors "always" observed curfew hours, physical distancing, wearing of masks, and hand-washing measures.

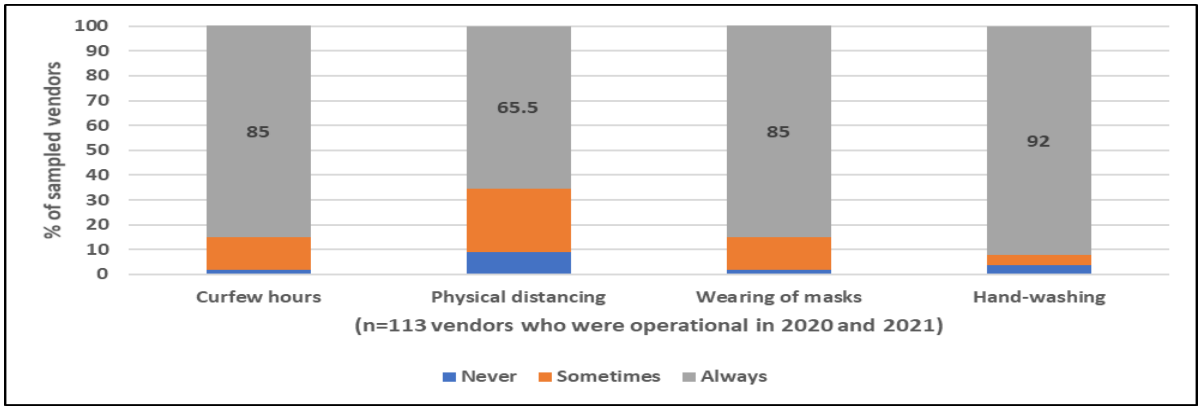

Figure 4.9: Levels of Observing Covid-19 Containment Measures at Business Premises
Source: Fieldwork (2024)

4.5.1 Effect on Business Costs and Prices of Goods

Figure 4.10 gives a summary of the effect on the overall costs of running business and prices of the food sold. Generally, more than half of the vendors reported that Covid-19 containment measures contributed, "to a large extent", to increased cost of purchasing stock (64.6%), increased cost of transporting stock (61.1%), and increased cost of running business (60.2%). On the other hand, due to changes in supply and demand, some of the vendors had to make price changes on the food commodities that they sold. For about one-third of the vendors, the containment measures led, "to a large extent", to either an increase (32.7%) or a decrease (33.6%) in prices of the food items that they sold.

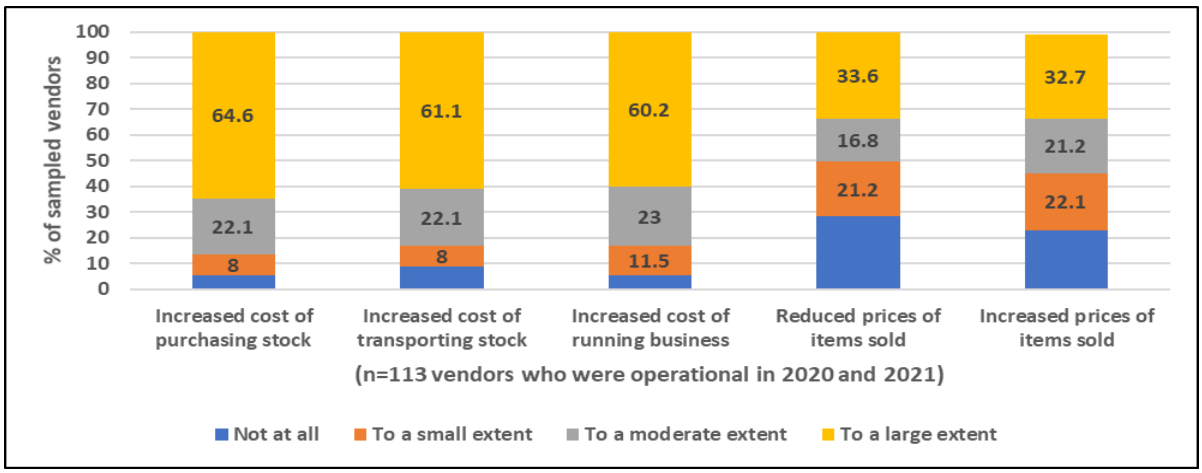

Figure 4.10: Effect on Business Costs and Prices of Goods
Source: Fieldwork (2024)

Price changes depended heavily on whether the food commodity was perishable or storable. On the supply side, mobility restrictions disrupted food supply chains, making some food products scarce. The transportation sector was equally disrupted, although some measures were

taken to allow formal food transporters in and out of the lockdown areas like Nairobi. However, informal food vendors with informal food supply chains were more affected. As such, there was a constraint in accessing food from different supply chains, including the rural areas, and for this reason, charges of transporting food commodities increased immensely. The general trends about wholesale and retail price changes in food products according to supply and demand dynamics during Covid-19 pandemic period was also noted in urban markets in India by Rajkhowa and Kornher (2022).

4.5.2 Effect on Customer Base, Business Hours and Sales and Profit

Due to enforcement of curfew hours and movement restrictions, street food vendors had to adjust in running their businesses in order to continue to earn a living. Food vendors were required to comply with curfew hours, wearing of masks and social distancing while operating their food businesses. All these regulations and measures affected the flow of customers, total hours of operating the business, as well as the sales made and profits earned from operating the food vending business.

