

The Role of Informal Trade Markets in Household Food Security and Nutrition in Cape Town's Food Systems Value Chain

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*Dissertation presented as part fulfilment of the degree of Masters of City and Regional
Planning*

*In the School of Architecture, Planning and Geomatics
University of Cape Town*

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27 October 2023

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Acknowledgements

First and foremost, I would like to give all praise, all honour, all adoration and express my gratitude to God for granting me the opportunity and strength to further my studies despite the long journey.

Secondly, to family and friends in all the communities I have been welcomed into over my lifetime. It takes a village to raise a child and every little bit counts.

Thirdly, to everyone who contributed to the contents of this research. More especially, the research participants who were charitable, brave and generous with their stories. To my supervisor for her unwavering support and also to the University and the School of Planning for providing me the opportunity and funding to pursue this research.

Abstract

Increasing populations in urban areas increases a household's dependence on bought food. This phenomenon, in turn, makes existing and projected food security issues an urban challenge (Frayne et al, 2009; Battersby, 2011). To this end, fresh produce markets (FPMs) in urban areas enable increased access to affordable nutritional foods, especially informal fresh produce markets (IFPMs) (AFSUN, 2008-9). Thus, informal fresh produce markets in particular are elements of food systems that warrant closer attention for legislators, policy-makers, and spatial development planners. This research has looked to understand how food security is improved through an exploration of the distribution, preparation and consumption dynamics of the food system in context. This was done through making use of the case study of the Protea Road informal traders (hereafter 'entrepreneurs') (Charman and Govender, 2016) in Philippi, Cape Town as an exemplar. This research therefore starts by looking at how the state of food [in]security in South Africa and the Western Cape Province has been framed, and what the gaps in research may be. This is followed by a look at what has or has not been done to address the issue, thus comparing what has or has not been said, who is involved and what those relationship dynamics are. It then answers why all this is happening as well as how these dynamics operate. Thereafter, the recommendations aim to suggest possible ways in which change can occur through policy engagement, capacity building and place-based spatial interventions. It has found that at macro-level, food systems and food systems planning is as equally dependent on political, economic, environmental and social support mechanisms, as urban priorities are. On a micro level, the physical, social and infrastructural requirements needed to make food more accessible to households are supported by urban priorities, while also recognising urban priorities as an integral part of food access (Crush and Frayne, 2011; Haysom et al., 2017; Battersby and Watson, 2018; SLF, 2018; Béné and Devereux, 2023; Haysom and Battersby, 2023; Upton et al, 2023).

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Chapter 1: Introduction

The FAO argues, more than 800 million people lack sufficient food to meet their basic nutritional needs (FAO, 1996). And, after a 15-year long global campaign to meet the Millennium Development Goals (MDG), about 795 million people are still undernourished (FAO, 2015). If growing populations in urban areas make existing and projected food security issues an urban challenge, then so too are the basic nutritional needs of these urban populations (Frayne et al, 2009; Battersby, 2011). This makes ensuring the sustainability of urban food systems and improving access to food for urban households a vital part of the urban agenda.

However, until recently, urban planners have paid little attention to food systems, emphasising ‘traditional’ urban priorities such as public transportation and decent housing (Escobar, 2018; Battersby and Watson, 2018). The term ‘food systems’ refers to “all the elements and activities that relate to the production, processing, distribution, preparation and consumption of food as well as how it is recovered and wasted (Figure 1.1). Included in these are the impacts of these activities, which are largely socioeconomic and environmental” (HLPE, 2014; FAO, 2018; ICLEI, 2021). This research refers primarily to distribution, preparation and consumption of fresh produce when using the term ‘urban food system’. The term ‘urban food system’ thus factors in the urban context of a food system, namely population growth, rate of urbanisation and policy change among others (FAO, 2018). It also considers the smaller scale modes of local production and shorter supply chains but does not neglect how larger scales of production are also supported by local distribution systems.

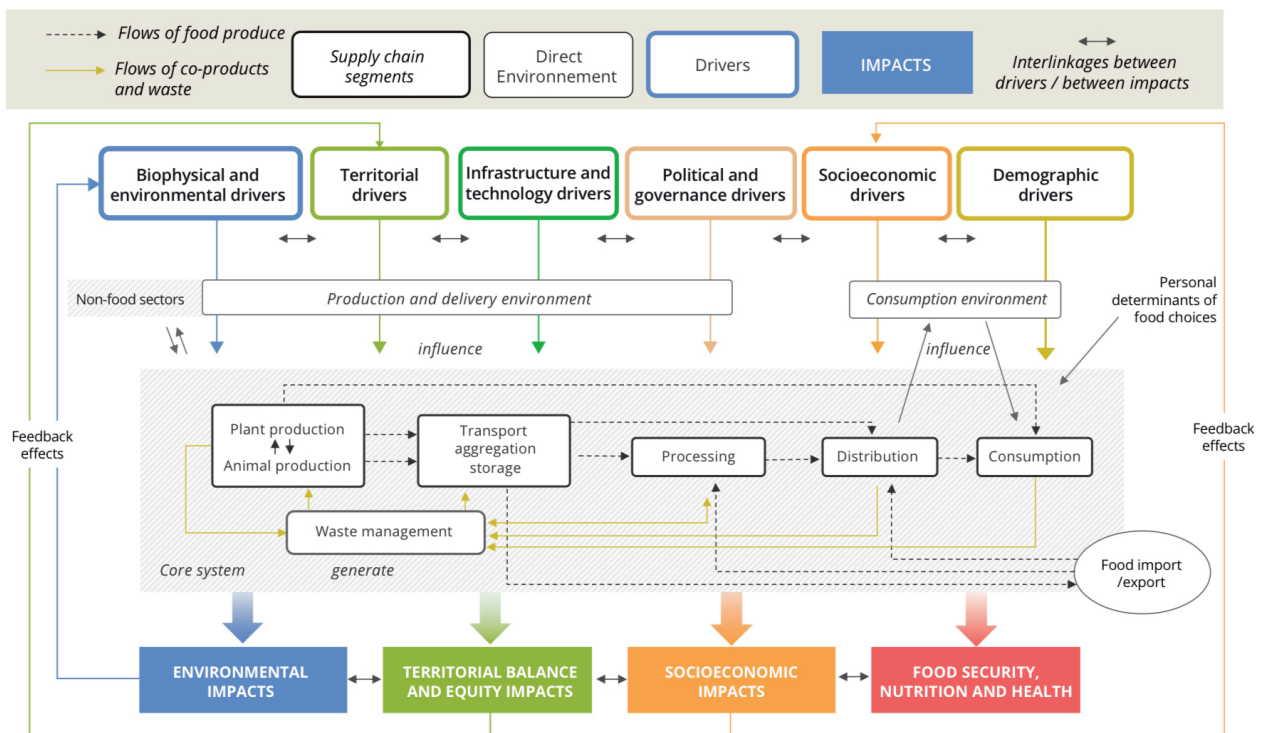


Figure 1.1: Analytical Representation of South Africa's Food System

(Sourced: FAO, EU and CIRAD, 2022)

This research pays particular attention to the question of food distribution, which involves the physical, political and social infrastructure around making food geographically and economically accessible. These include the formal and informal actors and stakeholders that influence access to food, namely the public and private sectors, researcher, developer, community and household level initiatives (ICLEI, 2021). It is worth noting that there is a relationship between formal and informal markets (Skinner and Haysom, 2017). It is partly for this reason that the FAO (2022) argues that planning can, therefore, play a much more positive role in facilitating the integration of formal and informal food systems activities (FAO, 2022).

Consequently, food systems planning is a collaborative planning process to develop and implement an approach to securing food for present and future generations. It involves planning how the food systems elements of and activities within food systems work together to improve access to food formally and informally. As such, food systems planning factors in the connection between food security, the food system and the wider set of urban planning systems in which food operates (Battersby and Watson, 2018). It does so by considering the integrity and capacity of current and future environmental, social and economic dimensions to formal and informal food systems elements and activities (HLTF, 2015).

Access to food is often influenced by increased urbanisation which, in turn, increases a household's dependency on bought food. As a result, less affordable nutritional food options are what is readily available to households due to competitive market dynamics - which affect food prices; and increasing commercial industry domination of food and beverages (Pereira, 2014; Igumbor et al. 2012). To this end, fresh produce markets in urban areas enable increased access to affordable nutritional foods, especially informal fresh produce markets. Thus, informal fresh produce markets are elements of food systems that warrant closer attention (see also Figure).

The next section, section 1.1, discusses the issue under study. That is, markets as a distribution point in urban food systems. It is followed by discussion on informal fresh produce markets as central distribution elements of South Africa's urban food systems. Section 1.2 then introduces the case for this research – the Protea Road Market in Philippi, Cape Town. Section 1.3 and 1.4 then state the research question and the structure of this dissertation, respectively.

1.1 The Issue Under Study

The term 'market' is used in this research to refer to a "demarcated area within a trading area or designated as such in a trading plan that is managed in a co-ordinated manner" (CCT, 2013: 4). The term 'informal' is used in relation to these markets to indicate the high level of flexibility and mobility of these trading activities that take place, often, but not always in places that do not have supermarkets (CCT, 2009; Battersby and Crush 2014). Lastly, the phrase 'fresh produce' refers to fruits and vegetables. Thus, an informal fresh produce market is an area that provides several opportunities for those "not registered or incorporated in terms of the corporate laws of South Africa" (CCT, 2009: 5) to trade in fresh produce with nutritional benefits.

Urban informal fresh produce markets provide better access to food for lower income households, households with irregular income and vulnerable populations (Skinner and Haysom, 2017), namely, children, adolescent girls, pregnant and lactating women, female sex workers, the elderly, the ill, the displaced, persons with disabilities, drug users, the marginalised and those with less control over their diet choices such as the poor (HLPE, 2017; Humphries et al, 2022). In this research, the term 'household' is used to refer to people who share a pot and pool resources as a strategy to meet basic food needs (Stats SA, 2011). The Food and Agriculture Organisation (FAO) highlights the need for a deeper commitment to food security, which is ultimately 'a situation that exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life' (FAO, 1996). It is with respect to the latter – the provision of physical, social and economic access to fresh food – that informal fresh produce markets play a role (Battersby et al., 2016; Skinner and Haysom, 2016; Park-Ross and Duminy, 2015; Hamann et al, 2021). And, it is this that this research examines. In particular, I examine how the Philippi informal fresh produce market in Cape Town, South Africa improves household food security.

It is important to note at the outset that, however, the stigma surrounding urban informality often casts a negative light on these critical urban informal food distribution points. This is because urban informal produce markets are often overcrowded, illegally occupy and acquire services (land, electricity and water infrastructure), and illegally trade, purchase or sell property (UN Habitat, 2015). Moreover, the perceived lack of dignity of these spaces as a result of general dirtiness is an issue for those who operate and rely on them (SLF, 2018; Oribi Village, 2023). This research encourages looking past these negative perceptions to explore the extent to which urban informal food markets improve access to affordable fresh produce in urban areas, particularly in Philippi, Cape Town.

Food insecurity in rural areas is well documented and recognised as a matter of concern by South Africa's national policy makers, but not well understood in urban settlements (Battersby, 2012; NPFNS, 2014; Skinner and Haysom, 2017; Nenguda and Scholes, 2022).

Additionally, rising population demographics in urban areas make food security an urban challenge (Frayne et al, 2009; Battersby, 2011) (Figure 1.2 and 1.3). Thus, the desire to contribute to a body of knowledge on the ways that informal fresh produce markets in urban areas improve food security is an important motivator for this research.

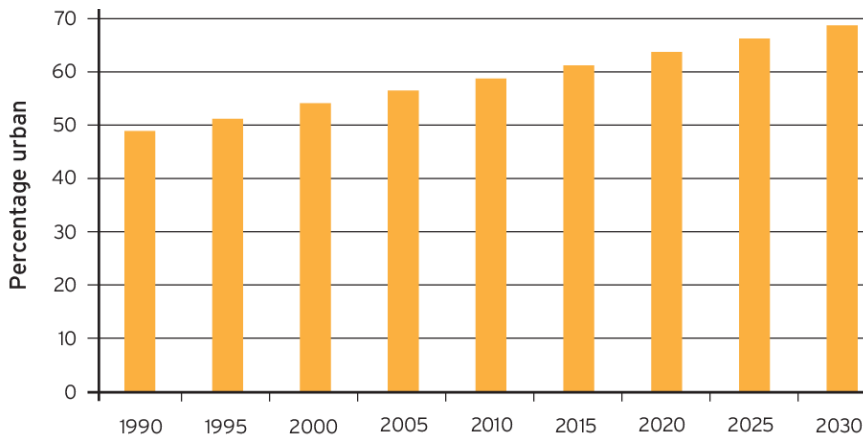


Figure 1.2: Projected Urban Residents as a Percentage of the Population in Southern Africa: 1990-2030 (Sourced: Frayne et al, 2009)

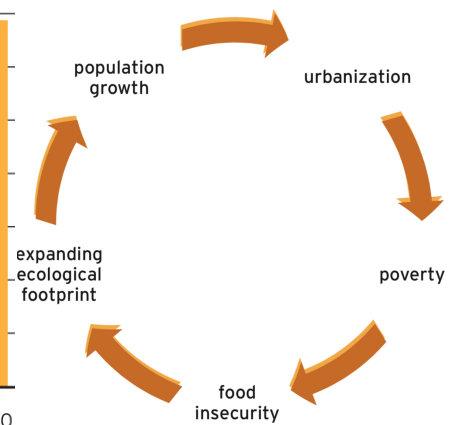


Figure 1.3: South Africa's Urban Food Challenge (Sourced: Frayne et al, 2009)

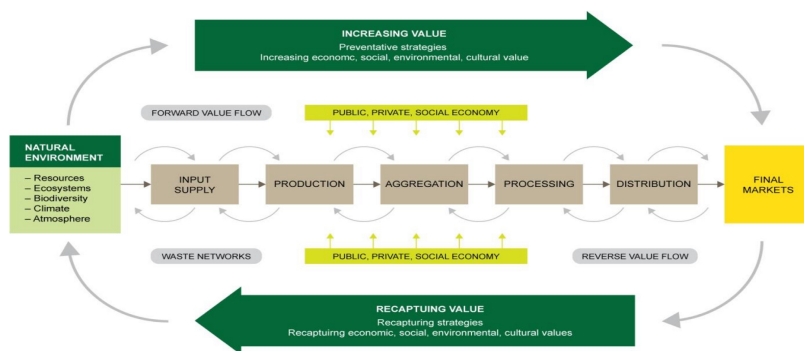


Figure 1.4: The Green Food Value Chain Development Framework (Sourced: FAO, 2014)

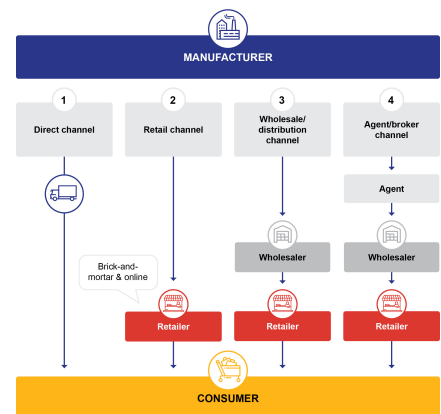


Figure 1.5: Product Distribution Channels (Sourced: Masojada, 2021)

1.1.1 Informal Fresh Produce Markets: Vital Elements of South Africa's Urban Food Systems

The urban poor in South Africa's largest metropolitan cities are largely dependent on the informal sector for access to food (Steyn et al, 2013; Skinner, 2016; FAO, 2022; Béné and Devereux, 2023). The African Food Security Urban Network (AFSUN) (2008-9) has found that the more food insecure an urban household is, the more likely they are to depend on the informal sector to secure food. Skinner and Haysom (2017) hypothesise that this is possibly due to several activities and relations that form part of distribution processes on a micro level. These include spatial accessibility and proximity to high traffic areas like schools and transportation nodes, competitive pricing, breaking bulk, and access to credit (2017: 6-7). At a macro level, they include the transportation, wholesale, and various forms retail and trade in the food value chain (FAO, 2001).

These highlight how informal retail and trading improves geographical and economic access to food. Furthermore, not only does informal food retail and trade facilitate access to affordable and reliable food for households, but it also facilitates final sales for formal retailers (Crush et al, 2015; Dube et al, 2013). Thus, informal food retail and trade is a dominant and significant sub-sector, and thus a necessary part of inclusive urban growth and development (Skinner and Haysom, 2017). Consequently, and as the Business Act of 1993 mandates, South African provinces have the responsibility to regulate and support the informal sector (Haysom, 2012). The National Development Plan (NDP) also advocates for a policy framework that addresses and responds to food insecurity (ref?).

The Informal Sector Framework of 2014 (ISF) is the Western Cape's policy response to these mandates. The ISF recognises the role of the informal sector in improving food security but still requires a deeper commitment for proposed support mechanisms to be implemented, since the Western Cape is a surplus food producer, yet, food insecurity remains a challenge (Skinner and Haysom, 2017; FAO, 2022). AFSUN (2008-9) has found that in the Western Cape's largest metropolitan city, Cape Town, informal retail is one of three main food sources for urban households. Informal retail is also a daily food source of choice for the most food-insecure consumers in Cape Town with 60-70% of Capetonians accessing food through informal retail (Battersby et al, 2016; FAO, 2022).

At the same time, Cape Town has also shown co-dependency between informal retail and formal retail (Skinner and Haysom, 2017; Ortiz, 2015; Battersby et al, 2016). The relationship that exists between formal and informal retail is evident predominantly through the sourcing and subsequent competitive pricing of food from formal retail as well as the location of informal trading sites is often close to formal retail sites. This further confirms the dynamic that exists where informal retail assists formal retail with their sales too. In spite of this, the City of Cape Town (hereafter, 'the City') has not recognised informal trade as a solution to food insecurity in its policy engagements with the informal sector and neglects

the role it plays in addressing food insecurity (Skinner and Haysom, 2017; Battersby et al, 2016). Food systems planning in Cape Town largely favours formal trading in urban areas through supermarkets. This makes it difficult for informal fresh produce traders, hereafter ‘entrepreneurs’ (Charman and Govender, 2016), in particular to compete economically.

In contrast, the City’s Integrated Development Plan (IDP) (2022) approaches the informal sector largely through an economic vantage point and refers to informal food trade only in relation to job creation, food safety and control regulation (2022: 24, 35, 54-56, 132). The IDP thus contradicts the City’s economical approach to informal trade in its preferred formal retail expansion. More importantly, this policy gap not only misses the opportunity to address urgent food insecurity issues in Cape Town through informal food trade, but also the opportunity to address malnutrition through informal fresh produce markets. Fortunately, Cape Town’s Resilience Strategy (2018) has been expanded to factor in the question of food security following the 2018 water shortages and the COVID-19 pandemic’s exposure of the weaknesses in the city’s food system - especially downstream of the food value and supply chains (FAO, 2014; FAO, 2022) (Figure 1.6 and 1.7). The City also acknowledged the need for support of the informal sector through its Food System Programme (FSP) under the theme of food economy (FAO, 2022; Faragher, 2022; CCT, 2018).

Food insecurity is more than an emergency shock response. Ensuring food security in Cape Town’s households will require a deeper commitment to developing a consolidated vision of food value chain contributions and support mechanisms within urban food systems. This research proposes contributing to this vision through (re)prioritising informal fresh produce markets as a central element of the City’s urban food system as well as a central element of its supporting mechanisms.

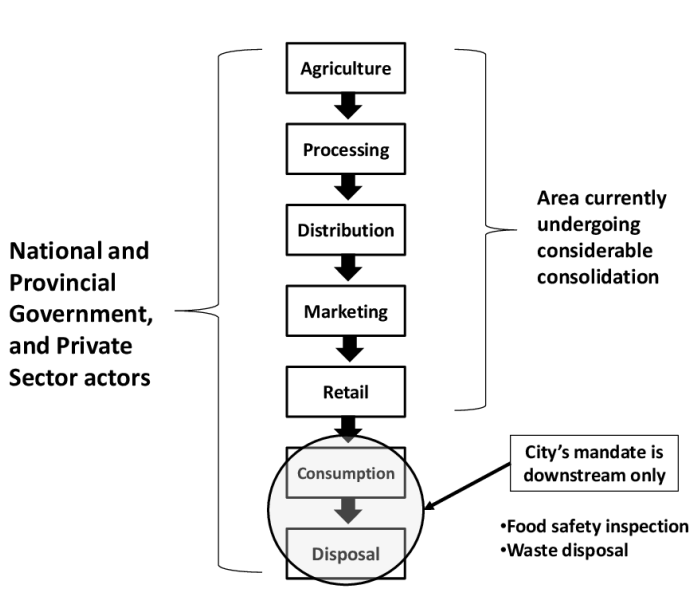


Figure 1.6: South African Urban Food Mandate (Haysom, 2012 adapted from Cooke, 2011)

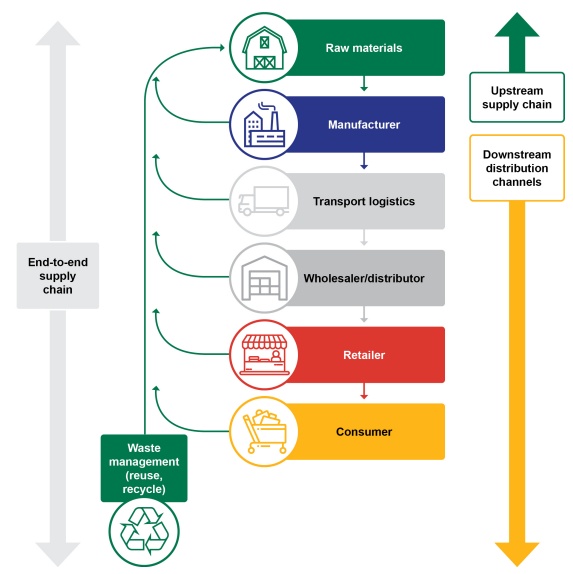


Figure 1.7: A Product’s ‘Route to Market’ (RTM) - Suggested Urban Food Mandate (Sourced: Masojada, 2021)

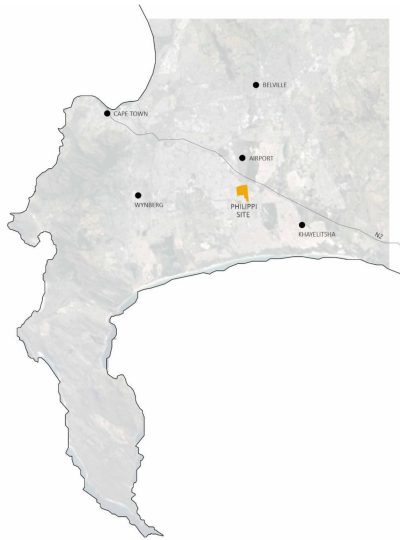


Figure 1.8: Precinct Under Study: Locality Map, CCT Sourced: SLF, 2018

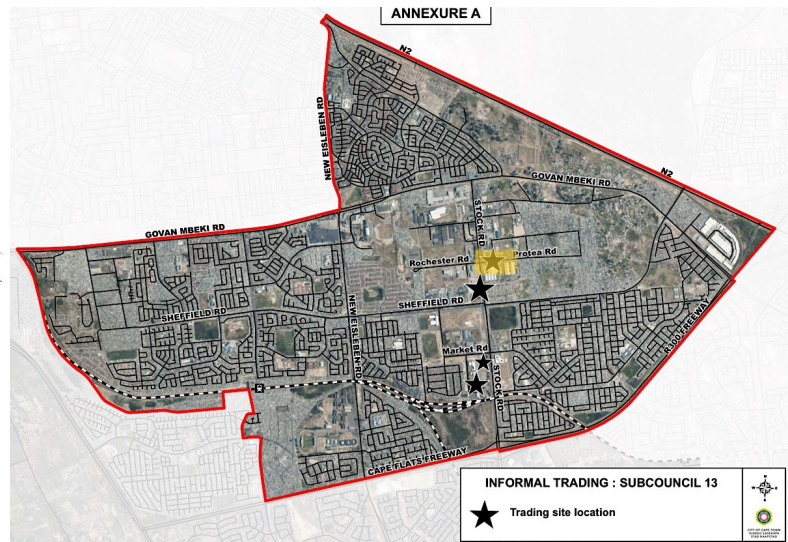


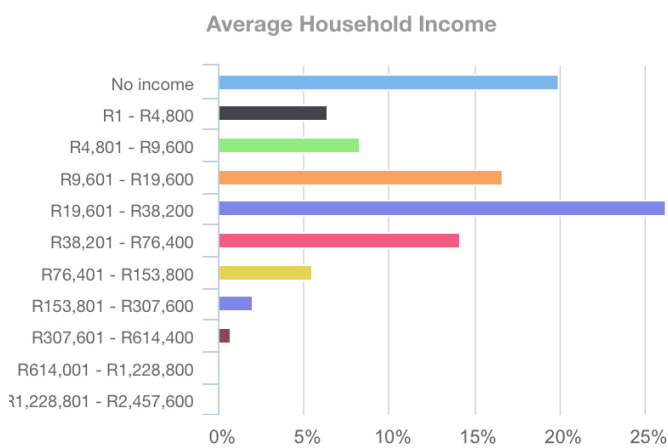
Figure 1.9: Trading site locations in the AED's proposed POA Informal Trading Plan - Philippi, Cape Town (Sourced: PEDI, 2016)

1.2 The Case: Protea Road Market, Philippi East Industrial Area, Philippi

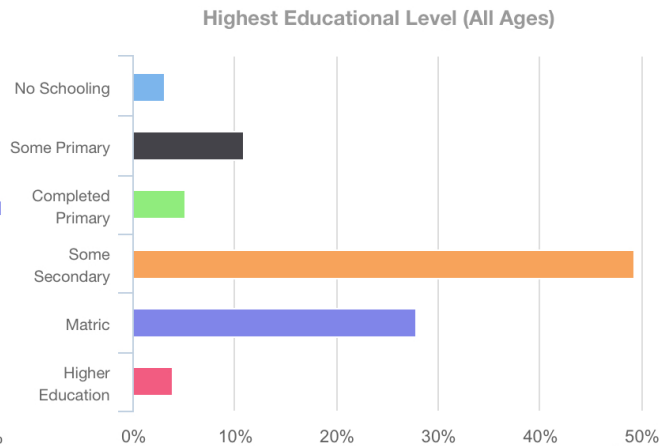
Philippi is a peri-urban neighbourhood situated in the metro south-east of Cape Town (Figure 1.8). The population is predominantly Black African (90.3%) and of ages 15-64 (70%) with a total population of 200 603 spread over a density of 4 182 persons per kilometre squared as at 2011. There are a total of 64 411 households with an average households size of three people. Figure 1.10 shows the household income range in Philippi and Figure 1.11 shows what the percentage spread of schooling levels are of the residents in the area (Stats SA, 2011). Within Philippi is a horticultural area and transit hub. The Philippi Horticultural Area (PHA) is referred to as the drought-proof, breadbasket of Cape Town due to its microclimate and aquifers (Donn-Arnold, 2018; Perspectives, 2019). The PHA also has a fresh produce market, a distribution hub and refrigeration services on location (FAO, 2022). The transit hub is dense near the train station and provides opportunities for informal traders (Battersby, 2008; Battersby, 2016).