According to Figure 4.11, Covid-19 containment measures led, "to a large extent", to reduced daily number of customers (69.9%), reduced regular daily business hours (66.4%), and reduced daily sales and profit (63.7%). Sales and profits were bound to be affected because of the reduction in the daily number of customers at the food enterprise. However, there were those who reported to have had an increase in their daily sales and profits (38.1%) due to high demand and low supply for the food commodities that they sold. Similar results were noted among food vendors in Yaoundé, Nairobi, Minna, Dakar and Harare cities (UN-Habitat, 2021).

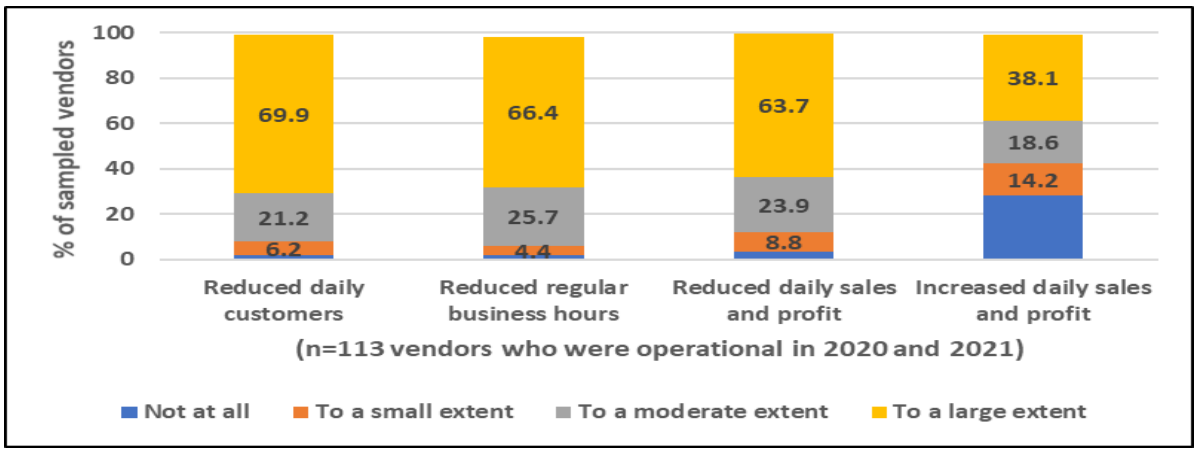

Figure 4.11: Effect on Customer Base, Business Hours and Sales and Profit
Source: Fieldwork (2024)

4.5.3 Effect on Business Stock

Due to the Covid-19 mobility restriction measures, food vendors had to make wise decisions about the variety and quantity of stock they purchased and proper ways of storage, especially for the perishable food commodities. As such, the most pronounced effect on business stock, as depicted in Figure 4.12, was loss, spoilage and wastage of perishable food products. Three-fifths of the vendors (60.2%) affirmed that they experienced, "to a large extent", loss, spoilage and wastage of perishable food products. Majority of these vendors being the ones who venture in fruits and vegetables selling. The perishable nature of fruits and vegetables does not allow them a long shelf life. Additionally, due to transport delays caused by mobility restrictions, food commodities took a very long time on the road, leading to spoilage and wastage of some of the food commodities that the food vendors may have ordered.

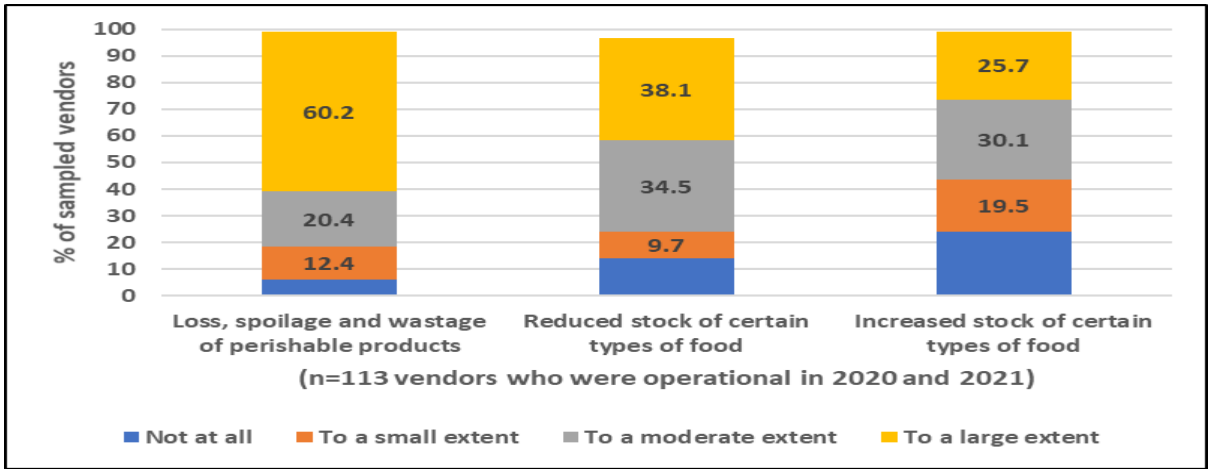

Figure 4.12: Effect on Business Stock
Source: Fieldwork (2024)

Moreover, during the pandemic period, there were certain food commodities that were in high demand in the food markets and outlets. Examples of these food commodities were lemon, garlic, ginger, oranges and tree tomatoes which were assumed to boost the immune system and reduce the chances of contracting the virus. As such, some of the food vendors (25.7%) increased, "to a large extent", the stock of these food products. However, some of the vendors (38.1%) chose to reduce, "to a large extent", stocking certain types of foods, largely to avoid spoilage and wastage. Such stocking strategies were noted among street vendors in South Africa's three provinces of Gauteng, KwaZulu Natal and Limpopo by Wegerif (2023).

4.5.4 Overall Effect of Covid-19 Containment Measures and Extent of Recovery

Besides the specific effects on business costs, prices of goods, number of customers, business hours, sales and profit, and business stock, the vendors were asked about their opinion on the *overall* effect of Covid-19 on their food vending businesses. According to Figure 4.13, more than half of them (51.3%) indicated that they experienced a major and difficult to manage effect, while more than one-third (36.3%) experienced a severe effect and near risk of closure.

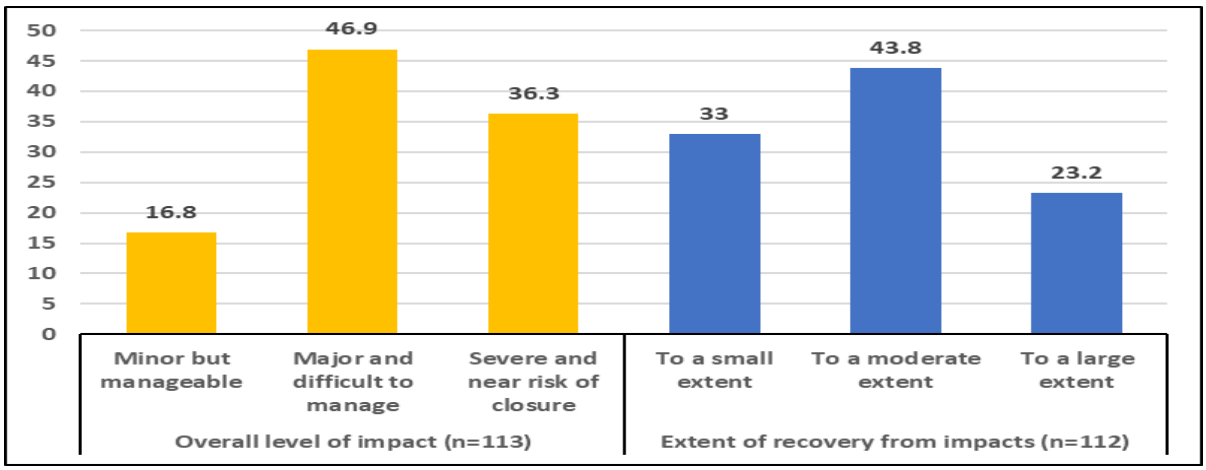

Figure 4.13: Overall Effect of Covid-19 Containment Measures and Extent of Recovery
Source: Fieldwork (2024)

When asked about the extent of recovery from the negative effects of Covid-19 containment measures, majority of the vendors (43.8%) noted that their business enterprises had recovered "to a moderate extent", while another 23.2 percent had recovered "to a large extent" (Figure 4.13). Notably, about one-quarter of the vendors (26.8%) noted that they had recovered "to a small extent", while seven vendors reported that they had "not at all" recovered. These results bring to the forefront the need for a holistic resilient recovery interventions and policies, especially to the vulnerable populations, including women.

4.5.5 Coping Strategies from Effects of Covid-19 Containment Measures

There is no doubt that during the peak of Covid-19 containment measures in 2020 and 2021, the national and county governments, including the affected populations and sectors of the economy, adopted a number of coping strategies to temporarily mitigate against the negative effects. As such, the study sought to understand some of the coping strategies that were adopted by the women street food vendors in Mukuru Kwa Reuben to mitigate against the negative effects of Covid-19 on their food vending businesses.

According to Table 4.8, the most common strategies that were adopted by more than three-quarters of the vendors were enhancing the hygiene conditions of business premises (97.3%), providing a handwashing point for customers (92.9%), and reducing stock to avoid loss (89.4%). This was followed by reducing the frequency of obtaining stock (74.3%), reducing retail prices to clear stock and minimize loss (62.8%), selling on credit (59.3%), and reliance on mobile phone to get orders from customers (57.5%). Notably (from other questions), only 14 of them received financial assistance, hand-washing containers and sanitizers from the government (national or county) to support their food vending businesses. Another 7 of them received financial and food assistance from non-governmental organizations to support their food vending businesses and families.

Table 4.8: Coping Strategies from Effects of COVID-19 Containment Measures

Coping strategies	Frequency (n)	Percentage (%)
I increased the hygiene conditions at my business	110	97.3
I placed a handwashing point for my customers	105	92.9
I reduced my stock to avoid loss	101	89.4
I reduced the number of times in a week of getting stock	84	74.3
I reduced my prices to clear stock and reduce loss	71	62.8
I sold my items on credit	67	59.3
I relied on my mobile phone to get orders from customers	65	57.5
I relied on my mobile phone to order for stock	55	48.7
I increased my prices because of high cost of stock	44	38.9
I bought my stock on credit	44	38.9
I temporarily closed my business	39	34.5
I increased my prices because of high demand of reduced stock	35	31.0
I increased my stock because of high demand	32	28.3
I took a loan to help in my business	25	22.1
**Multiple responses (n=113)*		

Source: Fieldwork (2024)

4.6 Hypothesis Testing

Table 4.9 is a summary of crosstabulation and chi-square test output of the first null hypothesis that “There is no significant difference between year of entry into food vending enterprise and importance of the enterprise to the vendor”. The year of entry into business enterprise had three categories (“Before 2010”; “2010-2019” and “2020-2024”), while the importance of the enterprise to the vendor had two categories: (“Important” and “Very important”).

Given that the p-value of 0.107 is *greater* than the chosen significance level (α) of 0.05, there is no enough evidence from the sample data to reject the null hypothesis. As such, there is no significant difference between year of entry into food vending enterprise and importance of the enterprise. In other words, year of entry into food vending enterprise and importance of the enterprise to the vendor are independent of each other.