Battersby (2011) has found that households in Philippi access food mainly through purchase, followed by formal and informal safety nets, with a small percentage of households growing food themselves. In other words, households depend on one or both formal and informal means of access to food including the small to medium-scale farming within Philippi and the PHA's immediate surroundings. For this reason, household income directly relates directly with how food secure a household is as it determines economic access to food. The map above (Figure 1.9) indicates the informal trading locations that are recognised by the City, such as the sites along Protea Road and Stock Road among others.

Whilst there are several (in)formal trading markets in the area, only a few are recognised by the City. Of these recognised sites, this study focuses on one – the informal market along



Figures 1.10: Average Household Income in Philippi (Source: Stats SA, 2011)



Figures 1.11: Highest Educational Level at All Ages in Philippi (Source: Stats SA, 2011)

Protea Road. Protea Road is part of a pedestrian and taxi route that serves the broader Philippi area and the Marikana informal settlement (SLF, 2018). It is also worth noting that the Protea Road informal market is located in the Philippi East Industrial Area (hereafter ‘Philippi East’) where several trading activities and businesses are located. Activities such as trading in fresh produce, personal and home accessories, clothes, braaied meat, meat and poultry and cooked food among others (SLF, 2018). Among the different goods that are traded in this market, fresh produce is one of the most dominant. This market is currently being upgraded by the City (CCT, 2022). Furthermore, with the PHA in its vicinity, there is reason to suspect that this potentially improves physical access to food.

I have chosen Philippi as a case study for this research, firstly, because it serves as an example of a community with both urban and agricultural households. Secondly, because the presence of informal trade suggests that there is the potential to improve access to food for households. Thirdly, because though the PHA supplies 80% of fresh produce in Cape Town and contributes millions of rands to economical growth, 84% of households in this area are food insecure (Battersby, 2011). Therefore, a deeper look at how the urban food system in the area operates as well as how informal fresh produce markets have the potential to improve access to food for its households is warranted. Moreover, taking a deeper look at the missing link between the availability of food in the area and the food choices available in Philippi explores this dynamic at household level.

1.3 The Main Research Question

Given that the aim of this research is to understand how urban informal fresh produce markets in Cape Town, namely the Philippi fresh produce market, improve household food security, the main research question asks:

How does the Philippi fresh produce market improve household food security?

1.4 Outline of the Dissertation

The introduction to this research highlights that informal fresh produce markets are central and vital distribution points in the urban food system, especially for urban households. This research proposes exploring how these markets are valued in the case of Protea Road in Philippi East, Philippi, Cape Town. In so doing, this research contributes to the body of knowledge about urban food insecurity and how fresh produce markets play a role in addressing it in Philippi, Cape Town.

The rest of this dissertation is structured as follows:

Chapter 2 examines the literature on food [in]security, with particular attention being paid to the question of access to fresh produce and role that informal food markets play in improving this access. In this chapter, assessment criteria and subsidiary questions are derived from the literature. The assessment criteria are used to evaluate the case in chapter 4. Chapter 3 outlines the research methodology. Thereafter, I present the key research findings in Chapter 4. Chapter 5 puts forward recommendations, based on the findings, through which the case's contribution to improving food security in the city can be increased. To conclude, I will reflect on the research and the unfolding narrative as well as further research into improving food security.

Chapter 2: Literature Review

2.1 Introduction

Undernourished populations place a limit on the social and economic development of a city (FAO, 2022; Cohen, 2005). So, beyond fulfilling the mandate of meeting the constitutional right to access to food, improving access to adequate nutritious, hygienic and culturally important food is as much a part of city development as it is social and economic development (Battersby, 2011; Constitution of South Africa, 1996; Ndhlovu, 2023). Though South Africa has a positive food balance and has a well-developed agricultural sector, food insecurity is a characteristic of many households (Figure 2.1). South Africa has the ability to produce enough food to meet three-quarters of its population's caloric needs. The difference is imported and distributed. Despite this, millions of South African households are food insecure because the country's food system is shaped by inequality and slow transformation toward inclusiveness (FAO, 2022; Ndhlovu, 2023). Additionally, and as stated in Chapter 1, rapid urbanisation in South Africa has created a dependency on bought food in urban areas. The cost is now a significant influence on a households' ability to remain food secure. Consequently, as Battersby (2011) and the FAO (2022) indicate, under- or mal-nutrition in urban areas is rising (Figure 2.2).

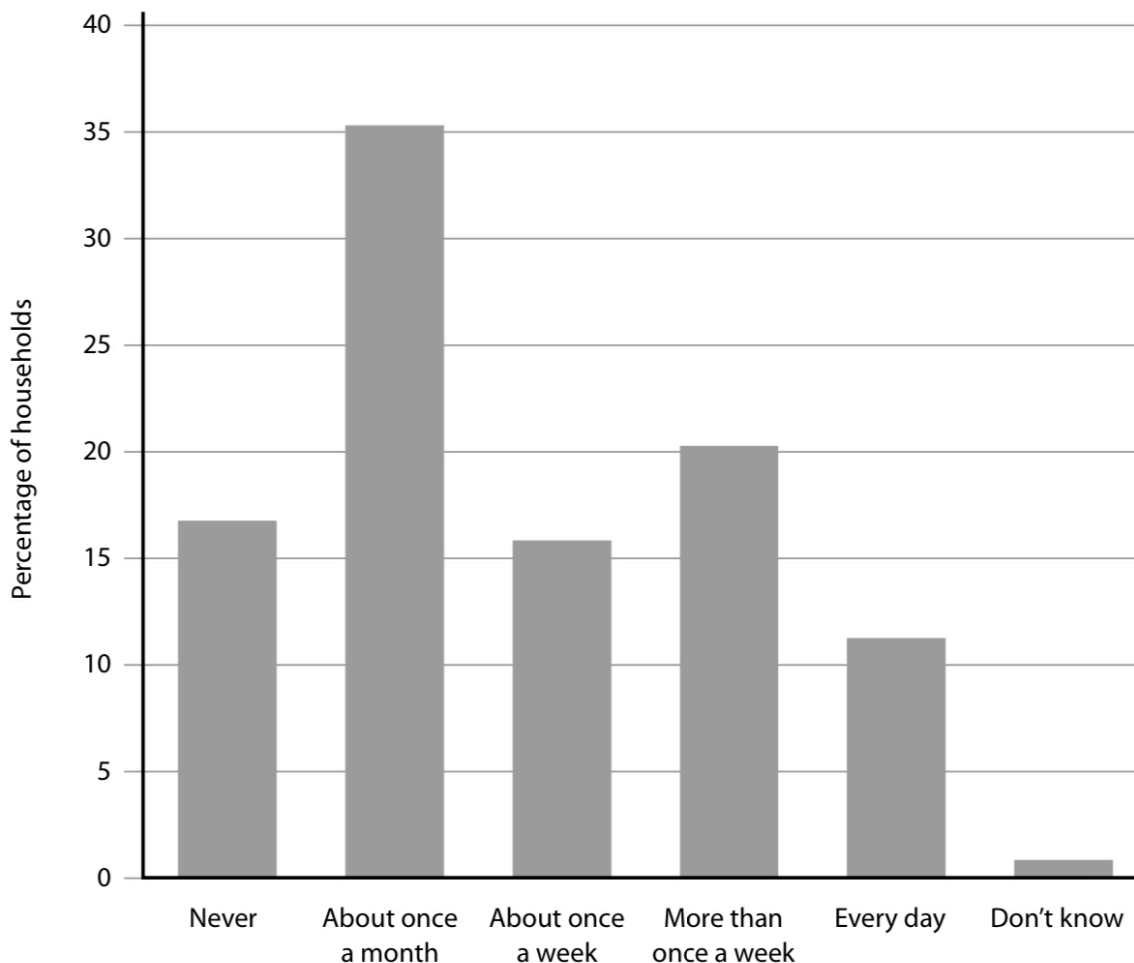


Figure 2.1 Frequency of Households in Cape Town Going Without Food

Sourced: Battersby, 2011

This, in turn, as the literature indicates is due to a high concentration of formal markets (supermarkets, restaurants etc) in the formal food retail sector (Competition Commission, 2008; Peyton et al., 2015). Several value chain inefficiencies and oligopolies that distort food prices also exist. These dynamics coupled with information asymmetries, monopolistic practices and collusion, and weak self-regulation, lead to food prices becoming increasingly unaffordable (FAO, 2022). As Battersby (2011) notes “households may have adequate resources to access food, but their location relative to accessible, affordable food may render them food insecure” (2011: 24) Furthermore, these dynamics create an uneven playing field that decreases insecurity, stifles livelihoods and bypasses local economic multipliers.

The chapter begins with a discussion on food [in]security and the criteria the literature establishes for food security. Thereafter, the chapter explores the role of informal fresh produce markets in fresh produce distribution in the country. This section highlights the ways in which access to food is influenced by entrepreneurs and the distribution of fresh produce in the country. This is followed by examining the challenges faced by entrepreneurs and informal fresh produce markets. This section aims to frame what could be addressed and what is missing in discourse regarding these dynamics in Philippi, Cape Town.

2.2 Food [In]Security

The definitions of urban food insecurity within the literature considers a wide range of factors that intersect and influence access to food at household level (Figure 2.4). The FAO (2006), Cohen (2005), Haysom and Battersby (2023) and Skinner and Haysom (2017) refer to four pillars of food security. These are: (i) availability; (ii) access; (iii) utilisation, and; (iv) stability. The Committee on World Food Security (CFS) has recently contributed two more, namely agency and sustainability (HLPE, 2020). Each of these pillars, which are utilised as criteria through which the case is assessed in chapter 4, is discussed in turn below.

2.2.1 Availability

The first pillar under discussion is that of availability. Cohen (2005) cited in Wynne (2016) criticises the agricultural industry for being overly rural and “productionist” (2016: 2). That is, firstly, the rural focus makes it geographically inaccessible to urban households. Secondly, there is an assumption that increased production means that availability and access to food is also increased. In South Africa, as previously demonstrated, availability of food is well secured. In their chapter on ‘Urban Food Security and Resilience’, Haysom and Battersby (2023) note that “food and nutrition insecurity has been framed as a food provision issue, with the belief that food shortages and unavailability were the key limiting factors of food security” (2023: 356). However, this framing puts limits on “effectively conceptualising [household] food and nutrition security” (2023: 356).

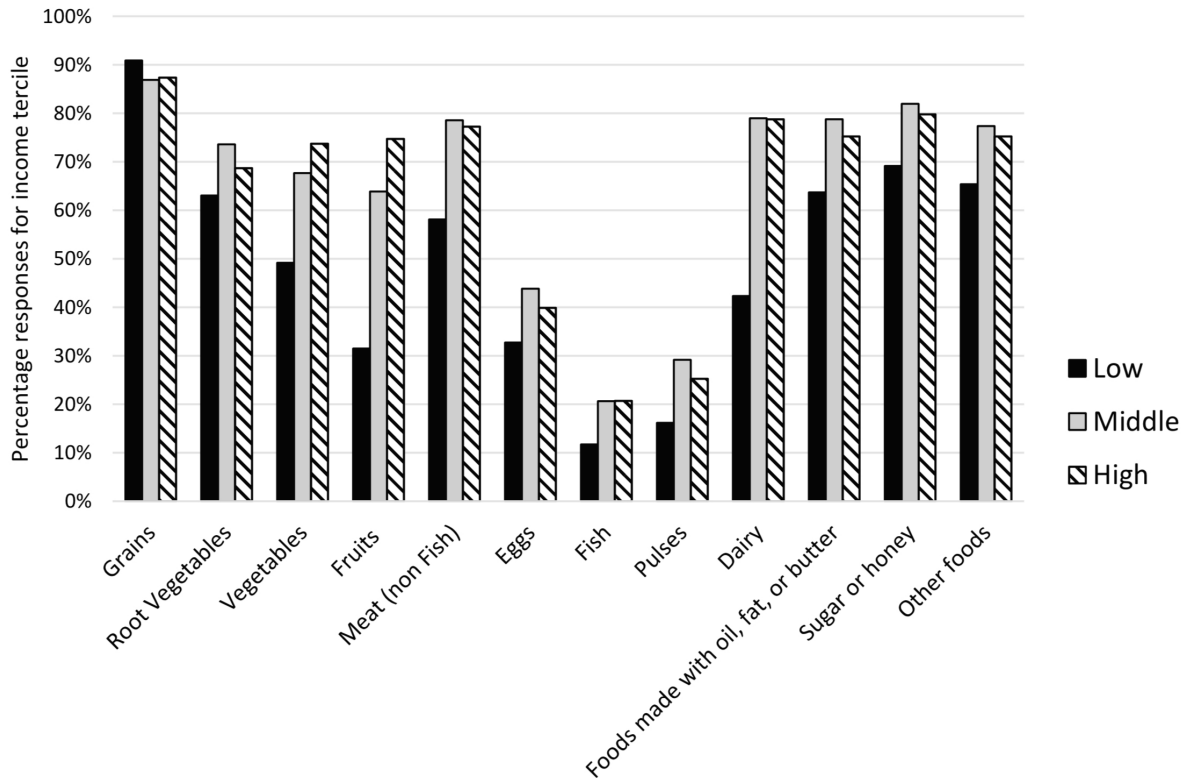


Figure 2.2: 12 Food Group Categories Consumed by Varying Household Incomes. Sourced: Battersby, 2011

Battersby and Marshak (2016) reflect on South Africa's post-apartheid agricultural policy. Though there was an effort to deregulate and liberalise the food system through the Marketing of Agricultural Products Act (Act of 1996) and the Strategic Plan for Agriculture (2001), it had the opposite effect of the intention. Commercial farming units have decreased and mid-sized farms have declined while very large agribusiness farms have increased. This has led to the creation of a greater concentration of formal production oligopolies (Vink and van Rooyen, 2009; Battersby and Marshak, 2016). This has implications on South Africa's small to medium farming businesses and all households, especially those that are vulnerable to supply and value chain fluctuations. *A subsidiary question in this research is: Is this true of Philippi, Cape Town.*

2.2.2 Access

The second and vital pillar is access. The term 'access' refers to the ability to derive benefits from things or a 'bundle of powers' (Ghani, 1995: 2) which one can make use of. The 'things' that are referred to in this case include material objects involved in food systems as well as the persons and institutions through which these food systems operate. Thus, in order to ensure household food security, physical (or geographic), social and economic access to food is critical. Therefore, these factors are sorted into two dimensions under this pillar. One dimension speaks to physical (or geographic access). The other speaks to social and economic access. Social and economic access also factors in how

political spheres influence access to food in all its forms (i.e. socio-political or political-economic).

2.2.2.1 Physical/Geographical Access

Physical (or geographical) access refers to spatial accessibility. Location is one of the first considerations that inform purchasing of food, then price, then quality. Places of commuting – especially in areas with high foot traffic is the common assumption of ease of access (Methvin, 2015). However, local knowledge of where these exist in various contexts and what the physical conditions are of these locations are also important (Battersby and Watson, 2018; Béné and Devereux, 2023). For example, if these locations are susceptible to changing weather conditions, frequent crime or in areas with little to no infrastructure, the desire to purchase from these locations decreases. Figure 2.5 shows that in Cape Town, local informal food access points in close proximity to lower income households are frequented far more often in a week (Haysom et al, 2017). Thus, another subsidiary question asks: *'Is physical access an important consideration for households' purchasing food at an informal fresh produce market in Philippi?'.*

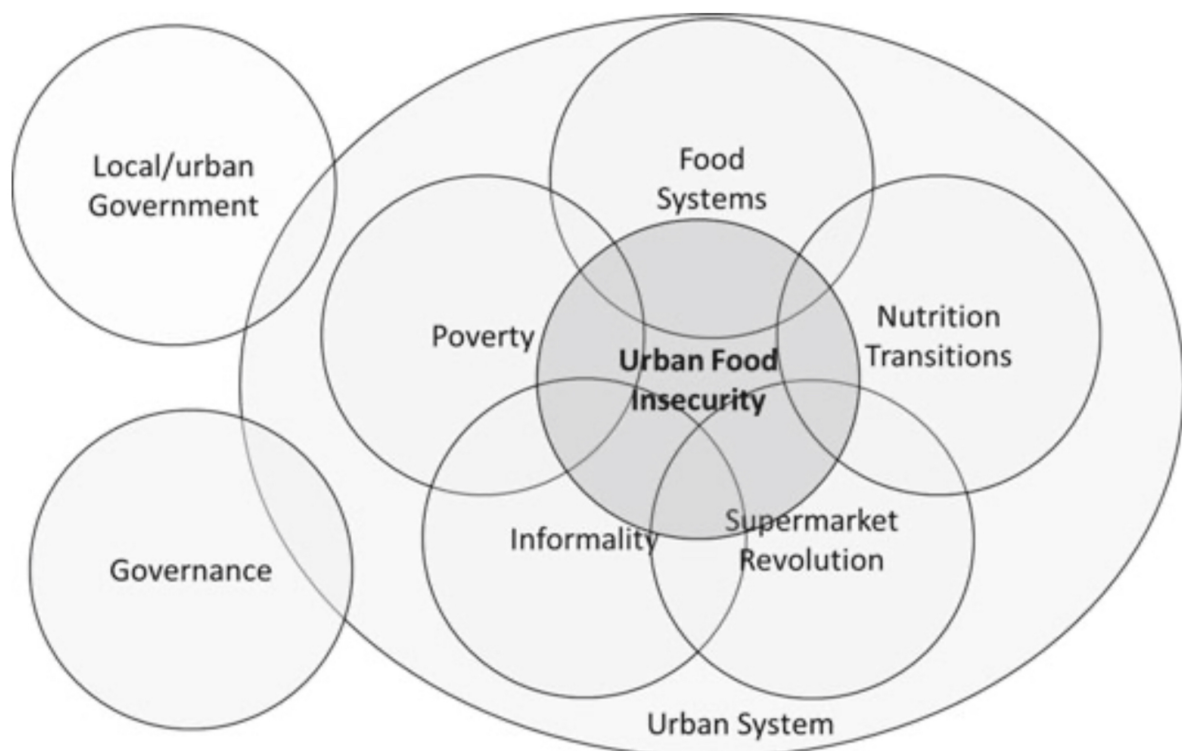


Figure 2.4 Urban Food Insecurity Factors

Sourced: Haysom and Battersby, 2023

2.2.2.2 Social and Economic Access

Social and economic access speaks to the relationships and financial means of purchasing or obtaining access to food. Battersby (2011) notes that one of the three ways households gain access to food is through purchasing food; through social networks, namely family, friends or neighbours as well as community interventions such as food kitchens, community food gardens; and self-sustenance farming like growing produce in yards. In Cape Town, household income is a determining factor in the choice and variety of food types afforded to them (Battersby, 2011). Figure 2.2 shows the Household Dietary Diversity Scores (HDDS) data collected that spread across the 12 Food Groups. It shows that lower household income terciles in Cape Town purchase less nutritious food than that of the medium to higher household income terciles (HDDS, 2013; Haysom et al, 2017). Therefore, a subsidiary research question also asks, *'Do changes in household income impact what kind of food a household purchases?'*

Socio-political access - an additional form of social access - speaks to the policy environment and the web of relations between society, decision-makers and enforcers over time. These allude to access through social identity. In other words, membership of or acceptance in a community, institutional body, or group of people. Thus, access to a resource is dependent on community in a context where social exclusion on the basis of gender and nationality occur, food insecurity increases for these households (). Intervention by the state of a socio-political nature may be required to negotiate access to food in communities less tolerant of these groups. Such interventions can include the revision of policy could be used as a tool to increase the benefit to communities. Representation through gatekeeping or institutional relations is another way to negotiate access to food. This also potentially can benefit communities, but it can also lead to the potential loss of benefit if representation is ineffective (Ribot and Peluso, 2003).

Political-economic access - another form of economic access - affords the use of a specific economic benefit from a single point in the food system or a chain of benefits from the whole food systems processes because of capital circulation. Capital circulation can exist formally within the requirements of formal arrangements governed by specific mandates or as alternative pathways of acquiring credit. Remittance flows in accessing food is another approach. Political-economic moments also bring into question the food security of households in that where there is instability or conflict, vulnerable households experience the greater impacts on the short-term but also over the long term period (Ribot and Peluso, 2003). These impacts affect the supply and value chain by decreasing the overall access to resources. Therefore, a subsidiary question raised in this section is: *'Is food security affected by the social identity or political-economic status of a household in Philippi?'*

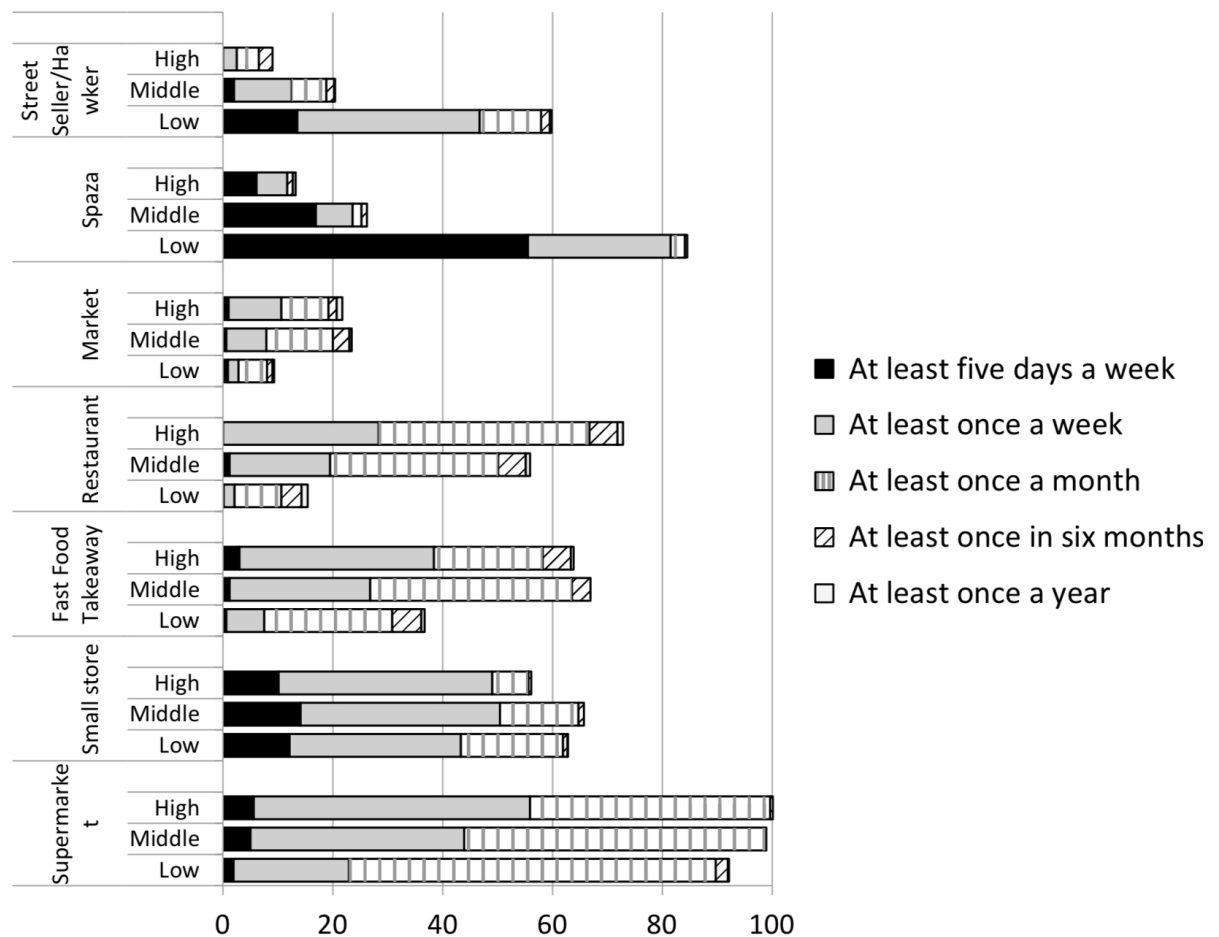


Figure 2.5 Frequented Source of Food for Households

Sourced: Battersby, 2016

2.2.3 Utilisation

Utilisation is a pillar that refers to the means or capacity by which to adequately and appropriately prepare or consume food. Preparation of food requires access to either some form of energy source, potable water or adequate sanitation. Needless to say, this speaks to adequate storage facilities and appliances. Consumption of food refers to the ability to the availability of absorb nutrients which is dependent on health status and the knowledge to acquire what is suitable for individual, household or community health (Fanzo, 2023). Stats SA (2011) has recorded that few households in Philippi have access to suitable preparation and storage facilities. A subsidiary question thus asks, 'How does preparation facilities/appliances affect the types of food a household in Philippi has access to?'.