Table 4.9: Crosstabulation and Chi-Square Test Output: Year of Entry into Business Enterprise and Importance of Enterprise

Crosstabulation		**Importance of enterprise**		
		Important	Very Important	Total
Year of entry into business enterprise	Before 2010	1	12	13
	2010-2019	17	65	82
	2020-2024	24	53	77
Total		42	130	172

Chi-square Tests	**Value**	**df**	**Asymptotic Significance (2-sided)**
Pearson Chi-Square	4.476[a]	2	.107
Likelihood Ratio	4.913	2	.086
Linear-by-Linear Association	4.423	1	.035
N of Valid Cases	172		

a. 1 cells (16.7%) have expected count less than 5. The minimum expected count is 3.17.

Source: Fieldwork (2024)

Similarly, Table 4.10 is a summary of crosstabulation and chi-square test output of the second null hypothesis that "There is no significant difference between the overall effect of Covid-19 containment measures on food vending enterprise and extent of enterprise recovery". The overall effect of Covid-19 containment measures had three categories, namely, "A minor but manageable effect"; "A major but difficult to manage effect"; and "A severe effect and near risk of closure". The extent of enterprise recovery had also three categories, namely, "To a small extent"; "To a moderate extent"; and "To a large extent".

Given that the p-value of 0.033 is *less* than the chosen significance level (α) of 0.05, we reject the null hypothesis and adopt the alternative hypothesis that "There is significant difference between the overall effect of Covid-19 containment measures on food vending enterprise and extent of enterprise recovery". In other words, the overall effect and extent of enterprise recovery are not independent of each other.

Table 4.10: Crosstabulation and Chi-Square Test Output: Overall Effect of Covid-19 Containment Measures and Extent of Enterprise Recovery

Crosstabulation		Extent of enterprise recovery			Total
		Small extent	Moderate extent	Large extent	
Overall effect	Minor	3	9	7	19
	Major	14	28	10	52
	Severe	20	12	9	41
Total		37	49	26	112

Chi-square Tests	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	10.513[a]	4	.033
Likelihood Ratio	10.536	4	.032
Linear-by-Linear Association	5.307	1	.021
N of Valid Cases	112		

a. 1 cells (11.1%) have expected count less than 5. The minimum expected count is 4.41.

Source: Fieldwork (2024)

CHAPTER 5: SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 Summary of Findings

5.2.1 Socio-Economic Characteristics of Women Street Food Vendors

Women street food vending enterprises in Mukuru Kwa Reuben are dominated by a youthful population aged between 18-39 years (72.6%), those married (64.3%), those who have some secondary level of education (61.1%), migrants from other counties in Kenya (87.2%), and those who had never been employed or engaged in any other business before (52.9%). Moreover, for the large majority of the vendors (90.7%), their business enterprises are their main income and livelihood source. This implies that street food vending enterprises are not only a source of employment to the unemployed youth and migrant women living in urban informal settlements, but is also their main source of household income and livelihoods. For the married women, the core motivation for engaging in street food vending business is largely to contribute towards the household income and food sources.

5.2.2 Enterprise Characteristics and Strategies of Women Street Food Vendors

Whereas a significant proportion (47.7%) of the women street food vendors in Mukuru Kwa Reuben have operated between 5 and 14 years, another significant proportion (44.7%) can be considered as recent entrants into street food vending business as they have operated only between the years 2020 and 2024. Only 7.6 percent of them have been in business for over 15 years. However, there is no significant difference between year of entry into food vending enterprise and importance of enterprise to the vendor. Notably, the need for a start-up capital was important for almost all the vendors (97.7%) with most of them relying on personal savings and loans from social networks. The vendors sell a wide range of food products with most of them displaying their products on a makeshift platform and shade (61.6%). They source most of their food products from wholesale and retail markets in Nairobi and transport them mainly using public transport. The vendors apply a wide-range of locational, operational, pricing, and business stocking strategies to maintain the success of their business enterprises. The most important ones being operating where there is a customer base; operating late at night, responding to customer preferences and offering credit facilities; and pricing and stocking that depends on the wholesale prices, profit margins, and supply and demand dynamics.

5.2.3 Livelihood Opportunities and Challenges

Street food vending provide a number of livelihood opportunities to women in Mukuru Kwa Reuben informal settlement. The livelihood opportunities emanate from opportunities provided by the street food vending enterprises for economic survival, ease of entry into the business enterprise, employment creation, and fallback and business growth opportunities. For example, food vending is the main income source for almost all the vendors (94.2%), while another 69.2 percent cannot survive without it. Moreover, another 98.3 percent of the vendors intend to grow their food vending business and more than half of them (55.2%) have an investment attributed to the food vending business. However, the vendors experience a number of operational, security, and policing challenges, including low levels of organizational structure and access to loans and training opportunities. For example, a number of vendors experience spoilage of fresh produce and low sales, as well as increased costs of night security, rents and protection fees. The livelihood approach describes the assets or forms of capital that dictates and influences an individual's pursuit of livelihood. For the success of women street food vendors, they need access to social capital (social networks and associations that bring together women vendors), financial capital (income and access to loans), physical capital (space for operation), and human capital (experience and training).