2.2.4 Stability

This pillar is especially impacted by disruptions in the supply and value chain like price volatility, seasonality and conflict (FAO, 2006). As is the pattern, when these shocks occur, low income and vulnerable households are most affected (Fanzo, 2023) (see also Figure 2.6). Haysom and Battersby (2023) speak of stability as a short-term goal in achieving household food security. They agree with the HLPE (2020) that at best, sustainability ensures it in the long term. Thus, two subsidiary questions ask, '*What disruptions in the supply and value chain are households in Philippi currently experiencing?*' Béné and Devereux (2023) link stability and sustainability of food household food to household resiliency. Though household resiliency is not mentioned as part of the expanded pillars of food [in]security, they note that literature and policy has recently connected the two (Béné and Devereux, 2023). This is further discussed in section 2.2.7 on resilience.

2.2.5 Agency

Agency is oriented around the choices and capacity of decision-making available to households (HLPE, 2020). That is, the term refers, first, to a household's ability to choose what food they are able to produce, purchase, consume. Second, it refers to a household's ability to engage in as part of the wider set of processes within food systems processing, distribution, policies and governance (Crush and Frayne, 2011; HLPE, 2020; Béné and Devereux, 2023). Agency around food is also referred to elsewhere as suitability of food. This alludes to the quality of the food households are afforded. Typically, this is an aspect that comes with a country's development processes (Kabeer, 1999; Sen, 1985; World Bank, 2005; Béné and Devereux, 2023). Figure 2. shows the food type choices of households in Cape Town according to their household income. A subsidiary question also asks, '*What agency do households in Philippi have around the quality of the food they are afforded?*'

2.2.6 Sustainability

Sustainability is spoken of with respect to the protection of ecosystems in their interaction with the social and economic systems involved in providing for food security and nutrition (HLPE, 2000; Béné and Devereux, 2023). Urban and peri-urban agriculture (UPA) is one of the alternative production methods that aims to propel the realisation of sustainability. UPA goes beyond provision of food in that there are also social benefits and insurance capability including any cultural heritage or indigenous knowledge in localised food systems and agrobiodiversity (Haysom and Battersby, 2023; Béné and Devereux, 2023; Ndhlovu, 2023). This also brings us back to the idea of decentralised production and increasing local ways of improving access to agricultural modes of ensuring food security - provided there is no limitation by food systems policy mandates (Battersby and Watson, 2018; Béné and Devereux, 2023). Thus, a subsidiary question asks: '*Does UPA in the PHA and other areas in Philippi improve the sustainability with respect to food security in the area? If so, how?*'

2.2.7 Resilience

Resilience is understood by the United States Agency for International Development (USAID) as the “ability of people, households, communities, countries, and systems to migrate, adapt to, and recover from shocks and stresses in a manner that reduces chronic vulnerability and facilitates inclusive growth” (2012: 5). Observing other ways to ensure food security, sustainability helps ensure that resiliency across social, economic and environmental spheres is upheld. Another form of household resilience is that of diversifying opportunities to make use of urban food systems. Be it access, utilisation or agency, in the absence of an equitable urban food system, households have had to navigate various formal and informal social, economic, physical, infrastructural and political flows to improve food security (Béné and Devereux, 2023). Ziervogel et al (2017) attribute the inequity of the urban food system in Africa as a negotiated resilience amidst all the developmental challenges faced by its cities in general.

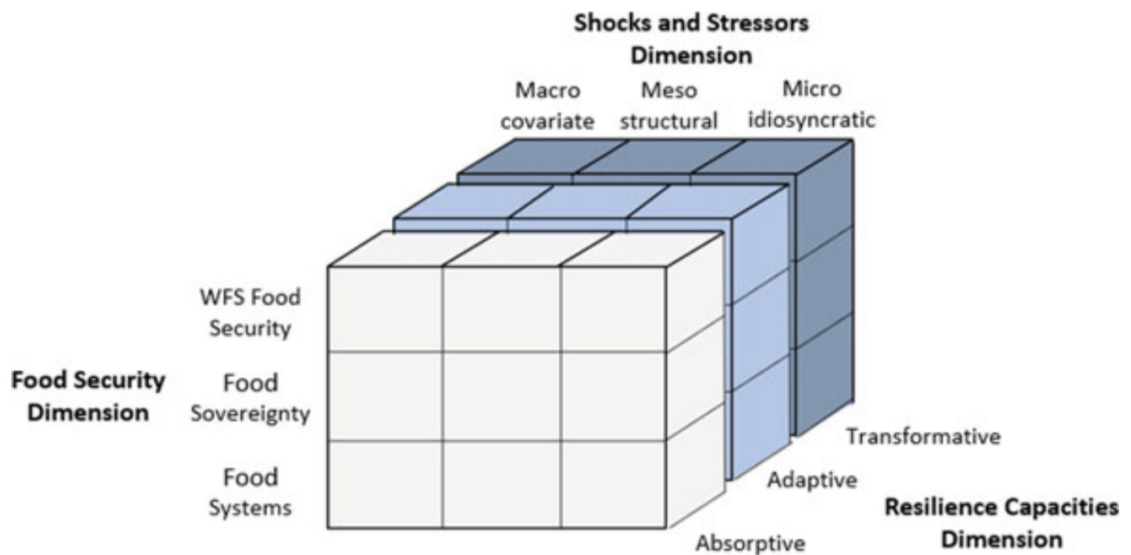


Figure 2.6 Integrated Food Security and Resilience Model

Source: Upton et al., 2023

The City regards resilience according to their 100 Resilient Cities (2019) definition as, “the capacity of individuals, communities, institutions, businesses and systems in a city to survive, adapt and thrive no matter what kind of chronic stresses and acute shocks they experience” (CCT, 2019). The City draws a connection between resilience and these four pillars which is useful but also limiting. There is an urgent need to coherently integrate food security and resilience at their intersection. Though climate change and economic implications of food security help cities, it is imperative that cities take the constitutional right to access to food seriously as an urgent basic need. Approaching food security through a resilience lens is not enough - especially if it is conceptualised as a tool of probability in avoiding poverty and not as an analytical tool (Barrett and Conostas, 2014; Conostas, 2023; Hoddinott, 2023). A subsidiary question therefore asks, *‘What household resilience strategies are employed in Philippi to realise food security?’*

2.3 The [In]formal Sector and the Food Economy

In South Africa, currently, distribution largely happens at the formal retail level through five large corporations. A central feature of [the post-apartheid agriculture] transformation is in the food retail sector which is increasingly dominated by major supermarket chains (Crush and Frayne, 2011). Market share dynamics confirm this imbalance. In 2003, major supermarket chains occupied 50-60% market share with only 2% of all food retail outlets. In 2010, 68% was occupied by the four biggest supermarkets with 97% of food sold in formal retail. In 2013, Shoprite Checkers and Pick n Pay were the dominant supermarkets with further growth projections (Battersby et al, 2016). This kind of development format increases market share in middle and upper income areas, but also into lower income areas through urban centre expansion and rural or small towns. Fresh produce supply chain from larger agribusinesses tie farmers to supermarkets in contractual agreements rendering farmers unable to sell crops to alternative market sources (Battersby et al, 2016; GAIN, 2012; Weatherspoon and Reardon, 2003; Planting, 2010).

The formal market is also segmented. Decisions made by one group of actors at one stage of the supply chain have implications for the others (HLPE, 2014a). These decisions influence the way food is produced, processed and distributed along the supply chain and impact the food systems network (Downs and Fanzo, 2016). In many respects, several urban areas in South Africa can be characterised as food deserts as a result (Battersby, 2011). The 'food desert' concept describes urban districts where affordable or good-quality, healthy or nutritious fresh food is difficult to access. While AFSUN's (2008-9) survey considers the concept of a food desert less relevant in their research sites, this research factors it in for the inclusion of access to nutritional food, not just food. It is for this reason that the term 'food desert', which is often used in Global North literature, is used to indicate sites where consumption of food does not necessarily include nutritious food. The consumption of food in South Africa is represented by 60% of supermarket food sales servicing different socioeconomic groups and locations. Luxury products are commonly found in higher income areas. Key staples for consumption, however, change according to supply chain dynamics (Methvin, 2015).

The attempt to increase participation of small to medium agro-processors inadvertently negatively impacted the agricultural food chain. This ultimately has had an impact on food pricing because of the higher concentration, high barriers to entry into the value chain, vertical integration and concentration of ownership (Competition Commission, 2008: 4). Peyton et al. (2015: 36) trace the penetration of supermarkets in Cape Town's lower income areas and have shown that they are "often incompatible with the consumption strategies of the poorest households". This further emphasises the importance of the informal food economy in Cape Town (Battersby and Watson, 2018).

The informal sector is recognised for its contribution to South Africa's GDP and employment. Informal trade is a traditionally bigger part of the informal sector with retail dominated by trade in food (Development et al, 2006; Skinner and Rogan, 2019; Skinner and Rogan, 2022). However, and as mentioned in chapter 1, the informal sector operates within and has a relationship with the formal sector. Mutual exchanges and trade between formal and informal sectors show that the dominant source of supply for the informal food trade is from the formal sector. For the formal sector, informal trade becomes an important part of final sales (Battersby et al., 2016). Thus, informal food trade in South Africa is as much connected to formal supply chain dynamics and formal food economies as those of the informal sector. A subsidiary question asks: *What relationship, if any, exists between the formal and informal food economies in Philippi?* With the dependency of households on the informal sector for access to food, and moreover, seeing the informal food trade is also an important source of employment, it is also worth factoring in how employment relates to the food economy.

2.3.1 Informal Fresh Produce Markets

Informal trading practices occur in a variety of trading locations, namely, spaza shops – informal convenience store in residential neighbourhood, mobile/roving traders in light vehicles or on their person, kiosks, beach trading, fixed bays, open spaces, public spaces, transportation interchange, street, market and event spaces, registered trade markets. There are two types of informal fresh produce markets: local and satellite markets.

Where entrepreneurs source fresh produce is an important consideration for logistical operations such as transporting fresh produce and trading location relative to customers and supplier among others. Entrepreneurs cannot be assumed to be sourcing locally. An AFSUN (2008-9) survey of 100 entrepreneurs in Cape Town found that food for trade was bought from sources that have local, national and international supply chains. Over half of the entrepreneurs bought from wholesalers (largely for processed foods and meat), who source processed foods from national and international producers. The main source of fresh produce was the Cape Town Fresh Produce Market, which procures locally where possible, but also sells key products such as bananas for example that cannot be produced locally. Some entrepreneurs also buy direct from farms, but this is not often possible given existing contracting agreements between farmers and formal retailers (Battersby et al., 2014).

The location of informal trade markets is a central consideration in relation to their capacity to ensure secure food access in that area. However, an additional consideration is the reality that some households may not have the means to store and prepare some fresh produce required to make healthy meals. For example, some households may not have the stoves or ovens, whereas other households may not have refrigerators to store produce.

Therefore, the proximity of fresh produce markets to households for those that do not have adequate storage facilities becomes important. Proximity helps make fresh produce more easily accessible as and when needed (HLPE, 2017).

Subsidiary questions raised in this section thus ask: (i) *Can Philippi be characterised as a food desert?*; (ii) *What type of informal fresh produce markets exist in Philippi?*, (iii) *What supply strategies do entrepreneurs use to source fresh produce? and;* (iv) *Do transportation and mobility networks impact informal fresh produce markets in Philippi and, if so, how?*.

2.4 Informal Trading (Infrastructure) Challenges

Upton et al. (2023) and Maloney, (2004) characterise informal trading as a “multi-stressor, multi-shock environment” with inadequate market conditions (2023: 10). It is also described as an environment where “shocks often have indirect impacts that far exceed direct impacts” (2023: 11). Five types of stressors and shocks have been documented in the literature. These are: Mobility Restrictions, Employment Disruptions [and Gendered], Price Shocks, Health Shocks and Meso-level Mechanisms (see Figure 2.6). Each of these are influenced by a varying combination of natural [phenomena and] hazards, global financial shocks, conflict, epidemics and pandemics, and covariate shocks (Upton et al, 2023). Each of these require a certain level of infrastructure be provided within fresh produce markets to ensure that entrepreneurs are less susceptible to these shocks and stressors as well as weather conditions, crime and conflict (Oribi Village, 2023; Aljazeera, 2020; Béné and Devereux, 2023).

Kennedy et al. (2004) refer to infrastructure as a key consideration to understanding food security. Water and sanitation infrastructure are examples of forms of infrastructure that are connected to the ability to trade in fresh produce. The lack of bulk infrastructure supply, including the lack of electricity supply, in many informal fresh produce markets can pose health risks as they impact storage and preparation conditions (Battersby, 2011). Though entrepreneurs can adapt and respond to infrastructure deficiencies in ways that formal retail is not able to, there is still an inadequate understanding of the infrastructural challenges facing informal traders. Energy, transport, water provision and economic activity are all interconnected urban systems that influence the efficiency and sustainability of urban food systems as well as informal markets (Béné and Devereux, 2023). This raises the following subsidiary research questions, *What infrastructure exists in Philippi’s fresh produce markets? How does this infrastructure impact activities within these markets?*

2.4.1 The Gendered Nature of Informal Trade

Official employment data is difficult to capture especially where undocumented migrants, asylum seekers and refugees are concerned. So, though the documented decline of informal sector activity is attributed to formal retail sector, it is worth noting that data collected on informal workers has a few blind spots. A documented trend, however, shows that women dominate the informal food sector in South Africa but experience the worst of economic effects, especially during the COVID-19 pandemic (Sinyolo et al, 2022) (Figures 2.7 - 2.8). The disruption of agri-food supply chains threatened the success of informal trading businesses. 23% of men lost their jobs in the informal sector job as a result of the pandemic. Women were worse affected with a 29% job loss rate. The major adjustments required to comply with COVID-19 regulations also affected the ability for entrepreneurs to sell foods and operate at traditional hours. This meant that all entrepreneurs would have to decrease the amount of stock on hand.

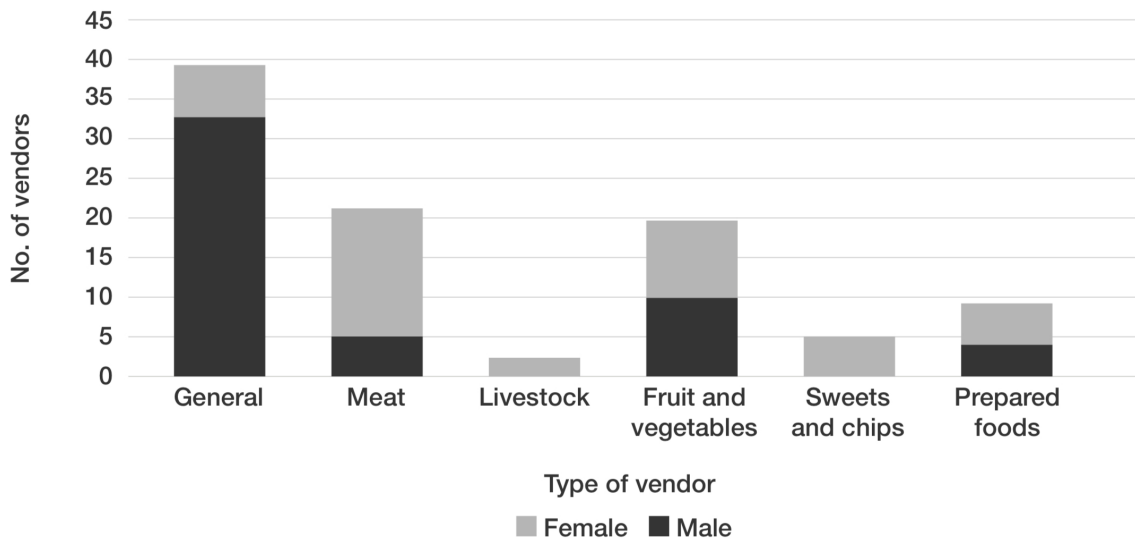


Figure 2.7 Gender Distribution by Type of Activity

Sourced: Battersby, 2011

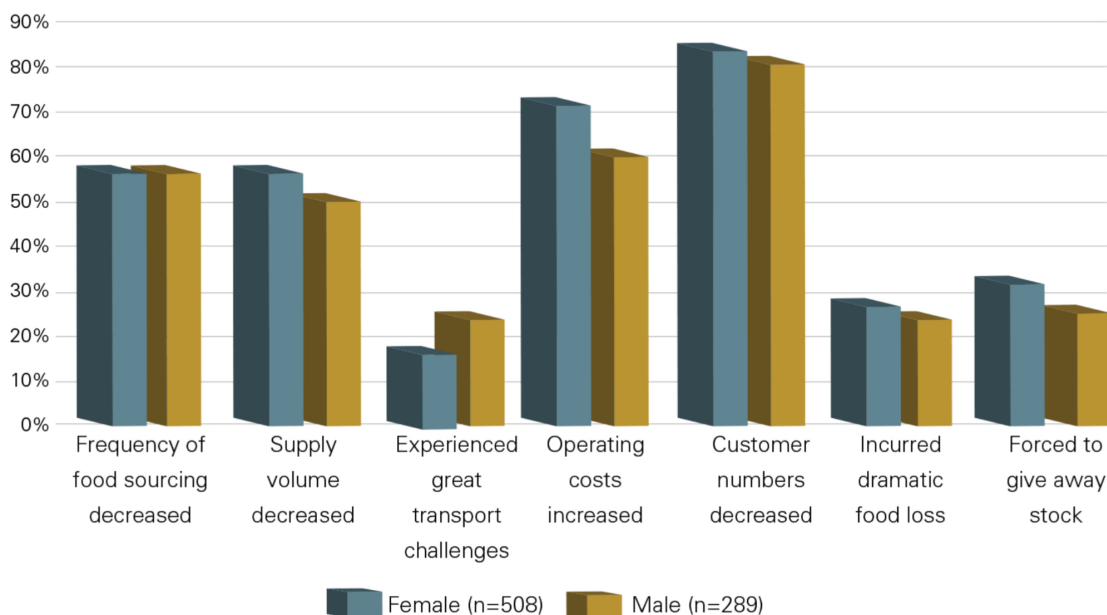


Figure 2.8 Gendered COVID-19 and Lockdown Impacts on Supply, Transport, Costs, and Food Loss
Sourced: HSRC, 2020

Moreover, Wegerif (2020) argues that the needs of entrepreneurs were ignored during the pandemic, especially since authorities were overly zealous in implementing restrictions. The role entrepreneurs play in localising agri-food value chains for consumers was not appreciated (Sinyolo et al, 2022). The gendered COVID-19 and lockdown impacts were imbalanced toward females than males. Impacts included that of supply, transport, costs, customers and food loss (see Figure 2.8). Targeted support is needed for those who suffered total losses and increase the capacity for those who are operating below usual levels (Sinyolo et al, 2022).

Battersby et al. (2016) and Sinyolo et al. (2022) further highlight the challenges experienced by women in informal trading (Figure 2.9). Women tend to operate survivalist, micro-scale businesses, selling a smaller share of fresh produce, for example, when compared to men. Where men have multi-level and relatively permanent fresh produce stands, women often have only a few fresh produce staples on a box stand (Battersby et al, 2016). Structural, social and administrative biases cause disparities between how men and women suffer adverse outcomes. The Human Sciences Research Council (HSRC, 2020) has found that fresh produce entrepreneurs were largely bakkie traders represented predominantly by men selling into non-urban areas in Limpopo, KwaZulu-Natal and the Eastern Cape. Women predominantly prepared, processed or cooked food to serve in urban areas in Gauteng and the Western Cape.

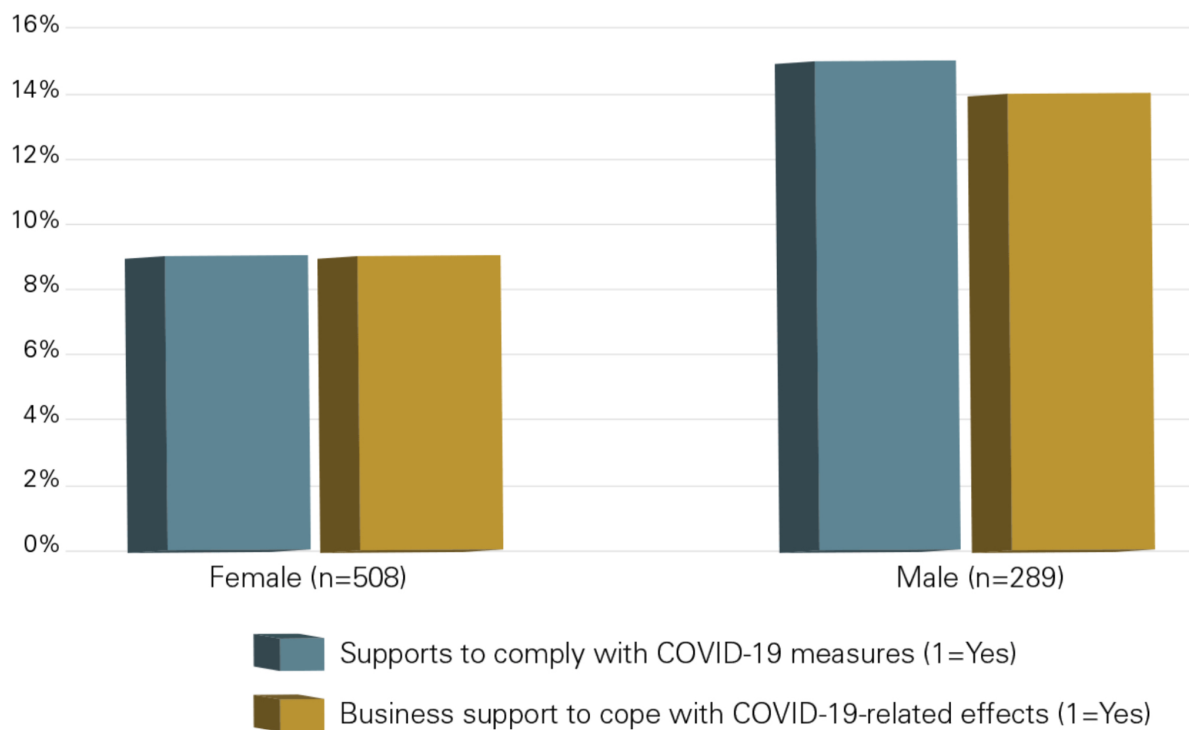


Figure 2.9 Gendered Access to Support

Sourced: HSRC, 2020

Level of education also serves as a barrier to entry in trading. This observation leads Battersby et al (2016) to believe that those educated beyond secondary school are less likely to work in the informal economy. Subsidiary questions that arise in this section are: ‘How do gender dynamics impact entrepreneurs in Philippi?’ and ‘What is the average level of education amongst entrepreneurs in Philippi?’.

2.4.3 Pricing

Entrepreneurs mainly source from formal fresh produce markets, wholesalers and supermarkets. Alternative sources and distribution flow range from context to context. Figure 2.10 shows varying additional sources that entrepreneurs make use of in Philippi, for example. Figure 2.11 shows the typical distribution flow of fresh produce sourcing in South Africa. Supermarket pricing is only competitive for customers who do not rely on credit for purchasing food. Fresh produce sold informally in low-income areas in Cape Town are typically sourced from the Cape Town Fresh Produce Market and the Golden Harvest Fresh Produce Market in Epping (PEDI, 2023; UKITA, 2023). Informal retailers also buy in bulk to supply to entrepreneurs of various kinds. This helps reduce the price per unit as they sell to a variety of businesses (Battersby et al., 2016).

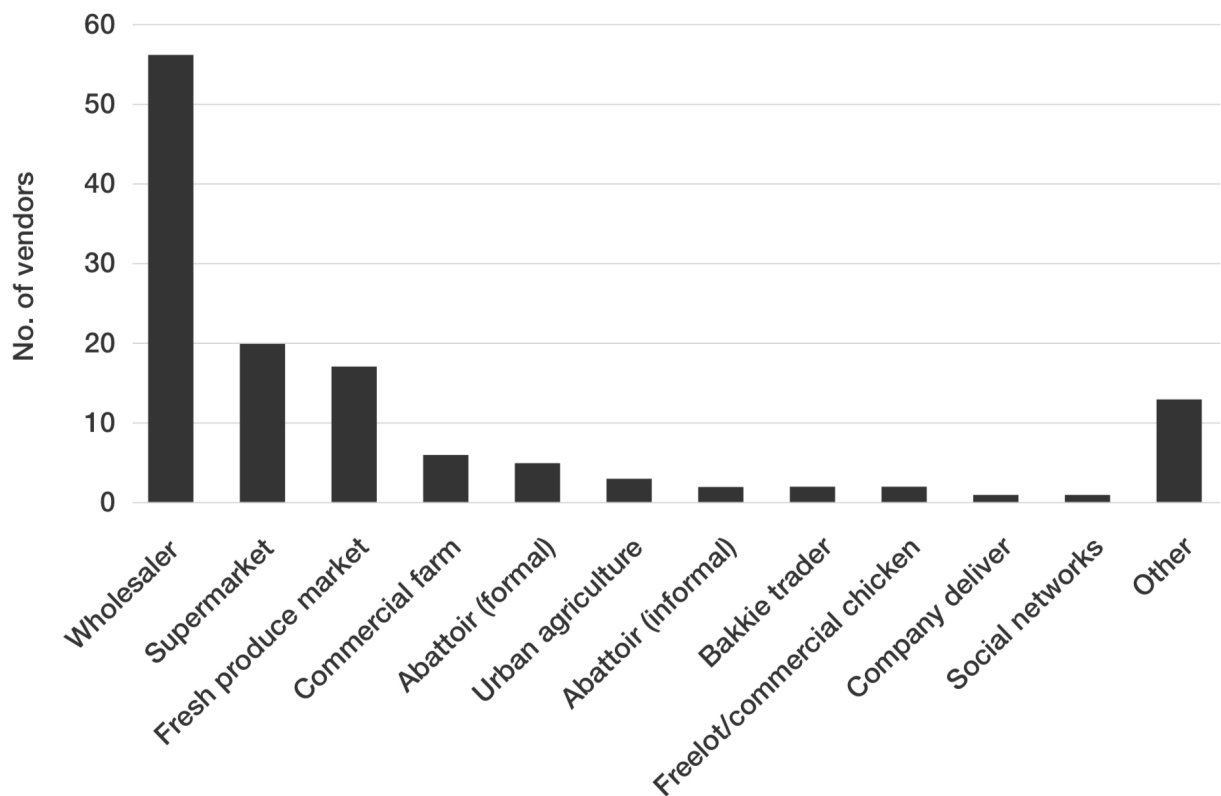


Figure 2.10 Sources of Produce (in Philippi)

Sourced: SLF, 2018

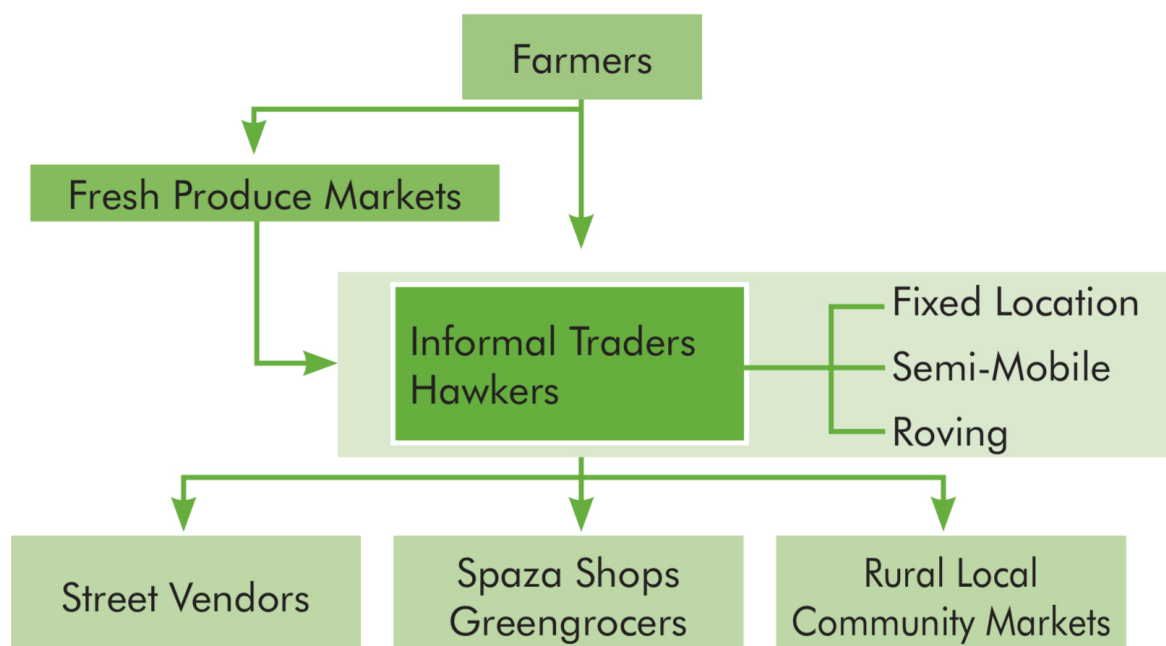


Figure 2.11 The Supply Relationship of Fresh Produce in terms of Informal Trade Sourced: Madevu, 2006

Thus, and in as far as informal food retail is concerned, when price affects how an individual can profit from selling his or her product or by redistributing access to it, querying the origins of that price could be both of benefit and of loss for entrepreneurs. Nevertheless, whether it was fixed at national level, set individually or collusively by ‘merchants’, or produced at the intersection of broader patterns of supply (i.e. perhaps a function of production) and demand (i.e. perhaps a function of need, disposable income, wealth, etc.) is still worth analysing (Ribot and Peluso, 2003). A subsidiary question thus asks: *‘What pricing strategies do entrepreneurs in Philippi make use of?’*

2.4.4 Meso-level Mechanisms

Access to resources in their various forms, namely relationships, means and processes can be summarised under mechanisms. This is because cooperative arrangements, changing social relationships, political-economic moments are processes. A combination of processes, relations and means (which implies agency and ownership) are thus mechanisms. The relationship between entrepreneurs and the various mechanisms relied upon for day to day business are important for household food security. This also brings in the legal perspective of trading activities. Entrepreneurs that function outside of legal confines are subject to tension with authorities. The illegal occupation of trading areas also has to do with questions around the ownership of the land on which trading activities are taking place. Policy analysis is needed for better flexibility around informal trade.

Strict by-law and policy conditions limit the health of the relationship between the City and entrepreneurs who rely on more than fixed conditions and spaces to operate. Conditions include fees, trading hours, nature of goods/services, nature of structure/operations through which trading occurs, preferential applicants and any prohibitions among others. Conditions extend to non-City owned land and especially where necessary services are located such as firefighting and surveillance equipment to mention a few. Existing and proposed trading plans, must take the dynamics of informal trading into consideration as well.

2.5 Summary and Conclusion

Several integrated criteria are discussed in this chapter. This criteria can be used to achieve “a situation that exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life” (FAO, 1996). This points to a food systems resilience approach that addresses food system inequalities and slow transformation to inclusion. It also points to distribution as a focal point around which food security is enabled. Urban informal trading is a central focus of literature on food distribution. However, the inequities surrounding formal and informal supply and value chain dynamics limit the agency of entrepreneurs and households to various forms of access efficiencies.

There is agreement in the literature on the three broad variables that make access to food possible namely, (i) availability of food, (ii) physical (or geographic), social and economic access to food and a nutritious diet, and; (iii) proper use of food to ensure adequate nutrition and hygiene. The expanded variables of stability, agency and sustainability nuance the criteria necessary for being food secure.

Three things are highlighted across these variables. First, availability - when viewed from the perspective of entrepreneurs - is characterised by high barriers to entry in the market for small to medium producers and businesses. The high concentration of formal large to mega agro-producers as well as formal wholesalers, supermarkets and retailers is part of the reason ‘food deserts’ exist in different parts of the country. Inclusion of local and satellite retailers, and especially those that are informal increase accessibility for households. Moreover, UPA helps significantly reduce the dependency on commercialised modes of production that often do not enable access by the urban households this research targets (Haysom and Battersby, 2023).

Secondly, access to food is best enabled when suitable locations to food access points are met first, then price and quality of food. However, access to food is essentially the ability to make use of the full spectrum of mechanisms that enable food access. Viewing access in this light highlights a plethora of mechanisms that are required for one to make use of and benefit from the resources available. This also brings into question the maintenance of access which is the control and stability of access over time (Ribot and Peluso, 2003).

Furthermore, the resiliency of these access mechanisms introduces a higher ability to buffer against the multi-shock multi-stress environments that food systems and urban households exist in. The informal sector as a distribution point in the food system help make more food accessible to urban households through both these dimensions. Beyond location, price and quality, the informal sector is also a significant source of work which improves household income (Battersby, 2011).

Thirdly, ensuring resilience is a legislative, policy, implementation, enforcement, monitoring and evaluation mandate. The policy environment affects informal sector and as a result food security. Often the informal sector is not fully seen by policy. In the context of South Africa, the informal food sector is not seen as a solution to food security for the households who depend on it the most. Thus policy, plans and development objectives should correlate with what the lived experience of entrepreneurs and households are. This includes those who require improved access to nutritious food and those who require increased capacity of access to nutritious food. Access here addresses both the legal and illegal use of mechanisms. The ambiguities surrounding illegal activities are often because of not being seen by legislation, policy and enforcement officials. Thus plurality through which claims can be made on the use of mechanisms (Ribot and Peluso, 2003). Often this leads to stigmatisation of the informal sector as a whole.

Therefore, consolidated subsidiary research questions that arise in no specific order are:

i) *What relationship, if any, exists between the formal and informal food economies in Philippi?*

ii) *'Is informal food, especially fresh produce, access key to ensuring food security for lower income households in Philippi, and what types of informal fresh produce markets exist in the area?'*

iii) *How does supply chain fluctuations affect entrepreneurs and households in Philippi, and what supply strategies are used to ensure sourcing of food?*

iv) *'How does food price fluctuation directly impact on the availability of nutritious food purchase options at a household level and what pricing strategies do entrepreneurs in Philippi make use of?'*

v) *'Does the social identity (i.e. gender, documentation or representation) or political-economic status of a household or entrepreneur in Philippi affect food security or business?'*

vi) *'Does infrastructure such as transportation and mobility networks for example have an impact informal fresh produce markets in Philippi and how, if so?'*

vii) *‘What household resilience strategies (stability of access to nutritional quality of food) are employed in Philippi, and does it automatically render that household food insecure if this is not achieved?’*

viii) *‘Does UPA in the PHA and other areas in Philippi improve the sustainability of food security for households in the area? If so, how?’.*

ix) *‘Does the quality of choice urban households have in Philippi around the quality of the food they are afforded change with level of access?’.*

x) *‘How does the education level affect entrepreneurs in Philippi?’.*

Assessment criteria established for the case study are thus summarised under the following themes:

ASSESSMENT CRITERIA DERIVED FROM THE LITERATURE	ASSESSMENT CRITERIA SUB-THEMES	
Availability		
Mechanisms Access	Physical	Proximity
		Place
		Mobility
		Energy
		Water
	Social	Sanitation and waste services infrastructure
		Health
		Gender
	Economic	Nationality
		Employment
		Supply and value chain dynamics affecting <u>price</u>
	Political	Legislative
		Policy
Capacity building		
Other institutional support		
Resiliency	Longevity of access	
	Anti-shock, anti-stress capacity	

Table 2.1 Summarised Assessment Criteria

Sourced: Author’s Own, 2023

This chapter has established a foundational framework for this research by exploring the literature around what it takes to achieve food security in consideration of its related multi-level food systems and urban planning dynamics. Subsidiary questions and assessment criteria were thus created against which the case study can be evaluated to assist in answering the main research question of how the Philippi fresh produce market improve household food security. The following chapter unpacks the research methods, techniques and analytical tools with which to discover findings and then discuss recommendations for possible interventions before concluding the research.

Chapter 3: Research Methodology

3.1 Introduction

This chapter presents the methods, techniques and analytical tools that were used in this research. The chapter discusses strengths and limitations of the chosen research methods, techniques and analytical tools are also discussed in the respective sections. This is followed by a discussion on the ethical considerations that guided this research. It concludes with an acknowledgement of the limitations of this research and ways in which these have been addressed.

3.2 Research Methods

A significant portion of this research relies on the ideologies and experiences of institutions and relevant stakeholders. What that means for the research is that it is qualitative. Qualitative research is interested in learning about or from the participants' experiences of the subject matter. This means that these experiences are subjective. So, I have learned about and from those who have put forward ideas on food security, food systems and food systems planning in theory, policy and practice. I have also learned how these ideas have or have not translated on the ground based on entrepreneurs' accounts (Winkler, 2022). To this end, I have employed the case study research method to achieve this. I have also used these lessons to answer the main research question and related subsidiary research questions. In this section, I explore the strengths and limitations of the case study research method below to justify my use of this method.

3.2.1 Case Study Method

The case study research method is concerned with verifying observations or experiences by describing and analysing these observations or experiences from multiple sources through in-depth investigation of subject matter within its real-life context (Flyvbjerg, 2006). Therein lies its strength. Thus, this research method is suitable for and has been used to explore the ideologies and experiences of entrepreneurs. It has also been used to explore and observe the spatial practices of urban informal markets as well as how urban informal markets are supported by fresh produce suppliers and other value and supply chain systems.

Flyvbjerg (2006) and Yin's (2004) arguments for case study methods reinforce my motivation for choosing case study research. They argue that case study research contributes to a narrative best explained through a detailed example (Flyvbjerg, 2006). In this case, the complexities surrounding urban informal fresh produce market spatial practices as an urban, a spatial phenomenon in addition to the experiences of entrepreneurs in the role they play in food security, food systems and food systems planning. Case study research has a few limitations, however, that do not allow for generalisation of the findings to an unlimited range of circumstances. The purpose of using

this research method in this instance is not to create a generalised narrative that is applicable to all or similar seeming contexts. The motivation is to explore and verify the observations made and experiences of this spatial phenomena within a site-specific context. Nevertheless, the opportunity that the case study research method presents, beyond context-specifics, is information on the actors and events involved as well as legislation and policy to a limited degree (Yin, 2004).

The case for this research is the Philippi fresh produce market (cf. Chapter 1). This case has served to, first, contribute to a body of knowledge through a “systematic production of [an] exemplar” (Flyvbjerg, 2006) of urban informal fresh produce market practices inside and outside of regulation in South Africa. Second, it has helped to gain an understanding of how urban informal fresh produce markets contribute to household food security in Cape Town at large and the areas in which they are located, as well as the challenges surrounding that (Yin, 2004). Lastly, they have enabled the exploration of how to improve the experience of entrepreneurs in their contribution to metropolitan urban food systems and subsequent planning. The Philippi fresh produce market in Cape Town has thus achieved these aims in its selection as a case for this research. It is discussed at length in the next subsection below as well as its specific strengths and limitations.

The neighbourhood within which the chosen case study - Philippi - is located in, has the following strengths and limitations. First, though Philippi is not relied upon to generate a predictive theory on food security or food systems planning throughout all of Cape Town and South Africa at large, as a site it has offered context-dependent, competent knowledge (Flyvbjerg, 2006). In fact, using it for hypothesis testing or theory building will limit the discovery of other elements outside of informal food systems planning (i.e. socio-political or economic dynamics) that potentially add to the study of existing policy and practice (Yin, 2004). And, so, an advantage of the case study method is its ability to both support findings that either directly or indirectly contribute to the research (Flyvbjerg, 2006).

A limitation is that the data collected on Philippi is specifically application dependent. That is to say, that the findings of this case in its location may not necessarily be true for all or even another case or location due to its specific context. However, a certain amount of flexibility is afforded by the case study method. For example, if it had been discovered that Sea Point as a case is more valid to the research aims (Flyvbjerg, 2006), one of two things can be adjusted; either the specific case, or – depending on the research findings, and in remaining open to unlimited discovery as mentioned above — the research question.

Good case study skills are yet to be defined. However, a notable strength in the application of the case study research thus lies in the triangulation of information from various sources. In other words, it enables the researcher to collect data collected through several techniques. This leads to an increase in the credibility and validity of the case study. An

added measure of strengthening the case study is the comparison of case study locations to tease out any differences and similarities. The nature of this research could have benefited from a comparative case study by employing at least one other case to serve as a confirmatory or contrasting measure of information. However, choosing to focus only on one of Cape Town's urban informal fresh produce markets has allowed for in-depth and carefully devoted attention to that case. This has strengthened the findings (Yin, 2004)) in addition to affording the researcher to evaluate how well the chosen case matches to all the research questions.

3.3 Research Techniques

To achieve the triangulation of data mentioned in the previous section, I detail in this section the research techniques - semi-structured interviews and non-participatory field observations - that have been used to collect data, as well as what their strengths and limitations are.

3.3.1 Semi-structured Interviews

An interview is a face-to-face conversation. Interviews allow the collection of subjective experiences, the co-construction of realities related to the subject matter and meaning-making. The additional strength of this method is in keeping it semi-structured. It gives the interviewee more opportunity to share their experiences, subjective as it may be (Winkler, 2022; Roulston et al., 2003). The transcribing process strengthens the value of the technique because it has enabled me to reflect on the process and take note of anything that I may have missed during the interview. It has also enabled me to improve on my interviewing skills for subsequent interviews (). The interviewees were willing to give me permission to record the session, however, some preferred not to have the camera on during zoom interviews. Notes were also taken during and after the interview session.

I was aware that my subjectivities influenced the type of questions that I asked and so to mitigate this, I had submitted the questions for peer and supervisor review. In doing so, I explained the relationship between the research question and the interview questions so that they were focused and sufficiently open-ended (Roulston et al., 2003). The questions were also informed by the existing literature.

Several other potentially unpredictable limitations included, first, the environment where the interviews were conducted also posed a challenge. Zoom calls for example relied heavily on network strength and little to no background noise or distractions. Second, the behaviour of interview participants especially in dealing with sensitive issues. The nature of the subject involves access to basic needs and services, which may have produced an emotional response or even a lack of willingness to discuss the subject at all. In cases where gatekeepers of Philippi's informal fresh produce markets chose not to participate, I respected their wishes. With those who did, I relied on the peer and supervisor review to

assess whether my questions allowed for building rapport with the interviewee, remaining sympathetic to the realities of entrepreneurs and, during the interview, redirection where necessary. Developing a relationship with gatekeeping associations outside of the interview before-hand and throughout has been beneficial to having meaningful and mutual interactions in order to develop and build trust (Roulston et al., 2003).

Variations of the semi-structured interview took the form of ethnographic face-to-face interviews but not in focus groups. Though not all face-to-face interviews were done in person, those that were assisted in documenting both verbal and non-verbal communication. Body language for example allowed for the interview to be adjusted if ever the research participant(s) responded negatively or positively to the subject matter under discussion. When the research participant(s) engaged, it created the opportunity for further questions or discussions around the subject-matter (Winkler, 2022). Where there was any potential hesitation or discomfort, the interview changed direction to maintain respect and rapport. Though focus groups were desired to discover the shared and varied experiences among and between participants, gatekeeping associations were relied upon to assist in conveying these experiences (Winkler, 2022). Taking both into consideration helped this research share group experiences of urban informality as well as individual experiences.

The interviews were conducted in English. However, given that many of the recipients of this research may want access to the research document, there will be an effort to publish it isiXhosa or Afrikaans. I will have made use of interpreters to assist with this. In the extreme case that none of the gatekeeping associations were willing to participate in interviews or if there were major language or communication barriers, non-participatory observations helped as a form of data collection.

3.3.2 Non-Participatory Observations

Sandercock (2003) and Bhattacharjee's (2012) research on non-participatory field observations formed the basis of the motivation for using this technique to enrich case study research. This technique is varied in that it has multiple opportunities for data collection through self-collected information, namely mapping, sketches and journaling by taking notes of observations from a distance. These variations helped document the spatial element of informal food systems as well as the spontaneous occurrences that happened in space during fresh produce trading. Examples of spatialisation included mapping out trading locations, customer flows and local food systems networks. Sketching assists with the three-dimensional spatial documentation of trading locations and set-ups, fresh produce types and potential interactions between traders and customers.

The benefits of having mapped, sketched or journaled from a distance made it a less invasive form of documentation. Furthermore, there was an element of control involved with what is relevant to the case and research aims. Conversely, it may have been distracting

and may have changed the behaviour of the research participants and the usual interactions with entrepreneurs or one-another. Once again, having been aware of the inherent bias toward capturing particular information through observed activities was mitigated by grounding the observations in academic theory (Sandercock, 2012). An additional measure was to submit an observation framework for review by peers and my supervisor. Additionally, participant interviews were cross-referenced with observations and vice-versa.

Ethical repercussions may have occurred if permission was not granted for the observation. To mitigate this, permission for non-obstructive observation was requested from, where necessary, market management. This was in addition to ethics clearance sought from the Ethics in Research Management Department. Additionally, because it was from a distance, there were limitations to the depth of data collected, especially those events that occurred at different times of day that were not safe for a woman on her own or potentially even with friends to conduct observations – night time or very early morning. These findings were supplemented with secondary sources about the informal fresh produce market which helped strengthen data collection — newspaper articles, legislature and relevant policy.

The strengths of all these techniques lie in the fact that they were less invasive, especially where sensitivities existed that could make entrepreneurs less willing to be observed. Entrepreneurs automatically had the opportunity to veto what information they did not wish to include. This was also a double-edged sword, however, because it also limited the type of information that is relevant to the case and therefore the research. Nevertheless and as a last resort, secondary sources of information was still be relied on to reinforce the case study.

3.3.3 Sampling

Sampling is a method of data collection that helped to identify interviewees, especially in light of the condition to approval of the ethics application. As such, sampling helped to identify research participants and organisations that are part of a network of alternative sources of food systems access that help to improve food security. Some organisations I approached included the South African Informal Traders Alliance, WIEGO, the South African Informal Traders Forum and Area-Based Informal Traders Associations in the case study locations identified. Other organisations included the Philippi Economic Development Initiative (PEDI) and the Area Economic Development (AED). The research these organisations have done and continue doing help contextualise food security and food systems planning complexities such as helping to explain how households make their food choices and how food security integrates with urban networks for example. Other research participants included the African Centre for Cities and their researchers who have studied food security and food systems. I hope to approach the identified research participants either by email, by phone call or in person.

3.3.4 Analytical Tools

Yin (2004) highlights the importance of analytical tools as a way to qualify the data collected. To achieve a balance of theoretical knowledge and practical research, content and discourse analysis has provided a framework of analysis. Theoretical knowledge and practical research have complemented one another because theoretical knowledge was largely based on prior experience from literature whereas practical research aimed to discover knowledge through findings in reality. Choosing only one or the other may have either skewed findings by selecting only the literature that affirms any bias or inadequately produces experience around the subject matter (Winkler, 2022). Discourse analysis assisted in understanding the 'particular way of talking about and understanding... an aspect of the world' (Jørgensen and Phillips, 2002) — in this case probing to discover the 'what', 'whom', 'why' and 'how' of urban informal fresh produce markets (Campbell, 2002). Content and discourse analysis allowed for better triangulation as it aimed to critically analyse the contexts and perspectives of prior experience in the literature. This contributed to making the case study research as a method more academically rigorous, reliable and in-depth (Winkler, 2022).

An important distinction between content analysis and discourse analysis is that content analysis involves 'what' has been said, whereas discourse analysis involves 'who' said it (Winkler, 2022). Critically engaging the content and discourse was for the purpose of considering alternative or new positions with regards to informal fresh produce market activities and unregulated spatial practices around food security and food systems activities. Planning could learn from these new positions, offering insight into 'how groups or individuals know and understand' achieving food security and how this plays out in space through place-making practices in different ways (Campbell, 2002). Additionally, discourse analysis offers the opportunity to uncover the role of regulatory actors in relation to questions on urban informality. Content analysis offers the opportunity to uncover the policy and legislation context regarding informal fresh produce markets and unregulated spatial practices (Flyvbjerg, 2006).

I acknowledge that any inherent bias or subjectivity may have affected the particular content that is highlighted and analysed (Flyvbjerg, 2006). A way to handle this was by carefully structuring the analysis. In beginning of the analytical process, I kept to a guiding — but not generalised — narrative. This aided the triangulation of important findings (Winkler, 2022). A step by step process helped achieve this by having done the following. First, by setting out what the criteria was that rendered a household food insecure and how to achieve food security. Second, by having analysed the food systems' planning elements which included food distribution, formal and informal fresh produce trade as well as supply and value chains among others. Third, by factoring in the wider urban planning systems that influence food systems planning and food security such as housing and infrastructure,

namely, energy and space considerations, public transportation, and water, sanitation and waste services. From there, assessment criteria, categories, and themes assist in 'coding' the data (Winkler, 2022). Structuring the analysis this way offered an approach to evaluating the validity of the information collected and a clear way of presenting it.

3.4 Ethical Considerations

In their paper on ethical guidelines and principles, Anthropology Southern Africa (2005) highlights the responsibility of the researcher to observe good research conduct. The nature of this kind of case study research requires a consideration of how the differing power contexts and access to resources affects all those who participate in it. Thus, the ethics board approved this research with the condition that I conduct research of entrepreneurs through gatekeeping associations. While this brought about a limitation in directly discussing the day to day lived experiences of entrepreneurs and the households they serve, gatekeeping associations were relied on to give these accounts.