5.2.4 Effect of Covid-19 on Women Street Food Vending Enterprises

Curfews, social and physical distancing, wearing of face masks, handwashing, and partial or full lockdowns had varied negative effects on women street food vending enterprises in Mukuru Kwa Reuben. To a number of vendors, the Covid-19 containment measures led, to a large extent, to increased cost of purchasing stock (64.6%), cost of transporting stock (61.1%), and cost of running business (60.2%), including loss, spoilage and wastage of perishable food products (60.2%). On the other hand, the containment measures reduced, to a large extent, the daily number of customers (69.9%), regular daily business hours (66.4%), and daily sales and profit (63.7%). Generally, about half of the vendors (51.3%) experienced a *major* and difficult to manage effect, while another significant proportion (36.3%) experienced a *severe* effect and near risk of closure, with varied levels of recovery. Moreover, there was a significant difference between the overall effect of Covid-19 containment measures and extent of enterprise recovery. Notably, the vendors adopted a number of coping strategies such as enhancing the hygiene conditions at business premises, provision of handwashing points, reducing stock and retail prices to minimize loss, selling on credit, and reliance on mobile phone to get orders from customers.

5.3 Conclusion

Sub-Saharan African cities have a large informal economy that makes a significant contribution to employment creation, income generation, poverty reduction, and local and national economic growth and development. The sector employs a significant proportion of the urban poor population. Consequently, the informal food sector in urban informal settlements is not only a source of employment and income to the women involved, but also a livelihood source to a majority of them who have a double burden of engaging in income-generating activities in addition to their socio-cultural obligations of care-giving and support to their families. Despite the livelihood opportunities that come with street food vending, there are limited policies, regulatory frameworks and governance measures that are in place to enhance this potential, reduce the challenges street food vendors face, and enhance their resilience to the changing global economic, climatic and environmental circumstances that may directly or indirectly affect street food vending enterprises. There is need to create an enabling environment with regulatory frameworks that support the informal food sector's entrepreneurship, inclusive growth, and innovation. Given the fact that street food vendors are part of the urban fabric, city planners need to include food vendors in their planning strategy, including the gendered dimension in planning. There is need for inclusive and spatial integrative approaches towards the complex nature of street vending.

5.4 Recommendations

5.4.1 Recommendations to Policy Makers

National and Nairobi City County government to formulate supportive policies, legislations and governance measures to facilitate:

- Enhancing and improving the urban food systems governance, with a specific consideration on the informal food economy.
- Extension of business financing to women street food vendors based on the existing government and county programmes to facilitate access to start-up capital and loans to women street food vendors.
- Training opportunities that target women street food vendors to enhance their entrepreneurial capacities.
- Organization of street food vendors into trader groups in various parts of informal settlements to enhance regulatory measures, conducive working environment, and food safety.

- Cushioning small and medium enterprises (SMEs) during global pandemics such as Covid-19 and putting in place measures to reduce impact and improve resilience of women street food vendors to such pandemics.

5.4.2 Recommendations for Future Research

There is need for further research on:

- The role of women-led street foods enterprises on household food security situation.
- Formal and informal governance dynamics of street food vendors in urban informal settlements.

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QUESTIONNAIRE

UNIVERSITY OF NAIROBI

In collaboration with Muungano wa Wanavijiji (SDI-Kenya)

Informal Food Vendors in Nairobi's Informal Settlements

MiFOOD PROJECT NAIROBI SURVEY QUESTIONNAIRE

1. I have understood the aim of the study and the informed consent, and agree to participate in this survey (**Verbal consent**)?

Code	***Label***
1	Yes
2	No **[TERMINATE CONVERSATION]**

[A] SURVEY DETAILS

2. Date of interview (Day, month, year)

Enter date

3. Name of Research Assistant (***As agreed during training***)

Enter name

4. Village of interview (***As agreed during training***)

Enter name

[B] VENDOR SOCIO-ECONOMIC CHARACTERISTICS

5. Gender of vendor

Code	***Label***
1	Female
2	Male

6. Age of vendor

Code	***Label***
1	18-28
2	29-39
3	40-50
4	51-61
5	62+

7. What is your marital status?

Code	***Label***
1	Never married
2	Married
3	Separated
4	Divorced
5	Widowed
6	Co-habiting

8. Which is the highest level of education you have attained?

Code	***Label***

1	No formal education
2	Primary school (incomplete)
3	Primary school (complete)
4	Secondary school (incomplete)
5	Secondary school (complete)
6	College
7	TVET
8	University

9. Have you ever been employed or engaged in any other business before starting this food selling business?

Code	***Label***
1	Yes
2	No

10. **[If yes]** Which kind of employment or business? (***Allow for explanation and categorize appropriately; allow for multiple answers***)

Code	***Label***
1	Full-time employment (formal sector)
2	Full-time employment (*informal* sector)
3	Part-time/casual wage employment (formal sector)
4	Part-time/casual wage employment (*informal* sector)
5	Own formal sector business
6	Own *informal* sector business (different activity)
7	Other (specify)

11. Do you currently engage in any other business or employment, besides this food selling business?

Code	***Label***
1	Yes
2	No

12. **[If yes]** Which kind of business or employment, do you currently engage in? (***Allow for explanation and categorize appropriately; allow for multiple answers***)

Code	***Label***
1	Another informal business (same activity)
2	Another informal business (different activity)
3	Part-time/casual wage employment (formal sector)
4	Part-time/casual wage employment (*informal* sector)
5	Other (specify)

[C] ENTERPRISE STRUCTURE AND PRACTICES

13. **[Observe and record]** Describe the premises where the food selling business is taking place

Code	***Label***
1	On a makeshift raised platform with no shade
2	On a makeshift raised platform with a makeshift shade
3	On the ground with no shade
4	On the ground with a makeshift shade

5	Makeshift hotel (*kibanda*)
6	Mobile food selling container
7	Other (specify)

14. **[Observe and record]** Describe the location where the food selling business is taking place (***Allow for multiple answers***)

Code	***Label***
1	Along a street
2	Along a major/main road
3	Along a railway line
4	At a bus/*boda boda* stage
5	Outside vendors house
6	At a designated market space
7	Next to an institution (school, church, etc)
8	Other (specify)

15. Which year did you start this business in Nairobi? (***Enter the year in full, i.e. 1999***)

Enter year

16. What were the **main** reasons that made you start this business in Nairobi? (***Allow for explanation and categorize appropriately; probe for other main reasons from the list; note that some responses are for vendors who started their businesses between 2022 and 2024 – after Covid-19 pandemic period of 2021-2022; allow for multiple answers***)

Code	***Label***
1	I was unemployed and unable to find a job
2	I had another job but the pay was low
3	**I had another job but was terminated because of the impact of Covid-19**
4	I had another business but it was not doing well
5	**I had another business but I closed because of the impact of Covid-19**
6	I did not require much capital to start this business
7	I did not require any skills to start this business
8	I wanted to contribute to my family source of income
9	**I needed an additional source of income because of Covid-19 economic hardships**
10	I wanted to help my family back home
11	I wanted to keep myself busy rather than sit idle at home
12	I saw a business opportunity in this business
13	I was influenced by a relative/friend/neighbour
14	I have always wanted to run my own business
15	Other (specify)

17. What are the reasons for locating this business here? (***Allow for explanation and categorize appropriately; allow for multiple answers***)

Code	***Label***
1	Access to customers
2	Access to electricity (for light at night)
3	Access to water
4	Closeness to my house
5	Safer than other locations

6	Adequate space for me to operate
7	Rents are relatively lower here
8	No rents are paid here
9	I own the space
10	Other (specify)

18. Did you need any capital to start this business?

Code	***Label***
1	Yes
2	No

19. **[If yes]** What was the **main** source of your start-up capital? (***Allow for explanation and categorize appropriately the main sources; allow for multiple answers***)

Code	***Label***
1	Personal savings
2	Loan from a financial institution (bank, micro-credit, SACCO)
3	Loan from mobile phone apps (Tala, M-Shwari)
4	Loan or help from social networks (relatives, friends, chamas)
5	Loan from a shylock (against an item or for payment with interest)
6	Sale of personal or family assets
7	Help from the government (county, national)
8	Help from an NGO, CBO or FBO
9	Other (specify)

20. **[Observe and record]** Does this vendor sell **fruits** (oranges, banana, etc)?

Code	***Label***
1	Yes
2	No

21. From where do you get the **fruits** that you sell? (***Allow for explanation and categorize appropriately; allow for multiple answers***)

Code	***Label***
1	From a wholesale and retail market in Nairobi
2	From a supplier in Nairobi
3	From a supermarket in Nairobi
4	From a farmer in Nairobi
5	From a market *outside* Nairobi
6	From a supplier *outside* Nairobi
7	From a farmer *outside* Nairobi
8	From own farm in rural area
9	Other (specify)

22. **[Observe and record]** Does this vendor sell **green vegetables** (kale, cabbage, tomatoes, onions, etc)?

Code	***Label***
1	Yes
2	No

23. From where do you get the **green vegetables** that you sell? (***Allow for explanation and categorize appropriately; allow for multiple answers***)

Code	***Label***
1	From a wholesale and retail market in Nairobi
2	From a supplier in Nairobi
3	From a supermarket in Nairobi
4	From a farmer in Nairobi
5	From a market *outside* Nairobi
6	From a supplier *outside* Nairobi
7	From a farmer *outside* Nairobi
8	From own farm in rural area
9	Other (specify)

24. **[Observe and record]** Does this vendor sell **dry cereals and grains** (maize, beans, rice, millet, green grams etc)?

Code	***Label***
1	Yes
2	No

25. From where do you get the **dry cereals and grains** that you sell? (***Allow for explanation and categorize appropriately; allow for multiple answers***)

Code	***Label***
1	From a wholesale and retail market in Nairobi
2	From a supplier in Nairobi
3	From a supermarket in Nairobi
4	From a cereals shop in Nairobi
5	From a farmer in Nairobi
6	From a market *outside* Nairobi
7	From a supplier *outside* Nairobi
8	From a farmer *outside* Nairobi
9	From own farm in rural home
10	Other (specify)

26. **[Observe and record]** Does this vendor sell **roots and tubers** (sweet potatoes, Irish potatoes, arrowroots, cassava, yams, etc)?

Code	***Label***
1	Yes
2	No

27. From where do you get the **roots and tubers** that you sell? (***Allow for explanation and categorize appropriately; allow for multiple answers***)

Code	***Label***
1	From a wholesale and retail market in Nairobi
2	From a supplier in Nairobi
3	From a supermarket in Nairobi
4	From a farmer in Nairobi
5	From a market *outside* Nairobi
6	From a supplier *outside* Nairobi
7	From a farmer *outside* Nairobi

8	From own farm in rural area
9	Other (specify)

28. **[Observe and record]** Does this vendor sell **fresh meat products** (beef, chicken, mutton, pork, **including organ meats**)?

Code	***Label***
1	Yes
2	No

29. From where do you get the **fresh meat products** that you sell? (***Allow for explanation and categorize appropriately; allow for multiple answers***)

Code	***Label***
1	From a wholesale and retail market in Nairobi
2	From a supplier in Nairobi
3	From a supermarket in Nairobi
4	From a farmer in Nairobi
5	From a butchery in Nairobi
6	From a slaughter house
7	From a processing factory
8	From a supplier *outside* Nairobi
9	From a farmer *outside* Nairobi
10	Other (specify)

30. **[Observe and record]** Does this vendor sell **fish products** (fresh, dry, fried)?