Careful consideration was given in my relationship with research participants as well as my relationship with my supervisor and peers (Anthropology Southern Africa, 2005). Several these considerations were included under each phase. During the data collection phase and in my responsibility toward research participants; during the data analysis phase to supervisors, peers, other colleagues of the discipline and; during the presentation of findings and final research document to sponsors, research participants, national and international governments.

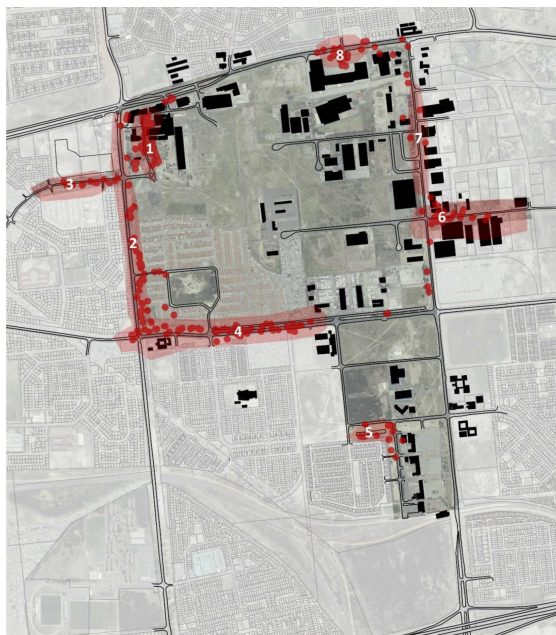
These considerations as covered by Anthropology Southern Africa (2005) included but are not limited to, first, protecting respondents, vulnerable persons or groups and anticipating potential harm. This required that I respected the dignity, rights, social and cultural values, and privacy of all parties involved by respecting boundaries, being as non-invasive as possible and through offering anonymity and confidentiality. Second, the issue of informed consent. This required being transparent about what the research study is, what purpose it achieves and any other details involving the boundaries and responsibilities of participation in the study with all participants. This was undertaken in two instances. First, upon requesting that respondents participate in the research, I introduced myself and explained the research and how respondents could contribute to the research. Second, at the start of the interview participants were given an informed consent form (see Appendix 1). This form also explained that I would request that the interview be recorded and that their anonymity would be respected. However, in the case that a respondent did not wish for the interview recorded, their wishes were respected. Furthermore, a concession was made, however, where persons who approached and asked for or offered information on the subject matter while observations were being conducted. Often these individuals mentioned that they were not represented by gatekeeping associations. In these occasions, consent for participating in the research was offered and obtained.

I was responsible to ensure that any information collected was understood and shared with all parties involved if they wished to receive it. Furthermore, where cameras and journals were used by research participants, I observed and complied with intellectual property rights procedures by attributing all images and notes to the relevant source. These measures, however, were not required given the data collection techniques used. Where discourse and content analysis occurred, I understood that I was accountable to uphold academic professionalism and respect. In all phases of the research all these measures were observed. To ensure accountability, peer reviews and supervisor screening was employed. Due respect and acknowledgements of research participants, research respondents, sponsors, governments or institutions was stated and observed.

Chapter 4: Findings and Analysis

4.1 Introduction

The 2023 storms and floods in the Western Cape caused near irreparable damage to infrastructure and machinery affecting to commercial farms. Sustaining jobs, rehabilitation of livestock and storage supply, and restoring vehicular access to farms were among the chief concerns when attempting to access farms. Relief funding and development funding became urgent needs when insurance cannot cover the overall damage as a result of force majeure or inadequacy to meet the scale of the need. Emerging and small-scale farms for example were almost irreparably damaged. Restoring the farms where the main aims are food security and sustainable livelihoods became an issue where immediate assistance was needed as well as over the long term. The overall damage at the time of the interview with Andrews (2023), the Food Sovereignty Stream Leader for Trust for Community Outreach and Education was estimated at R1.4 billion. Multi-level interventions and holistic restorative systems were stressed as needs that could restore and support small term farmers as well as commercial farmers. That is, in the form of secure access to markets and small localised economies that help to sustain livelihoods especially after shock events (Andrews, 2023).

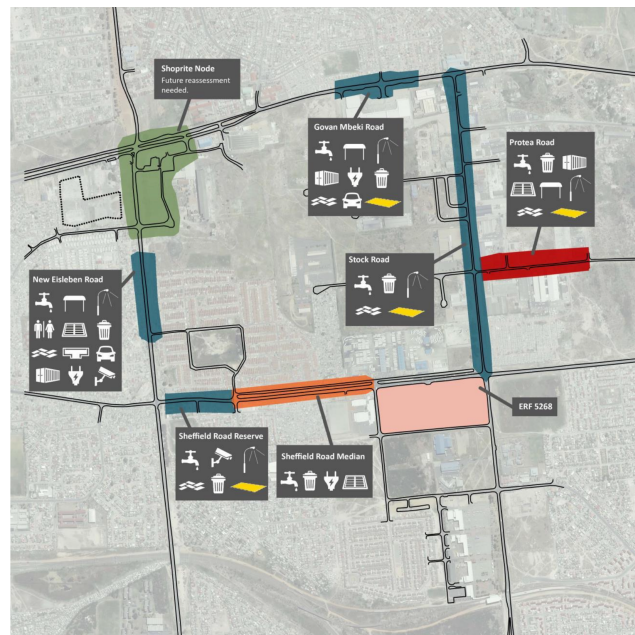


- Informal businesses
- Informal trading areas
- 1. Shoprite node
- 2. New Eisleben Road
- 3. Bristol Road
- 4. Sheffield Road
- 5. Joe Gqabi node
- 6. Protea Road
- 7. Stock Road
- 8. Govan Mbeki Road

INFORMAL TRADING AREAS | 1:7500



Figure 4.1 Informal Trading Areas
Sourced: SLF, 2018



- Trading strategy to be implemented once BRT development is finalised.
- Trading plan requirements to be reassessed.
- Traders to be accommodated on alternative site.
- Trading plan to be implemented.
- Unutilised city-owned land that could accommodate traders within a hub development.
- Fixed shelter
- Drainage
- Street lights
- Storage
- Bins
- Fat trap
- Electricity
- Water
- Parking
- Hard surface
- CCTV
- Ablutions
- Formalised trading bays

PHILIPPI EAST NODAL TRADING STRATEGY | 1:7500



Figure 4.2 Philippi East Nodal Trading Strategy
Sourced: SLF, 2018

Factoring in what chapter 1 and 2 have established, this chapter applies the established assessment criteria to the case study. It takes note that the changing multi level landscape in the Western Cape in recent years continually affects accurately evaluating the status quo. To this end, this chapter largely focuses on the findings of a comprehensive research report on the Informal Trading Strategy (ITS) of 2018. The ITS is an initiative backed by National Treasury (NT) and the City's Area Economic Development (AED)'s within Philippi East's Philippi Opportunity Area (POA). A comprehensive report was compiled by the Philippi Economic Development Initiative (PEDI) and the Sustainable Livelihoods Foundation (SLF) on the ITS to produce a precinct level design proposal within the POA (see Figures 4.1 and 4.2)

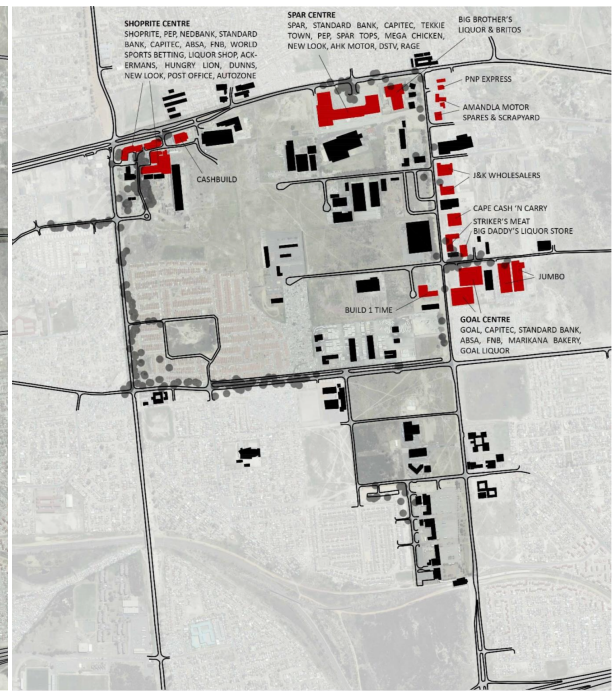
I make use of this report because of the extensive research and entrepreneurial analysis into Protea Road in particular. It also holds valuable information on the factors and dynamics of the precinct where relevant and applicable to Protea Road. The proposal of this development also made provision for feedback from entrepreneurs and representative organisations on opportunities and constraints into the development of informal trading within the precinct's boundaries.

A limitation of the precinct development research findings is the focus of entrepreneurial activity of public land and not as much on the social development aspect. Additionally, it was conducted in 2018. Not only is a more recent study needed but an understanding of the post COVID-19 context is also required. While there is a more recent annual report that updates data on budgets and future plans to continue with the development of the precinct, the 2018 study gives a more grass roots perspective on fresh produce markets and entrepreneur perspectives in service to households in the area. Thus, I expand on the data received from the development proposal together with findings from field interviews. These were conducted in Philippi and online where in-person discussions could not be conducted. Interviewees include the United Khayelitsha Informal Traders' Association (UKITA), the South African Informal Traders Association (SAITA) - also known as the Informal Economy Development Forum (IEDF), PEDI, Philippi Village and Oribi Food Systems Village.

This chapter hopes to explore how Protea Road's entrepreneurs currently improve the availability of, access to and resilience of nutritious food for the households they serve. It factors in the multi-shock and multi-stress environment that it exists in given COVID-19, recent floods and several poverty related influences that inform the decisions of entrepreneurs and the households they serve. The first section of this chapter thus contextualises the spatial aspect of the case study as well as the relational structure of the area. Spatial characteristics are then analysed together with the relational context to establish a profile of the case. This is followed by an assessment of the case according to the established criteria before concluding with lessons from a few case studies.



AREA OF STUDY | 1:7500



■ Formal retail
■ Formal buildings

FORMAL RETAIL ANALYSIS | 1:7500



Figure 4.3 Area of Study: Precinct Boundaries
Sourced: SLF, 2018

Figure 4.4 Formal Retail Analysis in Relation to Informal Activity (refer also to Figure 4.1)
Sourced: SLF, 2018

4.2 Case Study - Protea Road, Philippi East, Philippi, Cape Town

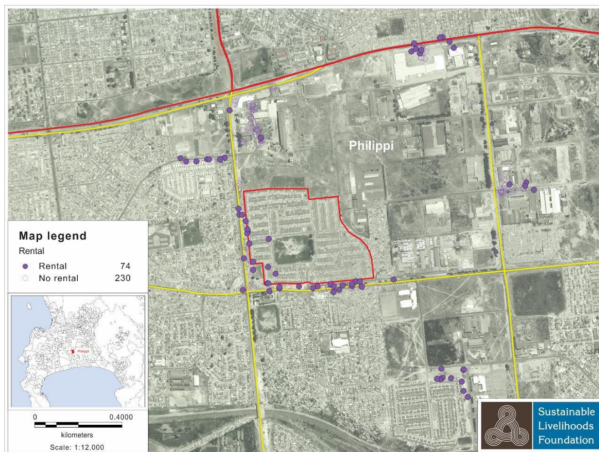
The Informal Trading Strategy (ITS) has identified trading nodes for development in Philippi East (CCT, 2022). PEDI's area development vision for accelerating economic inclusion through these nodes includes the precinct boundary of four roads and corridors. These are Govan Mbeki Road, New Eisleben Road, Sheffield Road and Stock Road (Figure 4.3). This research looks at Protea Road which is a node just outside of this boundary (Figure 4.2). Thus, the City's Area Based Service Delivery (ABSD) management team in Philippi awarded PEDI and SLF the opportunity to carry out extensive research and design the precinct and implementation plan over a three month period. SLF's report document that contained the research portion recommended that Protea Road be a part of the precinct development by extension of Stock Road. In 2021, PEDI's presentation to the City and the 2021-22 annual report has confirmed that it is included and undergoing implementation by the City (2021: 28).

Since its inception, the development of this precinct has experienced several set backs. The global COVID-19 pandemic and Western Cape floods are two of the biggest types of shocks to have occurred. Not only did these shocks affect the development time line but they also significantly changed and in some cases irreversibly altered the day to day dynamics of the area (UKITA, 2023; PEDI, 2023; Philippi Village, 2023). While the data captured by the SLF (2018) in their report is still useful to understand the development vision, several reconsiderations are worth keeping in mind five years later. Therefore, the SLF’s findings with the PEDI reconfiguration presentation of 2022, PEDI’s annual report of 20221-22 and the results of the sampling of this research in 2023 will be cross referenced to analyse the case in respect of this research.

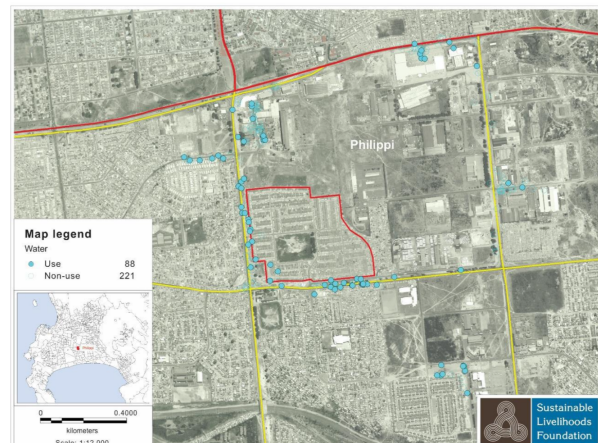
4.2.1 Precinct to Site Spatial Context: Analysis and Mapping Fresh Produce Markets

Philippi was once a rural farm, then developed into an industrial node and then was overrun by informal sector activities (i.e. settlements and trading). The lack of facilities to accommodate this change is the backdrop against which the POA precinct exists. There is still currently public and private undeveloped land, with well-located land being zoned for either zoned for commercial use or future industrial use by the City (SLF, 2018; PEDI, 2022). PEDI’s (2022) vision of the precinct within the POA reimagines it to be a Philippi which is a “thriving hub where businesses choose to invest and grow, and where people choose to live and work” (2022: 21).

Map 7: Rent



Map 9: Use of Water



Map 8: Access to Shelter from Rain



Map 10: Use of Electricity

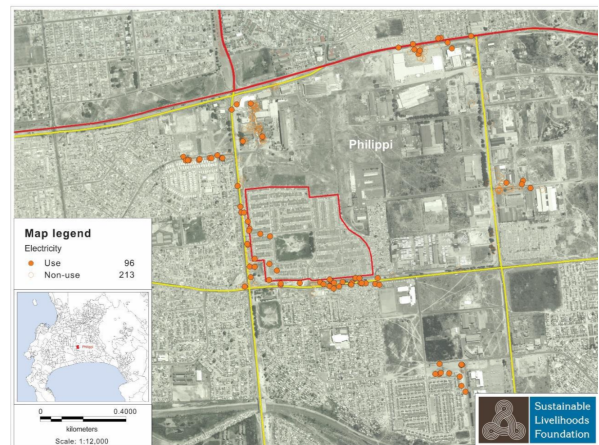
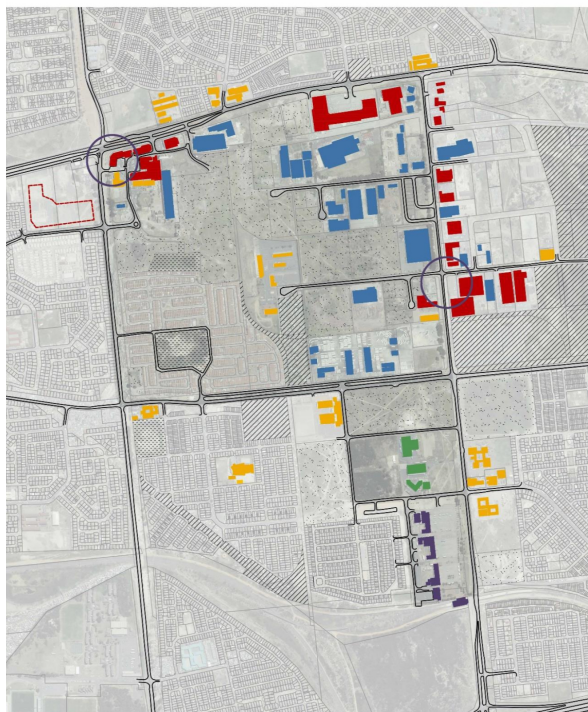


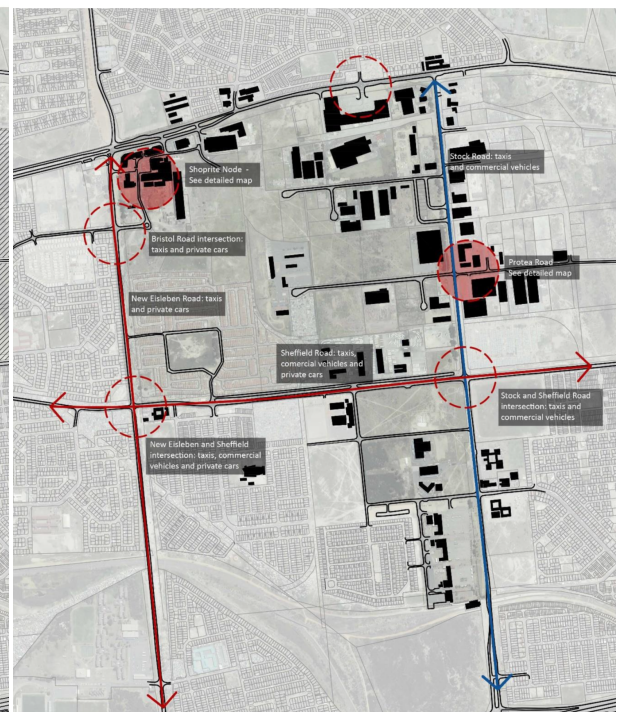
Figure 4.5 - 4.6 Rent and Access to Shelter From Rain
Sourced: SLF, 2018

Figure 4.7 - 4.8 Use of Water and Use of Electricity
Sourced: SLF, 2018

PEDI (2022) notes that the early years of work done by AED, SLF and PEDI helped forge an understanding of and define what the problems Philippi faces are. It assisted in understanding the formal and informal economies, gave direction to transport and digital infrastructure upgrades, helped to assess the economic potential of the occupied and unoccupied parcels of land, drive upgrades to informal trading zones and more pertinent to this research, guide how to maximise agricultural opportunities in the greater Philippi area through the POA (PEDI, 2022). In particular the formal and informal fresh produce markets in the targeted precinct within the POA. Within the geographic boundary of the precinct, the SLF documented the initial existing infrastructure and services provision (Figure 4.5-4.8), utilisation of land (Figure 4.9 - 4.10), and geographic spread of formal and informal fresh produce markets (which are referred to as ‘green grocers’ or businesses) (Figure 4.4).



■ Formal retail
 ■ Social/civic
 ■ Industrial/commercial
 ■ Agricultural
 ■ Transport
 ○ Amaphela concentration
 ▨ Informal housing
 ▫ Unutilised land
 ▩ Retention pond
 PRECINCT ANALYSIS | 1:7500



- - - Recommended road widening
 - - - Nodes of congestion
 - - - Road currently under construction



TRAFFIC ANALYSIS | 1:7500



Figure 4.9 Precinct Analysis: Land Uses
Sourced: SLF, 2018

Figure 4.10 Traffic Analysis: Road Uses
Sourced: SLF, 2018

Informal businesses saw an initial 64% provision of infrastructure and premises with use of shelter from rain, 20% ownership of structures/premises. Of these, 25% were shipping containers, 23% were corrugated sheet shacks, and 12% were semi-fixed structures (posts, tarpaulin or plastic sheets). Access to services saw 24% use of water and 25% use of electricity. Each of the precinct's nodes' informal businesses were activated by formal activity. Informal fresh produce markets are in close proximity to formal fresh produce markets and thus mapping the informal businesses of this nature alludes to the existence the formal kind. Informal fresh produce markets were found to represent less than 10% of informal businesses in the precinct, with Protea Road hosting just under 50% of them. (SLF, 2018). This location will be of particular interest in answering the research question.

Protea Road is an extremely busy retail node around the Goal shopping centre with the supermarket being its main attraction. This formal and informal trading node serves the settlement of Marikana as well as being an alternate site when Stock Road experiences disruptions. As a result of construction along Stock Road, for example, many traders moved to Protea Road (SLF, 2018). Protea Road also serves as a major pedestrian route to the broader Philippi area and as an access point to taxi ranks. Currently settlements have been established around the area (Figure 4.4).

A geospatial survey of fresh produce entrepreneurial activity saw that fresh produce is among the top 3 most common category of businesses in Protea Road (Figure 4.11). The type of trading activity concerning fruits and vegetables were done on make-shift street furniture and out the back of bakkies. Thus, infrastructure and shelter is a need for a majority of the businesses with 62% being survivalist and most make use of temporary furniture. The economic value of the infrastructure comes to R197 400 and R5 300 p.m. for rental. Though fresh produce was not among the top businesses at the Stock Road node, cooked food was. The temporary infrastructure to the estimated value of R44 000 with no rent (SLF, 2018).

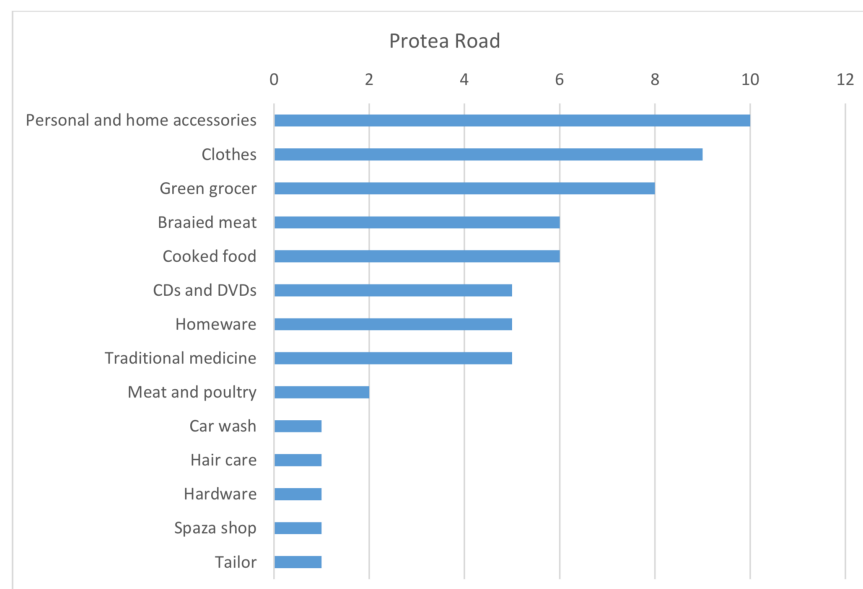


Figure 4.11 Protea Road Informal Activities Spread

Sourced: SLF, 2018

The reimagined precinct development plan is informed by NT's (2014) precinct management guidelines. The geospatial design of the precinct largely features infrastructure upgrades, services provision and public space interventions. Infrastructure upgrades include street lights and CCTV for increased security (along with officers for monitoring and upkeep); storm water drainage; and upgrades to the bus rapid transit (BRT) routes that support the MyCiTi buses (in line with the trade and urban development authority). Services provisions include utilities (water and electricity points with utility meters); rainwater collection tanks where appropriate; waste management (in form of ablutions, refuse and recycling, and cleaners); and Wi-Fi links. Public space interventions include pedestrian routes that are refurbished with surface treatment, furniture and trees; parks and heritage commemoration; community facilities (such as a Trader Support Service Centre) (SLF, 2018; PEDI, 2022).

The aim of reimagining this precinct within the POA is to increase development opportunities. As a result, an entrepreneurial analysis showed over 600 previously unemployed community members afforded with training in cleaning and security in particular as part of the Precinct Management Unit (PMU) and Presidential Employment Programme (PEP) (PEDI, 2022). PEDI's Philippi Fresh Produce Market (now known as the Philippi Agrihub), the Philippi Urban Agricultural Academy (PUAA) and the Recycled Organic Soil Enhancement (ROSE) was created to meet the economic and basic food needs of the community. The PUAA training enabled an additional 100 students a year for emerging small farmers to supply to specialty businesses. To support informal trading through the ITS, PEDI initiated several activities and projects along with a Trader Management Methodology Plan together with the City's AED department. However, the flow of finances is an ongoing challenge as PEDI is reliant on external funding until the Philippi Agrihub and ROSE become self-sustainable (PEDI, 2022). Until recently, NT and AED funded these projects (see Figure 4.12).

The household demographic in this area are largely housed in informal settlements. These households depend on one or both formal and informal means of access to food including the small to medium-scale farming within Philippi. However, to supplement access to food supply, entrepreneurs and households source from outside of Philippi. Entrepreneurs for example source fresh produce from Epping and other formal retail. Households source food from neighbouring formal retail as well as other places on their commute to and from home. To increase access to food in close proximity to households, more opportunities for nutritious food is required. The Philippi Agrihub and associated projects as well as the ITS are some such sought after solutions (PEDI, 2022).

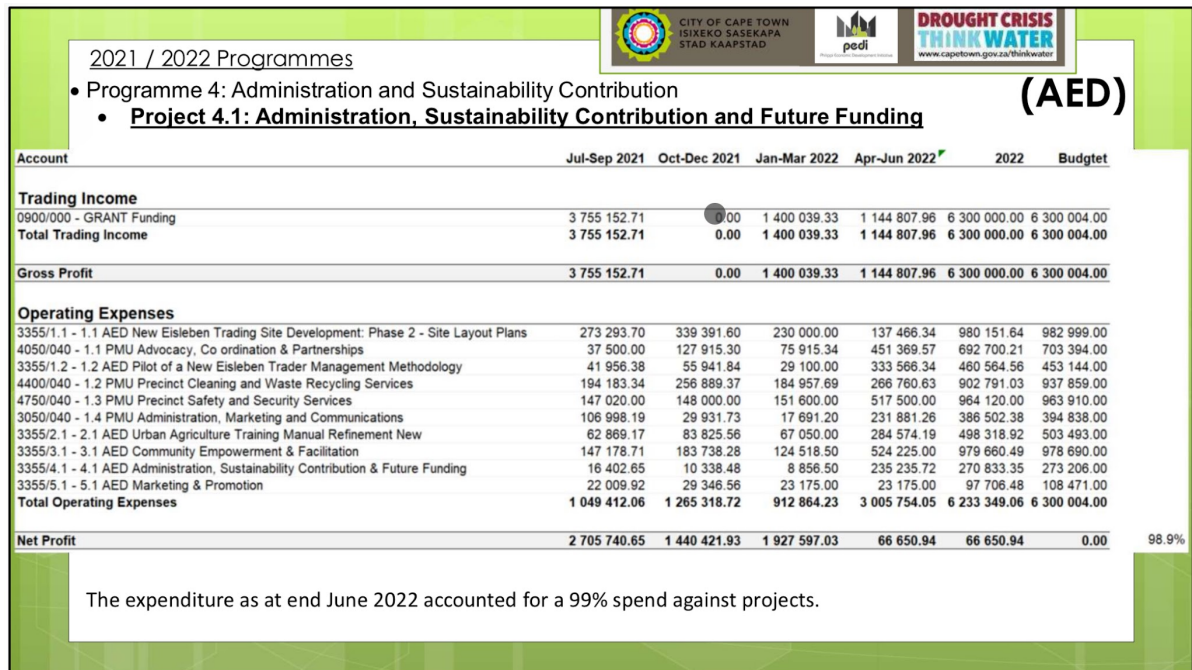


Figure 4.12 AED and NT Funding: PEDI Expenditure Report

Sourced: PEDI, 2022

The expected capacity of entrepreneur businesses was 102 but provision for more than four times that was allocated in the initial budget (Figure 4.). The types of seasonal fresh produce entrepreneurs factored into this that are mobile, street and kerbside entrepreneurs which increase as more opportunities become available (CCT, 2013: 9). PEDI (2022) noted the need to review spaces to allow for expansion in future should this estimation change. Serious consideration of the constraints, however, is required in order to mitigate and be proactive in the face of these challenges.

ASSESSMENT CRITERIA DERIVED FROM THE LITERATURE	ASSESSMENT CRITERIA SUB-THEMES	
Achieving food security for food-insecure households		
Food systems planning	Food distribution	
	Formal and informal fresh produce trade	
	Supply and value chains	
Urban planning systems	Housing and infrastructure	Energy
		Public space considerations
		Public transportation
		Water
		Sanitation and waste services

Table 4.1 Precinct Management Readiness: Assessment Criteria

Sourced: Author's Own, 2023

The Philippi Precinct Management Unit (PMU) thus aimed to firstly, manage the precinct spatially and secondly, become the first contact for community and stakeholders engagement to strengthen relationships with interested and affected parties (the City and other government representatives, PEDI, technical specialists, hired consultants and external business interest groups, entrepreneurs, civil society organisations and the community etc). Thus, assessing the precinct in terms of its relational profile, context and readiness for precinct management (see Table 4.1).

4.2.2.2 Legislative and Policy Context

SLF and PEDI's (2018) development vision began with organisational structure, namely, a project management system, a reporting structure, and partnership agreements that were established (2018: 8). This shows the importance of a governance structure to the development vision. This organisational structure together with the spatial intervention became the proposal document to make a case for funding with the neighbourhood development partnership grant (NDPG) (SLF, 2018; NT, 2014; PEDI, 2022). This section thus looks at the overall governance in the precinct. That is the organisational structure that exists with respect to the development vision, as well as the interested and affected parties in the precinct. These parties are namely, and in no particular order, the City (AED) and other government representatives; PEDI's numerous departments involved in food security; technical specialists; hired consultants and external business interest groups; the entrepreneurs and civil society organisations (UKITA, SAITA); and the community etc (SLF, 2018; PEDI, 2022). It also looks at the related documents that assist or constrain governance.

Though the City and other government representatives are involved in backing the precinct design and development, the provision of infrastructure and services as well as coordination with governance structures, the City is not responsible to drive the development (NT, 2014). In as far as food security concerns go, however, and because the PMU (for example) becomes an intermediary, it is important for the City to remain committed to the responsibilities around provisions, support and continuous engagement with the community through all relevant intermediaries such as the civil society organizations. A pilot of New Eisleben Trader Management Methodology includes traders informing customers of recycling process for PEDI is another such organization. They record and conduct waste and recycling, while the PMU monitors traders behaviour and manage waste. One of the programmes had a project for the consolidation of a manual that was converted to Xhosa and Afrikaans. The manual was aimed at the creation and operation of an urban or small-scale farm 'relevant for the growing conditions of the Western Cape references types of crops that can be easily and profitably grown in the Western Cape' (PEDI, 2022b).

Moreover, the Programme for Community Engagements Contribution with project on Community Empowerment and Facilitation also exists. Community Kraal events with PMU is centred around housing, development forums, service delivery, employment, and waste management including organic waste for farming which is connected to food security. There is also a PEDI Food Security Collaboration and Partnership. In fact, the Agrihub hosted a market day with Western Cape Government (WCG) and City officials to promote UPA and fresh produce markets linkages (PEDI, 2022). This opens up the opportunity for the informal sector as well. The SLF (2018) reported a large number of trader associations in the precinct. The dominant trader association for the Protea Road (and by extension, Stock Road) is UKITA. Though they were in support of the Protea Road plan and general precinct development, not all associations and entrepreneurs were in support of it (2018: 41). Fear of spatial displacement being chief among the motivations for the opposition, but also that of being formalised. SLF's report alludes to additional reasons for the opposition such as personal agendas and misrepresentation of development intentions.

The demographic profile of these entrepreneurs shows that a majority are run by South African women and are survivalist. Thus, the consideration of the volatility of these businesses is important which brings into question of how the design was negotiated. The NT (2014) highly recommends that the precinct plan should be developed with community. The Ward 35 Development Forum and the Ward 35 Business Forum are some such occasions where the precinct was presented and workshopped (SLF, 2018; PEDI, 2022). Safety and Security Services were among the greatest need that entrepreneurs communicated, however, this could not be provided by the PMU as they cannot be directly involved in law enforcement but they can patrol Mondays to Fridays in the boundaries of the precinct (illustration does not indicate that Protea Road is included). SAPS thus also patrols the precinct and the greater Philippi area. A record of incidents for analysis is thus often recorded and analysed, especially to identify hot spots that form in the area. For example, hijack patterns and identifying situations where hijacking happens (PEDI, 2022).

The legislative, policy and related documents context is mostly founded on the Informal Trading Policy; Informal Trading By-Laws; the Informal Trading Policy Implementation Plan. There are several other legislation and spatial policy documents including Spatial Development Frameworks (SDFs) and the Integrated Development Plan (IDP). The Informal Trading Policy is a multi-stakeholder document intended to reflect the needs, and requirement of the key stakeholders. It sets the direction of the developmental response to the informal trading sector. These include strategic objectives, planning and management guidelines, and stakeholder roles. The implementation document is operational. That is the resources, sequencing, roles and responsibilities in relation to informal sector. The by-law goes into further detail on management and that city and relevant parties are but responsibility for various areas of management not thoroughly specified, especially since management portfolio is large undertaking (CCT, 2013).

The City issues permits, business licenses (e.g. certificates of acceptability) for trading activity and makes the relevant provisions as outlined in the previous subsection but any leases for land or facilities lay with the civic or community associations such as PEDI in this case. However, any market related rental is due to the City. The management contract with the City is a flexible enough fee payment structure depending on supply and demand, and compliance. To contextualise this for entrepreneurs, the policy and by-laws is work-shopped with entrepreneurs, especially with new permit holders. This is a good relationship building initiative with the community, however, management of the mandates for upholding and enforcing the contents of the legislative and policy is outsourced for the markets on cyclical tendering basis. The responsibilities include security, cleansing and maintenance. For the funding of urban management, dedicated budget allocations and streaming revenue is collected directly to the management of trading, leasing/management agreements, advertising sponsorships, and partnerships with stakeholders.

Monitoring and evaluation of these is done by the AED, and especially through annually monitoring the implementation policy or the biannual multi stakeholder engagement platform so that policy can be reformed. At the end of 5 years, the intention is to review the problem statement. Alternative forms of monitoring include surveys, focus group discussions and additional workshops, telephone hotline for information, and register queries or log issues relating to sector. All this data helps create a centralised hub of data for planning processes, strategies and stakeholder utilisation, trend analysis to anticipate growth over time, identify needs, map areas and bays and shifts over time. IEDF and UKITA should've be able to make use of this through technology for the entrepreneurs they represent. Enforcement of the legislation and implementation of policy allows for officers in the precinct to write warnings and impound property (copies of inventory are provided) if in contravention with by-law. Appeals and any disputes including where medical evidence and affidavits could create barriers to those who cannot afford the bureaucratic delays to trading.

This governance context of the precinct assists with institutional arrangements as per development approach as well as community engagements. Engagement forums that occur both at metro and district level together with representative organisations and industry development organisations (industry-specific/purpose built intermediaries) are identified as one such institutional arrangements (CCT, 2013). Forward planning function to this end best supports the viability and sustainability as well as the flexible and appropriate levels of infrastructure along with maintenance plans (CCT, 2013). The next section looks at how the existing spatial and governance context is evaluated against assessment criteria set up for the precinct, and at Protea Road in particular.

4.3 Household Food (In)Security in Philippi

4.3.1 Availability

There are formal fresh produce markets at every formal retail site in the precinct as main anchor for supermarkets. These are Goal Shopping Centre, Shoprite Centre and Philippi Plaza's Spar (See Figure 4.4). The mainly active ones (Goal and Shoprite) are connected to transport. Goal is on corner of Stock and Protea Road and has a dedicated informal taxi area allocation to transport residents between supermarkets (and thus trading locations), neighbouring areas and transport interchanges (SLF, 2018). Philippi's farming community is assumed to be an area from which entrepreneurs source fresh produce, however, it is more often sourced from formal retail or from outside of Philippi (PEDI, 2023; UKITA, 2023). The selection and range of what is marketed in stores is also tailored according to income level which can place limitations on the choices of the entrepreneurs and by extension, places limitations on what the households in Philippi are able to access locally (Oribi Village, 2023).

A challenge here for all fresh produce entrepreneurs in this precinct and at Protea Road around availability of food is where and how to acquire the food. The proximity of markets that fresh produce is sourced from for example can be as far away as Epping which makes the means of transporting the fresh produce a necessity (UKITA, 2023). Additionally, if any fresh produce is damaged on its way to an entrepreneur's business, not only does it hamper the quality of the produce, but often because it becomes less desirable, the food goes to waste (IEDF, 2023). Often this is because entrepreneurs would rather increase the opportunity to sell their fresh produce for as long as possible, thereby increasing the potential of increased household income, than consume and thus preserve their own household's access to nutritious food with their own produce supply (Oribi Village, 2023). This may even result in the entrepreneur rather buying other food. Moreover, should they not have the means to prepare the produce, it is less likely that the nutritious food is beneficial for their household and so there is no choice but to sell. The same can be said for the households the entrepreneurs serve (Oribi Village, 2023).

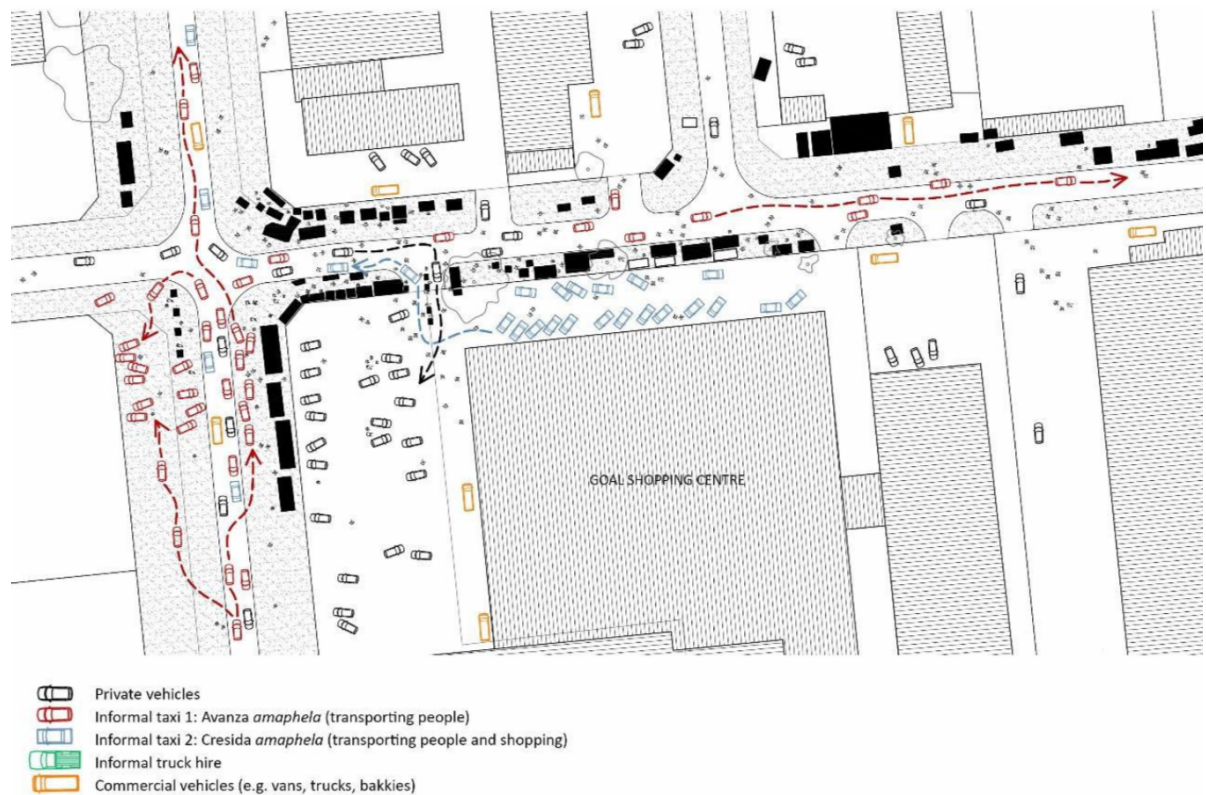
4.3.2 Meso-level Mechanisms Access

4.3.2.1 Physical (Geographic/Spatial) Access

A majority of businesses are located on road reserve. This is followed by those on the sidewalk and then on open ground. There are smaller amounts of businesses that operate from private property. This becomes a cause for concern where encroachments occur on public land. Nevertheless, where entrepreneurs choose to locate depends on spatial opportunities, pedestrian movements, shopper profiles, cluster dynamics, public transport access, gaps in products not marketed in formal centres, retail brand and strength (SLF, 2018). Understanding the ebb and flow of circulation patterns of vehicles and pedestrians in

Philippi and particularly in this precinct is important because that is how entrepreneurs make decisions on how to change locations. Often areas of congestion become beneficial for customer-base expansion, especially where there are taxis. Not only do they regulate movement in, around and out of the precinct but they also assist in the regulation of associations (SLF, 2018).

Figure 4.13 shows the circulation patterns of taxis in, around and out of the precinct. Cressida *amaphela* taxis, which operate from the informal rank within Goal's parking lot, transport clients from Goal to Jumbo on Protea Road to their destinations. Avanza *amaphelas* transport residents around Philippi and neighbouring areas but to access Quantums, the Avanza *amaphelas* often transport residents to neighbouring areas and interchanges (SLF, 2018). Another phenomena to note is that some residents would climb in a taxi to go to checkers rather than shop nearby because of the perceived dignity and social class associated with shopping at a supermarket compared to the informal fresh produce (Oribi Village, 2023). However, eventually when credit is needed, households frequent the entrepreneurs. Informal businesses offer the convenience of physical access when credit and remittance benefits help prevent the household from becoming food insecure (Battersby, 2016). Nevertheless, convenience of physical access depends on the routes to work, time of day (especially because of safety) and availability of disposable income for food (Oribi Village, 2023).



PROTEA ROAD TRAFFIC ANALYSIS | 1:1000

Figure 4.13 Protea Road Traffic Analysis

Sourced: SLF, 2018

The infrastructure upgrades to transportation routes strengthen the relationship between fresh produce retail and circulation of customers and goods in the Philippi area and accommodate existing and future densities through the development of opportunities and resources in the area (PEDI, 2022). The sustainability of enterprises, growth and profitability, or return to the entrepreneur is the developmental intention to not only afford better physical access but better quality of physical access to fresh produce for entrepreneurs and households alike. The aim is to do this through the localised interventions of the Agrihub and related projects that are industry-based and tailored to individual entrepreneurs (CCT, 2013). The spatial principles that come with this development are detailed in the recommendations chapter.

4.3.2.2 Economic Access

The City recognises that the informal economy is important in the broader Philippi economy. Philippi itself is also recognised as an important growth and development node within Cape Town (SLF, 2018). However, access to markets and access to financial capital tend to be biggest challenges for entrepreneurs. To that end, the development also offers entrepreneurs the opportunity to formalise, however, if the recognition of the informal economy is one that requires that it be honoured, the impact of formalisation may negatively impact Philippi's economy. Moreover, even with the capital, financial literacy tends to depend on education level and experience. For example, in order to register as a formal business, an entrepreneur would need to know how to use a bank account (Oribi Village, 2023). The opportunity that the informal market affords is the low barrier to [market] entry. Thus, it may not be beneficial for the formalisation of fresh produce entrepreneurs to formalise.

On the formal side of fresh produce markets, Philippi's Agrihub aims to support what was recorded to be 2500 existing small scale farmers of fresh produce (PEDI, 2022). The model is aimed at being an alternative to the traditional model of municipal markets. The concern with municipal markets was the uncertainty around pricing of products which trade in these markets (PEDI, 2022). This was supplemented by the Philippi Agrihub and its PUAA to educate entry level small scale farmers and provide them with the skills to access markets. If the formalisation of informal fresh produce markets still provides the benefits of the low barrier to entry and the acquisition of skills over time while still meeting economic and household food security needs, then under these conditions together with the social implications, formalisation may be beneficial.

4.3.2.3 Social Access

The differences between representation and recognition is acknowledged. Recognition does not guarantee that one can be represented, whereas representation could assist in developing engagements around support for entrepreneurs. These possibilities are

beneficial where new or burdened entrepreneurs can be represented by the institutions or organisations that recognise their needs. That is, for example, if an entrepreneur has other full time work during the week and only trades on the weekends, thus negotiating security of trading areas over weekends becomes something that can be coordinated within these representative bodies (UKITA, 2023). The limitations of this approach, however, means additional administration which takes time away from trading activities. Therefore, a more human-centric approach to the access of food that understands the challenges of the distributor is required.

Considering the perspective of the entrepreneur is valuable in this sense. It enables a more accurate problem definition of the more nuanced challenges entrepreneurs face as well as the households they are connected to and serve in their communities (Oribi Village, 2023). Often, the social dynamics unfold internally unbeknown to development aims, implementation and operations. The social dynamics that hinder the longevity and growth of businesses for example are caused by crime and the lack of dignity in the spaces of trading. That is, infrastructure and services (toilets, water, electricity, drainage, street lights, electric cable theft, shelter, secure storage space, waste removal etc as well as externalities like smoke from open fires and general dirtiness of the area (SLF, 2018). The attractiveness of formal retail buildings is one of the minor ways entrepreneurs take advantage of to bring in customers. Fostering partnerships with private sector and government departments around the City's recommended engagement principles are thus called into question (CCT, 2013). An example of this is the NDGP the PEDI acquired to fund the precinct development. This is further discussed in the recommendations chapter.

Informal businesses are also a social safety net and livelihood sustenance for foreign nationals seeking refuge from war torn countries and so the social access factor is also connected to political dynamics at community level. Should entrepreneurs not be socially accepted in these communities, the impact of social access to nutritious food is affected by less desire to operate businesses in these communities. This has an impact on entrepreneurs as they adjust to supply demand dynamics as well as barriers to markets entry as a result of social acceptance but also higher level considerations of food security at a household level.

4.3.2.4 Political Access

Political access to markets are influenced by the governance dynamics in Philippi. The policy tools identified in the City's policy document should be through the physical, economic and social planning objectives around development. That is, the economic needs of stakeholders and role players, spatial and distribution planning, health and safety. However, currently the focus is largely justified through spatial and economic rationale. As mentioned above, a social development approach is also required as an important consideration. Currently, according to the IDP (2023), the economic aspect is met. An

opportunity for social development can be factored in through physical and spatial development. That is, through regional and local strategy, urban landscape planning and the corresponding relationships with formal and informal expansion or overlap of uses with all interested and affected parties. Sustainability of growth through economic rationale can rather be sustainability of development through socio-spatial collaboration and intervention ().

Land use is the limit of the regulatory authority in formal areas in terms of informal trading in accordance with zoning scheme. On public land, compliance is mandated by the by-laws on informal trading and the by-laws of public space (streets, public places, prevention of noise nuisances) (SLF, 2018). Existing by-laws, policies, authorisations and compliances include COA, permits and registration with the CIPC among others but fresh produce trading may not necessarily need the same as those preparing food. For example, fresh produce trading does not require gas permits. Nevertheless, compliance on health and safety is conducted by the Department of Health and Safety (Oribi Village, 2023).

To this end, restrictions are placed on fresh produce traders where vehicular or person interference with transport objectives occurs, and where trading outside religious buildings, public monuments, cash machines and police stations. Additionally, entrepreneurs may not trade 5m from intersection or on less than 3m wide sidewalk or outside formal business selling same product as well points to need for provision of adequate space (SLF, 2018). While the safety aspect can be argued in some of these locations or interfere with operations, the desirability of these spaces in question is high because they are the best located, and ideal places at most times for trading activities and access to clientele. Though trading in these locations is not ideal, these restrictions are just some of the aspects of the by-laws and regulations that inadvertently make it more difficult for entrepreneurs to access the market if the clientele base is best accessed in these locations (Philippi Village, 2023).

High demand zones are an attraction for entrepreneurs and planners alike. Regulatory engagement around registration and allocations of these bays is not up to the entrepreneurs. While there are social aspects considered in allocations, it needs to be established at planning phase so that relationships between entrepreneurs are already fostered by the time allocations occur. Building trust and safety networks within the community to improve social and political access is improved this way. Then there is the permit fee structure. The role of planning is highlighted here as well as calling into question the valuation of permit fee according to supply and demand dynamics. That is, the expense, size and desirability (CCT, 2013). The suitability of the trading activity is not factored in and so allocation of a trading bay may not respond well to its context if based primarily on utilitarian principles. This is further discussed in the recommendations chapter.

4.3.3 Resilience

The City has acknowledged that variation and flexibility is required in addressing opportunities for entrepreneurs as the single approach is insufficient (CCT, 2013). To assist against disruptive impacts, the SLF (2018) made budgetary recommendations to help in the interim (medium term) of the precinct development. For the longevity of development, additional commercial uses that support trading should be introduced to the precinct through mixed use developments. Expansion of Sheffield Road informal trading activities through incorporating mixed-use business development could foster cooperation with Stock Road (and transits), PEDI's Agrihub and PAA, and the Joe Gqabi long distance bus terminus.

Supportive structures in these locations in addition to the provision of infrastructure, services and precinct management (such as off-street parking), creates further opportunities for a diverse range and mixture of businesses. This business development will also benefit from the kind of mix and character of New Eisleben Road, and the agglomeration with the formal and informal food hubs that could attract households of varying income levels. Protea Road entrepreneurs in particular enhance, compliment and benefit formal trading for the formal retail in the area, and so any perceived competitive threat is eliminated. It also offers the opportunity for informal retail to minimise externalities (SLF, 2018). The longevity of access and the capacity to be fortified against shocks and stresses is further discussed below.

4.3.3.1 Longevity of Access

The vision that the development seeks out aims to understand what the business dynamics are, what the impacts of the intended development will be on street trade and entrepreneurial in the area. This research extends this effort to the surrounding settlement areas with respect to food security influences. This is because site specific interventions in the long term across sites in the precinct will require maintenance in order to ensure the economic stability of precinct and the broader Philippi area these sites serve. Strategic objectives over the medium term with high-level and sector specific aspects are thus split into two functions. The first being trader development and engagement processes facilitated by the City (sourcing resources, making services available and fostering partnerships). The second being infrastructure provision and maintenance which is dependent on budget provision.