Code	***Label***
1	Yes
2	No

31. From where do you get the **fish products** that you sell? (***Allow for explanation and categorize appropriately; allow for multiple answers***)

Code	***Label***
1	From a wholesale and retail market in Nairobi
2	From a supplier in Nairobi
3	From a supermarket in Nairobi
4	From a farmer in Nairobi
5	From a butchery in Nairobi
6	From a processing factory
7	From a supplier *outside* Nairobi
8	From a farmer *outside* Nairobi
9	Other (specify)

32. **[Observe and record]** Does this vendor sell **ready-to-eat cooked food and snacks** (kibanda, mutura joint, sausage choma, mayai, chips, etc?

Code	***Label***
1	Yes
2	No

33. From where do you get the **ingredients for the cooked food and snacks** that you sell? (***Allow for explanation and categorize appropriately; allow for multiple answers***)

Code	*Label*
1	From a wholesale and retail market in Nairobi
2	From a supplier in Nairobi
3	From a supermarket in Nairobi
4	From a wholesale and retail shop in Nairobi
5	From a farmer in Nairobi
6	From a local butchery in Nairobi
7	From a slaughter house
8	From a processing factory
9	From a market *outside* Nairobi
10	From a supplier *outside* Nairobi
11	From a farmer *outside* Nairobi
12	From own farm in rural area
13	Other (specify)

34. **[Observe and record]** Does this vendor sell **processed food and beverages** (milk, bread, soda, yoghurt, etc)?

Code	*Label*
1	Yes
2	No

35. From where do you get the **processed food and beverages** that you sell? (***Allow for explanation and categorize appropriately; allow for multiple answers***)

Code	*Label*
1	From a supplier in Nairobi
2	From a supermarket in Nairobi
3	From a wholesale and retail shop in Nairobi
4	From a factory
5	From a supplier from *outside* Nairobi
6	Own processed
7	Other (specify)

36. How do you transport your stock from where you get them? (***Allow for explanation and categorize appropriately; allow for multiple answers***)

Code	*Label*
1	Public transport (matatu, bus, train)
2	Own transport (car, motorbike, bicycle)
3	Hired transport (including taxi, uber)
4	Hand cart (*mkokoteni*)
5	Motorbike (*bodaboda*)
6	Delivered by supplier
7	On foot
8	Other (specify)

37. How do you determine the price of the food products that you sell? (***Allow for explanation and categorize appropriately; allow for multiple answers***)

Code	*Label*
1	We set our standard prices in this area
2	Negotiate with customers

3	Give discount to regular customers
4	Depends on wholesale price
5	Depends on demand and supply
6	Depends on targeted profit margin
7	Other (specify)

38. How do you determine the variety of stock that you sell? (***Allow for explanation and categorize appropriately; allow for multiple answers***)

Code	***Label***
1	Depends on general demand and supply
2	Depends on seasonality of product
3	Depends on specific demand of regular customers
4	Depends on price of stock
5	Other (specify)

[D] ENTERPRISE OPPORTUNITIES AND CHALLENGES

39. How important is this business to you and your family? (***Read aloud to guide the respondent***)

Code	***Label***
1	Not important at all
2	Slightly important
3	Important
4	Very important

40. Do you agree with the following statements about your business? (***Read aloud and record accordingly***)

Code	***Label***
1	I operate my business after 7 pm at night
2	I open my business before 8 am in the morning
3	I offer credit facilities and fair prices to my regular customers
4	I use mobile phone for orders and payments
5	I respond to my regular customers demands and preferences
6	I keep written records of my business activities
7	I frequently assess the market dynamics
8	I partner with other food sellers in supplies and transport
9	I am a member of a welfare group (*chama*) of fellow food sellers
10	We have an association of food sellers in this area
11	This business is my main source of income
12	I cannot survive without this business
13	I have engaged an employee in this business
14	I engaged a relative to help me in this business
15	I applied for a bank loan to improve this business and was granted
16	I applied for a bank loan to improve this business and was *not* granted
17	I have received training on business from the county or national government (Youth Fund, Uwezo Fund, Women Enterprise Fund, M-Akiba)
18	I have received training on business from an NGO, CBO, FBO
19	I intend to grow my food selling business
20	I intend to look for a better job, business or employment

21	I pay rent to operate this business in this place
22	I pay night security fees for safety of the items I sell
23	I pay (daily, weekly or monthly) rates to the county to operate this business
24	I pay "protection fees" to operate this business
25	I have an investment which I can attribute to this business

41. What are some of the **major** challenges facing your business? (***Allow for explanation and categorize appropriately; probe for other major challenges from the list; allow for multiple answers***)

Code	***Label***
1	Low sales due to fewer customers
2	Business competition from similar food sellers
3	High cost of doing business with little profit
4	Lack of adequate storage facility
5	Spoilage of fresh produce
6	Crime and theft
7	Harassment and demand for bribes by county officers
8	Confiscation of goods by county officers
9	Arrests by county officers
10	Eviction from business premises by county officers
11	Non-payment of debts by customers
12	Other (specify)

[E] MIGRATION PROFILE

42. Were you born in Nairobi?

Code	***Label***
1	Yes
2	No

43. **[If no]** Which year, did you come to live in Nairobi? (***Enter the year in full, i.e. 1999***)

Enter year

44. What were the **main** reasons that made you come to Nairobi? (***Allow for explanation and categorize appropriately for the main reasons; allow for multiple answers***)

Code	***Label***
1	I came to look for a job
2	I came with my family
3	I came to join my spouse/family
4	I came to school
5	Other (specify)

45. Nationality of the vendor

Code	***Label***
1	Kenyan
2	Non-Kenyan

46. [**If Kenyan**] Which county do you consider as your rural home?