The SLF (2018) also cautioned security measures because crime is already an existing concern and a risk to development operations. Additionally, and because a large majority of entrepreneurs in this precinct are women and thus vulnerable, a gendered approach to security, training and development of the sector is needed into the long term. The urban safety report showed Philippi East to be worst in terms of crime nationally as a result of undeveloped land and lack of 'safety' infrastructure (street lights, CCTV etc) creating

opportunistic and contact crime (mugging, armed robbery etc) as well as looting and robbing of home businesses (SACN, 2017). Storage thus becomes difficult to leave on site overnight and trading at night also becomes dangerous. Stock Road and Protea Road are among highest risk of crime according to UKITA (2023)

4.3.3.2 Anti-Shock, Anti-Stress Capacity

Precinct management to help be proactive against disruptions that stresses and shocks threaten. Open discussion with relevant stakeholders (the City, property owners, entrepreneurs etc) about what that looks like is important for buy-in. In addition to crime, five additional stresses affect the Protea Road entrepreneurs. The first being the absence of shelter as trading activities was dependent on weather etc (SLF, 2018). The second is that of the unpredictability of land owners. If trading occurs on private property, the onus is on the owner to provide facilities and services. And so, in absence of these for any reason, the ability to trade is threatened by the competency of the land owner. The third of these being the permit expenses and corresponding trading hours. Permit expenses are threefold. Firstly, besides acquiring a trading permit from the City, membership within markets and agencies are an additional expense. Secondly, eligibility is a limitation for some survivalist entrepreneurs that may not necessarily be registered as a result of documentation difficulties. Thirdly, though there is a benefit to preference of allocation as a result of being previously disadvantaged, this preference is also limiting for those who do not qualify even under this condition.

Additionally, a limitation of trading bays means potential refusal of entrepreneurs that cannot be accommodated. For those who rely on informal trading as a supplementary to current employment are also affected by these preferences as informal trade as part of a household income resilience strategy is not factored into these considerations for limited provision of trading locations. Furthermore, trading hours are fixed by the City thus limiting the ability for entrepreneurs to set it according to need. The fourth additional stressor is displacement and special events interruptions are some of the biggest problems for Protea Road entrepreneurs. Special events prevents access to trading bays as well, especially if these events require more public space in areas near formal retail where informal trade often locates. Displacement of any kind (even in the same area) can potentially affect entrepreneur and customer relations if it alters how business is conducted. (CCT, 2009). The fifth is that of sickness or the passing of an entrepreneur and the desire to transfer permit holding permissions in the interim. A transfer process to avoid displacement requires access to conditions under which transfer may occur (eg access to medical practitioner).

4.4 Summary and Conclusion

There is enough food in South Africa, the Western Cape and Cape Town (). There is also enough food in Philippi. The issue of food security in Philippi is less one of availability of food and more one that has to do with equitable systems of access. The precinct

development proposal seeks to meet these challenges with resilient solutions that allow for adaptation in the face of stresses and shocks. The developmental approach is taken along with facilitating access to job and entrepreneurial opportunities, in addition to nurturing positive relationships with the formal business sector and consumers (CCT, 2013). This is done in line with the vision of a Philippi which is a “thriving hub where businesses choose to invest and grow, and where people choose to live and work” (2022: 21). However, the development is limited to publicly owned land. Privately owned land development can only be incentivised. Moreover, delays to the development have hindered this. Several lessons have thus been noted of this case study.

Firstly, the development vision desires to value of the informal trading sector as well as its integration into the economic life, urban landscape and social activities within the City of Cape Town. However, to truly value and integrate the nature of informality is not justified through formalisation. While this is an option, the development only caters for those who choose to formalise. The provision of infrastructure and services comes at the cost of formalised governance that is expected to be “predictable” and “sustainable” (CCT, 2013: 8) does not actually leave room for flexibility if it happens to be unsustainable. Given that the policy has not been revised since 2013 and is lacking the implementation document it advertises, the flexible management model is yet to be seen. Moreover, the expansion model is based on anticipated growth without factoring future need. Given that informal trading grew from a response to need, better anticipation of growth would profit from a more human-centric needs-based holistic systems approach.

Secondly, higher level planning around the informal economy through the IDP’s ‘Opportunity City’ together with the Resilience Strategy focus acknowledges that implementation of the informal trading policy has focused a lot more on the regulation of the policy than on the implementation of it. Nevertheless, the IDP considerations around informal sector better address the challenge of implementation than the informal trading implementation plan has. Mainstreaming policy directives, coordination and addressing development priorities is limited, fragmented and approached in silos. Regular and constant engagement is needed. Cooperation among the currently fractured institutions and representative bodies also causes delays in making joined decisions on important and crucial issues (CCT, 2013). Though there support is offered in training and education of the community to this end, these programmes and projects are heavily reliant on financing and funding throughout their life times especially throughout the medium term.

Thirdly, Philippi’s food security profile shows great potential for improved access to food through improved distribution networks. The relationship balance between formal and informal production and markets needs improved access as they compliment one another. This feeds into an improved localised economy. However, to be resilient in the face of shocks and stresses around production and distribution between formal and informal retail,

a variation of agreements is needed to be able to adapt to change especially where financing and funding is less reliable. Ultimately, a consolidation of governance structure is required, especially because management is a big undertaking even among representative organisations.

Lastly, though the physical and spatial development responds to its context through its design, the allocation of trading bays does not respond to the nature around how entrepreneurs locate themselves. This is especially important because trading activities are for survivalist purposes and so a better understanding of these dynamics is needed. If the formal market dynamics self-regulate according to supply and demand, similar can be said for trading locations that cater to specific customers. Ensuring the threat of displacement is minimalised is also important. This will also help to eliminate competition between entrepreneurs and planning visions for the City. Furthermore, the dignity and safety of spaces important. The scope of the trader support service centre can be expanded to serve as more than an information centre but as an opportunity for better precinct level management housed on site among trading locations. Resiliency of food security through ensuring the flexibility and sustainability of informal trading activities is thus formed through multi-level interventions and restorative systems as well as through secure access to markets and smaller localised economies ().

Chapter 5: Summary, Recommendations and Conclusion

This chapter presents a summary before exploring recommendations and concluding. It starts by looking at how the state of food [in]security in South Africa has been framed and what the gaps in the research may be through the example of Philippi, Cape Town as an exemplar. This is followed by a look at what has or has not been done to address the issue, thus comparing what has or has not been said, who is involved and what those relationship dynamics are. It then answers why all this is happening as well as how these dynamics operate. Thereafter, the recommendations aim to suggest possible ways in which change can occur through policy engagement, capacity building and place-based spatial interventions. Finally, and in conclusion, the limitations and reflection of the overall research process is presented.

5.1 Summary of research findings

In their book on Urban Food Systems Governance and Poverty in African Cities, Battersby and Watson (2018) affirm that food has been largely absent from urban studies and urban policy. Not only this, but food security studies have also neglected the urban (2018: 57-58). That is, public transportation, decent housing, infrastructure and services, and social development such as job creation and so forth. The socio-economic and environmental impacts of food systems and food systems planning affect the urban just as much as the urban affects the food agenda. This research has looked to understand how food security is improved through an exploration of the distribution, preparation and consumption dynamics of the food system in context through the Protea Road, Philippi case study. It has found that at macro-level, food systems and food systems planning is as equally dependent on political, economic, environmental and social support mechanisms, as urban priorities. On a micro level, the physical, social and infrastructural requirements needed to make food more accessible to households are supported by urban priorities as an integral part of it. This is especially in light of the increasing dependency of households on bought food in urban areas.

And so to summarise, the 'what', the 'whom', the 'why' and the 'how' of improving access to food in urban areas has been explored through distribution as a central and vital aspect of food systems. Urban fresh produce markets in particular, as a vital part of food distribution systems, were of interest in this research not only to secure food security but also nutrition. The 'what' alludes to the status quo of household food [in]security and the criteria required to be food secure according to the literature. The 'whom' is concerned with the actors involved with what has been said in the literature but it also examines the roles and responsibilities of the actors who improve the status quo. The 'why' is seen as a way through which the research question is answered by way of informal fresh produce markets as an enabler of increased food access. The 'how' thereafter recommends avenues toward constructively improving the status quo through informal fresh produce markets.

5.1.1 The 'What'

To maintain the longevity of food supply that is more resilient to multiple shocks and multiple stresses, food systems planning will need to adapt to mitigate current challenges, plan for future need and leave enough room for flexibility and adaptation. Resiliency of food systems planning not only secures availability of food for national production and supply objectives but also for varying household incomes whose livelihoods depend on diversification of food sourcing strategies. Though the PHA is the drought-proof breadbasket of Cape Town, initiatives like PEDI's Agrihub improves these opportunities for ensuring availability of food in the long term. It was deduced that because the Western Cape is a surplus producer and the PHA ensures security against shocks and stresses. Availability of food in Philippi is sufficient to meet basic food needs.

Conversely, what the FAO, Haysom and Battersby have demonstrated is that regardless of the availability of food in South Africa, it is not necessarily the point at which intervention is required. This research hypothesises that access to food supply is the point at which intervention is required. Moreover, access to food is supported by control of access over time and maintenance of access over time is equally necessary to satisfy food security needs. The literature expands access to be physical and geospatial; social and socio-political; economic and political-economic. These elements that enable improved food access are discussed under a three-pronged approach, namely, policy review; place-based intervention; and a strategic plan. Under these are five recommendations, namely distribution and trade opportunities; supply incentives; spatial and development planning; capacity building; and an expansion of the resiliency scope respectively. To illustrated through the precedent study below.

5.1.2 The 'Who'

The interested and affected parties involved include Philippi's households about whom this research is orientated towards; the communities they exist in and are part of within the broader City of Cape Town; all those who influence or are part of the nutritious food and fresh produce markets, both formal and informal, which includes by extension the producers, processors and distributors of said nutritious food and fresh produce markets; then lastly and most importantly the decision makers at the Protea Road case study site, at local, provincial and national scale together with the mechanisms used to reach decisions such as legislation, policy and plans. An actors and stakeholders analysis is discussed in more detail under the roles and responsibilities section of the recommendations.

5.1.3 The 'Why'

To answer the research question which asks how the Philippi fresh produce market improves household access to food, this research began by noting that the literature indicates an increasing dependency on bought food in urban areas. Access to food in these areas, however, are characterised by value chain inefficiencies and oligopolies that distort

food prices; information asymmetries; monopolistic practices; collusion and weak self-regulation create slow transformation toward inclusiveness further perpetuating food system inequalities. Furthermore, these characterisations exist amidst increasing multi-shock and multi-stress environments as a result of epidemics/pandemics, natural phenomena, financial fluctuations and inflation, conflict, gendered biases and other covariate shocks (Upton et al, 2023). These not only threaten food supply for households but for the food system in general as a result on the affect on mobility, employment, pricing, health and safety, and a range of mechanisms on a macro, meso and micro level. Given the international human rights and constitutional mandate that a situation where “all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life” (FAO, 1996) should exist, this research aims to answer the question of how household food access is improved through exploring how the what can be addressed with the how of informal fresh produce markets.

5.1.4 The ‘How’

For low income households and irregular income households as well as vulnerable populations, their dependency on informal fresh produce markets is also a focus of this research. It was noted that both formal and informal markets have an interdependent relationship that is mutually beneficial. This research identifies that a policy gap is in the recognition that the role of urban informal markets in improving access to food is a way to address food insecurity. That being said, urban informal fresh produce markets are not without their challenges. Nevertheless, that does not necessarily mean they cannot be addressed through policy review. Additionally, though the City’s Resilience strategy identifies food and nutrition security as a part of its imperatives, there too the connection between informal fresh markets is not made. This research highlights the ability of informal fresh produce markets to meet household food security needs through mechanisms that formal fresh produce markets are not necessarily permitted. This ability is, however, still tethered to the functionality of formal fresh produce markets. Thus, this relationship needs to be honoured.

This research encourages policy-makers as well as all interested and affected parties to take a humanistic and eco-centric approach that ultimately addresses an enabling environment for short-term mitigation; medium-term buy-in and investment; and long-term flexibility and adaptation of policies and place-based interventions so that local economic multipliers are best able to accomplish the task for which they were created. In the short term, capital expenditure (CAPEX) will be useful for catalysing place-based interventions and fuelling the existing informal fresh produce markets to thrive and create opportunities for future urban informal fresh produce markets. Conversely, this is not possible without the support of legislation and policy and urban macro, meso and micro level mechanisms. Operational expenditure (OPEX) funding and financed through creating local circular

economy and incentivising external stakeholder investment to maintain and stabilise the momentum gained by CAPEX injection into place-based initiatives. Over the long-term, implementation strategies to increasingly approach transformation in a humanistic (Rogers, 1951) and ecocentric (Leopold, 1949) way that allows for flexibility and adaptation to a plethora of circumstances. Nevertheless, regulatory functions still observed to uphold and safeguard public interest.

Urban policy making In the form of the Resilience Strategy (2018) document and the IDP (2022) is recommended to undergo expansion that will by extension influence SDF and other spatial plans in order to ensure implementation of food security objectives in tandem with urban development objectives. The FSP (2018) is one such approach where food security is addressed under six themes, namely, food governance, food resilience, food production, food environments, food health and food economy. Under these themes, bulk and service infrastructure is a short-term CAPEX need. This includes water and electricity provisions, storage and waste, security of tenure and security of supply with scalability visions for individual entrepreneurs as well as the overall market; transportation and safety. Over the medium term, large focus on governance structures. Additionally, fostering relationships and a capacity building effort is recommended to ensure that formal and informal retail have a conducive environment for collaboration and coordination of food distribution that is not only suitable to various socioeconomic profiles and household incomes but provides an inclusive and transformative approach to enabling an optimal mix of household food security strategies. Over the long term, monitoring and evaluation of governance structures through consistent engagement to adapt policy and implementation with the changing landscape from individual households through to the state.

5.2 Recommendations

Several proposals exist for food systems thinking in urban policy, precinct management, public space as well as how to engage with informal trading. There are also proposals and trading plans for development of the area. Past research on public safety and general well being in public space argues for the need to dignify the experience of entrepreneurs as well as of the households they service. Seeing crime is a frequently occurring concern, safety on public space interventions. Seeing also that entrepreneurs are predominantly women, the safety of women, in particular, in public space is important.

5.2.1 Food Systems Planning: Food Systems Programme

The City's FSP proposal focuses on improving access to affordable and nutritious food for Capetonians and particularly for those living in vulnerable communities. The City acknowledges the lack of a governance approach to managing food systems with little appreciation for systemic risks, disruptions to food supply through multiple shock events and multiple stress environments (CCT, 2018). As mentioned before, the connection between food security and informal fresh produce markets has not been established. The

IDP does, however, recognise the need for a deeper commitment to development and support of the informal sector. The economic principles outlined in the IDP include an informal sector support initiative as part of their inclusive economic development and growth programme to provided for the needs of entrepreneurs (CCT, 2022).

The recommendations under this subsection aim to highlight the possibility for efforts to fill this policy gap and propose to have it reflect in SDFs under strategic precinct development interventions for a contextual approach to food systems planning. Recommendations under each theme of the FSP combined with the literature and field work findings are namely, considering the supply chains and procurement under food production; considering nutrition support programmes and public health under food health; considering environmental sustainability, rehabilitation, water, energy and waste under food environment and resilience; and the support of local enterprise and local economic multipliers under food economy and governance. All these are geared to alleviate the strain on achieving integrated systems planning. It requires that this urban food system approach holistically consider additional factors such as poverty reduction and nutrition in addition to food security. That is to say the natural and social factors that encompasses environment, economy and society (see figure 5.1).

The geography of the urban food system, in particular planning and zoning regulations regarding the location of both formal and informal retail within low income areas, needs to ultimately make food central to all city planning processes by understanding urban food security needs at household scale throughout Cape Town. PEDI Agrihub seeks to increase economic opportunity through the circular economy in Philippi, thereby increasing household income in the community and providing greater opportunity to food access. However, it is evident that though resources are available to households, does not necessarily increase access even though resources afford them greater economic opportunity. If entrepreneurs and households need to source from further away to ensure quality or greater economic opportunity, their income is used on transportation to source the food. Proximity to quality produce becomes an important factor together with greater economic opportunity. Thus, PEDI Agrihub solution requires that an optimal mix of local and external supply so that households and entrepreneurs also have actual benefits of proximity of agricultural activity.

Mapping those geographies and non-spatial determinants is a research exercise that can be developed as an integral part of the FSP. Governance structures are a vital part of establishing this as localised and decentralised food islands that combat food deserts will require support and analysis from precinct to neighbourhood scale (Battersby, 2011). However, this support is not recommended in the form of formalisation. The threat that formalising poses is that future applications will have an even higher barrier to entry if they do not conform to the by-laws regardless of optimal location. Additional threats to the

location of informal trade are those of displacement. For example, in Philippi, the development of transportation routes. The SLF (2018) mention lack of ability to accommodate or permit trading on Stock Road due to BRT, NMT expansion and upgrade routes, thus permanently displacing traders who traded on Stock Road.

The potential for street trading on Protea Road was included by SLF (2018), PEDI (2022) and the City (2022) especially because it is feasible. While there are no legal obstacles at the Protea Road site with respect to heritage, religious or government function buildings, on Stock Road, the new BRT routes create obstacles to pre-existing forms of trade. There is the potential to trade at BRT/bus station sites, but there are limitations around the kind of trade permissible at these sites. This irreversibly changes the nature of the kind of trade that may not always be beneficial for the entrepreneurs and the households that depend on them. Considering the actual impact on household food security is thus a factor that should go in tandem with transportation objectives for a mutually beneficial relationship in the specific type of trade and type of transport route. Involving local recipients in strategies from the outset of any intervention is important because you tap into knowledge they already possess rather than deciding for the communities. This is further discussed under the governance precedent study.

5.2.2 Informal Trading Policy Provisions and Policy Review

A review of the Informal Trading Policy and proper structuring of the Informal Trading Implementation Policy may aid the City in mainstreaming basic service delivery and infrastructure upgrades to urban informal fresh produce markets. Bearing in mind the trade-offs required to maintain the nature and character of socio-economic opportunities and character of the community. Additionally, several recommendations relating to fostering partnerships with private sector and government departments as part of negotiable operational models; allow entrepreneurs better agency with respect to where they can locate their stalls; monitoring and evaluation processes that include and involve entrepreneurs by enabling them to give input where improvements to the markets can be made are put forward here. The recommended engagement principles are also called into question.

For this to be enacted, identifying the roles and responsibilities of the interested and affected parties is important. The Informal Trading Policy highlights that the City's municipal council is responsible for decision-making but can delegate these powers to authorities within the municipality (CCT, 2013). The sub-delegate functions and powers within the municipality are given to a non-specified appropriate official. Therefore the rules of engagement surrounding entrepreneur-City relationships is not well-established over time. The FSP suggested that the programme be located within government. Seeing that this research recommends the amalgamation of the FSP and IDP oriented implementation programmes, it further suggests that a dedicated personnel be responsible for working with

societal partners and other spheres of government. If the City Manager, however, is responsible for this role, a body of authorised persons can be elected to oversee and coordinate with community/organisations and report to the City Manager (CCT, 2009). In as far enforcement goes, better partnerships between officers, entrepreneurs and the community can be fostered through the trader support service centre that PEDI proposes.

An operational model of partnerships can make use of the documents and the interested and affected parties. Mainly in this section, public institutions and the tariff structure, third-party organisations and the community. In as far as permits, fees and tariffs go, negotiable rates should replace discretionary application and trading fees. Incurred costs such as service fees may potentially be fixed but to ensure that the payment structure matches the situational context of the entrepreneur, discounting the true cost) can leave room for variation. The benefit here is that an opportunity for skills can be developed around the true cost of conducting business. Moreover, a better understanding of the full scope of tariff structure can be workshopped with entrepreneurs. The expectation of official documentation in the form of affidavits and medical practitioner documentation may require commitment to ensuring that the relevant facilities are within the range of entrepreneurs. Potentially dedicated service staff can be on site at the trader support service centre. Regardless, some form of onsite presence will be required to foster relationships with the community and public institutions. PEDI's PMU is one of the ways this is done through a third-party, however, for effective relationship and capacity building, the trader support service centre's function can be expanded to facilitate these relationships.

5.2.3 Spatial Planning and Development: Place-Based Interventions

This sub-section explores the potential for place-based policy recommendations because the solution to food insecurity is not as simply linked to local and national policy interventions. Spatial determinants of household food insecurity ground interventions as much in policy as it is in place. Therefore enhancing informal markets is as vital as addressing informal distribution and sales relations between state, formal and informal actors through spatial and food systems planning policy. However, though this approach has been explored in the North, it should not be loosely applied. Local and indigenous knowledge still takes preference (Battersby, 2011).

Section 5.5 of the Informal Trading By-Law says:

“Any person shall be entitled to request that the City considers the adoption of a trading plan; provided that where a proposed trading plan contemplates trading taking place on non-City property, the request is accompanied by the written consent of the owner of such non-City property. The City must consider and decide upon the request within a reasonable period”

(CCT, 2009).

Section 5.6 also says:

“When considering a request for the adoption of a trading plan, the City shall have due regard to any existing proposed trading plans in the vicinity of the proposed trading area in order to determine the desirability of the adoption of a trading plan.”

(CCT, 2009).

The City recognises areas of significant overlaps between formal and informal trading as areas where trading plans are made, most likely because of the fixed nature of formal trading and the relationship informal trade has with formal trading areas. Flexibility of informal trade is difficult to plan for without remaining up to date with changes. Thus, an amount of flexibility on the part of the City can assist in allowing for more opportunities of expansion on City-owned land. The mainstreaming of basic services and infrastructure becomes important here. Basic provisions create the opportunity for improved trading spaces which could further improve the confidence of entrepreneurs, households and the public at large in the City's ability to incentivise better public spaces, especially in trading areas. Incentives for private land owners can then be employed for increasingly optimal trading locations in and around the City.

Freedom of trading and freedom of social and economic development are principles that are recommended to be embodied in the interventions. Heritage and environmental areas within these interventions should still be respected but in as much as developments can factor in heritage and environmental considerations, the confines and management of operations through legal arrangements with any relevant parties involved must still comply with any relevant and applicable laws (CCT, 2009: 7-8). In terms of access to information, however, all are entitled to request the City to consider the draft of a trading plan with written consent in cases where non-City owned property is concerned. Creating vibrant urban trading places that optimise public and private sector investment catalyses the possibility of sustainable liveable public spaces. Nevertheless, to make this possible, attracting investment is important. This is what precinct development and management aims to do. However, precinct development only works if the investor sees it through. Interventions ultimately aimed at “catalytic human settlement transformation” in the long term (NT, 2014: 16).

A planning exercise could perhaps be one where a correlation is drawn between precinct management guidelines and spatial planning framework guidelines. Engagement can occur through the organisations and a supporting development approach. Social development support can be involved in the planning stage, however, business or technical training and

mentorship depending on the need is important for stakeholders and providers to offer. The dedicated City department can acquire the help to ensure the expected standards are met. Indirect support in the form of services (roads, water and sanitation), planning (spatial, land use, urban design etc), site identification, preparation and development, contract development and legal services, management and regulatory services would remain the responsibility of the City. This is because site specific interventions in the long term across sites in the precinct will require maintenance in order to ensure the economic stability of precinct and the broader neighbourhood areas these precinct sites serve.

In Philippi, a separate analysis of what this amalgamation would look like is required. Nevertheless, environments that create healthier choices can be created (Architecture for Humanity, 2012). The elements that draw or attract particular choices around food are also recommended in the specifics of the fresh produce. Thus, it is important to preserve the commercial use of the area and as such, a call for the development of underutilised land is another priority of the precinct development. The precinct development's aspiration is to have New Eisleben Informal Trader's Market become a destination point in Cape Town to this end (PEDI, 2022).

5.2.4 Monitoring and Evaluation Processes

The eradication of spatial inequality is a national priority as outlined in the National Development Plan (NDP). Chapter 8 of the NDP prioritises public spaces that improve the life of poor communities who cannot afford public amenities (NT, 2014). Thus the neighbourhood development programme through the Urban Network Strategy assists this agenda with the condition of on-going operational management to avoid physical, functional and economic obsolescence. To that end, the challenge to do is posed as a problem statement. That statement is thus:

“In the context of scarce municipal resources, how do municipalities support the operational management of key precincts which require services beyond what the municipality can equitably provide to all its citizens?”

(National Treasury, 2014: 3).

This is to say, in this case, monitoring and evaluating how fresh produce markets can be (re)designed in order to improve access to fresh food; how fresh food markets can be supported by existing planning instruments and how supply and value chains can be better supported is a concern for municipalities over the long term. With increasing reliance on technology, there is additional effort required to making data and communication more accessible. UKITA for example, suggested an application that enables continuous updates and payment options among other aspects (2023: interview). Informal social networks and other forms of social capital can assist in the accumulation of information. That is, NGOs,

civil society at large, etcetera so as not to create dependency on the state and private sector - even though their support is still necessary to maintain positive relationship (Battersby, 2011). Again, through the trader support service centre, the establishment of relationships through this centre can also assist with monitoring and evaluation. PEDIs PMU would supplement this.