Code	***Label***
1	None

2	Nairobi County
3	Another county in Kenya

47. [**If another county in Kenya**] Name of the county

Enter county name

48. [**If non-Kenyan**] Which country do you come from?

Enter county name

[F] IMPACT OF COVID-19 CONTAINMENT MEASURES ON ENTERPRISE

49. Confirm whether your business was in operation during the period of COVID-19 containment measures in Kenya

Code	***Label***
1	My business was in operation in 2020-2021
2	I started my business in 2022-2024

50. How often did you observe ***curfew hours*** at your business? (***Read aloud to guide the respondent***)

Code	***Label***
1	Never
2	Sometimes
3	Always

51. How often did you observe ***physical distancing*** at your business? (***Read aloud to guide the respondent***)

Code	***Label***
1	Never
2	Sometimes
3	Always

52. How often did you observe ***wearing of masks*** at your business? (***Read aloud to guide the respondent***)

Code	***Label***
1	Never
2	Sometimes
3	Always

53. How often did you observe ***hand-washing*** at your business? (***Read aloud to guide the respondent***)

Code	***Label***
1	Never
2	Sometimes
3	Always

54. From your assessment, what was the **overall** impact of COVID-19 containment measures on your business? (***Read aloud to guide the respondent***)

Code	***Label***
1	No impact
2	A minor but manageable impact

3	A major and difficult to manage impact
4	A severe impact and near risk of closure

55. To what extent did COVID-19 containment measures affect your business in terms of ***increasing the total cost of running the business***? (***Read aloud to guide the respondent***)

Code	***Label***
1	Not at all
2	To a small extent
3	To a moderate extent
4	To a large extent

56. To what extent did Covid-19 containment measures affect your business in terms of ***increasing the cost of transporting stock***? (***Read aloud to guide the respondent***)

Code	***Label***
1	Not at all
2	To a small extent
3	To a moderate extent
4	To a large extent

57. To what extent did Covid-19 containment measures affect your business in terms of ***increasing the cost of purchasing stock***? (***Read aloud to guide the respondent***)

Code	***Label***
1	Not at all
2	To a small extent
3	To a moderate extent
4	To a large extent

58. To what extent did Covid-19 containment measures affect your business in terms of ***increasing the prices of items sold***? (***Read aloud to guide the respondent***)

Code	***Label***
1	Not at all
2	To a small extent
3	To a moderate extent
4	To a large extent

59. To what extent did Covid-19 containment measures affect your business in terms of ***reducing the prices of items sold***? (***Read aloud to guide the respondent***)

Code	***Label***
1	Not at all
2	To a small extent
3	To a moderate extent
4	To a large extent

60. To what extent did Covid-19 containment measures affect your business in terms of ***increasing the daily sales and profit***? (***Read aloud to guide the respondent***)

Code	***Label***
1	Not at all
2	To a small extent
3	To a moderate extent

4	To a large extent

61. To what extent did Covid-19 containment measures affect your business in terms of ***reducing the daily sales and profit***? (***Read aloud to guide the respondent***)

Code	***Label***
1	Not at all
2	To a small extent
3	To a moderate extent
4	To a large extent

62. To what extent did Covid-19 containment measures affect your business in terms of ***increasing certain types of stock purchased and sold***? (***Read aloud to guide the respondent***)

Code	***Label***
1	Not at all
2	To a small extent
3	To a moderate extent
4	To a large extent

63. To what extent did Covid-19 containment measures affect your business in terms of ***reducing certain types of stock purchased and sold***? (***Read aloud to guide the respondent***)

Code	***Label***
1	Not at all
2	To a small extent
3	To a moderate extent
4	To a large extent

64. To what extent did Covid-19 containment measures affect your business in terms of ***reducing the daily number of customers***? (***Read aloud to guide the respondent***)

Code	***Label***
1	Not at all
2	To a small extent
3	To a moderate extent
4	To a large extent

65. To what extent did Covid-19 containment measures affect your business in terms of ***reducing the regular daily business hours***? (***Read aloud to guide the respondent***)

Code	***Label***
1	Not at all
2	To a small extent
3	To a moderate extent
4	To a large extent

66. To what extent did Covid-19 containment measures affect your business in terms of ***loss, spoilage and wastage of perishable food products***? (***Read aloud to guide the respondent***)

Code	***Label***
1	Not at all
2	To a small extent
3	To a moderate extent

4	To a large extent

67. To what extent do you think that your business has recovered from the negative effects of Covid-19 containment measures? (***Read aloud to guide the respondent***)

Code	***Label***
1	Not at all
2	To a small extent
3	To a moderate extent
4	To a large extent

68. Did you receive any kind of support for your business from the government (county or national) during Covid-19 pandemic period?

Code	***Label***
1	Yes
2	No

69. [**If yes**] Explain the nature of support

Enter nature of support

70. Did you receive any kind of support for your business from an NGO, CBO or FBO during Covid-19 pandemic period?

Code	***Label***
1	Yes
2	No

71. [**If yes**] Explain the nature of support

Enter nature of support

72. Do you agree with the following statements about your business during Covid-19 period? (***Read aloud and record accordingly***)

Code	***Label***
1	I increased my prices because of high cost of stock
2	I increased my prices because of high demand of reduced stock
3	I increased my stock because of high demand
4	I reduced my prices to clear stock and reduce loss
5	I reduced my stock to avoid loss
6	I reduced the number of times in a week of getting stock
7	I sold my items on credit
8	I bought my stock on credit
9	I took a loan to help in my business
10	I relied on my mobile phone to get orders from customers
11	I relied on my mobile phone to order for stock
12	I placed a handwashing point for my customers
13	I increased the hygiene conditions at my business
14	I temporarily closed my business