5.2.5 Precedent: Philippi Village Place-Based Intervention

The Philippi Village Incubation Project was founded with the intention of working together with the community and the City. Investors and funders help with managing expenses running the facilities which creates a continuous need for outreach. Philippi Village recognises that it takes more than just provision of nutritious food to eradicate poverty and so a multi-faceted approach is used to address poverty which includes food security. The site itself houses spaces to live, work, play and connect. Many of its public spaces are activation of spaces for the community. It's expansion is currently limited by the capacity of existing staff to do marketing, as well as the issue of safety and general perceptions of the organisation. Their asset mapping exercise showed that factories, malls, informal settlements and storage facilities are among those that contribute to the Philippi Village effort.

There are several direct and indirect challenges which include service delivery, fires and especially flooding as the site and surrounding settlements are situated near a retention pond. Philippi Village supplies much needed water for the community as a result of a borehole on the premises; fresh fruit and vegetable produce; and chicken farming among other initiatives. These initiatives are often a marriage of already existing businesses and movements within the community. However, distribution is affected by crime and safety concerns. Improving the informal trading situation is tied to crime and safety concerns in the area. Moreover, Philippi Village is only able to contribute to the local economy but scalability is an identified need as a result of demand from surrounding neighbourhoods. And so, farm to table models that make use of as much organic produce, compost, pesticides and the sourcing of seeds from produce that is of lower quality are some of the ways that Philippi Village manages expenses and makes replicable examples for small to large scales in an attempt to alleviate and eradicate poverty by decentralisation. This also happens through education initiatives. Education takes place through learnerships where NQF level 1-4 qualifications are offered in general and project management. Learners are given access to technology for community benefit. This in the hopes of forming a new kind of entrepreneurship.

A possible avenue for scaling up is the consideration of a governance model that helps in this regard. Firstly, communication is important in all that happens in the community. The buy-in of the community and the entrepreneurs is important to avoid unnecessary conflicts. Nevertheless, for scalability, this research borrows lessons from the Rosebank Precinct

Management Governance Structure. Careful consideration was paid to expansion as it does not necessarily mean upscaling of management. Small scale representation is still important. Rosebank's original Management District before growth found them establishing a Lower Rosebank Management District. Operational structures and service delivery mechanisms were shared as well as a common identity and vision. However, districts have separate governing boards. Meaningful integration and consultation of beneficiaries of this expansion is important from the start so as to maintain cooperation and collaboration of the community.

Furthermore, the expansion may require the establishment of a municipal managed entity where the City is more involved with community to build trust and thereby build safety. Seeing Philippi is a strategic precinct which currently lacks a substantial private investment base, they require investment coordination. Can support Urban Investment Strategy. Considerations include who will do the management, who they report to (planning function, local economic development, engineering, finance), is there a local hierarchy, dedicated personnel in one or several areas? The responsible official must foster good community relations and regular engagements. Area based management (ABM) assists here. Capital investment targeted toward need is suggested as a method of trust building. Institutional structures established in Warwick Junction, for example, made use of municipal managed approach and ABM. The ABM team could be assembled from existing departments into one building to make collaboration easier. Entrepreneurs may subsequently have to invest in social relations with resource owners or managers in order to maintain access to both labour opportunities and the resources themselves as part of this expansion (Berry 1993)

The operating model can be combined with precinct management in its objective (business plan and operational model for precinct management), municipal role (partner to lead, municipal area manager, engagement with precinct association) and NDPG role (tech assistance for feasibility study, business plan development and required engagement) (NT, 2014). A coordinated, multi-stranded approach involving organisations from other sectors is also needed, especially if the MDGs, hunger and poverty, child mortality, health care, and education schemes around nutritional basics with respect to food security are to be addressed. Moreover, gender sensitive planning is something to be considered. An example of this is the research done by Mofokeng (2022) which is titled: 'An in-depth investigation into the safety of Nyanga's public spaces from a gender-sensitive perspective'. Seeing crime is a frequently occurring concern, and in particular, the safety of women in public spaces is important this is an important study. The most vulnerable in some communities tend to be those with dependents (i.e. single mothers) and those without food production assets). Programmes and projects that prioritise according to need, (lack of) security of tenure and building resilience. Increasing the economic profile of the area through marketplaces – roads for delivery/distribution etc need to be of standard. Sustainable solutions require more than reactive but also proactive measures.

5.3 Conclusion

This research began by contextualising the issue of food security under the banner of food systems and food systems planning. This is in light of the lack sufficient food to meet basic nutritional long after a 15 year global campaign to meet the Millennium Development Goals (MDG) found 795 million people still undernourished (FAO, 1996; FAO, 2015). It established that food [in]security is an urban challenge which makes ensuring the sustainability of urban food systems and improving access to food for urban households a vital part of the urban agenda (Frayne et al, 2009; Battersby, 2011). The impacts of “all the elements and activities that relate to the production, processing, distribution, preparation and consumption of food these, which are largely socioeconomic and environmental” (HLPE, 2014; FAO, 2018; ICLEI, 2021) led this research to refer primarily to distribution, preparation and consumption of fresh produce when using the term ‘urban food system’.

Particular attention to the question of food distribution was explored, which involves the physical and social infrastructure around making food geographically and economically accessible. These include the formal and informal actors and stakeholders that influence access to food, namely the public and private sectors, researcher, developer, community and household level initiatives (ICLEI, 2021). It demonstrates that there is a relationship between formal and informal markets (Skinner and Haysom, 2017). Partly for this reason planning can, therefore, play a much more positive role in facilitating the integration of formal and informal food systems activities (FAO, 2022).

Consequently, food systems planning is a collaborative planning process to develop and implement a systemic approach to securing food for present and future generations. It involves planning how these food systems elements of and activities within food systems work together to improve access to food formally and informally. As such, food systems planning factors in the connection between food security, the food system and the wider set of urban planning systems in which food operates (Battersby and Watson, 2018). It does so by considering the integrity and capacity of current and future environmental, social and economic dimensions to formal and informal food systems elements and activities (HLTF, 2015).

Access to food is influenced by increased urbanisation, which, in turn, increases a household’s dependence on bought food. Oftentimes, less affordable nutritional food options are what is readily available to households; competitive market dynamics affect barriers to entry and food prices; and there is increasing commercial industry domination of food and beverages (Pereira, 2014; Igumbor et al., 2012). To this end, fresh produce markets (FPMs) in urban areas enable increased access to affordable nutritional foods, especially informal fresh produce markets (IFPMs). Thus, informal fresh produce markets in

particular are elements of food systems that warrant closer attention for legislators and policy-makers; and spatial development and planning.

In this research the Protea Road market was examined. It was done through first by establishing criteria through the literature on food [in]security and how it has been conceptualised in relation to food systems and food systems planning at national, provincial, local and case study-context scales in South Africa. It also examines the role of informal fresh produce markets with regard to informal fresh produce markets with the aim of developing criteria against which the case can be assessed. The findings indicate that ... This research explored the role that informality plays in the food system value chain and acknowledges that further studies on other notable locations in Cape Town's metropolitan region could benefit from an in-depth study. This can help better understand the variations between these locations and as a comparative effort to explore the nuances in complexities.

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Appendices

Declaration and Plagiarism Forms

Signed Declaration Form

Declaration of Free Licence

" I hereby:

- (a) grant the University free license to reproduce the above thesis in whole or in part, for the purpose of research.
- (b) declare that:
 - (i) the above thesis is my own unaided work, both in conception and execution, and that apart from the normal guidance of my supervisor, I have received no assistance apart from that stated below.
 - (ii) except as stated below, neither the substance or any part of the thesis has been submitted in the past, or is being, or is to be submitted for a degree in the University or any other University.
- (iii) I am now presenting the thesis for examination the thesis for examination for the Degree of Master of City and Regional Planning

Name.....**TSTEGOFATSO GRACE MALATI**

Signature....

Signed Plagiarism Form

Name: TSHEGOTATSO GRACE MALATJI
Student Number: MLTTSH033
Course: AFG5051Z

Declaration

I know that plagiarism is wrong. Plagiarism is to use another's work and pretend that it is one's own.

I have used the HARVARD convention for citation and referencing. Each contribution to, and quotation in, this ~~essay/report/project~~ DISSERTATION from the work(s) of other people has been attributed, and has been cited and referenced.

This ~~essay/report/project~~ DISSERTATION is my own work.

I have not allowed, and will not allow, anyone to copy my work with the intention of passing it off as his or her own work.

Signature _____

Date 03/12/2023

Ethics Report and Response Letter

Ethics Approval with Conditions



UNIVERSITY OF CAPE TOWN
IYUNIVESITHI YASEKAPA · UNIVERSITEIT VAN KAAPSTAD

2023/08/24

EBE/00335/2023

RE: Research Ethics Committee Project Approved with Condition(s) Letter

Dear Tshegofatso Malatji,

Your application for ethics review of your project titled

How the Philippi Fresh Produce Market Improves Household Food Security

has been reviewed and evaluated by the

Engineering & Built Environment Committee.

Based on the information supplied your application has been conditionally approved.

Please note the following additional conditions associated with this approval:

- (i) Approved, subject to two conditions:
 - 1) Please do discuss with your supervisor whether any gatekeeper permission is needed to do research in the chosen study area;
 - 2) Noting that you ticked both options regarding conflicts of interest, please declare by email to the Chair of the EBE EiRC, Prof. Harro von Blotnitz, cc. to your supervisor, which of the two applies.

Proof that you have met these conditions, in the form of letters of permission or other relevant documentation, should be supplied to the REC, via the eRA system.

Once you have met with the above condition(s), you may proceed with your research project titled:

How the Philippi Fresh Produce Market Improves Household Food Security

Please note that should:

- (i) any serious or adverse effects to participants occur and/or,
- (ii) aspect(s) of your current project change and/or
- (iii) any unforeseen events that might affect continued ethical acceptability of the project occur then you should immediately report this to the approving REC. You may be required to submit an amendment to this application, in order to determine whether the changed aspects increase the ethical risks of your project.

Regards,

Engineering & Built Environment Committee.

Letter to the REC to meet Conditions

25 October 2023

Re: Research Ethics Committee Project Approved with Conditions Requested Letter

Dear REC,

Please find below and attached, as requested, the responses to the conditions to my research project titled 'Philippi Fresh Produce Market: A Key Contributor to Household Food Security'.

The conditions associated with the ethics approval of my research project are:

1. Please do discuss with your supervisor whether any gatekeeper permission is needed to do research in the chosen study area;
2. Noting that you ticked both options regarding conflicts of interest, please declare by email to the Chair of the EBE EiRC, Prof. Harro Von Blottnitz, cc. to your supervisor, which of the two applies.

With respect to the first condition, following further discussions with my supervisor, we noted that whilst some organisations (listed in the research proposal) may have gatekeepers, not all of those listed and approached to be part of the study did. This, therefore, meant that we were able to get consent directly from the individuals we have contacted through their official (read work) email addresses upon inviting them to participate in the research. Those individuals I have approached had the authority, to the extent of my knowledge, to grant permission for us to interview them as determined partly by the fact that they did not re-direct our queries to gatekeepers (see attachment 1 - signed consent forms). Please note that in the end, I opted not to interview UCT staff, namely staff at the African Centre for Cities due to delays early in the research process. Therefore, I did not engage with the institution to seek gatekeepers permission.

With respect to the second condition, I hereby declare that I am not aware of any current or future conflicts of interest. I ticked both options in error.

If anything remains unclear, please do not hesitate to contact me or my supervisor Dr. Nobukhosi Ngwenya (cc'd). Thank you for your consideration in this matter.

Kind regards,

Tshego G Malatji
MLTTSH033

Research Participant Consent Forms

Philippi Economic Development Initiative (PEDI)



University of Cape Town

Faculty Engineering & the Built Environment

School of Architecture Planning & Geomatics

City & Regional Planning Programme

Researcher: Tshagofatso G Malatji

Contact Details: 0799483335

Date:

Supervisor: Nobukhosi Ngwenya

E: Nobukhosi.Ngwenya@uct.ac.za

Consent Form

Introduction

I am conducting research towards a Master of City and Regional Planning Studies degree at the University of Cape Town. I am investigating how urban informal fresh produce markets help to provide better access to food in Cape Town's urban areas and would like to invite you to participate. The purpose of this research is to understand how urban informal trade supports food systems and food security in Cape Town.

Expectations from participations

Participation is voluntary and not obligated. If you choose not to participate or withdraw at any time after choosing to participate, there will be no negative consequence. Where it is not possible to hold in person interviews, virtual sessions will be arranged at a minimum of 30 minutes regarding your understanding of urban food security and how urban informal trading of fresh produce improves access to food. It is anticipated that insights, views, perspectives into how people access food from informal fresh produce markets and the potential implications are for law makers, government, communities, agricultural and informal businesses, and households dependent on these will be discussed.

Benefits to participants and any risk involved

The participants may express their views and proposals openly. There is no financial obligation from the project or to the participant. Therefore, there is no payment/reimbursement available. There are no foreseen or unforeseen risks associated with the research and should you feel at risk, you may withdraw fully or refuse to answer any question/s if you remain.

Sharing and use of data – Anonymity and confidentiality

With permission, data collected from the interview will be synthesised, used for academic purposes only to answer the research questions set in the study, and stored on password protected cloud-based storage in line with the Protection of Personal Information Act (POPIA). The recordings will be kept private, and all data will be destroyed once the research is completed. Confidentiality will be maintained as pseudonyms will be used in the final research report for anonymity. Research publications will be made available to participants on request.

Ethical approval

The research has been reviewed and approved by the University Research Ethics Committee of UCT, and permission has been obtained to commission the interviews.

By signing the consent form, you agree to the terms stipulated in this consent sheet regarding the interview. If you are not comfortable with the terms, please make a note.

Interviewee name:

THOMAS L. SWANA

Interviewee's signature

Date:

24/10/2023

Date:

24/10/2023

Consent form for recording of interview – to accompany information sheet given to participant

Title: The Role of Informal Fresh Produce Markets in Household Food Security in Cape Town.

Name of interviewer: Tshegofatso Grace Malatji (MLTTSH033@myuct.ac.za 0799483335)

Name of Translator: TBC

Name of Supervisor: Nobukhosi Ngwenya (Nobukhosi.Ngwenya@uct.ac.za 021 650 2081)

Title of degree: MCRP

University of Cape Town

I, THOMAS SWANA, confirm the following:

1.	I have read the information sheet provided by the researcher and thus understand the projects aims and objectives.	✓
2.	I am participating in this project voluntarily and understand that I may withdraw from the interview at any time if I so do wish.	✓
3.	I acknowledge and understand that confidentiality will be maintained.	✓
4.	I have been asked permission to record this interview and have given my permission.	✓
5.	I understand that this data is accessible to other researchers only if they honour the confidentiality agreement.	✓

Participant

Date 24/10/2023

Signature of participant

Name of participant THOMAS L SWANA

Organisation of participant PHILIPPI ECONOMIC DEVELOPMENT INITIATIVE (PEDI)

Researcher:

Name:

Signature:

Date:

Informal Economy Development Forum (IEDF)



University of Cape Town

Faculty Engineering & the Built Environment

School of Architecture Planning & Geomatics

City & Regional Planning Programme

Researcher: Tshegofatso G Malatji

Contact Details: 0799483335

Date: 31 August 2023

Supervisor: Nobukhosi Ngwenya

E: Nobukhosi.Ngwenya@uct.ac.za

Consent Form

Introduction

I am conducting research towards a Master of City and Regional Planning Studies degree at the University of Cape Town. I am investigating how urban informal fresh produce markets help to provide better access to food in Cape Town's urban areas and would like to invite you to participate. The purpose of this research is to understand how urban informal trade supports food systems and food security in Cape Town.

Expectations from participations

Participation is voluntary and not obligated. If you choose not to participate or withdraw at any time after choosing to participate, there will be no negative consequence. Where it is not possible to hold in person interviews, virtual sessions will be arranged at a minimum of 30 minutes regarding your understanding of urban food security and how urban informal trading of fresh produce improves access to food. It is anticipated that insights, views, perspectives into how people access food from informal fresh produce markets and the potential implications are for law makers, government, communities, agricultural and informal businesses, and households dependent on these will be discussed.

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The participants may express their views and proposals openly. There is no financial obligation from the project or to the participant. Therefore, there is no payment/reimbursement available. There are no foreseen or unforeseen risks associated with the research and should you feel at risk, you may withdraw fully or refuse to answer any question/s if you remain.

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Ethical approval

The research has been reviewed and approved by the University Research Ethics Committee of UCT, and permission has been obtained to commission the interviews.

By signing the consent form, you agree to the terms stipulated in this consent sheet regarding the interview. If you are not comfortable with the terms, please make a note.

Interviewee name:

Chantal Maxim
Business Development Director
IEDF

Interviewee's signature:

Date:

Date: 26 October 2023

Consent form for recording of interview – to accompany information sheet given to participant

Title: The Role of Informal Fresh Produce Markets in Household Food Security in Cape Town.

Name of interviewer: Tshegofatso Grace Malatji (MLTTSH033@myuct.ac.za 0799483335)

Name of Translator: TBC

Name of Supervisor: Nobukhosi Ngwenya (Nobukhosi.Ngwenya@uct.ac.za 021 650 2081)

Title of degree: MCRP

University of Cape Town

I Chantal Maxim, confirm the following:

1.	I have read the information sheet provided by the researcher and thus understand the projects aims and objectives.	Yes
2.	I am participating in this project voluntarily and understand that I may withdraw from the interview at any time if I so do wish.	Yes
3.	I acknowledge and understand that confidentiality will be maintained.	Yes
4.	I have been asked permission to record this interview and have given my permission.	Yes
5.	I understand that this data is accessible to other researchers only if they honour the confidentiality agreement.	Yes

Participant

Date 26 October 2023

Signature of participant

Name of participant Chantal Maxim

Organisation of participant Informal Economy Development Forum

Researcher:

Name:

Signature:

Date:



University of Cape Town

Faculty Engineering & the Built Environment

School of Architecture Planning & Geomatics

City & Regional Planning Programme

Researcher: Tshegofatso G Malatji

Contact Details: 0799483335

Date: 31 August 2023

Supervisor: Nobukhosi Ngwenya

E: Nobukhosi.Ngwenya@uct.ac.za

Consent Form

Introduction

I am conducting research towards a Master of City and Regional Planning Studies degree at the University of Cape Town. I am investigating how urban informal fresh produce markets help to provide better access to food in Cape Town's urban areas and would like to invite you to participate. The purpose of this research is to understand how urban informal trade supports food systems and food security in Cape Town.

Expectations from participations

Participation is voluntary and not obligated. If you choose not to participate or withdraw at any time after choosing to participate, there will be no negative consequence. Where it is not possible to hold in person interviews, virtual sessions will be arranged at a minimum of 30 minutes regarding your understanding of urban food security and how urban informal trading of fresh produce improves access to food. It is anticipated that insights, views, perspectives into how people access food from informal fresh produce markets and the potential implications are for law makers, government, communities, agricultural and informal businesses, and households dependent on these will be discussed.

Benefits to participants and any risk involved

The participants may express their views and proposals openly. There is no financial obligation from the project or to the participant. Therefore, there is no payment/reimbursement available. There are no foreseen or unforeseen risks associated with the research and should you feel at risk, you may withdraw fully or refuse to answer any question/s if you remain.

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Ethical approval

The research has been reviewed and approved by the University Research Ethics Committee of UCT, and permission has been obtained to commission the interviews.

By signing the consent form, you agree to the terms stipulated in this consent sheet regarding the interview. If you are not comfortable with the terms, please make a note.

Interviewee name: [Bianca Dempers](#)

Interviewee's signature:

Date: [31 October 2023](#)

Date: [31 October 2023](#)

Consent form for recording of interview – to accompany information sheet given to participant

Title: The Role of Informal Fresh Produce Markets in Household Food Security in Cape Town.

Name of interviewer: Tshegofatso Grace Malatji (MLTTSH033@myuct.ac.za 0799483335)

Name of Translator: TBC

Name of Supervisor: Nobukhosi Ngwenya (Nobukhosi.Ngwenya@uct.ac.za 021 650 2081)

Title of degree: MCRP

University of Cape Town

I Bianca Dempers, confirm the following:

1.	I have read the information sheet provided by the researcher and thus understand the projects aims and objectives.	yes
2.	I am participating in this project voluntarily and understand that I may withdraw from the interview at any time if I so do wish.	yes
3.	I acknowledge and understand that confidentiality will be maintained.	yes
4.	I have been asked permission to record this interview and have given my permission.	yes
5.	I understand that this data is accessible to other researchers only if they honour the confidentiality agreement.	yes

Participant

Date 31 October 2023

Signature of participant

Name of participant Bianca Dempers

Organisation of participant Oribi

Researcher:

Name:

Signature:

Date:

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insights, views, perspectives into how people access food from informal fresh produce markets and the potential implications are for law makers, government, communities, agricultural and informal businesses, and households dependent on these will be discussed.

Benefits to participants and any risk involved
The participants may express their views and proposals openly. There is no financial obligation from the project or to the participant. Therefore, there is no payment/reimbursement available. There are no foreseen or unforeseen risks associated with the research and should you feel at risk, you may withdraw fully or refuse to answer any question/s if you remain.

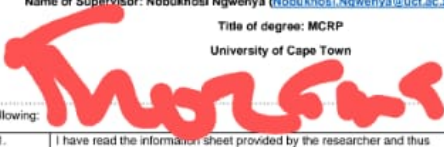
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Interviewee name: Interviewee's signature:
Date: Date:

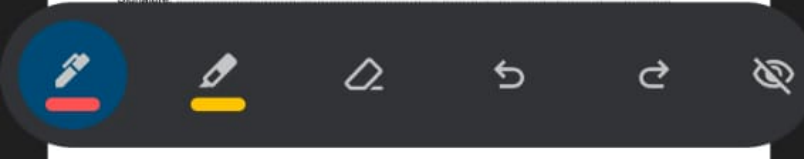
Consent form for recording of interview – to accompany information sheet given to participant
Title: **The Role of Informal Fresh Produce Markets in Household Food Security in Cape Town.**
Name of Interviewer: Tshegofatso Grace Malatji (MLTTSH033@myuct.ac.za 0799483335)
Name of Translator: TBC
Name of Supervisor: Nobukhosi Ngwenya (Nobukhosi.Ngwenya@uct.ac.za 021 650 2081)
Title of degree: MCRP
University of Cape Town

I, , confirm the following:

1.	I have read the information sheet provided by the researcher and thus understand the projects aims and objectives.	
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5.	I understand that this data is accessible to other researchers only if they honour the confidentiality agreement.	

Participant
Date
Signature of participant 
Name of participant
Organisation of participant.....

Researcher:
Name:
Signature:





University of Cape Town

Faculty Engineering & the Built Environment

School of Architecture Planning & Geomatics

City & Regional Planning Programme

Researcher: Tshegofatso G Malatji

Contact Details: 0799483335

Date: 31 August 2023

Supervisor: Nobukhosi Ngwenya

E: Nobukhosi.Ngwenya@uct.ac.za

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Participation is voluntary and not obligated. If you choose not to participate or withdraw at any time after choosing to participate, there will be no negative consequence. Where it is not possible to hold in person interviews, virtual sessions will be arranged at a minimum of 30 minutes regarding your understanding of urban food security and how urban informal trading of fresh produce improves access to food. It is anticipated that insights, views, perspectives into how people access food from informal fresh produce markets and the potential implications are for law makers, government, communities, agricultural and informal businesses, and households dependent on these will be discussed.

Benefits to participants and any risk involved

The participants may express their views and proposals openly. There is no financial obligation from the project or to the participant. Therefore, there is no payment/reimbursement available. There are no foreseen or unforeseen risks associated with the research and should you feel at risk, you may withdraw fully or refuse to answer any question/s if you remain.

Sharing and use of data – Anonymity and confidentiality

With permission, data collected from the interview will be synthesised, used for academic purposes only to answer the research questions set in the study, and stored on password protected cloud-based storage in line with the Protection of Personal Information Act (POPIA). The recordings will be kept private, and all data will be destroyed once the research is completed. Confidentiality will be maintained as pseudonyms will be used in the final research report for anonymity. Research publications will be made available to participants on request.

Ethical approval

The research has been reviewed and approved by the University Research Ethics Committee of UCT, and permission has been obtained to commission the interviews.

By signing the consent form, you agree to the terms stipulated in this consent sheet regarding the interview. If you are not comfortable with the terms, please make a note.

Interviewee name: Angela Teffo

Interviewee's signature:

Date: 17/10/2023

Date:

Consent form for recording of interview – to accompany information sheet given to participant

Title: The Role of Informal Fresh Produce Markets in Household Food Security in Cape Town.

Name of interviewer: Tshegofatso Grace Malatji (MLTTSH033@myuct.ac.za 0799483335)

Name of Translator: TBC

Name of Supervisor: Nobukhosi Ngwenya (Nobukhosi.Ngwenya@uct.ac.za 021 650 2081)

Title of degree: MCRP

University of Cape Town

I, Angela Teffo, confirm the following:

1.	I have read the information sheet provided by the researcher and thus understand the projects aims and objectives.	X
2.	I am participating in this project voluntarily and understand that I may withdraw from the interview at any time if I so do wish.	X
3.	I acknowledge and understand that confidentiality will be maintained.	X
4.	I have been asked permission to record this interview and have given my permission.	X
5.	I understand that this data is accessible to other researchers only if they honour the confidentiality agreement.	X

Participant

Date 17 October 2023

Signature of participant

Name of participant Angela Teffo

Organisation of participant Philippi Village

Researcher:

Name:

Signature:

Date: