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Urban Food Access: A study of the lived experience of food access within a low-income community in Cape Town.



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Abstract:

Studies around urban food access are a recent addition to food security literature. Food security researchers and policy makers have been largely concerned with the gross availability of food rather than how it was accessed. As the food insecurity of urban households became more apparent despite the gross availability of food, a shift occurred whereby the importance of food access was recognised. This shift in focus was accompanied by a shift in scale, as food security was no longer viewed as being the product of large scale agricultural productivity on a national or regional scale, but the product of community-level or household-level factors which determine their access to food. Within the pool of urban food access literatures a split has emerged. One body of literature has tended to look towards the structural elements of the food economy to indicate communities which have limited access to nutritious and affordable food. A second body of literature have focussed more on the household-level to investigate which household characteristics and entitlements act as constraints to food access. This thesis integrates both of these bodies of thought to explore the limitations to food access present in a low-income urban community in Cape Town. This is achieved through an investigation of both the local food retail environment and the household-specific characteristics which inform food access. The food purchasing patterns have been chosen as an important indicator of food access as they reveal how the household navigates its food environment to access food, given its entitlement set. This thesis hopes to explore a more complex approach to food access, which better engages with the dynamic relationship between the household and its surrounding food environment. A better understanding of how households actually access food will aid in developing more efficient, relevant and accessible urban food economies and by extension a built environment which caters to the basic needs of its residents. Furthermore, it will enable a better sense of the household-level constraints which prevent the access of food.

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This work has not been previously submitted in whole, or in part, for the award of any degree. It is my own work. Each significant contribution to, and quotation in, this dissertation from the work, or works, of other people has been attributed, and has been cited and referenced.

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Date: _____

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Chapter 1: Introduction

1.1 Introduction:

“Food security stands as a fundamental need, basic to all human needs and the organisation of social life. Access to necessary nutrients is fundamental, not only to life per se, but also to stable and enduring social order” (Hopkins, 1986 in Maxwell, 1999: 4).

Food security has long been considered a crucial outcome of development and is hence surrounded by an ever-widening literature base and an increasingly prominent place in global and national policy. This thesis will focus upon the food security of a low-income urban community in Cape Town. The methodologies and analytical tools which have been used within food insecurity literature are not yet well developed when considering the food security of urban communities. Thus, this thesis will expand on current understandings of what factors influence food insecurity in an urban context and explore how these factors can be assessed.

The concept of food security first surfaced at the 1974 World Food Conference and was thought to be the product of the gross availability of food (Maxwell, 1996). This definition has experienced some major shifts since its origins, with the access and utilization of food also being considered as determinants of food security. The definition upon which this research is based is from UN's Food and Agricultural Organization (FAO), “Food security exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preference for an active and healthy life” (FAO, 2005:1).

There has been a bias towards a more rural focus for food security research and policy and a neglecting of the urban (Crush and Frayne, 2010a). Maxwell (1999) argues that this is due to a framing of poverty as rural, whereby urban populations are viewed as being largely better off and thus, not afflicted with food insecurity to the same degree. However, the high levels of urbanisation and consequently, high levels of unemployment and inequality in urban areas throughout the developing world in recent decades has led to a shift in the locus of poverty (Maxwell, 1999). The 2006-7 ‘State of the World Cities Report’ found that a considerable proportion of the urban population in developing cities are, “suffering from extreme levels of deprivation – more debilitating than the rural poor” (p. 1). This increase in urban poverty has led Atkinson (1995) to describe urban food security as being, “the greatest humanitarian challenge of the next century” (p. 152).

This is especially true of developing cities. In Sub-Saharan Africa 71.9% of the urban population live in overcrowded and under serviced slums (UNDP, 2004). The urban poor are forced to engage in the monetized economy, with little opportunity to grow their own food, due to lack of space, know-how and agricultural inputs. They are thus left reliant on the urban food distribution system, in terms of both food prices and spatial availability, together with their ability to earn cash income. However, as urban centres are unable to absorb such huge quantities of labour into the formal economy, large numbers of people are left with little hope of a formal wage income. Although, there has been an increase in the attention given to urban poverty, Maxwell (1999) argues that urban food security has still not been widely recognised as an issue of concern.

The African Food Security Urban Network (AFSUN) conducted a survey in eleven cities in Southern Africa and found that 77 % of low-income urban residents were food insecure (Crush and Frayne, 2010a). This research group also reviewed the policy documents pertaining to food security amongst SADC countries and stated the following,

“Nowhere is there any systematic attempt to differentiate rural from urban food security, to understand the dimensions and determinants of urban food security, to assess whether the rural policy prescriptions for reducing hunger and malnutrition are workable or even relevant to urban populations, and to develop policies and programmes that are specific to the food needs and circumstances of the urban poor” (Crush and Frayne, 2010a: 20).

Where urban food security has been considered on a political level, it has been in relation to food shortages and the consequent rapid rises in food prices, like those which occurred in the 1980s in Africa (Maxwell, 1999). This led to food security policies which focussed on the productivity of agricultural areas and stabilising food prices with the aim of securing the food supply of urban areas. However, Maxwell (1999) argues that food productivity and the availability of food is only one aspect of food security, levels of income and access to food that is available are far more important in terms of the food security of urban populations.

The following diagram (Figure 1.1) from the Food and Nutrition Technical Assistant Project (FANTA) delineates some of the complex factors and relationships around food security, which will aid in establishing what informs food security in an urban setting (Riely et al., 1999). It recognises that food security takes place within the context of the social, policy and natural environments and that there are underlying elements which greatly determine the extent of food security, namely the community, natural, capital and human resources present in a region. FANTA has identified three central themes which make up the process of food security; food availability, food access and food

utilization. These three themes are reflected in this statement put forward by USAID, “Achieving food security requires that the aggregate availability of physical supplies of food is sufficient, that households have adequate access to those food supplies through their own production, through the market or through other sources, and that the utilization of those food supplies is appropriate to meet the specific dietary needs of individuals” (Riely et al., 1999: 2). ‘Food Availability’ refers to the actual quantity of food available and asks the question, does the aggregate production of food meet the demand? ‘Food Access’ refers to the *ability* of the household to acquire available food. Finally, ‘Food Utilization’ refers to how this food is used within the household to meet the specific nutritional needs of its members, a concept which recognises that the intra-household dynamics, as well as the quality of care within the household and the health status of various household members, can influence the distribution of food in the home.

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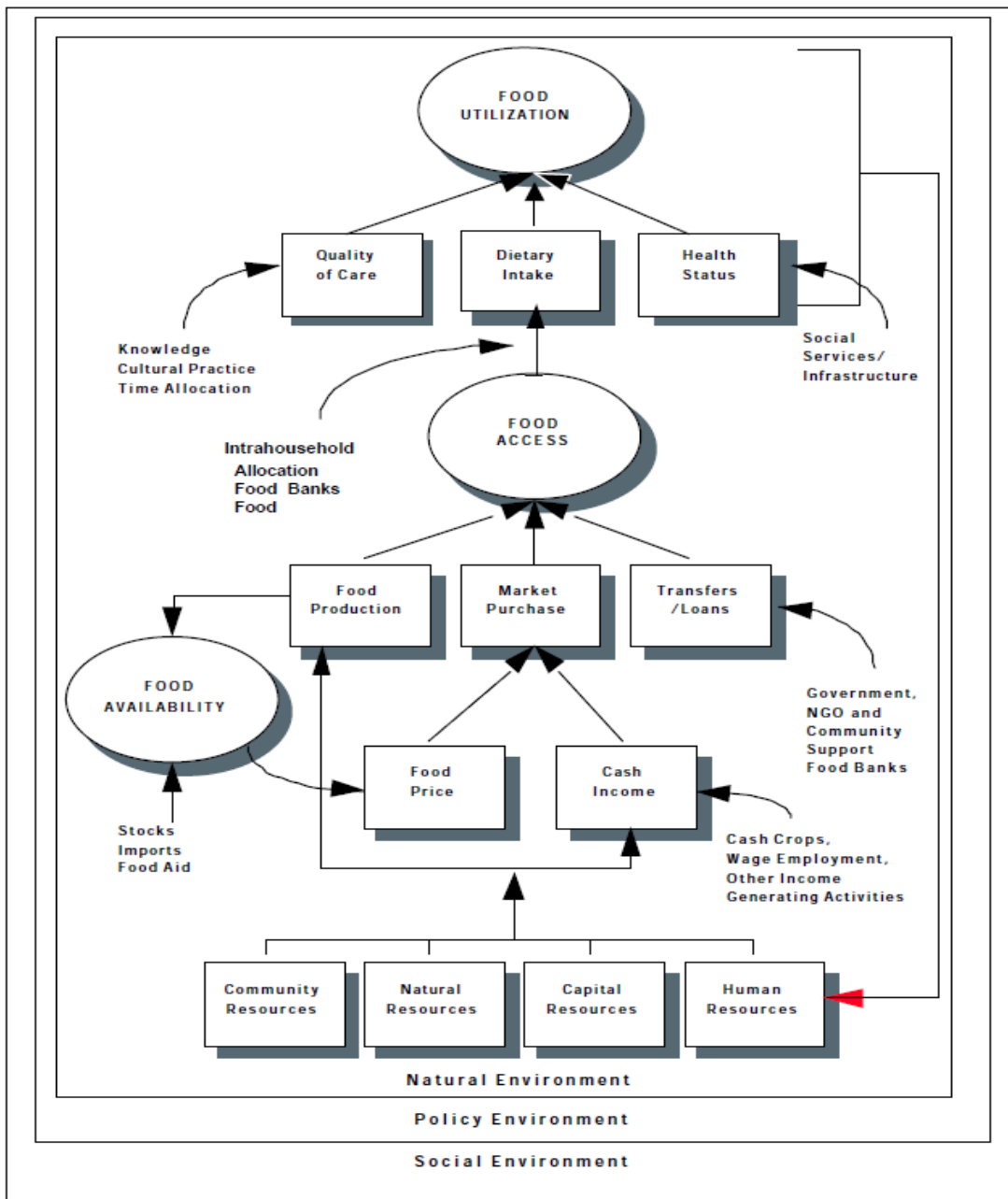


Figure 1.1: Food Security Conceptual Framework (Riely et al., 1999: 13)

Food availability has long been the focus of food security studies, as it is the dominant issue of concern when investigating food security in a more rural context. This fixation with food availability has been carried over into food security studies within the urban context, with the majority of study being focused on the potential benefits of urban agriculture (Battersby, 2011b). Therefore, despite the recognition of food access within food security definitions, considerably more emphasis is placed on the aggregate availability of food, even when considering *urban* food security. Oshaug (1994) argues that it is important to not only regard urban food security as being a product of environmental sustainability (agricultural practices), but also as a product of economic and social

sustainability, which dictate the conditions and mechanisms involved in securing food access (adequate income, efficiency of the food retail economy, formal and informal safety nets).

It is clear that greater exploration of *urban* food security is needed, and moreover food security studies which focus on the *access* component. This thesis intends to address this need through investigating food access within a low-income urban community within Cape Town. The means through which food access is investigated must have its foundation in an understanding of both the urban food environment and the urban household.

1.2 Urban Food Environment and the Urban Household

Southern Africa has the highest urbanization rate in the world and it is expected that two thirds of the regional population will be urban by 2030 (UN-HABITAT, 2006). UN-Habitat (2006) referred to cities in the South as being, “two cities within one city” (p. 1) where one part of the urban population that enjoys all the benefits of urban living, and the other part live in squatter settlement often under worse conditions than their rural counterparts. This is especially true of ex-colonial cities, where there is the added dynamic of the structural and historical segregation of race. In South African cities black and coloured communities are still largely spatially and economically peripheral to the city, due to the Apartheid regime and its legacy of segregation. Oldfield (2004) notes how the apartheid city endures in the, “segregation, uneven access, peripheral locations and marginal environments” evident in African and Coloured neighbourhoods (p. 200).

The diversity evident in South African cities is evident in the food economy, which is comprised of both the formal and informal food retail sectors. The informal sector in South Africa has been valued at between R20/30 billion and forms an important component of the local food environment for low-income consumers (Ligthelm, 2005). Currently, the urban food economy is in a state of transition within South Africa, with supermarkets increasingly moving into low-income township areas and capturing large portions of the low-income consumer market due to their lower prices (Tustin and Strydom, 2006). How the formal and informal food economies integrate to form the food environment has important implications for the accessibility of food.

In order to gain an understanding of the complexity of the food environment within the study area some of the broader political and economic processes operating within Cape Town, such as rapid urbanization and recent transitions in the urban food economy, must be accounted for. Cape Town is the second largest urban area in South Africa, with a population of 3 497 101 (Small, 2008). Like

many other Southern African cities, Cape Town is experiencing massive housing backlogs due to rapid urbanization, which has led to sprawling informal settlements along the outskirts of the city. In February 2007, the unemployment rate for Cape Town was 24.5% (Small, 2008). The geographically isolated nature of these low-income settlements makes it very difficult for residents to be included in the formal economy of the city, both in terms of the formal labour economy and the formal food retail economy (de Swardt et al., 2005). For many years there was an absence of formal food retailers in this area due to the spatial restrictions placed upon it during Apartheid, as well as the low-income nature of its residents which would not provide an ideal customer base for a supermarket (Tustin and Strydom, 2006). Thus the informal food economy was able to flourish and was the dominant food economy for low-income residents. However, in recent years, supermarkets have expanded into low-income areas in response to rising incomes and population densities, as well as the abolition of Apartheid and associated spatial and economic restrictions (Tustin and Strydom, 2006). Cape Town has also experienced a transition within the informal sector with the increased presence of foreign owned food retailer outlets, which operate under different business models to those of the local owned outlets (Charman et al., 2012).

The African Food Security Urban Network (AFSUN) has supported widespread food security research in each of the eleven major urban centres in nine Southern African countries (Crush and Frayne, 2010a). This research made use of a FANTA food security assessment tool called the Household Food Security Access Survey (HFIAS), a measure which purports to provide a reflection of the absolute access to food and access to appropriate food choices. This survey was conducted among 1064 households within three low-income areas in Cape Town during 2008. According to the AFSUN survey the levels of food insecurity in low-income areas in Cape Town are very high, 80% and Battersby (2011a) argues that this is not due to a shortage of total food but rather an accessibility issue.

Within the Cape Town household dataset compiled by AFSUN, food was established as the largest single household expense with food purchases making up an average of 30.1% of total household income, with a high of 53.2% in the poorest tercile of households (Battersby, 2011a). Furthermore, 56% of households reported that they were in debt with food being one of the most prominent reasons for this debt (Crush and Frayne, 2010a). Battersby (2011a) found that there has been a general worsening of food insecurity in various townships in Cape Town over time, with a large proportion of households stating that their food situation was worse than the previous year (p.28). This is likely due to external economic factors such as, food price increases and widespread loss of employment (Battersby, 2011a).

Research for this thesis was conducted in the lower-middle class suburb of Manenberg, shown as a star in Figure 1.2 below. This suburb was constructed in the late 1960s to house coloured families removed from 'white' areas and used by the Apartheid government as a means of separating the informal 'black' shanty towns from the white residential areas (Western, 2002). Like many low income areas within Cape Town, it is characterised by high unemployment, poor public transport infrastructure and limited private vehicle ownership (Western, 2001). This community is situated within a food environment which contains both formal and informal food retailers. There are two shopping centres located within 5km of the study area (Cape Town City Maps, 2010) and a large number of informal food retailers can be found within the study area. This dynamic mix of formal and informal food retail economies is characteristic of many low-income urban areas (Crush and Frayne, 2011) and it was intended that this case study would produce findings which could be easily related to other areas within Cape Town and other developing cities.

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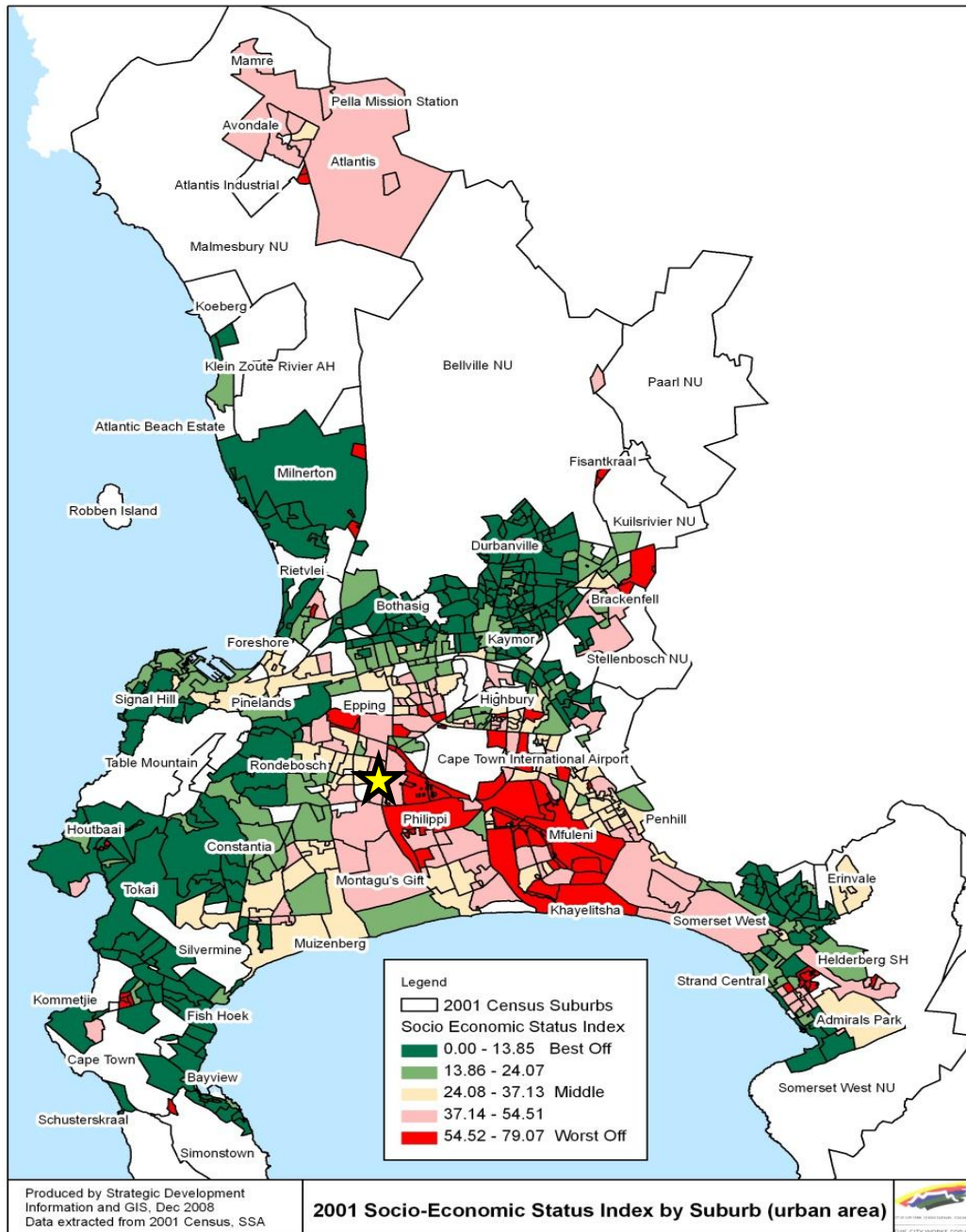


Figure 1.2: Socio-Economic Status Index by Suburb (City of Cape Town, 2001)

1.3 Motivations for Research

As stated in section 1.1, this thesis intends to add to literature in terms of how food access in urban communities can be assessed and understood. A split is evident in the approaches currently taken in literature with regards to urban food access. One body of literature has been largely preoccupied with the presence of 'Food Deserts', which refer to areas where access to affordable and nutritious

food is constrained due to the spatial distribution of different food retailers within urban areas (Block and Kouba, 2006). These studies focus on investigating trends in the type and number of different food retailers present within urban areas and is informed by ideas of social exclusion within urban areas (Battersby, 2010). A second literature body focuses on the household scale, viewing food access predominantly as a function of food prices and household income and thus, makes use of livelihood measures to determine food access (Battersby, 2010). Constraints to accessing food have generally been viewed as being either the product of the spatial food environment or the households' asset base. Very few studies have investigated how the interplay *between* the household and the food environment determine food access.

Furthermore, means of accessing food outside of the formal market have not been widely recognised in food access research. It has been found that low-income urban communities located in the South access food from a wide range of sources, with elements of informality in the food economy and non-market means of accessing food forming essential components of the urban food environments in developing cities (Battersby, 2010). Maxwell (1999) states that, "the major factor mitigating the increase in urban poverty and food insecurity has been the unplanned and usually informal livelihoods and coping strategies of low income urban groups" (p. 1950).

It is clear that urban food access literature is somewhat disjointed and there are some clear gaps in how food access is evaluated. Battersby (2011b) argues that there needs to be a rethinking of the research methodologies used to assess the causes and consequences of urban food insecurity. This thesis uses a more integrated approach to urban food access which focusses on how food access is realised through the household's interaction with its wider food environment. Hence, this thesis engages with three aspects of food access: What is the nature of the local food environment within the study area? What are the constraints and opportunities available in terms of food access on a household level? How do these two facets interact to determine food access? Furthermore, this study of food access will expand the household and spatial elements taken into consideration, in order to better explore these informal and non-market channels of food access. The following aim and objectives reflect these intentions.

Aim: To assess how urban food access is influenced by both the spatial food environment and household entitlements through an investigation of how households interact with their food environment to access food.

Objectives:

1. Develop framework for understanding the complexities of urban food access
2. Assess the nature of the local food economy in terms of its influence on food access
3. Assess household entitlements in terms of their influence on food access
4. Explore the interplay between the spatial food economy and the household in terms of food access
5. Evaluate how households cope with food access constraints in the ways in which they navigate the local food environment, including non-market channels of food

Urban food security and more specifically adequate food access are crucial in ensuring that cities function and grow sustainably (Crush and Frayne, 2010a). There is thus a need to further understandings of urban food access, specifically, within developing cities where urbanisation and unemployment are rife, and this thesis hopes to contribute to the literature base in this regard. Furthermore, this thesis intends to respond to the need to search for new ways of understanding the food access constraints of households as they relate to urban food environments and engage with the complexity behind food access.

The study area has many place bound characteristics, both in terms of its spatial characteristics and the socio-economic and ethnic nature of its residents, which may limit the transferability of the research findings to other urban areas. However, the mix of formal and informal food retailers within close proximity to the study area is a phenomenon common to many urban areas within developing cities.

1.4 Outline of the Thesis:

The following Chapter (Chapter 2) will review the current literature on food access, outlining the principle foci of spatial and household-level food access literature, as well as their dominant methodologies and implications for food security policy. A more integrated approach to urban food

access is proposed using the work of Shaw (2006) and Cannuscio et al. (2010), both of which motivate for an expanded notion of food deserts in their evaluations of food access. Methods of assessing the spatial food economy and household entitlements as they relate to food access, will be reviewed, as well as means of establishing how consumers make decisions about how access food. There are context specific characteristics evident in both the spatial food economy (informal food retailers) and the household (access of food through social networks) which are not accounted for in current food access literatures, hence other literature bodies are drawn upon in order to incorporate these elements in this analysis of food access. Chapter 3 presents the methodologies used within this research, as well as the limitations faced during the research and how the data collected was analysed.

Chapter 4 describes the context of the study area, in terms of both the local food economy as well as the characteristics of the households. The first section discusses the location and type of food retailers situated within the local food environment, together with the diversity and price of food items sold in these outlets. The nature of these various retailers in terms of their business practices is also discussed. The aim of this section is to explore how the different retail outlets integrate to form the local food economy and thus impact upon the spatial accessibility of food. The following section will focus on the household. The prevalence of Household Food Insecurity is discussed together with a range of household entitlements in order to ascertain which entitlements most influence the ability of food managers to access sufficient food through the market. This section aims to identify trends in the characteristics of food insecure households, which may reveal some of the constraints faced by households in terms of food access.

Chapter 5 evaluates how the food economy is actually navigated by the household. The spatial, content and temporal aspects of the food purchasing patterns are discussed and trends are identified in terms of the mix of formal and informal food retailers utilised and the manner in which specific types of food is purchased. This Chapter will explore the way in which these purchasing patterns are influenced by and reflected in the local food economy, as well as how they relate to household entitlements. Chapter 6 explores the social networks within which food access is embedded. These networks exist both between households and between households and local food retailers. The channels through which households access food, when they don't have the means to purchase it, have a considerable impact upon their vulnerability to food insecurity.

It is hoped that the findings of this thesis will add to current understandings of the lived experience of food access in low-income urban communities. Better understanding of how households actually

access food will aid in developing more efficient, relevant and accessible urban food economies and by extension a built environment which caters to the basic needs of its residents.

Chapter 2: Literature Review

2.1 Introduction:

Urban food security and thus the issue of food access have been gaining greater attention within food security literature and there has thus been an increase of literature focussing on food access instead of simply availability in the last decade. As stated in the introduction, food access can be defined as, “the ability of the household to acquire available food” (von Braun et al., 1999:45). The multi-faceted and complex nature of food access has given rise to a number of theories from a variety of disciplines. There has been much discussion about what the critical issues surrounding food access might be and the best ways to effectively investigate these issues and a variety of indicators have been used in assessments of food access.

The two most prominent distinctions in the foci of urban food access literature exist with regard to scale, whereby one literature body considers constraints on food access to be the result of the inequities in the spatial food economy which are experienced by communities as a whole, whereas another literature block considers constraints on food access to be the result of deficiencies in the household asset base. Studies focussing on the structural nature of the food economy and the existence of food deserts have tended to be located within the global North. Whereas, studies focussing on how the asset base of households, in particular income, affect the ability of these households to access food have tended to be conducted by researchers in the global South. Although this is a broad characterization of these literature groupings, it provides a useful shorthand approximation of the major foci and methodologies utilized in food access research. The following literature review will present the key principles and methodologies behind both these spatial and household-level studies, identify gaps and expand upon these notions of food access using other bodies of literature. This literature review will also present a more integrated approach to food access, which integrates both the spatial and household-level approaches, with the aim of better assessing the lived experience of food access.

2.2 Spatial Food Access Studies

Spatial studies on food access focus on the geographical aspects of the food environment and the ability of individuals to easily access food in a physical sense. This work emerged due to concerns around the issue of food justice, nutritional and health challenges in low income areas (Battersby,

2011a). The spatial component of food access is largely discussed within the context of 'Food Deserts', a concept which first surfaced in 1995 in a paper by Beaumont et al., whereby food deserts were defined as 'areas of relative exclusion where people experience physical and economic barriers to accessing healthy food' (Beaumont et al., 1995: 138 in Reisig and Hobbiss, 2000). 'Food Deserts' have been commonly identified by overlaying data on the locations of different types of retailers over census data (see for example Zenk et al., 2005 and Block and Kouba, 2006). Thus, urban food insecurity in the North has largely been attributed to the unequal spatial distribution of various types of food retailers within the urban area.

The literature surrounding the spatial element of food access follows a progression from early studies which looked only at issues of proximity to studies which incorporate all three of these measures (Larson et al., 2009). The vast majority of spatial food access studies utilize geographical analysis to identify the spatial constraints of food access. Apparicio, Cloutier and Shearmur (2006) evaluated food accessibility within the food economy based on three measures namely; proximity, which determines the shortest distance an individual has to travel in order to reach a food store; diversity, which refers to the number and type of food stores within a certain area and finally; variety, which evaluates the variety of food and prices available in different food stores. Studies on proximity and diversity utilize ground-truthing and non-participatory observation to collect data and then Geographic Information System tools are used to plot this information on a map. Variety studies usually utilize instruments such as market baskets or checklists to collect data (Larson et al., 2009).

Larson et al. (2009) have compiled a study of all papers published within the US between 1985 and 2008 which deal with issues of neighbourhood access to food stores and/or the types of food products available in these food stores. The majority of research has been directed towards the spatial profiling of different shop types within designated areas and confirms the intuitive notion that the residents of neighbourhoods with better access to larger food stores and supermarkets, which sell a greater diversity of food, tended to have healthier diets (see Cummins and MacIntyre, 2002; Guy, Clarke and Eyre, 2004; Popkin et al., 2005; Ball and Timperio, 2008). These studies found that small independent stores, such as convenience stores, are subjected to the physical and economic limitations of their size and thus have limited diversity within their stock and higher prices. These constraints mean that the foods which contribute to a healthy and diverse diet were more expensive and difficult to obtain in more disadvantaged areas.

This approach has developed to include more detailed assessments of the diversity, quality and prices of food available in these retail outlets, in order further reveal how imbalances in the urban food economy further disadvantage low-income consumers (see Guy and David, 2004; Short, et al., 2007; Raja et al., 2008). A number of research papers have conducted more detailed in-store evaluations of the diversity of foods available, with specific reference to the availability and affordability of healthy foods. Many studies have been conducted around the price and availability of healthy foods in socio-economically deprived areas (Donkin et al., 1999; Guy and David, 2004; Abarca, 2005; Block and Kouba, 2005; Latham and Moffat, 2006; and Glanz et al., 2007). These studies involve observational measures of the nutrition environment of food stores, which are achieved through a food store survey conducted amongst a representative number of stores within a certain area. The survey is used to collect data on the availability and price of a predefined basket of goods deemed adequate for a healthy diet. The results of the in-store surveys are analysed geographically to depict the spatial distribution of the availability and affordability of certain types of food.

More recently, a number of studies have highlighted the food access constraints brought about by the spatial nature of the food system; together with the nature and extent of transport networks (see Whelan et al., 2002; Algert et al., 2006; Bowyer et al., 2006). These elements are especially pertinent when considering food access in the context of low-income communities, as they play an important role in determining the physical accessibility of various types of foods (Clifton, 2004). Ideas on food deserts have thus, developed from the identification of a lack in certain food retailers in certain areas to a more complex interpretation of this lack informed by variety issues.

2.2.1 Policy Implications of Spatial Food Access Studies

Much of the literature which has focused on the spatial component has found that food access in disadvantaged communities often takes place in food environments which are limited both in terms of number and variety of food outlets (see for example Donkin et al., 1999; Guy and David, 2004; Abarca, 2005; Latham and Moffat, 2006; and Glanz et al., 2007). These communities thus, exist within a food desert. Battersby (2012) explains how studies focussing on the spatial inequities within the urban food retail environment are rooted in social justice theory and more specifically debates around food justice. Constraints to food access are seen to be a result of the spatial and economic marginalisation of certain communities, and thus urban food insecurity is thought to be a form of social exclusion. Correlations between certain race, ethnic and income groupings and constrained food access are the focus of much of this research (see for example Wrigley, 2002; Whelan, 2002; Block and Kouba; Bodor et al., 2008; Larsen and Gillard, 2009). The urban food system has largely

been identified as being ineffective in providing marginalised communities with access to adequate quantities of diverse and affordable food in both developed and developing nations. This approach aims to criticize the political and structural elements which underlie urban food insecurity (Battersby, 2012).

More specifically, Battersby (2012) argues that this kind of literature provides a critique of the neo-liberal food system which allows supermarkets only to locate in areas of relatively higher purchasing power. Thus, the primary recommendation to emerge out of this body of literature is the localisation of the food system, whereby community gardens are encouraged as a means of countering the injustices inherent in the food economy. A number of studies have been conducted surrounding the responsibilities of the public sector in initiating and maintaining an urban food system which is fair and which caters to the nutritional needs of the urban population (Smith, 1998; Hubbard and Onumah, 2000; Cummins et al., 2004; Larsen and Gilliland, 2009). These authors recognise that the current nature of the urban food supply system has largely contributed to growing urban food insecurity and propose a sympathetic re-regulation of the urban food system in support of marginalised communities.

The major critique of this approach to urban food security is that it fails to engage with the full complexity of the urban food economy. Maxwell (1999a) argues that the spatial accessibility of retailers does not translate into real access, as these outlets still remain economically inaccessible for large sections of the urban population. Thus there is a need to recognise that food insecurity cannot only be understood as being determined by a set of common challenges faced by a community, the specific challenges relating to households need to be considered (Battersby, 2012). Shaw (2006) and Cannuscio et al. (2010) have utilised an expanded view of food deserts to conduct studies which demonstrate an understanding of the lived-experience interplay evident in how the household accesses food through the local food economy. Their contributions to the concept of food deserts provide the theoretical basis of this research and will be discussed later in this Chapter.

2.3 Household Food Access Studies

Much of the early household focussed literature were similar to food desert studies in that they assessed household food access on a macro-scale, whereby household food access was assumed to be a function of national food supplies and food price trends and household income. These studies used data from household income surveys to assess the food security of urban communities indirectly (Maxwell, 1999a). However, there has been an increasing interest within food access

literature regarding the experience of food insecurity on the household scale, as although food access challenges are structural, in terms of either the food economy or the food system affecting food prices, these challenges are experienced individually. This household scale approach characterises food access literature in the South and many household-level studies have been conducted in developing cities across the global South (Maxwell, 1991; Maxwell et al., 1999; Atkinson, 1992, 1995; von Braun et al., 1993; Ruel et al., 1998; Lemke, 2001; Oldenwage et al. 2005).

It has also been recognised that although, in an urban setting household cash income is perhaps the dominant means of accessing food but other household endowments often play an important role in the accessing of food. More recent studies have argued that accessing food requires several different types of resources. Hence, the concept of entitlements has underpinned many recent studies surrounding food access on a household level, whereby a range of household assets are analysed in terms of their impact on food access (see William and Hubbard, 2001; Lemke, 2001; Hitchman et al., 2002; Ballantine et al., 2008; Battersby, 2011a). Such research aims to assess food access through a livelihood analysis on the household level, through collecting data surrounding the specific economic and social characteristics of households (Maxwell and Frankenberger, 1992). This thinking originated from Sen's (1981) paper, 'Poverty and Famines', where the idea that household entitlements impact upon food access was birthed. The entitlement set refers to the, "set of alternative commodity bundles that a person can command in a society using the totality of rights and opportunities that he or she faces" (Sen, 1984: 497).

Maxwell (1996) notes that these household level studies on food access are premised on the idea that livelihood security is a necessary and often sufficient condition for food security and thus food security should be viewed within the wider context of livelihood security. A household's livelihood security refers to its viability as a productive and reproductive unit, which largely determines its access to food. A number of household level studies on food security have been conducted in South Africa and these studies have influenced the contextual foundation of this project (see May and Rogerson, 1995; Lemke, 2001; D'Haese and Huylbroeck, 2005; Ballantine et al., 2008; Crush and Frayne, 2010a, b; Crush et al., 2010 and Battersby, 2011a, b). These authors have focussed on a range of household assets which include income, mobility, storage and cooking facilities and social capital.

However, this approach is in danger of reducing food insecurity to a manifestation of poverty on a household scale and by focussing on the household as the sole unit of analysis it has neglected the wider food environment (Battersby, 2012). If a household is considered food secure when it has, "access to the food needed for a healthy life for all its members (adequate in terms of quality,

quantity, safety and culturally acceptable), and when it is not at undue risk of losing such access” (UN ACC/SCN, 1991 as cited in Ruel et al., 1998:7), then the food environment in which that household is situated should be considered as crucial in determining the accessibility of food of sufficient ‘quality, quantity, safety and cultural acceptability’.

The neglect of the spatial economy in the analysis of household food access has implications for the household-level indicators used to assess food access. These studies tend to conflate the characteristics and assets of the household with adequate food access, without considering how these household characteristics and assets are utilised within their food environment. It needs to be recognised that households are strategic managers of a complex set of assets, which include those assets which influence the household’s ability to access food through the spatial food economy. For example, factors such as lack of car ownership, compounded by insufficient public transport, also determine the actual accessibility of retailers (see Maxwell, 2000; Clifton, 2004).

Thus, there is a need for a more complex notion of the characteristics and assets of the household which impact upon its food access through the spatial food economy, in order to gain greater understanding of the food access constraints faced by households. However, these barriers are more difficult to determine and measure than indicators such as household income and food prices, as they are more complex in their origins and workings (Maxwell, 1996). In order to establish the influence of household entitlements on food access, methodological tools will be taken from household-level food access literature and expanded upon to include different kinds of indicators, in an attempt to better capture the characteristics of the household in the local context, which impact upon food access.

2.3.1 Policy Implications of Household-Level Studies

The dominance of the household scale approach to food security in the South has had major implications for food security policy. Urban food insecurity has been widely viewed as an issue to be dealt with in the home and thus not the concern of the public sphere. Maxwell and Slater (2003: 104) state, “so long as food insecurity is a household level problem and does not translate into a political problem, it does not attract policy attention”. The formidable rise in food prices in 2007/8 and its disproportional effect on the urban poor did evoke more political response to the issue of urban food insecurity (Lagi et al., 2011). However, food security policy interventions have continued to focus upon ensuring gross food availability and consequently guarding against food price hikes, which reflect fixations on aggregate food availability and the rural bias within food security literature (Battersby, 2011), as the implicit assumption that greater production of food in rural areas will

improve urban food security by decreasing food prices continues to dominate Southern policy (FAO, 2008b).

Crush and Frayne (2010a) found that food security interventions within SADC are almost by definition focussed on revitalising agricultural production. Although, the 2002 Integrated Food Security Strategy (IFSS) for South Africa provides a progressive approach to food security, which emphasises both the importance of urban food security and lived experience of food insecurity on the household level (Department of Agriculture, 2002). However, the fact that this policy and its related interventions are housed within the Department of Agriculture, Forestry and Fisheries (DAFF) speaks to the fact that food security is still viewed as a rural issue (Drimie et al., 2011). On a household level it is assumed within the IFSS that improving household income through welfare transfers and employment creation policies would be the best means of improving urban food access (DAFF, 2002). Thus, this strategy has neglected to realise that the household's access to food is influenced by household entitlements other than income and is mediated through the spatial food environment, with factors other than food price bearing implications for household food access. Furthermore, Moser (1997) proposes that interventions which aim to allow households to use their assets more productively to access food are important in improving urban food security. Such interventions are not evident within the South African context.

In addition, within the IFSS the need for an equitable urban food system is stressed, whereby the need for an equitable provision of food to points of demand at the right time and place is highlighted (p. 16). However, there is no mention of the importance of the informal food retailers within the urban food system and this policy indicates very little consideration of the urban food economy and its transitioning state.

This thesis argues that the concept of 'Food Access', and the resultant policy interventions, needs to be understood within a framework which incorporates the theoretical approaches of both spatial and household-level studies. It will draw on both the more geographic focus of Northern literature, as well as the livelihood focus of Southern literature to propose an integrated approach, building on the work of Shaw (2006) and Cannuscio et al. (2010). These authors do not assess food access through a static account of the spatial food economy or household assets; rather it is a dynamic and strategic navigation of the household of the food environment, whereby households employ their asset base to effectively procure food. Sen's (1981) ideas around household capabilities and entitlements and food access will lay the foundation with engaging with this more dynamic and complex analysis of food access.

2.4 An Integrated Approach:

Shaw (2006) and Cannuscio et al. (2010) argue for a more integrated approach to food access and this thesis follows on from their thinking. Shaw (2006) reasons that although 'Food deserts' are necessarily spatial phenomena; they cannot be treated as merely a spatial phenomenon, as although, geographical access to good food is an enabling factor for a good diet, it does not guarantee a good diet. This is evident in the fact that it is possible for households living on the same street can have very different levels of access to food and patterns of shopping (Hitchman et al., 2002). This kind of approach incorporates principles from theories regarding the socio-spatial dialectic and is concerned with how food access is the product of the interaction between the household and the local food environment.

This approach also echoes ideas of household food access being the product of its entitlement set. This kind of thinking is based on Sen's theory around how the erosion of households' entitlement to food, rather than the gross availability of food, is what caused many of food crises in Africa in the mid-1980s (Sen, 1981). Sen's notion of entitlements is the, "set of different alternative commodity bundles that the person can acquire through the use of the various legal channels of acquirement open to someone in his position" (Sen, 1987:2). The food entitlement of a person is a function of their endowment (original bundle of ownership) and the exchange entitlement, which refers to the various alternative bundles of food which can be acquired through trade or production (Sen, 1987). Entitlements in the context of food access refer to, "how much food household's actually have access to from their own production, income, gathering of wild foods, community support (claims), assets and migration" (Frankenberger, 1992:9). This approach enables a movement away from merely focussing on income and other primary goods in assessing food access and motivates for the recognition of a more complex understanding of which household assets influence food access.

Furthermore, when food access is considered in light of Sen's capabilities approach, the *process* by which households' access food can also be captured. Capabilities refers to whether a person is able to choose the combination of human functioning which they desire (Sen, 2005). The capabilities approach addresses the fact that two people can have very different opportunities to access food even when they have the same set of means (Sen, 2005). An understanding of food access as being determined by the capabilities of the household to access food allows for a recognition of the role of both the household-specific characteristics and the nature of the spatial food economy in food access. The food economy, together with the household entitlement set, determine the various bundles of goods which a household has the opportunity to access. This approach has been

foundational in informing studies around household-level food access; however the spatial component of food access has largely been neglected within such studies (Battersby, 2012). This could be attributed to the rural focus of development studies.

Both Shaw (2006) and Cannuscio et al. (2010) reflect but do not specifically reference this entitlement/capabilities approach to food access and have motivated for a movement away from the current understanding of food deserts amongst their Northern colleagues. Shaw (2006) identifies that the constraints under which 'Food Deserts' develop can be of a geographical, economic, sociological or psychological nature and thus breaks away from the purely spatial focus of Northern researchers. Similarly, Cannuscio et al. (2010) argues that a community's lived experience of food access is not only shaped by the food environment, which refers to the, "structure, type, density and proximity of food outlets" (p.381), but also the social dynamics which play out within the food environment, which they refer to as foodways. Both of these authors recognise that merely tallying the number and type of food outlets, as is common amongst food desert research, will not reveal the multiple ways in which the food environment erodes or fosters food access. The manner in which the household interacts with their spatial food environment determines their food access, rather than being a product of the spatial food environment. Thus, 'Food deserts' are rooted in the *lived* experience of poverty (Shaw, 2006). This expansion of the concept of 'Food Deserts' gives rise to a much wider scope for research and there is a renewed need for studies which conduct analyses on a variety of levels. Household and individual level analyses are necessary to probe the complex factors contributing to 'Food Deserts'. One could argue that all studies which focus on food access should in some way be trying to determine the extent to which a 'food desert' exists and the reasons behind it, if 'Food Deserts' are taken to represent a set of conditions under which food access is restricted.

Shaw (2006) developed the 'Ability, Asset and Attitude' framework as a means of classifying 'Food Deserts' according to the dominant food access constraints faced by certain communities, namely Ability, Asset and Attitude. Within this framework the interaction between the household and the wider food retail environment is evident. The framework incorporates the dialogue between these two elements rather than artificially separating them as exclusive facets within food access, thus enabling this framework to cope with the complexity of urban food access. These three contributory components are formed according to the various determinants of food access. The spatial aspect of food access is incorporated within the 'Ability' component, which includes, "anything that physically prevents access to food" (Shaw, 2006: 11). This component includes factors pertaining to the local geography or personal physical disabilities which make accessing food difficult. The 'Asset'

component includes the, “lack of any financially valorizable asset that prevents consumption of food” (Shaw, 2006: 11). This component includes the specific characteristics of the household which determine its ability to acquire food. The ‘Attitude’ element refers to, “any state of mind that prevents the consumer from accessing foods they can otherwise physically bring into their homes and have the necessary assets to consume” (Shaw, 2006:11). This component encompasses the knowledge and skills base, as well as the personal beliefs and perceptions, which influence the procurement and preparation of food. These three components each represent a set of capabilities within which the household may face constraints. Each of these set of capabilities will affect the extent to which a person or household is free to choose a particular level of functioning, which in the case of food access would be being well nourished (Sen, 2005).

Cannuscio et al. (2010) introduce the concept of ‘Foodways’ as a means of identifying some of the more complex social dynamics within which food access is embedded. Foodways refer to the, “processes involved in the growth, purchase, preparation, consumption, sharing – or absence – of food within communities” (Cannuscio et al., 2010: 382). This paper asks the question what factors beyond proximity drive decisions around food purchases. It recognizes that the physical and mental challenges around acquiring food also influence how households access food. The way in which customers and food retailers interact, for example, forms an important component of food access, as the way in which the food environment is navigated is embedded in social networks. Thus, food access is driven by both objective and subjective forces which contribute to the construction of foodways. It is hoped that by examining foodways, rather than just food outlets or foods alone, that a better understanding of how people experience food access and how their food environment affects their capabilities, or the set of real possibilities open to a consumer/household which reflect the opportunity for choice (Oughton and Wheelock, 2003). Foodways provide a lens through which the lived experience of food access can be engaged with and thus provides greater insight into what opportunities are actually available and thus allows for a much better understanding of the barriers existing against food access security (Nussbaum, 2003).

Both Shaw’s (2006) integrative framework, together with Cannuscio et al.’s (2010) notion of foodways, have been expanded upon to provide the conceptual basis for this thesis. The following diagram (Figure 2.1) has been developed to demonstrate the relationship between the three components as they relate to this thesis. There is a great deal of interplay between the spatial food economy (‘Ability’) and the household-specific characteristics (‘Asset’) as the household exists within the context of its spatial food retail environment. This interplay is mediated through the ‘Attitude’ component, whereby people respond to factors within these two components to make food

purchasing decisions. Trade-offs between different influences relating to both 'Ability' and 'Asset' are considered before making any food purchasing decisions. How food managers perceive their own asset base and their food retail environment will directly impact upon their shopping choices, as well as the foodways present in the local food environment. This research will investigate each of the three components to provide a thorough account of food access.

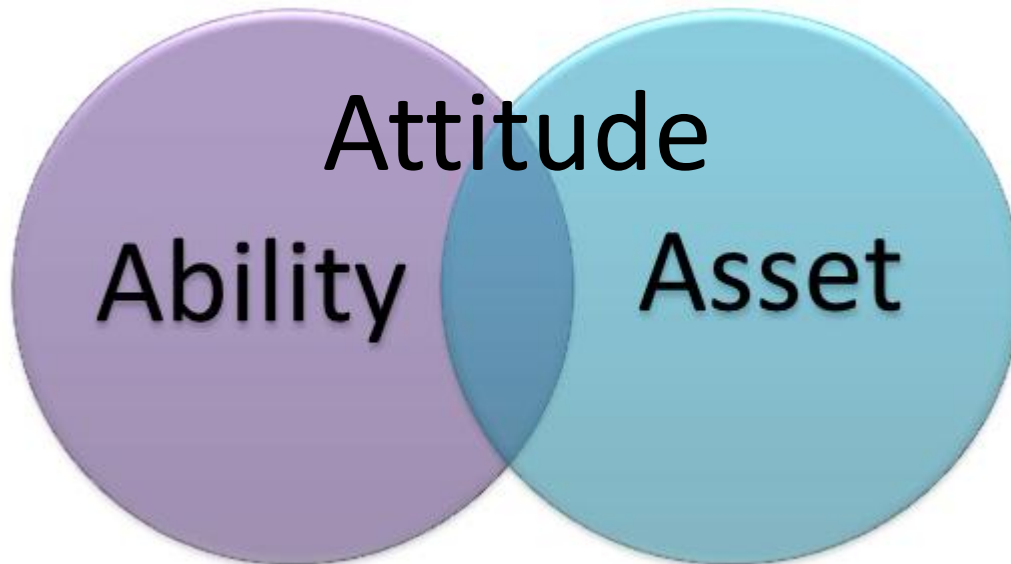


Figure 2.1: The Ability, Asset and Attitude Framework

The constraints which are associated with each of these three components will be expanded upon in light of the context of this research. Battersby (2011a) found that households in Cape Town access food through a wide range of sources, which include formal and informal food retailers, meal sharing, gifts, community food kitchen, home production and food aid (p. 25). This translates into a need to engage with a more complex notion of the food environment and the channels of accessing food available to the household, when analyzing the food access. In developing cities these channels exist in two main clusters, namely the market which refers to both the formal and informal food retailers and non-markets which includes formal and informal safety nets and urban agriculture (Battersby, 2011a).

However, this thesis is not concerned with merely evaluating the access of households to food solely through the market economy, if the market food economy is taken to mean merely "the structure, type, density and proximity of food outlets" (Cannuscio et al., 2010: 382). It is this notion of the food economy which is used in much of the literature surrounding food deserts. The concept of food deserts, in this sense, does little to encapsulate the social dynamics surrounding the food economy. Although the urban household does access food largely through the market, it is still deeply couched within a network of social ties, within which food is accessed. Cannuscio et al. (2010) identified how

food access is couched in the social and cultural organization of a community, whereby households engage in non-market channels to access food. There is much literature, based on vulnerability and livelihood studies, on the social economy and how households organize themselves to spread risk, as well as taking advantage of social networks, in accessing food (Moser, 1997; Smith, 1998; Lemke, 2001; Oldewage-Theron et al., 2005; Misselhorn, 2009; Delormier et al., 2009). This literature body aids in expanding upon the notions put forward in livelihood focused food access literature, whereby household food access is a product of its asset base, which includes both financial and social capital.

Cannuscio et al. (2010) also argue that food environments cannot be assumed to operate in isolation from their context. It is clear that food environments do, “shape people and their food-related behaviours”, however there is a reciprocity evident in the urban foodscape whereby people, “in turn reshape or reinforce the food environment” (Cannuscio et al., 2010: 389). If we consider Giddens’ (1984) structuration theory, we can expand on Shaw’s notion of attitude and describe the social practices of purchasing patterns as a function of the interplay between ‘agency’ and ‘social structure’ (Delormier et al., 2009). Agency refers to voluntary action by the agent and Social Structure refers to rules within which the agent operates and resources available to the agent. These elements operate in a reciprocal relationship which produces food choice which in turn leads to social practices such as purchasing patterns. Social practices or purchasing patterns in this case, are described by Giddens (1984) as, “skilful procedures, methods or techniques that are appropriately performed by social agents” (p. 20). Giddens’ theory can further explain the dynamic relationship between purchasing patterns, an aspect of social practice, and the food economy, an aspect of social structure (Delormier et al., 2009). Giddens (1984) understands structure to be “both the medium and the outcome of social practice”, as social practice both reinforces and changes existing social structure. In terms of the food economy, the purchasing patterns of a community are shaped by the surrounding food economy, but this food economy is in turn shaped by the purchasing patterns of individuals.

In this thesis, the urban food environment will, thus, be taken to include both market and non-market economies and both of these economies will be investigated with the intention of evaluating their influence on the ability of people to access food. The spatial analysis of food security within this thesis will include the informal food retail economy and the household level analysis will include social capital, as both of these elements are crucial in understanding food access in a low-income urban community in a developing country. The reciprocal relationship between the purchasing patterns of food managers and the local food economy will also form an important part of the analysis of food access. This reciprocal relationship is thought to be more prominent in the case of

local retailers and especially informal local retailers, as they are more responsive to the demands of their consumer base (Delormier et al., 2009).

To fully understand the lived experience of food access, it is important that a comprehensive knowledge base is developed around the causative factors and the consequences of each component and the interplay between them, on both the community and the household level. Research relating to how each of Shaw's (2006) food access components, namely Ability (the spatial accessibility of nutritious and affordable food), Asset (the households ability to access this food given their asset base) and Attitude (the factors influencing the decisions made by food mangers regarding food access), can be understood in terms of the lived experience of food access in a low-income urban area in a developing city will be discussed in the following sections. Shaw's (2006) three components take place in relationship with the various economies in which food can be accessed within the food environment, namely the formal and informal food retailing environments and the social food economy. Literature surrounding these economies and the interactions between them will also be presented.

2.5 Spatial Elements of Food Access within developing cities

Within food desert literature it has been widely established that food store and restaurant access was linked to income, race, ethnicity and level of urbanization (Larson, Story and Nelson, 2009). Thus, many of these predominantly spatial studies of food access go on to emphasise how food poverty is an element of social exclusion, whereby the minority and low-income populations are spatially disadvantaged with regard to access to food (Alwitt and Donley, 1997; Powell et al., 2006; Marland, 2001; Moore, 2006; Lisabeth et al., 2009). This notion of food access as a product of the socio-political structure of the city can aid in explaining the food access situation in developing cities, especially in the case of Cape Town with its stark economic and spatial segregation of communities. As mentioned in Section 1.2 of Chapter 1, Cape Town's history of segregation has had a profound impact on both the market and social economies through which food is accessed. It has led to large areas of low-income households being under-serviced by the formal food economy and consequently, the development of a burgeoning informal food economy to meet the food access needs of these communities (Tustin and Strydom, 2006). However, there has been a marked increase in the number of supermarkets being established within low-income areas in developing cities throughout the world and supermarkets have been steadily increasing in South African township areas since the late 1990s (D'Haese and Huylenbroeck, 2005). There are thus, two aspects of the spatial urban food economy which are relevant to the Cape Town context which are not

evident in current spatial studies on food access. These are the important role which the informal food economy plays in making food accessible to low-income communities and the transitions evident in the food economy as a result of supermarketisation.

2.5.1 Food Economy in Transition

This supermarketisation of low-income areas is a profit-driven process, whereby developers aim to capture the extensive and ever-expanding consumer market within townships (Smith, 1998). Increases in real per capita income of the people living in township areas, together with the increased availability of electricity and refrigeration and access to transport have all contributed to the ability of consumers to shift towards shopping in supermarkets instead of local retailers and thus to the success of supermarkets in these areas (Reardon et al., 2003). There has been a small amount of research in South Africa which highlights some of the food access considerations linked to the increase of supermarkets in low-income areas. D'Haese and Huylenbroeck (2005) argue that the ability of supermarkets to exercise a more efficient management and procurement system than local retailers, enable them to take advantage of economies of scale and thus sell goods at a comparatively lower price. Therefore the increased presence of supermarkets in low-income areas can yield extensive benefits for the food access of these communities, due to the supermarkets ability to provide cheaper foods, greater variety and better quality food and offer specials.

This transition in the urban food economies in developing cities does not feature significantly in food access literature. The proximity, diversity and variety studies, which inform spatial food access literature, are concerned only with the formal food economy as they are based in developed countries and are thus do not account for the spatial characteristics of the informal economy. Household level studies have tended to delimit its analysis on food access to household income flows and assets, and thus, these researchers have ignored the urban foodscape as an actor in accessing food (Battersby, 2011a) and as a result transitions within the food economy have yet to be recognised as influencing food access within literature. There is thus a need for studies which identify and analyse how shifts in the food economies of developing cities will affect household food access and to what extent these transitions benefit the low-income consumer.

In more recent years research around the introduction of supermarkets to low income areas and speculation on its effect on the informal food retailers has surfaced (Louw et al., 2004; Weatherspoon and Reardon, 2003; D'Haese and Huylenbroeck, 2005; Tustin and Strydom, 2006). Madevu (2006) conducted a study of food access in the Tshwane metro and found that the competition between the formal and informal food economies differed spatially across the city. The

most intense competition took place in middle income areas, where the establishment of supermarkets competed with the already established small scale and informal retailers. In the more affluent areas supermarkets already have the dominant share of the market and in the lowest income; informal settlements are serviced only by the informal food economy as they are situated on the very outskirts of the city and are not viewed as yielding enough disposable income to sustain a supermarket.

Research on these transitions in the food economy tend to be informed by arguments such as that of the economist, Lewis (1954) who proposed that the informal economy will disappear as it is either absorbed by the formal or transforms itself to take on the character of the formal. Thus, these researchers speculate that this trend will be evident in the food economy as small scale informal retailers fail to compete with larger supermarkets (see McGaffin, 2010). McGaffin (2010) presents evidence that the proportion of household food expenditure being directed towards the informal sector has decreased considerably in six urban case study areas throughout South Africa with the introduction of supermarkets. Northern food economy literature has made similar arguments with regards to the impact of supermarkets on local food retailers (see for example Bromley and Thomas, 2006). The fact that small scale retailers cannot achieve economies of scale on the same level as supermarkets is understood by this group of researchers to mean that the local formal or informal retailers cannot compete with supermarkets and will thus demise.

However, the findings brought forward by researchers who have approached the transitions in the food economy from the perspective of the household reveal that the diminished asset base of low-income households restrict the extent to which they can shop at supermarkets (Tustin and Strydom, 2006; Battersby, 2011a, Crush and Frayne, 2010a). Thus, supermarkets are prevented from becoming the sole or even most dominant players in the food economy of low-income communities. Tustin and Strydom (2006) have found that the business practices of supermarkets are often at odds with the interests of low-income consumers, in that they only offer a centralised node of food retail, access to which can prove costly for poor and immobile consumers who must use public transport to access these centres. Furthermore, Battersby (2011a) found that the minimum unit size of food items which supermarkets deal in is often too large given the food budget constraints of low income consumers. These consumers would prefer to buy foods in much smaller quantities in order to use their limited food budgets to gain a range of food items rather than a few items in larger quantities (Battersby, 2011a). Thus, the perceived benefits of lower prices and greater variety of foods which are associated with supermarkets are not accessible to all low-income consumers.

Findings such as these have had important implications within the debate around how supermarketization will affect the food economy as a whole. There are a group of researchers who argue that the local food economy has a defined role which is separate and independent to that of the formal food economy, thus ensuring its resilience in the face of increasing supermarketization (see for example Atkinson, 1995; Ligthelm, 2005; Abrahams, 2009; Becker, 2008). Jayne (2008) states that, “far from being an irreversible tsunami, supermarkets are one of many forces affecting the evolution of the food system in developing countries” (in Abrahams, 2009: 125). Abrahams (2009) describes the local food economy as being an efficient, transparent and increasingly quality-based means of distributing food, many of which have “tailored their enterprise to meet local parameters” (p. 131). These researchers understand food access as taking place in a dynamic and varied food retail environment made up of the integration of the formal and informal food economies, which are both strategically navigated by low income consumers. Thus, within the South African context an understanding of the informal food economy is important in understanding the food environment’s impact on food access.

2.5.2 The informal food economy

There have been a number of studies conducted in South Africa which have explored how the informal food economy operates and these findings can help in understanding the resilience of these retailers in the face of supermarket expansion. Most of these studies have focussed on the general characteristics and functions spaza shops, as they form the largest component of the informal food retail sector in Southern Africa (Ligthelm, 2005; D’Haese and Huylbroeck, 2005; Becker, 2008; McLahlan, 2009; Crush and Frayne, 2010b; Battersby, 2011a). Spaza shops can be defined as being small scale, informal retail businesses which operate from a residential stand or home (Ligthelm, 2005). Becker (2008) found that each spaza shop is distinct and offers a distinct character to its immediate neighbourhood and these retailers are one of the distinctive elements of “typical township” scenes, representing the vibrancy inherent in township living. Spaza shops were thus found to have a considerable cultural and social value attached to them by the communities in which they are situated and their functions go beyond the selling of food and household goods.

Ligthelm (2005) conducted a study on the size and nature of the spaza shop industry in South Africa and documented that R32 billion was spent in informal retail outlets in South Africa in 2002. He found that these spaza shops were open for long hours and extended food on credit, and the products and quantities they provide are more appropriately targeted towards the needs of the low-income population, than those offered in the formal food retail outlets. Skinner (2000) argues that

the fact that local food retailing outlets are survivalist enterprises, in that Spaza shop owners depend on the success of their business for their own survival, makes them more responsive to the needs of the surrounding community. Battersby (2011a) found that many households prefer to buy their food in small quantities from local spaza shops, which bulk break foods into smaller unit sizes, rather than making bulk purchases at larger supermarkets. The heightened responsiveness of informal retailers promulgates Giddens' (1984) notion of reciprocity within the informal food economy, whereby food access of the household is a product of their engagement with their food environment, and the food environment is, in turn, shaped by the household's engagement with it.

The ability of local spaza shops to cater to the needs of low-income consumers with regards to the type and quantities of foods sold and the provision of credit enables households to have better access to food which would be economically inaccessible if they were to purchase from the supermarket. Furthermore, the large numbers of Spaza shops in low-income urban communities means that there is generally one situated in close proximity to the majority of households (Ligthelm, 2005). Without the presence of these informal food retailers many low-income communities would find themselves located within a food desert, due to mobility constraints and the distance between these communities and formal food retail outlets (Crush and Frayne, 2010b). These communities would be in a food desert in which access to any food would be difficult, never mind nutritious and affordable foods.

However, there are a number of problems associated with relying on the informal food sector for food access. Ligthelm (2005) found that spaza shops generally have a very limited variety of stock, poor quality fresh produce and high prices for branded goods. McLachlan (2009) also found the quality of foods sold in spaza shops to be lower than formal food outlets. The South African Food Price Monitoring Committee (2003) found that the prices in local shops were higher than national price averages, especially for processed food. This Committee (2003) proposed that these higher prices were not only a result of transport and distribution costs and profit margins, but also a result of the monopolistic position of these local retailers in low-income and immobile communities which meant that local retailers could charge more for their foods. This illustrates the assertion that proximity studies alone will not truly reveal whether a community exists within a food desert, diversity and variety studies are necessary in establishing the extent to which nutritious and affordable food is available through the informal sector.

It is evident that there are market failures in both informal and formal economies and it can be assumed that low income consumers must navigate both these sectors in order to fully meet their food access needs. It is, thus, important to understand the urban food economy as a dynamic and

interdependent system, one which is experiencing transitions and is comprised of an integrated system of formal and informal retail economies. This more complex understanding of the urban food economy has not been captured in the conceptualization of food access held by spatial food access studies. There is much need for research investigating how effectively the informal food economy meets the needs of the disadvantaged consumer, or how it interacts with and responds to the formal food economy, in order to move towards reform within the urban food environment which benefits the urban poor in terms of food access.

The opportunities and inefficiencies within the urban food system, both formal and informal, can only be understood if these spatial analyses of food access are analysed in conjunction with household level analysis, whereby the household asset base is recognised as impacting upon the accessibility of certain food outlets to low-income consumers. Research of this nature is necessary to achieve truly beneficial reform based on the lived experience of food access. The following section will consider the theories and measures which have been used to gauge the asset base of households as it relates to food access.

2.6 Household-Specific Elements of Food Access

Shaw's (2006) ideas on the components contributing to food deserts, Ability, Asset and Attitude, echo a Capabilities approach to the household asset base in that household assets are viewed in terms of the degree to which they enable food access. Shaw's (2006) approach differs from other household studies of food access, as it explicitly engages with the nature of the food environment. Thus, household assets are assessed in relation to how they aid the household in interacting with its food environment to procure food. The following section outlines the household assets associated with the various channels of food access available within the food environment and how these assets are *utilised* by the household to access food.

Moser (1997) builds upon the capabilities approach to household assets to bring the dominant static measures of food security into question. She draws on Lipton and Maxwell's (1992) notion that vulnerability is a more useful concept than poverty, as vulnerability captures change as it recognises that people move in and out of poverty (in Moser, 1997: 23), a concept which is transferrable onto the vulnerability to food insecurity as opposed to a permanent state of food insecurity. Vulnerability is defined as, "insecurity and sensitivity in the well-being of individuals, households and communities in the face of a changing environment" (Moser, 1997: 23). It refers to the responsiveness and resilience to risks. These risks can take the form of sudden shocks, long term trends or cycles. The

same criticisms laid upon income-poverty measures can be laid upon absolute measures of food security. Food security, like poverty, is difficult to measure in absolute terms. The means by which a household has to reduce risk is the assets and entitlements which can be mobilized and managed to prevent insecurity. Moser (1997) presents an Asset Vulnerability Framework which is based on Swift's (1989) notion that the vulnerability of a household to food insecurity is a function of its assets. Moser (1997) developed a classification of assets which is intended to be relevant for the urban poor. Labour, being the most important for an urban resident; Human Capital, which determines the capacity for and return on labour; Productive Assets, housing being the most prominent within the urban community; Household Relations, which refers to the ability of the household to pool income and share consumption; and Social Capital, which refers to the "reciprocity within communities and between households based on trust deriving from social ties" (Moser, 1997:25).

The household level study conducted by AFSUN in Cape Town, is useful in ascertaining which of the asset bases outlined by Moser (1997) are most important to household food access in Cape Town. Battersby (2011a) found that household income made a, "significant difference in reducing food insecurity" but was not the only determinant (p.19). Crush and Frayne et al. (2010b) argue that, "there is not simple correlation between household income and food security" (p. 28), due to a number of intervening factors, such as mobility, time, storage and cooking facilities, social capital and the price of other variables such as shelter and clothes. Crush and Frayne (2010b) also found that full time employment was strongly correlated with food security. Informal or casual employment is the reality for the majority of low-income households, which has major implications for the household food security, as irregular income can compromise the ability of the household to maximise their food budget (Crush and Frayne, 2010b). In terms of productive or material assets, Battersby (2011b) argues that car ownership and access to storage facilities and a stable electricity supply may all have strong implications on the food security of households. However, it was found that only 5% of households in the Cape Town AFSUN survey utilized the land around their house for urban agriculture (Crush and Frayne, 2010b), which contradicts many household-level studies and food access policies who uphold this means of procuring food as important for urban food access (see for example Aliber and Modiselle, 2002). Finally, in terms of social assets Battersby (2011a) found that social networks were one of the three main channels through which low-income households accessed food in Cape Town.

2.6.1 Social Capital as an Asset

The 'household relations' or 'social capital' asset bases are not commonly found in discussions around household food access, as these non-market channels of food access are more difficult to determine. Moser (1997) distinguishes between household relations and social capital as two separate intangible assets available to the household. Household relations refer to the ways in which the structure and composition of the household is organized around food, which has a direct effect on the vulnerability of its members (Moser, 1997). Social capital is the extent to which communities can be considered an asset that decreases vulnerability or increases opportunities (Moser, 1997). These assets are important when considering the household's 'coping strategies', which include food aid, remittances, sharing meals with neighbours and/or other households, food provided by neighbours or other households, community soup kitchens and borrowing food from others, according to the AFSUN survey (Crush and Frayne, 2010b).

In terms of household relations, the extension of a household to include multiple generations and family subsets can allow for a more effective pooling of resources, such as, food, space, income and childcare, which will decrease vulnerability (Moser, 1979). The ease with which the household structure can adapt to changes in food availability will affect how resilient the household is to food shortages. However, an accurate sense of the household in terms of how it is organized around food is difficult to capture due to the complexity and fluidity of these household relations.

Social capital can be defined as, "informal and organized reciprocal networks of trust and norms embedded in the social organization of communities" (Putnam, 1993 in Moser, 1997:25). These stocks are exchanged within the social or moral economy, which refers to the, "right to make claims on others, and the obligation to transfer a good or service" (Moser, 1979: 24). This economy is embedded in the social and moral fabric of communities and it is through this economy that the community can develop a sophisticated system of insurance for the most vulnerable (Ahmad, 1991). This system of insurance is especially evident in terms of food, being a basic need. Food is transferred between households outside of the market along channels of informal social ties. The continuation of this social economy can be explained by Sahlins (1969) concept of a 'continuum of exchange' whereby, non-market transfers are, "sustained largely by long term self-interest of households in search of mutual insurance against livelihood insecurity" (p.201). Being actively engaged in the transfer of food within the social economy can aid households in reducing the risk of food insecurity due to shocks. Thus, the manner in which households foster and employ their social assets within the moral economy, will greatly affect the extent to which they can access food. Hence,

theories on the social economy where people use social networks to access food are useful in assessing the capabilities of households to access food.

2.6.2 Capabilities Approach to Household Food Access

It is clear that low-income families confront food access constraints which go much further than just lack of sufficient income to buy food. The household focussed studies within food access literature could benefit from further engagement with Sen's Capabilities theory as Moser (1997) has done. Sen's (1982) concepts of 'Entitlement Sets' and 'Capabilities' provide an effective means of engaging with the household asset base and its effect on food access. As stated previously, in order for a Capabilities approach to be used in assessing food access these measures of a household's productive and material asset base cannot be conflated with food security, but rather analysed in relation to how they impact on the actual ability of the household to access food. Sen argues that a household's primary goods (financial, material and social assets) should not be seen as a list of things but a list of central capabilities (Nussbaum, 2003), which when related to food access would translate into the means which a person can use to gain access to food.

This approach to household assets allows or a movement away from focussing on the amount of income and wealth within a household, but rather the degree of capabilities of that household, which focuses on how these assets are *used* to achieve wellbeing (food access in this case) (Nussbaum, 2003). This will enable a broadening of the household assets being analysed in terms of food access, and a better understanding of how these assets would impact upon how the household accesses food through its food environment and hence, its vulnerability to food insecurity. The aim of this thesis is to investigate the assets held by the household which are relevant to food access - those assets utilized to access food, either through the formal, informal or social food economies.

Ascertaining which assets are important in the access of food through these economies requires an engagement with how these assets are *used* to access food, in other words, how households interact with its food environment to access food based on the assets available to them. Hence, Shaw's (2006) Attitude component and Cannuscio et al.'s (2010) foodways will be used to explore how the interaction between the household and the food environment might be understood.

2.7 The Lived Experience of Food Access

Moser (1997) argues that it is not only the households' asset endowment which is important, the ability of a household to effectively manage these assets, to transfer them into food. Shaw's (2006) 'Attitude' component refers to the factors involved in the management of food resources within the household, how the household utilises its asset base to access food. Household food resource management can be defined as, "the handling of all foods and resources that may be used to acquire foods by an individual or family" (Hersey et al., 2003:1). This management takes place throughout the chain of events leading up to food consumption: planning – food shopping – storage – preparation. Cannuscio et al. (2010) argues that the mental and physical stresses which are experienced by the individual when navigating the complex, multi-dimensional food economy are important in understanding how the food economy and the household asset base shape the food access of households.

However, very little attention has been focussed on the Attitude component in food access literature, especially regarding the low-income consumer. Food access literature in general has tended towards focussing either on the spatial food economy or the asset constraints faced by the household, with very little attention being given to the behavioural processes behind food access – how food managers (economic agents) interact with their food retail environments to procure food. Household food purchasing patterns are an important tool in determining what food is accessed by the household in the urban environment, as they reflect how assets are utilized strategically to access food within the wider food environment (see for example Ballantine et al., 2008). Frayne et al. (2010) found that the types of retailers from which households purchased food was one of the strongest indicators of their food security. However, this aspect does not currently feature strongly as a part of household studies on food access.

Maxwell and Frankenberger (1992) describe access to food is a multi-dimensional objective which means that individuals and households are constantly forced to make trade-offs between the various objectives when accessing food. Both the spatial food retail environment and the household's specific characteristics will contribute to which trade-offs are made and which objectives are dominant in food purchasing decisions, which will impact where people choose to shop and the type and quantities of food they will buy. Piacentini et al., (2001) have identified proximity, convenience, value-for-money, product quality and range and social interaction as some of the factors influencing these trade-offs. A major trade-off within poor urban communities is between quantity and quality, whereby individuals who experience income restraints must decide

between obtaining foods which may meet energy needs and give them a full sensation and obtaining foods that are nutritionally rich (Maxwell and Frankenberger, 1992).

The spatial food access studies outlined in Section 2.2 of this Chapter provide important insights into the nature of the urban food environment in terms of the availability of nutritious and affordable food. However, in order to gain more of an understanding of the lived-experience interplay between formal and informal retailers and consumers and how this interplay affects food access, a more nuanced assessment of the local food environment is needed. The mental processes behind purchasing decisions determine how people respond to their household specific characteristics and their spatial food environments to access food. Hence, Shaw's (2006) 'Asset' and 'Ability' components are both mediated through the 'Attitude' component. The purchasing patterns of the household are a function of both the internal asset base of the household as well as the external environment in which it finds itself (Maxwell and Frankenberg, 1992). Thus, an analysis of purchasing patterns also addresses the key limitation of the majority of these household-level studies on food access, being that they neglect to recognise that the household exists within a larger context (Battersby, 2011a).

Furthermore, an analysis of the reasoning behind food purchasing patterns can reveal how the social economy interacts with the food economy to influence food access, a factor which Cannuscio et al. (2010) highlighted through their study of foodways. As mentioned previously, urban foodways refer to the, "social dynamics surrounding the production, purchase, and consumption of food" (Cannuscio et al., 2010: 381). The field of Economic Sociology, within which most studies on food choice are situated, supports a break-away from the neo-classical notion of all economic activity being performed in self-interest by atomized, 'rational' economic actors. This body of literature regards economic behaviour as being, "embedded in and mediated by complex and extensive web of social relations" (Hinrichs, 2000:296). This body of literature has investigated the social embeddedness of retailers, which provides insight on how the nature of the food economy is influenced by these networks of social relations. Cannuscio et al. (2010) motivated for better inclusion of the complex social dynamics within which food access is embedded as these social dynamics will influence the food purchasing decisions made by the household and is thus important in how food access is understood. The social embeddedness of retailers, thus, has important implications for how food is accessed by the household.

2.7.1 Social Embeddedness of Retailers

The concept of social embeddedness is useful in understanding how the social economy interacts with the food retail economy. Granovetter (1985) describes the embeddedness approach as a means of analyzing concrete patterns of social relations within the economy. It enables a better assessment of the interaction between the economic and the social, whereby social networks are evident within the economic system. It is based on the premise that markets are “socially structured institutions, infused with cultural norms and meanings” (Hinrichs, 2000:296). This idea of the embeddedness of retailers in social networks is important in revealing the nature of the urban food economy and the actual opportunities available to consumers in terms of food access. Social embeddedness occurs when the relationship between the retailer and the consumer is, “immediate, personal and enacted in shared space” (Lyson and Green in Hinrichs, 2000: 295). There is a much stronger link between customer and retailer within the local economy and thus there is a level of trust and social connection which is not present in the formal food economy, where relationships are more distant and anonymous (Hinrichs, 2000). The concept of social embeddedness is one of the key things distinguishing between the local and large scale, global food systems (Hinrichs, 2000) and provides greater insight into the role of the informal food retailers within the food economy.

Block (1990) notes that there is often a tension inherent in the economy between the social embeddedness of retailers and their profit motive, whereby the desire for profit and the social ties and connections of the retailer “jostle side by side”. The business decisions made by retailers are a function of both the extent to which the retailer prioritizes economic goals and engages in opportunistic behaviour to achieve them and the extent to which the retailer enacts their social objectives (Hinrichs, 2000: 297). Block (1990) presents the idea that all economic transactions take place on a continuum, whereby the retailer operates at varying scales of social embeddedness and thus invokes a different set of priorities, prioritizing non-economic goals such as, friendship, family, ethnic ties, morality and spirituality. However, it is important to realise that even the most socially embedded markets aim to be economically viable and thus profit-making and self-interest are still important goals. Hinrichs (2000) has used the theory of social embeddedness in analysing the food economy and argues that a realisation of the interaction between the social and profit motives behind the business practices of food retailers will be extremely useful in understanding the viability, relevance, development and outcomes of the local food system.

There is also a need to explore the extent to which the social embeddedness of local retailers in the local community influences how food managers interact with their food environments, as emphasised by Cannuscio et al. (2010).

2.8 Conclusion

The multi-faceted and complex nature of food access has given rise to a literature base which encompasses a wide variety of theoretical approaches and methodologies drawn from a broad mix of disciplines. It is evident that Shaw's (2006) 'Ability' and 'Asset' components have each been identified by various food access literatures as being important in evaluating food access. However, very few studies have engaged with both the household and its spatial food environment in their analyses of food access. Spatial food access studies have tended to focus solely on the structural nature of the food economy, whereas household-level studies have focussed on the household entitlements affecting food access and largely neglected its spatial food environment. This has meant that food access studies from both of these literature blocks have provided a skewed and somewhat limited representation of urban food access. This thesis will incorporate both the spatial and household-level components in its analysis of food access, to provide a rich case study analysis of food access, thus integrating both Northern and Southern thinking on food access. This will be grounded in Shaw (2006) and Cannuscio et al.'s (2010) explorations of an expanded notion of food deserts to include how the household interacts with its spatial food environment to access food.

The proximity, diversity and variety studies evident in spatial food access literature provide useful methodologies and principles for analysing the accessibility of nutritious and affordable food. However, two gaps are evident within food access literatures focussing on the spatial food economy which are especially pertinent within low-income communities in developing cities. Firstly, the transitions currently taking place in the food economies of developing cities with the rise of supermarkets in low-income areas have not been analysed in terms of their effect on urban food access. Secondly, not much research has been conducted on the effect of the informal food retail sector on the access of the urban poor to food. This research aims to investigate these lesser understood facets of the local food environment and their impact on food access, as they are viewed to be important in understanding the nature of the food economy in developing cities. The extent to which informal food retailers form a part of the study population's food retail environment will be investigated, as well as the impact of supermarketisation on the local food economy and consequently, on households' access to food.

It is evident that there has been a number of household level food access studies conducted in the South, which have engaged with a variety of household entitlements and characteristics and their impact on food access. Although, these studies are based upon Sen's (1981) entitlement approach; they have not engaged with Sen's capabilities approach to investigate how the characteristics and assets of the household affect their capability to access food through the food economy. Rather these studies conflate household poverty measures with food insecurity, which does not offer a comprehensive analysis of how the household's entitlements influence food access. The analysis of food access as being the product of the household's *interaction* with their food environment within this thesis, translates into the need to consider both a wider spectrum of household entitlements and how these assets are *utilised* to access food.

Furthermore, the social capital endowment of households has not been widely considered in terms of food access, as non-market channels of food access have not been recognised as forming an important part of the household's food environment. Moser's (1997) reference to vulnerability theory highlights the importance of recognising the informal safety nets available within communities in terms of food access. The importance of the social economy as a channel of food access will be investigated within this thesis and thus the importance of social capital as an asset.

Shaw (2006) recognised that the household's navigation of its food environment is mediated through the 'Attitude' component, however this component has not been engaged with within food access literature, as it requires recognition that food access is derived through the interaction between the household and the food environment. Hence, this more integrated understanding of food access means that factors influencing the food purchasing decisions of households need to become more prominent in the analysis of household food access. This thesis explores the interplay between the household and the spatial food environment in order to assess which factors are most prevalent in determining how the household navigates its food environment to access food.

Lastly, analyses of the social dynamics surrounding the household's navigation of the food economy, highlighted by Cannuscio et al.'s (2010), are not currently present in food access studies. The social embeddedness of local informal retailers translates into a local food economy which is couched within social networks, which will have considerable implications for how it functions and thus, how food is accessed (Neves and du Toit, 2012). The social dynamics at work within the food economy will be explored within this thesis in terms of their impact on how households interact with food retailers to access food.

The more integrated approach to food access presented in this literature review requires an expanded view of what characterises a food desert, beyond merely the number and proximity of different types of food retailers. It also requires an expanded view of the household entitlements which impact upon the household's capability to access food. This thesis applies this integrated approach to food access to a case study with the intention of providing conceptual and contextual thickening in terms of understandings of food access within low-income urban communities.

University of Cape Town

Chapter 3: Methodology:

3.1 Introduction:

It is clear from a review of literature that a new framework for understanding urban food access is needed, one which accounts for both the nature of the food economy, including its spatiality, together with a household level analysis of the means available to access food through this economy. The extent to which food is both spatially and economically accessible is a function of both of these elements. The rapid changes occurring within urban areas in developing cities invoke the need to analyse food access in terms of new types of households and new food retail economies. Households access food by strategically navigating not only their spatial retail environments and their own entitlement constraints to access food, but also their networks of social capital. Thus, this field of study requires a research approach which is able to cope with its complex nature. The following Chapter will outline how the following five objectives were achieved through a variety of methodologies.

1. Develop framework for understanding the complexities of urban food access
2. Evaluate the nature of the food economy in terms of its influence on food access
3. Evaluate household entitlements in terms of their influence on food access
4. Explore the interplay between the spatial food economy and the household in terms of food access
5. Evaluate how food managers respond to their specific food access constraints in the ways in which they navigate the local food environment, including non-market channels of food

Data was collected through a variety of means in order to gain a thorough understanding of food access within this study site, as both data regarding the nature of the local food environment and the household specific factors affecting food access were required. The data collection for this project has been separated into two sections, namely the spatial analysis and the household level analysis of food access. The spatial analysis was based upon a series of maps of the local food economy which outline the spatial location and type of food retailers. A profile of these different

food retailers was developed, which included the variety and price of goods sold by these retailers, as well as the business models which these retailers operate under. This information is presented with the aim of demonstrating the spatial access of households to a diverse and affordable collection of foods.

The household level analysis is based on both quantitative and qualitative data gained through interviews. Quantitative data was collected regarding the prevalence of food insecurity, the general household asset base and the purchasing patterns of the households. Qualitative data was collected pertaining to the factors contributing to the various food choices which people make, in response to both spatial and household specific factors.

This spatial and qualitative account of the local food economy was analysed together with information on the asset base of the households and its impact on the spatial and economic accessibility of food. Trends were identified between the prevalence of household food insecurity and the asset bases and the purchasing patterns of households. In addition, qualitative accounts of the factors contributing to the various food choices which food managers make, in response to both their spatial food context and household specific characteristics, inform discussion around how the local food economy is navigated.

3.2 Notion of the Household:

The notion of the household itself needs to be carefully constructed when undertaking a household-level study. In low-income communities in particular, households cannot be assumed to consist of a static number of members. Households are dynamically organised around food and this fluidity ensures that it can perform risk-sharing and consumption smoothing functions. For the purposes of this study, the household will be taken to be, “everyone who eats out of the same pot”, on a regular basis (UNDP, 2004). This definition was decided upon as it was found that within this community in order for the concept of a household unit to be relevant to an analysis of food access, it could not be restricted to only those living within a building or erf boundary. Information regarding the households’ food access was sourced from the households’ primary food manager as they are predominantly responsible for the procurement and preparation of food for the household and would thus, be best able to recount the food purchases patterns of the household. Using the food manager as the unit of research instead of the household as a whole allowed for a more dynamic

concept of a household to be captured within the data collection and thus, a better account of some of the nuances of food access on a household level.

3.3 Study Area

The study area is situated in the suburb of Manenberg which is situated within the old Coloured Group Areas, which was created to house coloured people forcibly removed from the central city (Western, 2001). Manenberg was classified as a lower-middle income suburb, as shown by the star on Figure 3.1 (City of Cape Town, 2001) and is situated relatively close to the Cape Town CBD compared with more informal neighbourhoods. The study area consists mainly of semi-detached brick structures with some detached bungalows, the majority of which are owned and rented at subsidised rates by the state. Many of the houses have added on informal structures in the space behind the house, which are referred to as backyarders, most of which do not have access to plumbing facilities and sometimes electricity, which impacts upon their ability to store and cook food.

Socio-demographic data for Manenberg is somewhat outdated as the 2001 census data remains the sole source of socio-demographic information about the Manenberg area (City of Cape Town, 2001). A census was conducted in 2011 but these figures are not available yet. In Figure 3.1 Manenberg is indicated by the star. According to the 2001 census data which informed Figure 3.1, Manenberg was classified as a lower middle class area. This suburb had a total population of 54,499 people of which 94.36% were coloured. This community was largely excluded from the formal labour economy with an unemployment rate of 34.28% and 58.82% of those individuals who were employed earned an income of less than R1600 a month (City of Cape Town, 2001).

This area was thought to provide an interesting case study for investigating food access among low-income urban households for a number of reasons. According to Madevu (2006), more middle income neighbourhoods are at the forefront of transitions in the food economy and thus, experience the most intense competition between formal and informal food retailers. Manenberg is within proximity to both formal and informal food retailers, with two formal supermarkets being situated within 5km of the study area. The prevalence of the informal food economy within the study area, together with the presence of formal food retailers in close proximity, allows for an analysis of how these two economies interact and exist within the same local food environment and how they are

navigated by households. This thesis was therefore, able to explore questions around whether the informal food economy is sufficiently different to exist within the same local food environment as formal retailers or whether the presence of formal retailers in close proximity to the study area will cause the informal economy to go into decline.

The fact this is a long-established urban area means that residents presumably have few rural ties and thus, access their food solely through the food economy and not directly from rural areas, as is often the case for more newly urbanised households (Crush and Frayne, 2010a). This enables an analysis of food access for *urban* households. Furthermore, the residents in this area are lower middle income and had a high rate of unemployment and thus, presumably utilise a variety of sources in accessing food (Battersby, 2010), including non-market channels, which provides insight into the food-related coping strategies and the social economy within low-income urban communities. However, a relatively large proportion of residents are formally employed, compared with lower income suburbs (City of Cape Town, 2001), thus the study participants will yield differentiated income characteristics which enables a more interesting analysis regarding the impact of wage income on food access.

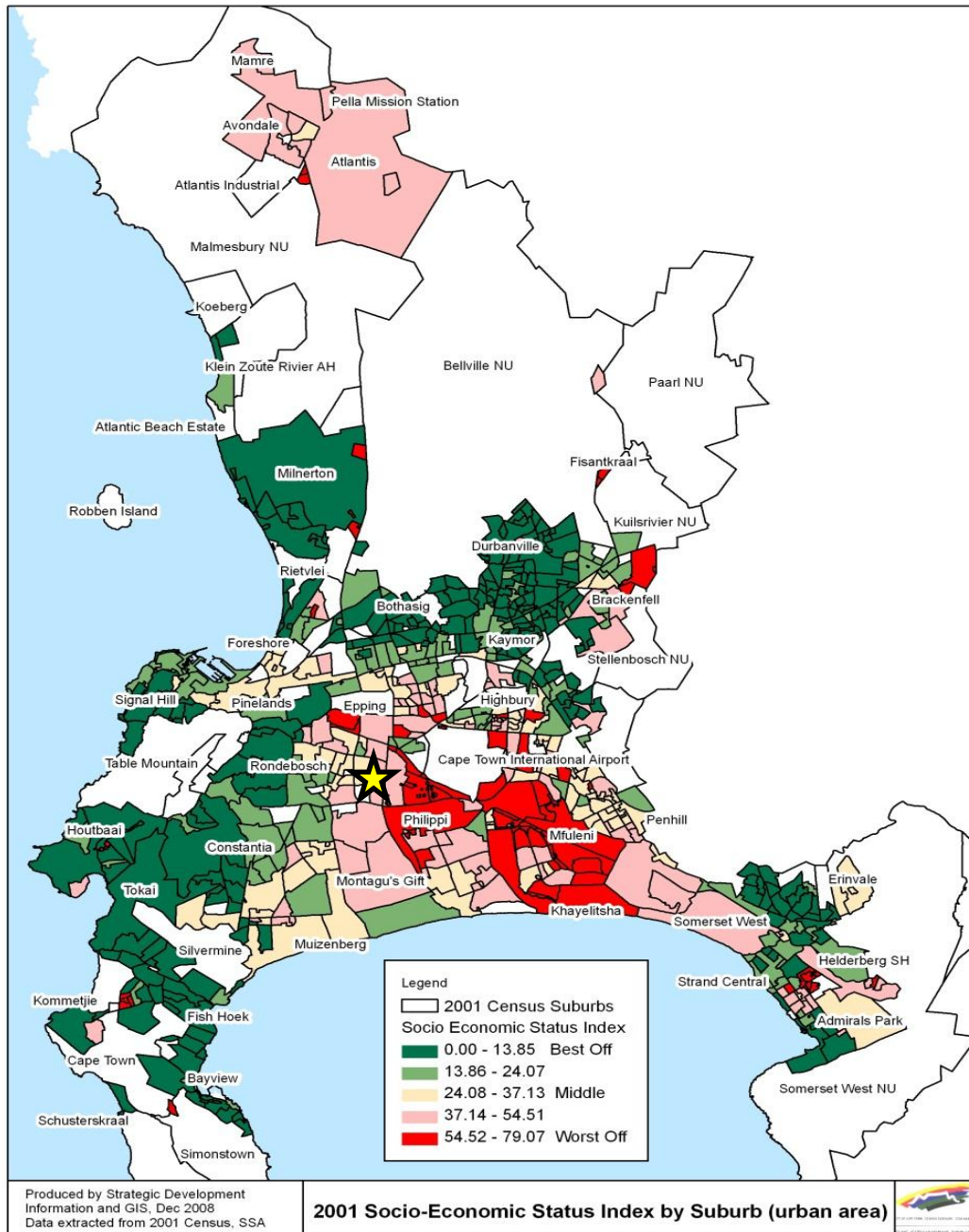


Figure 3.1: Socio-Economic Status Index by Suburb (City of Cape Town, 2001)

3.4 Scope of Research

The aim of the research is to intensively investigate the lived food environment of a community of people, whereby in-depth interviews and shop profiling will take place. The spatial area covered had to be relatively small because of time and labour constraints. Thus, the entire suburb of Manenberg was not a feasible option and it was decided that the study area would be delineated by the portion

of the Manenberg which resides within Ward 45. Figure 3.2 below depicts how the suburb of Manenberg is split between Wards 45 and 46. Figure 3.3 below depicts the boundaries of the study area with the green lines delineating Ward 45 boundary and the red lines delineating the suburb boundary. All of the interview participants were residents of this area and all the base retailer profiling occurred within these boundaries.

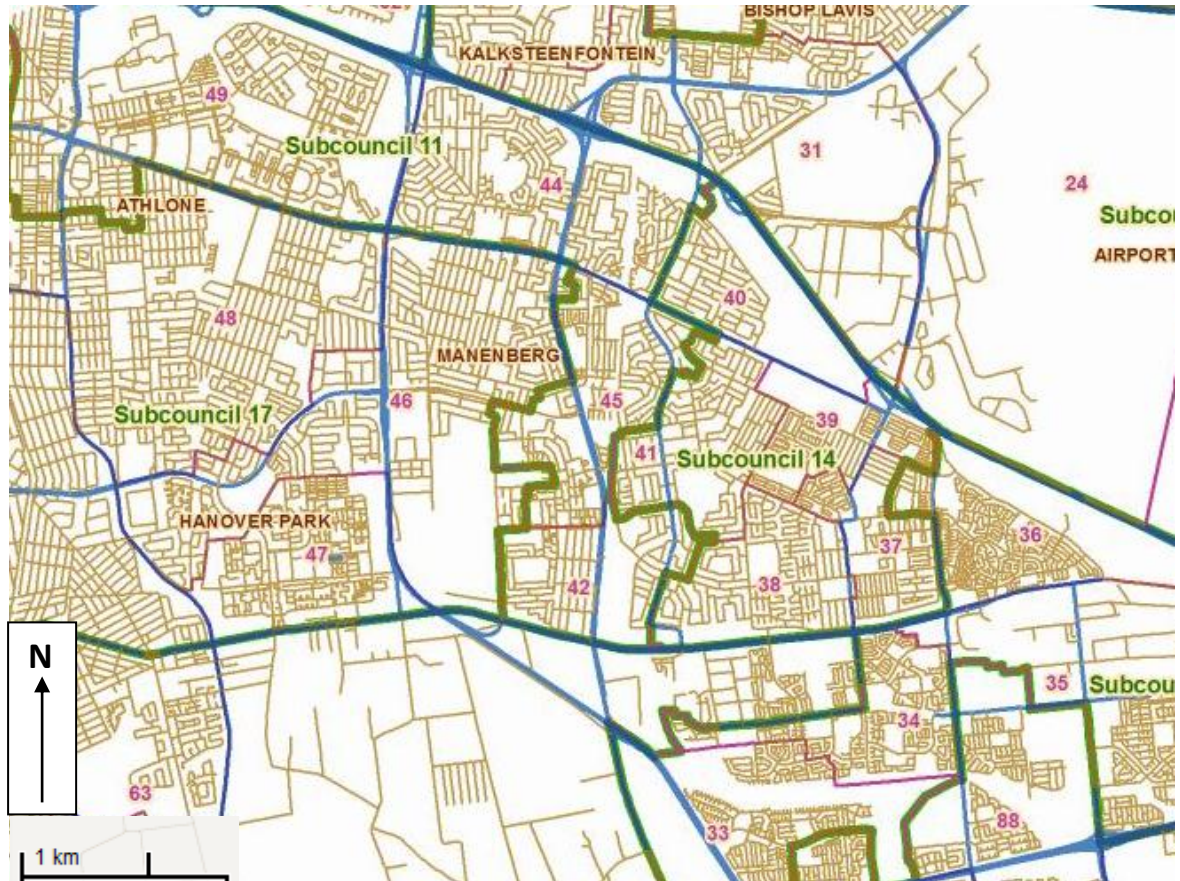


Figure 3.2: Ward Map of Manenberg (Cape Town City Maps, 2010)

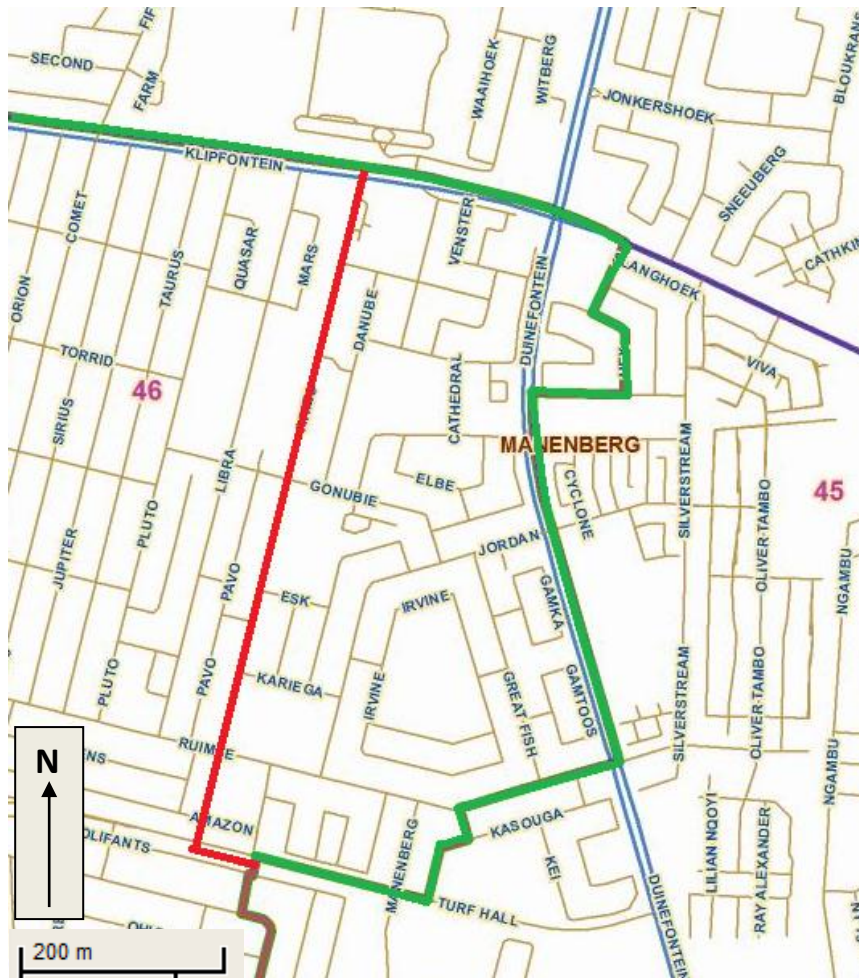


Figure 3.3: The Study Area (City Map City Maps, 2010)

3.5 Methodological Objectives:

The five objectives outlined above have been broken down into the following methodological objectives, which refer to the various types of data which will contribute to both the food economy and household level analysis.

Food Economy Analysis:

1. Map the location and type of food retailers situated within the lived food environment
2. Establish the diversity and price of a select range of foods sold in each of the different types of food retailers
3. Investigate the business practices of local informal retail outlets

Household Level Analysis:

1. Determine the prevalence of Household Food Insecurity
2. Investigate the Household Entitlements which influence the ability of food managers to access sufficient food through the market
3. Investigate the spatial, content and temporal aspects of the food purchasing patterns of food managers
4. Explore the extent to which food is accessed through non-market channels

3.5.1 Analysis of the Food Economy

The first three objectives aim to gain an understanding of the local food economy, both in terms of the formal and informal food economies. This spatial analysis was conducted within the lived food economy, which within this research refers to all the food retail outlets within the study area, as well as retailers outside the study area which are significant in terms of food procurement for the food managers interviewed. Through the interviews with food managers, it was found that the retailers visited by respondents were all either within very close proximity to their houses or else within supermarkets. It was therefore unnecessary to include, in a blanket sense, those retailers within a buffer around the study area as the lived food experience of the interview participants did not include these retailers.

Without the household level component of this study, the lived food environment could not be ascertained, as is the case in food desert research which relies on indirect assessments of the food economy. A profile of shops which make up the lived food economy was established, in terms of the shop types present and the diversity and price of goods available in these shops. This information together with data on household mobility will enable an evaluation of the physical availability of nutritious and affordable foods in this area. The business practices of the informal retailers were investigated with the aim of ascertaining how the way in which these businesses operated impacted upon the food access of households. Objectives 1 and 2 were achieved through ground-truthing and non-participant observation and objective 3 was achieved through interviews with food retailers.

1. Map the location and type of food retailers situated within the lived food economy

The location of formal and informal food retailers was geo-coded and represented on a map using GIS. Only fixed food informal retailers were captured which included both tuck shops¹ and street retailers. As no data is currently available pertaining to the location of informal food retailers, these retailers were identified through observation whilst systematically walking around the study area. Every shop in the study area was plotted spatially and coded by type. Four types emerged which were formal supermarkets, butcheries, informal tuck shops and fruit and vegetable stalls. Within the tuck shops grouping a number of differences were observed which were noted, such as the presence of entertainment facilities, the selling of fast food and whether the retailer was a local or foreign.

2. Establish the diversity and price of goods sold in these retail locations

A profile of the diversity and price of certain goods being sold within the various retail outlets was compiled through observation. The list of foods recorded was derived from those foods most commonly mentioned within the interviews with food managers as forming the basic food requirements of households. All of the informal fruit and veg stalls and tuck shops within the lived food environment were profiled, together with one of the supermarkets to provide comparison. Food visible on the shelves was noted, as well as their prices.

3. Establish the business practices of informal retail outlets

Interviews were conducted with informal retailers which enquired about their basic business operations; such as working hours and busiest time of day, through a series of closed questions. These interviews also included more open ended questions regarding the sourcing and pricing methods of the retailer regarding the different food items and the profit margins on these different food items, as well as any value added functions which the retailer engaged in (refer to Appendix 1 for an outline of this interview). The credit system operating within the local food economy was investigated, in terms of whether credit was administered, to whom and how much, as well as its profitability as perceived by the retailer. The customer base of the retail outlet was also accounted for through open ended questions pertaining to who, in terms of gender and age, what they bought and how often, as well as the proportion of which lived in the immediate vicinity. All of the fruit and vegetable retailers were interviewed and all of the tuck shop retailers who were willing to be

¹ Spaza Shops within the Cape Town context are referred to as Tuck Shops.

interviewed were interviewed, which amounted to ten retailers, which was 25% of the total number of tuck shops.

3.5.2 Analysis of the Household

The following household focussed objectives were investigated through a series of semi-structured interviews conducted with food managers residing within the study area. The sample population was made up of twenty five food managers, all of which were women and either mothers and/or grandmothers. Each of these self-identified food managers played a vital role in the procurement and preparation of food for the household and thus, had intimate knowledge of the food situation of the household. These interviews were conducted within the homes of the food managers.

It is important that the sample of households interviewed was spread spatially throughout the study area, as the spatial position of the household relative to the local food environment will impact upon their purchasing decisions. There are also different housing types within the study area, which could impact upon their ability to store and cook food, which in turn would impact upon their food purchasing patterns. Therefore, participant households were chosen according to a stratified random method of selection, in order to ensure that a cross-section of different household types and location within the study area was included in the sample. A collection of five roads were chosen which were distributed evenly throughout the study area. The researcher and research assistant walked down each of these roads and conducted interviews in five households where the food manager was present.

The twenty five interviews conducted each lasted between twenty five and forty five minutes and contained four main sections, which were directed towards achieving each of the four objectives outlined below. The outline of the interview can be found in Appendix 2. Twenty of the interviews were conducted on week days in the afternoon and the remaining five interviews were conducted on a Saturday to account for those households with employed food managers.

1. Determine the Prevalence of Household Food Insecurity

The African Food Security Urban Network (AFSUN) utilises a prescribed food security assessment tool, namely the Household Food Security Access Scale (HFIAS) measure (Crush and Frayne, 2010a). The purpose of this measure is to provide a reflection of the absolute access to food and access to appropriate food choices. This measure is based on the presumption that food insecurity as a result of access constraints is a “measurable experience which can be described and analysed” (Swindale and Bilinsky, 2007:3). There are three aspects pertaining to food access, which are focussed upon

within the HFIAS measure, namely the availability, quality and utilization of food. The availability of food is determined through questions surrounding the household's anxiety and uncertainty about household food access. The quality of accessible food is gauged through questions about the variety, preferences and aspects of social acceptability regarding the household's food consumption. Finally, the utilization component is established through questions pertaining to the extent of insufficiency with regards to food intake and the physical consequences. This measure has been used within the AFSUN food security studies conducted in numerous cities within Southern Africa (see for example, Crush and Frayne, 2010a,b; Frayne et al., 2010; Battersby, 2011a) and it is hoped that by including this measure in this study it will allow for comparisons and dialogue with this research series.

Participant households are placed in categories according to weighted responses to nine questions, three pertaining to each of the three aspects outlined above. These questions can be found in Section 11 of Appendix 2. The HFIAS measure allows households to be analyzed in terms of three graded categories of food insecurity, rather than merely analyzing them through a binary of food secure or insecure (Coates et al., 2007). Thus, it allows the extent of food insecurity to be gauged, a tool which is very useful when large proportions of households are classified as food insecure but experience insecurity to varying degrees (Swindale and Bilinsky, 2006).

2. Investigate the Household Specific Characteristics and Entitlements which influence the ability of Food Managers to access sufficient food through the market

A number of questions were included in the interviews with food managers which investigated the financial and material asset base of the household and certain entitlements were investigated specifically as they were expected to impact upon food access through the market. The most important being the size and nature of the food budget, which is largely determined by the extent and type of employment which household members are engaged in, together with the social grants which the household collected. The extent of household mobility in terms of access to private and public transport also influences how food is accessed through the market and was enquired about. Furthermore, the storage and cooking facilities available to food managers were noted, as these assets impact were also expected to have an impact upon food purchasing decisions.

However, the interviews were semi-structured in order to allow for the food managers to draw attention to those entitlements or characteristics of the household which they felt most influenced food access. Thus, the extent to which the various entitlements and characteristics of the household influenced food access was derived from both quantitative data and descriptive accounts from food

managers. This information was then analysed together with the HFIAS findings to assess the implications of various entitlements on the ability of households to access food.

3. Determine the spatial, content and temporal aspects of the food purchasing patterns of food managers

Quantitative data was collected pertaining to the purchasing patterns of the study population within the last month. The time span of a month has been chosen as some people are expected to do a big shop on a monthly basis, whereby food is purchased in bulk with the intention of it being consumed in the long term. Questions surrounding the spatial nature of food purchases were asked, regarding the location of food purchases and the frequency with which participants visited certain food retail locations. Questions were also asked surrounding the specific types of food purchased, the frequency with which different food items were purchased and the quantities in which these foods were purchased. This data was analysed together with the HFIAS data and the data collected on household characteristics and entitlements.

4. Determine the extent to which food is accessed through non-market channels

Not all food is accessed through the market and urban households engage in strategies to access food through non-market means, particularly when their food budgets are insufficient to meet their food requirements (Battersby, 2011a). Subsistence urban agriculture (Crush and Frayne, 2010a) and food access through networks of social capital are an important means of accessing food for many low-income households (Moser, 1997). Hence, open ended questions pertaining to how the household accesses food outside of the market were included.

3.6 Research Limitations

The most prominent challenge associated with this research was gaining access to the area in order to collect data. Manenberg is renowned for being a dangerous environment due to the strong presence of gangs in the area. It would, thus, be unadvisable for a researcher to enter the area unaccompanied, especially given that the data collection of this project involves a lot of time spent walking around the area in search of informal food retailers, as well as entering people's homes to conduct interviews. Carol, a resident of the area and chairperson of a local housing NGO called 'The Phoenix Foundation', accompanied the researcher during the actual data collection within the study area, and aided with the identification of food retailers and households to interview. Carol knows

the area and its residents well and therefore, her participation in the data collection process ensured that the process of data collection was sensitive to the specificities of the area, thus, making it safer. However, Carol did not merely fill the role of a guide but was an active agent in the research. She both facilitated conversation and offered further explanation on responses given by food managers. Thus, she was an important source of local knowledge, both in general terms and specifically the food situations of the study population.

Carol's presence during the data collection process does, however, create some ethical considerations. As food access is a sensitive topic, ideally anonymity with regard to the interview participants should be prioritized. However, as Carol was present during all of the interviews anonymity could not be achieved. Carol is a well-known member of the community and many of the participants knew her, thus, they may have been hesitant to share details of the financial and/or food situation of their household with a fellow community-member.

The sensitivity of the topic of the interviews presented ethical considerations in itself. Questions regarding the prevalence of food insecurity in a household and what the household does to cope with this insecurity require a carefully considered approach. It was important not to make the respondent feel uncomfortable and to be sympathetic to their struggles in procuring food for their households. A semi structured interview was therefore, a more appropriate interview style as it allowed the interviewer to conduct the interview a more natural way which was more sensitive to the emotional state of the individual respondents.

This issue compounds the concerns already associated with using an interview as a main source of data collection. The reliability of the data collected through interviews can be questioned due to the uncertainty pertaining to the truthfulness of the participants, particularly when speaking about something as sensitive as household food security (Feldman, 1995). In addition, the researcher was not comfortable speaking in Afrikaans, the first language of all of the participants, and thus, all of the questions were asked in English. Although, the majority of the participants were bilingual, the English medium may have restricted the fluency with which they could express some of the more complex responses. Carol acted as translator for those households who had only basic English abilities. Lastly, food access is perhaps best understood if it can be monitored over time, in order to identify how it changes in response to income shocks or stages with regards to household income rhythms. Although, participants were asked how they responded to income shocks and rhythms, this longitudinal aspect of food access could not be comprehensively grasped through the scope of this research.

3.7 Data Validity

Each of these limitations compromised the quality of the data collected, which is compounded by the fact that the topic of food access is a sensitive one which may have resulted in less-than-honest responses. Thus, a means of verifying the data collected through the interviews with food managers was important in ensuring the validity of the research findings. Hersey et al. (2003) states that, “the extent to which a test measures what it claims to measure, requires independent verification of actual behaviour” (p. 7). It is important to assess the validity of the data collected, particularly when the means of gaining information largely relies on the truthfulness of one’s participants.

The interviews conducted with tuck shop owners were a means of verifying the self-reported purchasing behaviour documented through the interviews. Information on the types and quantities of foods sold by these local retailers and accounts of the nature of their customer base provided insight into the purchasing patterns of the surrounding community. As local retailers are expected to be more receptive to the food requirements of their customer base (Delormier et al., 2009), it is expected that the types and quantities of foods sold in these outlets would reflect the purchasing patterns of the surrounding community.

This research did not aim to fully investigate how food was utilization in the home, which would have entailed extensive research into the many inter-household dynamics which determine how food is prepared and divided amongst household members. However, a very general overview of the types of meals prepared within the households was established and this information also proved to be a valuable means of verification. This information was analysed together with recollections of shopping behaviour made by the food managers themselves, as well as information gained from local retailers. Therefore, the validity of food purchasing data was improved through triangulation, whereby data was gained from three sources which each indicated the food purchasing patterns of the local community.

Drawing conclusions from accounts on purchasing patterns from food managers alone would have proved problematic, as there were certain aspects of household purchasing patterns which food managers appeared to emphasise or de-emphasise, presumably according to how they wished to be perceived by the researcher and Carol, and perhaps food managers adjusted their responses according to how they would like to perceive their purchasing patterns themselves. In addition, due to the often erratic nature of food budgets the purchasing patterns relayed by food managers would

tend to reflect how the household goes about procuring food when the budget allows for it, as it is during these times that the planned food shopping excursions would occur. The times when food has to be procured in an unplanned, somewhat opportunistic manner would presumably not be reported on by the food manager to the same extent, as this means of accessing food falls outside what the food manager would deem to be the household's purchasing patterns. Knowledge of the types and quantities of foods stocked by tuck shop owners, together with knowledge of the types of meals eaten by the household could help in distinguishing the extent to which these more ad hoc means of accessing food are prevalent.

3.8 Data Analysis

The spatial data was plotted on a GIS map using ArcGIS and was analysed to identify trends in the spatial distribution of different types of retailers. A detailed documentation of the frequency and spatial distribution of the various types of food retailers, together with data collected regarding the nature of the goods sold in these retailers, provided a thorough sense of the local market food economy. This analysis allowed for greater insight into the food purchasing demands of the local community, as the structure and form of the informal food economy is responsive to household asset bases and their resultant food demands (Delormier et al., 2009). By the same token, analysis of the more quantitative data gained through the interviews regarding household food insecurity, the household asset base and the purchasing patterns of food managers allowed for better understanding of the reasoning behind the structure of the local food economy.

This more quantitative data relating the HFIAS level and the characteristics and entitlements and purchasing patterns of households aided in establishing some of the broad trends regarding which household specific factors were most influential in terms of food access. This data formed the foundation of analysis regarding how food managers interacted with the food environment to access food.

The more open-ended questions relating to the determinants of food purchasing decisions underwent a narrative analysis whereby key words or concepts were identified and answers were grouped according to similarities and trends. This more qualitative data provided further insight into some of the complex reasoning behind purchasing decisions. An analysis of this information will aid in linking the household specific characteristics and spatial food economy to the purchasing patterns

of food managers. The ways in which the purchasing decisions of food managers are mediated by their environments are complex and dynamic and thus, allowing trends and relationships to surface through food managers' explanations of their food purchasing patterns provides a useful means of exploring the interplay between household and food economy. A similar narrative analysis was conducted regarding the accounts provided by food managers regarding the extent to which food managers accessed food outside of the market. The form in which these extra-market channels of food access took was investigated in order to get a sense of the social economy existing around food.

3.9 Conclusion:

It is intended that the research methodologies outlined provide the scope for comment on how the means through which food managers' access food is shaped by their spatial food environment and their household entitlements. Although, this case study is relatively small, it does allow for an intensive evaluation of food access through both a household level study and a spatial food economy study. The scope and depth of investigations into the local food economy are intended to enable an overview of the local food economy in terms of the availability of diverse and affordable foods, as well as a more detailed account of their business practices. The interviews conducted with food managers were intended to provide insight into the nature of their food purchasing patterns, as well as the reasoning behind these patterns of food access. The focus on purchasing patterns within these interviews allows food managers to make reference to both their own asset base and the characteristics of the food economy in their explanations of their food purchasing decisions. This household specific data was analysed in relation to the spatial data, in order to draw conclusions about the lived experience of food access.

Chapter 4: Setting the Scene:

4.1 Introduction:

The following Chapter will present findings pertaining to both the food economy and the household components of this case study and the conclusions which can be drawn from each of these studies. Section 4.2 outlines how different types of retailers are spatially distributed within the lived food environment. These retailers will be discussed in terms of the diversity and price of foods sold. This section provides a purely spatial analysis of food access, similar to that found in food desert studies. Hence, it enables an assessment of whether the study area exists within a food desert in terms of the availability of affordable and diverse foods. Section 4.3 presents the household characteristics and entitlements of the twenty five households interviewed. Data on household income and associated food budget, mobility, type of income and household size is analysed together with HFIAS data to ascertain which entitlements correlate household food security and can thus be assumed to be influential in terms of household food access. This section engages with the household-level analysis of food access, which is conducted by many food access researchers, particularly in the global South.

The intention of this Chapter is to show the nature and extent of food access analysis which is allowed by both spatial and household-level studies when considered in isolation. Chapter 5 will then analyse the findings from both the spatial food economy assessment and the household-level assessment in terms of food access, through the lens of the household's interaction with the food economy as demonstrated by its purchasing patterns.

4.2 Overview of the Food Economy

4.2.1 Introduction:

In the following section, an overview of the food environment will be given. The food environment of the study population is made up of both the formal shopping centres, which are situated outside the boundaries of the study area, about 4km away, as well as the informal food retail outlets which lie inside the boundary. The lived food environment refers to those retailers which were utilised by

households living in the study area, and was established through the interviews with food managers. The 'Formal' retailers referred to in this research project have a bureaucratic organisation, employ wage labour and are registered and operate within the tax net (Dannhaueser, 1999). Informal retailers within this case study include neighbourhood stores and shops which are small, easy to start up and are largely unregulated, with some having wage labour and some relying on the labour of family members only (Dannhauser, 1999). This grouping also includes vendors which have government licences and rental fees, but are still largely unregulated and do not pay tax. There were no formal shopping outlets situated within the study area. The following section will describe the spatial distribution and nature of both the formal and informal food retailers and how they integrate to form the local food environment. These outlets will be discussed in terms of their major characteristics: the price, type and variety of goods sold, as well as their business model.

There are two major shopping centres in relatively close proximity to the study area, as indicated in Figure 4.1 below. The study area is demarcated by the red outline.



Figure 4.1: Study Area in relation to shopping centres (Google Earth)

As discussed in Section 2.5.1 of Chapter 2, research on the process of supermarketisation has focussed upon the ability of supermarkets to take advantage of economies of scale to sell foods at

relatively lower prices than smaller scale food retailers, this is especially true of processed foods such as flour, bread and sugar (see for example D’Haese and Huylenbroeck, 2005; Roos, 2012). However, despite the proximity of these two shopping centres and their accompanying supermarkets to the study area – the informal food economy within the study area is extensive, as shown in Figure 4.2 below where the dots represent informal food traders. Each of these food outlets operated from a residential property, either from the front room of a house or from a fixed independent structure in front of a house. There are a total of 39 fixed informal retailers operating within the study area, two of which sold only fresh produce and the remaining 37 were tuck shops. These retailers were distributed quite evenly throughout the study area with many being situated along the busier roads, namely Ruiteweg, Great Fish Road and Jordan Street.

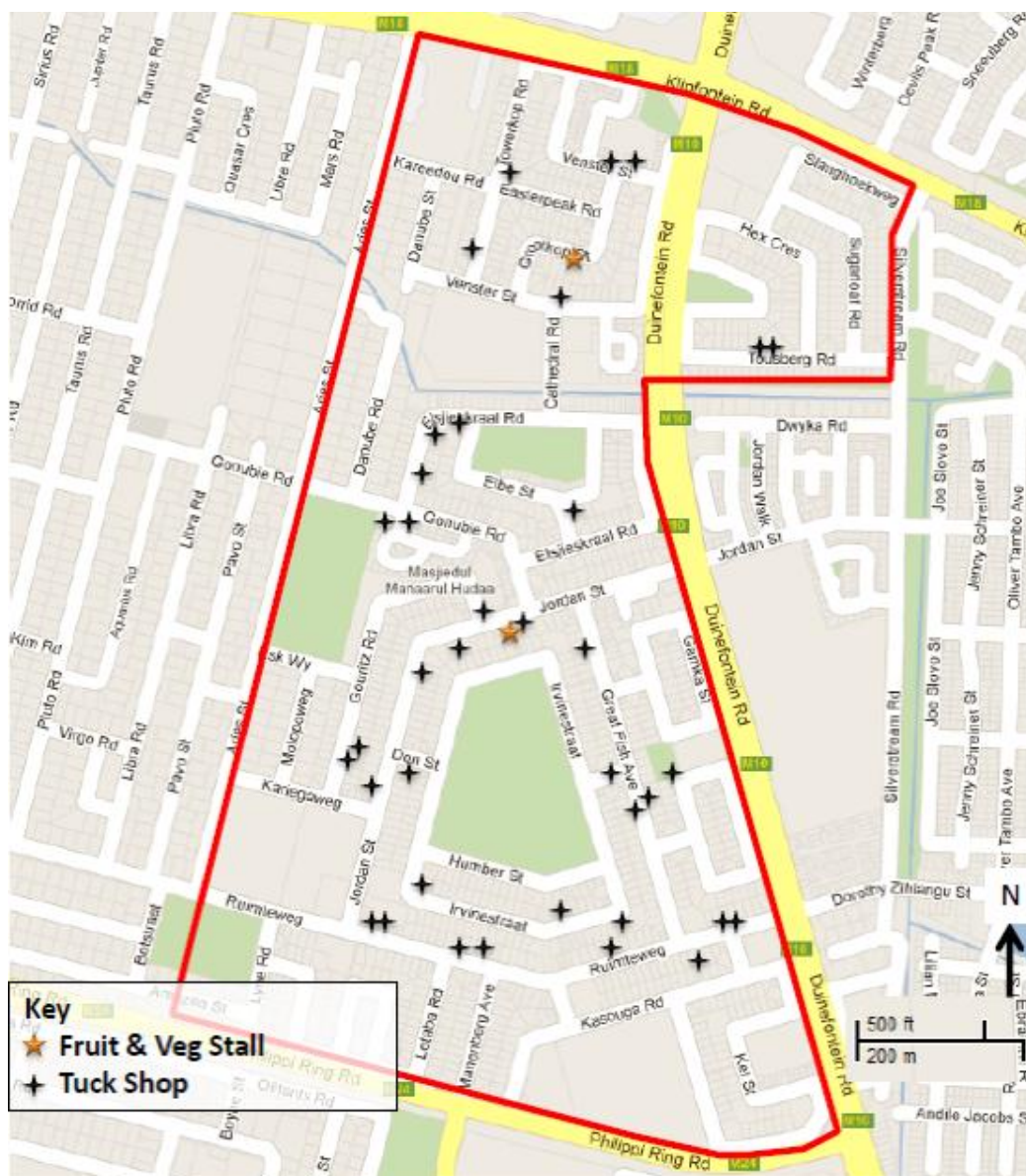


Figure 4.2 Map of Informal Retailers situated within the Study Area

The dominant trend in literature when analysing the informal economy is to focus upon how the limitations faced by these retailers affect how they operate and how these limitations lead them into decline in the face of an emerging formal food economy (Weatherspoon and Reardon, 2003; Louw et al., 2004; D’Haese and Huylenbroeck, 2005; Tustin and Strydom, 2006). This is reflected in Lewis’s (1954) notion that in order for the informal sector to survive in the face of an encroaching formal economy, it must either take on the characteristics of the formal economy or decline. However, the number of tuck shops situated within the study area indicate that the presence of two shopping centres in close proximity to the study area have not meant that the informal food retail sector is redundant. The following section will describe the types and prices of goods sold by the various formal and informal food retailers, as well as their business practices, to better understand how these two elements of the food economy relate.

4.2.2 In-store Analysis

The structure of the informal food retailing sector in Manenberg is similar to many others in developing cities around the world (Smith, 1998), whereby fresh produce is generally sold on the street and dry, processed food stuffs is sold in small convenience stores or tuck shops. There are stark divisions along product lines evident in this economy, with tuck shops dealing almost solely in dry/processed goods and fresh produce being sold from wooden stands on the side of the road. There are a number of mobile fruit and vegetable traders operating within the community, with some selling produce from the back of their bakkies [small pick-up trucks] and others selling door-to-door on foot. These fresh produce bakkies drive along the Mainer roads within the study area once or twice a week and sell a variety of fresh produce. There was no evidence of ‘street food’ in terms of “ready-to-eat foods and beverages sold and sometimes prepared in public places, notably streets” (FAO, 1986: 23). However, some tuck shop owners did prepare and sell fast food on weekends. The prices of food sold by tuck shops were largely similar, especially in terms of tuck shops owned by residents. There were a number of Somali-owned tuck shops which offered foods at slightly lower prices. There was also very little difference in the variety of foods sold within the local tuck shop sector. Price and variety differences were evident between these informal retailers and the formal supermarkets.

A price comparison was conducted between supermarkets and tuck shops among those foods which were recorded as forming the basis of household food requirements, as determined by the interview data, excluding meat, fresh produce and dairy products which were not widely sold by informal

traders situated within the study area. The average quantities and prices of these goods were recorded for all of the local informal traders in the study area and for the Shoprite/Checkers supermarket situated in Gatesville, which was the supermarket most widely used by the study participants. It is clear from the price comparisons in Table 4.1 below that there is potential to save a lot of money by shopping at supermarkets instead of purchasing food from formal retailers, as all of the foods listed were cheaper at the supermarket when one compares the cost per gram or litre. If a household was to buy each of the following basic food items at Gatesville instead of the local tuck shop they could save around R84 which is substantial given the total cost of these items. This figure was calculated according to the estimated quantity of each of the items which a household of four would require for a month, as revealed through the interview data. The savings are even more pronounced when one takes into account the prices of smaller packets of rice, sugar and coffee. If a household were to meet their requirements of these food items solely through the purchase of smaller packets they would be paying an additional R9.00 for sugar, R12.50 for coffee and R64.10 for rice per month, as compared with purchasing these items from a supermarket. Furthermore, if a household bought its weekly requirements of bread and milk at the supermarket rather than the local tuck shop they would be saving R7 per week. These figures serve as an indication of how the expansion of supermarkets into low-income areas can benefit the urban poor in terms of access to more affordable food and thus food security.

Table 4.1: Price and Product Comparisons between Tuck Shops and Shoprite Supermarket

Food Type	Tuck shops		Supermarket			Requirement for Household of Four ¹			
	Unit Size	Price	Unit Size	Price		Quantity	Price		
							Tuck Shop	Super market	
Bread	Albany/Blue Ribbon	R 7	Albany/Blue Ribbon	R6 .50	Weekly	7 loaves a week	R 49	R 45.50	
	Daily Bread	R 5	Daily Bread	R4. 80			R35	R33.60	
	Half Loaf	R 4	-	-					
Milk	1 litre	R 6	1 litre	R5. 50	Weekly	7 litres a week	R 42	R 38.50	
						Total	R91	R84	
fish oil	1 litre	R 13	1 litre	R12.00	Monthly	2 litres	R 26	R 19.90	
	500 ml	R 8	2 litre	R 19.90			R32		
Rice	500g	R 6	1kg/500g	R7.50/ R4.90		5kg	R60	R 35.90	
	small packets (100g/300g)	R2/R5	2kg	R15.50			R100.00 (100g packets)		
Flour	500g	R6. 50	1kg/500g	R10.50 /R5.50		2.5kg	R 32.50	R 26.50	
Sugar	2.5kg	R 19	2.5kg	R15.99		2.5kg	R 19	R 15.99	
	1kg	R 10	1kg	R9. 50			R 25.00	R23.50	
	500g	R 5	500g	R4.50			R25.00	R22.50	
	250g	R3. 50	250g	R2.99					
	Small packets (100g/200g)	R1/R2	-	-			R25.00 (100g packets)		
Tea	25 teabags	R 6	25 teabags	R3.99		100 teabags	R24	R16	
	Each	50c	-	-					
Coffee	100g frisco	R 9	100g frisco	R7.50		500g frisco	R45	R37.50	
	small packets (20g/50g)	R2/R5	-	-					
Eggs	Dozen	R 6.50	Dozen	R5.50		8 dozen	R52	R44	
	Each	R 1	-	-					
Baked Beans	1 tin	R 7	1 tin	R4.99		8 tins	R56	R35	
						Total	R314.50	R230.80	

¹ As reported in interviews with Participants

4.2.3 Formal Retail Outlets:

Gatesville Shopping Centre was a popular choice of shopping centre, with many of the participants listing it as their primary shopping venue. It is 3 km from the study area, which is a R10 round trip taxi fare, and has a mix of both formal and informal with supermarkets and smaller food retailers selling a diversity of foods. This shopping centre made up of a collection of buildings situated in a semi-circle. Within this shopping centre there are two formal food retail outlets, Shoprite Checkers and Elite, as well as other more speciality stores, the major ones being 'Osmans' a large shop which sells wholesale spices and baking goods and a Halaal butchery. USave is a low cost brand of Shoprite and is situated a little further down the road from Gatesville Shopping Centre. Both USave and Elite are supermarkets which are geared towards more low-income shoppers. Shoppers visiting the Gatesville Centre can easily walk to this store and it thus forms part of the Gatesville food outlet cluster. There are also a number of stores selling clothing or household goods. These buildings are lined with small informal stalls situated on the pavements selling clothing or jewellery. Within this shopping centre there are large informal fruit and vegetable stalls, which operate from permanent structures, some even directly outside the entrance to the Supermarket, as seen in Figure 4.3. There is also a collection of informal stores in one corner of the centre called 'Housewife's Paradise' which sold a variety of different food and drink and general household items, as shown in the Figure 4.4 below.



Figure 4.3: A fruit and vegetable informal trader situated directly outside the entrance to a Supermarket (Shoprite)



Figure 4.4: Housewife's Paradise

Vangate Mall is also in close proximity to the study area but is a more up-market establishment. It only contains large formal food outlets, namely Pick and Pay and Checkers. These stores are more expensive than Shoprite Checkers, the supermarket found in the Gatesville Centre. Only five of the participants mentioned shopping at this centre and these were only those who belonged to the upper quartile in terms of food budgets.

4.2.4 Informal Retail Outlets: Diverse means of food retail

Devey et al. (2005) have found that informal retailers can have very different economic capacity and potential to each other; some are purely survivalist enterprises and some are more successful and thus more growth-orientated enterprises. Growth-orientated informal business owners are typically entrepreneurs by choice and have a willingness to take risks due to the spirit of entrepreneurship (Devey et al., 2005). These businesses are generally locked into wider value chains and possibly linked to the external market. However, they still lack business licences, formal premises and have a limited capital base, as well as having relatively low levels of productivity as they are more labour intensive (Rogerson, 1996). Nonetheless, these businesses still have the potential to develop into larger and more formal enterprises. On the other hand, survivalist enterprises are poverty driven and their objectives are maximising security and avoiding risk (Devey et al., 2005). They have low productivity due to the negligible capital investment and the low education of business owners. Business owners are pre-occupied with securing their income and are unwilling to take risks in business due to a fear of dropping below the poverty line. Rogerson (1996) found that the income generated by informal traders often fell short of even the minimum standard of income. These

retailers are locally bound due to financial and human capital limitations and are thus isolated from wider markets and growth opportunities.

These two categories will be used to better describe the nature of the informal food economy researched. When interview data relating to the business practices of the various informal retailers, together with information on stock and prices were assessed using the above definitions, both survivalist and growth-orientated businesses were operating within the local informal economy. It was found that those traders who are situated within the Gatesville Centre were more growth-orientated. Retailers situated within the study area were more survivalist, with the exception of foreign-owned tuck shops which tended towards a more growth orientated business model. The variations in business models evident in the informal economy impact upon the manner in which food is sold and thus, are important in assessing the accessibility of food through the food economy. Hence, it is important that the informal food sector is not regarded as one homogenous body of retailers, but recognised as containing a mix of business practices.

4.2.4.1 Gatesville Fresh Produce Stall

McGaffin (2010) has noted the trend, whereby informal traders locate closer to supermarkets in order to maximize on the thoroughfare of people and thus access a larger market. In the case of Gatesville Shopping Centre, the formal and informal food economies are spatially integrated and consumers can move easily between the two. This has allowed the this shopping centre to become a one stop shop where foods can be bought in bulk for cheaper prices from the supermarket and consumers can also take advantage of the fresh produce provided by informal traders, thus making it a favourite with food managers within the study area. D'Haese and Huylenbroeck (2005) found a similar trend occurring with the expansion of supermarkets into a rural area in South Africa. Thus, it appears that the functions fulfilled by formal and informal food retailers are different enough to allow for co-existence within the same shopping centre. The Gatesville supermarket, Shoprite, also presumably benefits from this centre being an established hub of retail due to the integration of formal and informal economies.

The increased foot traffic which the fresh produce stalls located within Gatesville Shopping Centre have access to allows them to sell a greater variety of fresh produce, as compared with the smaller fresh produce stalls situated within the study area. The Gatesville stalls sell R5 packets of eighteen different types of fruit and vegetables with the option to buy in bigger quantities and different quality grades. The two stalls situated within the study area only had on average ten different types of fruit and vegetables on sale. This greater variety, both in the types of fresh produce sold and in

the grades and quantities, in which it is sold, can be attributed to the fact that the customer base of this stall is larger than any of the informal retailers situated within the study area.

There are a number of opportunities, in addition to the increased foot-traffic, which these informal food enterprises can enjoy as a direct result of the integration of formal and informal food economies. The stall sources its stock from the Cape Town Fresh Produce Market, which is situated about 10 km away and the Gatesville fruit and vegetable retailers visit this market daily at 4am. These retailers mainly sell 10kg and 7kg pockets of potatoes and onions and have their own trucks which they use to deliver this fresh produce to both the stall in Gatesville Shopping Centre. Hence, this “growth orientated” informal business has invested in capital, in the form of delivery trucks, to bridge the gap between the formal and informal fresh produce economies, enabling fresh produce to flow between the two. The Gatesville stall then sells fresh produce to local, “survivalist” tuck shop owners, who go on to break bulk and sell smaller amounts of fresh produce in the local community. One Stall Holder explained that, *“we cater for the people who also got small business, because they can’t go the market, they haven’t maybe got enough money to go and buy bulk, so now we cater for them”* (Stall Holder, 12/08/10). These tuck shop owners buy potatoes and onions in pockets and sell R5 packets of each to customers. Therefore, although this stall is not accessible to a large segment of the market, due to the low-income and immobile nature of many households within the local community which prevents them from buying from this stall directly, by supplying to tuck shop owners they are able to indirectly sell goods to a much wider consumer market. Thus, these fruit and vegetable stalls fill an important role in the distribution of fresh produce within the local food economy.

It was found that certain fresh produce items sold at these stalls are cheaper than those available in the supermarkets, as illustrated by Table 4.2 below. These findings are similar to those of Roos (2012). Their profit margins remain largely constant at R5 per pocket of potatoes, but this margin is adjusted according to the quality of the potatoes. One stall holder stated that, *“If the potatoes is not a good one, then we sommer [only] make a R3 hey”* (Stall Holder, 12/08/10). The reasoning behind these narrow profit margins is that the bigger bulk that these retailers buy their goods from the Cape Town Fresh Produce Market the cheaper it is to source these goods, as shown in the following quote, *“you have to buy 600 [pockets of potatoes] to get a good price”* (Stall Holder, 12/08/10). Hence this Stall Holder would prefer to buy large amounts of stock and sell it at low prices, making a smaller profit on each item but a larger profit overall. The Stall Holder estimated that they sell around 5000 pockets on a Saturday. Furthermore, this stall sells a variety of different types and grades of fresh produce at a variety of prices, and thus has a much larger range than what is available in the formal supermarkets, as illustrated by Table 4.2 below, with regards to potatoes, onions and tomatoes.

Table 4.2: Quantity and Prices of Fresh Produce

Fresh Produce	Tuck Shops		Gatesville Stalls		Supermarkets	
	Quantity	Price	Quantity	Price	Quantity	Price
Potatoes	Packets of 3/4 potatoes	R5	10kg (lowest grade)	R25.99	10kg	R48.00
	Each	R2	10kg (mid-grade)	R39.99		
			10kg (highest grade)	R44.99		
Onions	Packets of 3/4 onions	R5	10kg	R29.99	10kg	R35.00
	Each	R2	7kg	R23.00		
Tomatoes	None		1 x Box of 80-100 (lower-grade)	R35.00	Packet of 10 tomatoes (higher-grade)	R6.00

It is evident that this retailer has succeeded in establishing a niche within the fresh produce supply chain and thus has great potential for profit and growth. Hence, this business is afforded the opportunity to operate in a “growth orientated” manner. There are a number of characteristics of this stall which are a result of its informality, which make it an efficient retailer of fresh produce. The benefit of this retailer on the food access of its consumer base will be discussed in further detail in Chapter 5.

4.2.4.2 Survivalist Enterprises

Informal food traders within the study area, both tuck shops and fruit and vegetable retailers, however, do not have the critical mass of people to allow them to take advantage of these economies of scale. They do not have the means to buy in bulk at cheaper prices from the Cape Town Fresh Produce Market or local wholesalers, nor do they have the means of transporting such large quantities of goods. Thus their potential for growth and profit is very low and these businesses

largely operate with the sole purpose of ensuring a family's survival, as is generally the case with survivalist businesses (Devey et al., 2005). As shown in Table 4.1, tuck shops charge higher prices for their goods than the supermarkets. However, all of the tuck shop owners interviewed reported that the profit margins of their businesses were very low, as illustrated by the quote below.

Tuck Shop Owner: "This business you can say it's not like you can put the money in the bank, no there's no such thing" (Venster Street Tuck Shop; 08/08/10).

Thus, it appears that the only function which these businesses are able to fulfil is to ensure that the current financial needs of the household are met. Ligthelm (2003) found that as limited alternative career options exist for tuck shop owners, they start up and remain in the market despite limited opportunity for profit. The 1995 South African White Paper on SMME's defines a survivalist enterprise as an activity performed by people unable to find a job (Devey et al., 2005). This was true of tuck shop owners in the study area who were generally pensioners or families whose only other form of income was social grants. Starting up a tuck shop was viewed as a means of dealing with employment shocks, due to the relatively low start-up capital required, as illustrated by the quote below from a Tuck Shop Owner in Grootkop Street,

"Actually I'm unemployed, I was working. I was casualing actually, but the lady I was working for nine years, for that nine years she gave me R2000. So what I'm doing with the R2000 I just start, I open up a Spaza Shop. Ja I start with chips and after chips I start buying the sugar, bread, so it grows, it grows" (Grootkop Street Tuck Shop Owner, 14/08/10).

These tuck shops or spaza shops as they are commonly known in other parts of South Africa are an iconic feature of low-income urban areas within all South African cities. The word 'Spaza' means 'hidden' in Zulu (D'Haese and Huylenbroeck, 2005), which speaks to the embedded nature of this type of food retailer, operating from residents front rooms or garages or informal structures along the street. These "survivalist" informal food retailers enjoy advantages such as lower production costs as they have no rent or labour costs, as well as the convenience of their location within a community of people who are experiencing mobility constraints (Ligthelm, 2004). Thus, there are very low barriers to entry when opening a tuck shop. Furthermore, as these retailers operate from home, they are able to stay open daily from 6am to 10pm, which is convenient for the employed people within this community who have to spend long hours travelling to and from work and thus get home late at night.

4.2.4.2.1 Product Profile:

The tuck shop in Figure 4.5 below operates from the front room of a house and depicts a typical mix of products, typical of both the tuck shops in this study area and those recorded in other studies. The products which were commonly available within all tuck shops was junk food, such as carbonated drinks, sweets and chocolates, and basic staples and processed food items, such as rice, sugar, tinned food, coffee and tea. Less commonly found food items found in tuck shops included potatoes and onions and processed meats. This is a similar product mix to that found by Roos (2012) and Ligthelm (2005) in their respective studies on tuck shops. The congruency in the types of foods sold by tuck shops seems to be due to a mixture of supply driven and demand driven factors.



Figure 4.5: Tuck Shop

In terms of supply side restrictions, all of the informal traders in the study area source their goods from the same wholesalers or supermarkets as they lack the resources to source goods from further afield. This restricts the ability of these retailers to differentiate their product base. Furthermore, Roos (2012) found that tuck shops prefer not to sell a large variety of fruit and vegetables and meat due to the problems associated with spoilage due to storage and transport constraints. Within Cape Town there are specific regulations which relate to the sale of perishable goods, a trader only has to apply for a business licence if they are trading in perishable goods (Provincial Gazette, 2009). Thus, these retailers may prefer to deal almost solely in sugared, salty, canned and packaged foods with a long shelf life to avoid the difficulties associated with the retail of perishable goods. This factor can help to explain why only limited fresh produce was sold by tuck shops and a variety of fresh produce

was sold in the local community through mobile traders. There was mention of fresh produce being sold door-to-door and on the back of bakkies (small trucks) which drove up and down the streets. A mobile form of retail would ensure that the retailer reaches a much higher number of customers, thus reducing the risk of having left over stock which will go bad. The flexibility inherent in this type of retailing suits the nature of this food group, as fresh produce has the shortest shelf life and thus a more active and opportunistic means of selling it is more effective. Thus selling fresh produce door-to-door is more efficient than selling it from a fixed retail location, such as a tuck shop.

Meat was not found to be sold within the informal food economy, apart from the processed meats sold by tuck shops. Roos (2012) found that the tuck shops within the Breede River Region did sell a greater variety of meat but that it was much more expensive than that available in formal butcheries, which suggests that tuck shops are not able to sell this type of food as cost-effectively as they are able to sell dry and processed foods. Thus, it is possible that the presence of formal butcheries within close proximity to the study area has discouraged informal retailers from selling meat as they are unable to compete with these formal retailers.

On the demand side, the nature and size of the customer base of these tuck shops could restrict the ability of tuck shops to sell foods outside of the more basic food requirements. Given that there are 39 tuck shops quite evenly spread throughout the study area, as shown in Figure 4.2, and are locally bound, it can be estimated from Figure 4.2 that the average catchment for each informal trader is roughly between 20 and 50 houses. Thus, the customer base of these retailers is very small and thus, perhaps only those foods which make up the basic food requirements of a household are feasible for retailers with such a small market share. Hence, there is little incentive for tuck shop owners to stock their shelves with speciality or luxury items, as the low-income nature and limited size of their customer base does not provide the scope for the provision of foods beyond the basics.

Although limited in terms of the variety of goods sold, tuck shops offer variety in the quantities in which they sell goods. All tuck shops offered a 'bulk break' service, whereby they would decant goods into smaller units to allow low-income consumers to afford them. The major goods which were sold in this manner were sugar and coffee, which were sold in sealed R1 or R2 packets, single tea bags were sold and fish oil was sold in half and quarter litres, as indicated in Table 4.1. Potatoes and onions were sold in R5 packets by a number of tuck shops, as well as the fruit and vegetable stalls, which also offered single pieces of fruit. When asked what food items they gain the most profit from, all of the tuck shop owners listed either junk food, R1/R2 packets of sugar/coffee/rice and bread.

4.2.4.2.2 A Saturated Market

According to Turok and Richardson (1991), the large number tuck shops within the study area and the fact that these tuck shops offer a similar range of goods at similar prices would lead to the development of a saturated market. Market saturation refers to the point at which a market is no longer generating new demand for a business's product, in this case the foods sold by tuck shops, due to intense competition and lack of growth in the demand market (Turok and Richardson, 1991). Ligthelm (2003) found that it is the low entry barriers evident in the informal economy contribute to the development of this saturated market. The presence of so many tuck shops situated within close proximity of one another, buying their stock from the same wholesaler and selling an almost identical profile of goods, makes it impossible to gain high profits on any item. This is expressed by the owner of a Tuck Shop in Grootkop Street, *"Ok you make a profit on certain items but just around the corner is about three or four spaza shop"* (Grootkop Street Tuck Shop Owner, 14/08/10). A tuck shop owner in Hex Crescent stated, *"We don't make a lot of money on any item because our profit margin is like 50c/20c up to a rand per item"* (Hex Crescent Tuck Shop Owner; 12/08/10). Thus, the high levels of competition within the tuck shop sector ensure that profit margins are kept very low.

It is expected that the intense competition evident in the local food economy would result in increased pressure to create niche for one's business through differentiating the product base. However, as mentioned previously, it was found that there was very little variation among the tuck shops in terms of the types of products which they sold. Rogerson (2000) describes this trend as being the result of growth through involution rather than evolution, whereby the tuck shop industry grows because of increasing entrants who replicate the businesses they see around them. Growth through evolution would involve the intensification or upgrading of capital, skill or technology (Rogerson, 2000), which is generally not an option for the majority of tuck shop owners.

Similarly, it is expected that tuck shops would try to decrease their prices in order to undercut their competitors, however, as mentioned, there was a complete lack of price competition evident among the local tuck shops, with each boasting very similarly priced foods (a part from foreign owned tuck shops which will be discussed later in this Chapter). Neves and du Toit (2012) describe a social opprobrium against price competition which exists within the local tuck shop sector, thus discouraging tuck shop owners from lowering their prices in order to gain greater market share. Due to the survivalist nature of these businesses, any attempts to undermine the abilities of other tuck shop owners to make a living is viewed by the surrounding community as being in bad taste (Neves and du Toit, 2012).

Peterson and Charman (2008) have identified a 'covert competitiveness', whereby tuck shops compete surreptitiously through non-price means. This covert competitiveness is apparent within the Manenberg informal food economy to a limited extent, with some tuck shops attempting to make their businesses distinct through non-price means through diversifying the types of foods sold and the type of services offered. Figure 4.6 below shows how some tuck shop owners have differentiated their product base slightly and sell foods beyond the normal tuck shop product profile evident in the study area. Seven of the thirty nine tuck shops sold R5 packets of potatoes and/or onions. These products have a comparatively long shelf life compared with other fresh produce which lends them to being sold in tuck shops. None were found to sell fresh meat but four did sell processed meats which were usually in the form of polony. Others diversified themselves by offering additional services; Figure 4.6 shows that four of the tuck shops offered additional entertainment facilities, such as a pool table or games, an example of which is shown in Figure 4.7 below. None of the tuck shops sold fast food on a daily basis but two of the ten tuck shop owners interviewed reported selling fast food on weekends. The tuck shop operating in Grootkop Road sold chicken and chips and boerewors and chips on the weekends and the tuck shop in Hex Crescent makes up Gatsbys, a local food consisting of a long bread roll filled with fries and often fried polony, and sells them on Friday evenings.

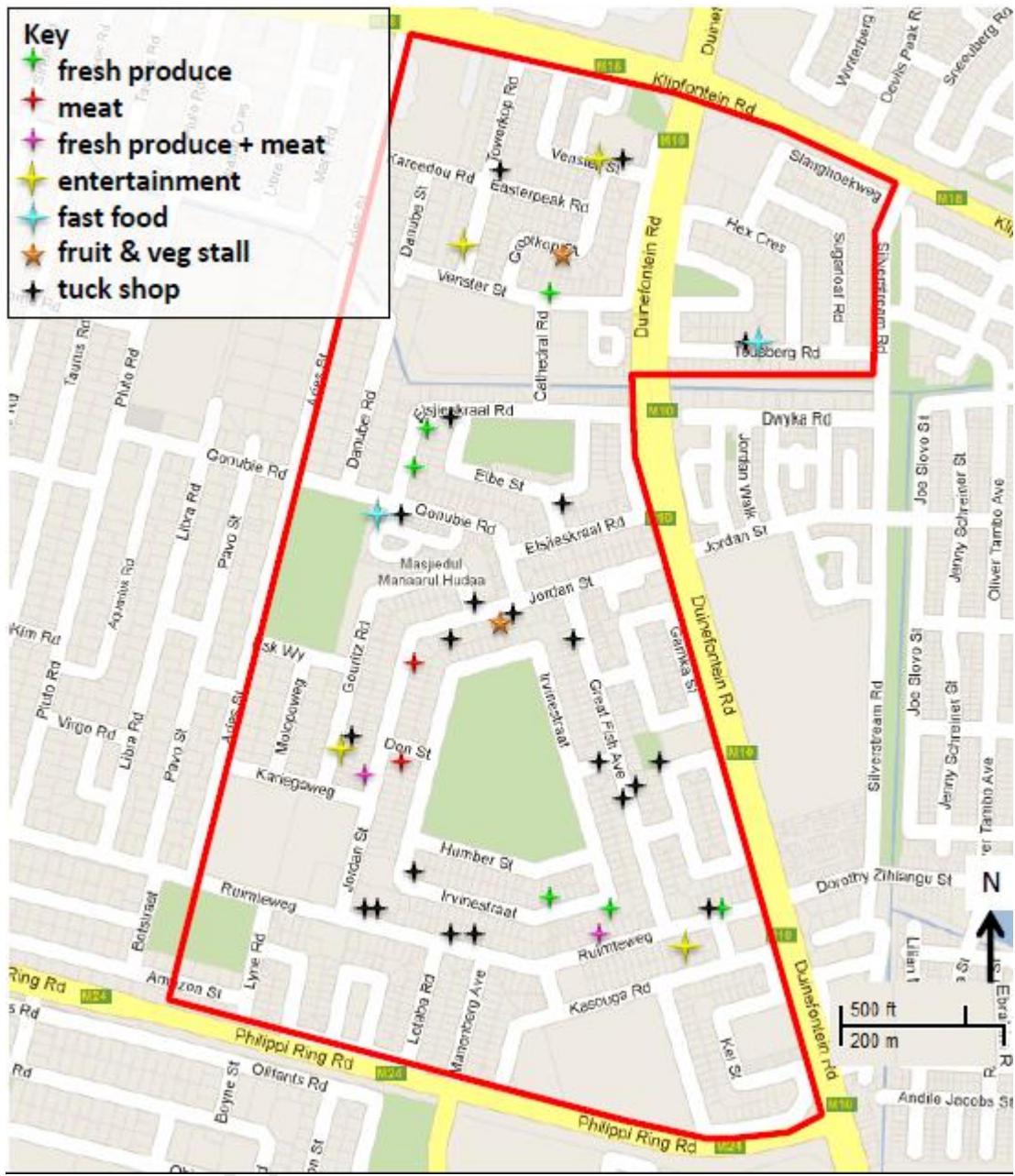


Figure 4.6: Map of Distinctiveness amongst informal traders



Figure 4.7: Tuck Shop entertainment facilities

Despite these small differentiations, these tuck shops are still largely similar in terms of the types and prices of their products, and are thus, restricted to operating within a saturated market and enduring the associated low profit margins. However, this survivalist business model is not common to all tuck shops present within the local food economy. As previously mentioned, foreign (Somali) tuck shop owners operate their businesses with the aim of pursuing larger profits and therefore, operate in a more growth orientated manner than their South African counter-parts.

4.2.4.2.3 Somali-owned Tuck Shops:

Eight of the thirty eight tuck shops in this area were owned by Somalis, as shown in Figure 4.8 below. Most of these Somali retailers were unwilling to be interviewed and those who did agree to answer questions did so in broken English. Thus, a comprehensive account of their business practices was difficult to ascertain. However, the information gained from these brief interviews combined with accounts provided by local tuck shop owners and residents of the operations of these retailers, was sufficient to build an understanding of their basic business practices.

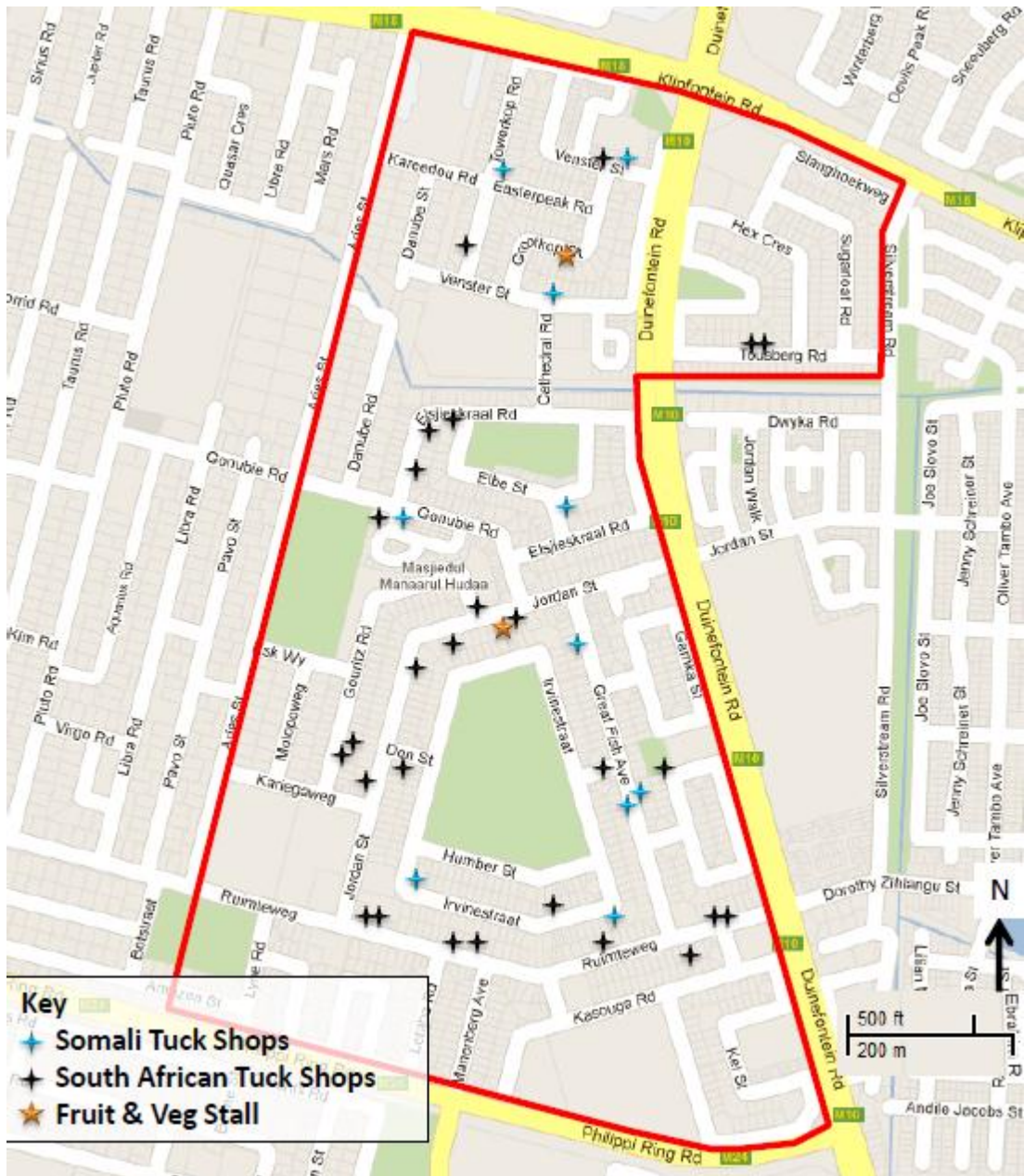


Figure 4.8: Map of Local and Somali owned Tuck Shops

It was found that the Somali tuck shop owners have adopted a different business model, which is not based on involution but was more growth orientated. These Somali tuck shop owners operate as an organised group and pursue profit much more aggressively. They source their goods collectively, which means that they are able to take advantage of economies of scale. A member of this organised group of tuck shop owners owns a bakkie and uses it to source and distribute all of the stock required by all the tuck shops within the group. This method of sourcing stock means that this group of retailers can buy in much larger quantities at reduced prices and are thus, able to sell these

goods for a lower price, undercutting the local tuck shops. This point is described by a tuck shop owner in Venster Street in the following quote,

[Somali tuck shop owners] *“are in syndicates and they buy big that’s why they are cheaper. When she buys two cartons of cigarettes, they buy boxes, and they get discount, if you buy a box you get a discount”* (Venster Street Tuck Shop; 08/08/10).

Although, working as a collective does not enable these tuck shop owners to take advantage of economies of scale on anywhere the same level as supermarkets, the presence of this more organized and co-operative system of procuring goods to sell (traditionally regarded as a more formal sector characteristic), does allow these tuck shops to lower their prices whilst remaining profitable. This is a level of organization not evident in the local tuck shop sector. In addition, some local tuck shop owners reported having some of their high turn-over goods such as, bread and milk, delivered to their stores which presumably would decrease the cost of sourcing these goods themselves on a daily basis, but such strategies were not extended to other goods. Table 4.3 below displays some of the price differences evident between South African and Somali owned tuck shops for the basic foods presented in Table 4.1.

Table 4.3: Price comparisons between local and Somali owned tuck shops

		Local-owned Tuck shops	Somali-owned Tuck Shops
Food Type	Unit Size	Price	Price
Bread	Albany/Blue Ribbon	R 7	R6.50
	Daily Bread	R 5	R4.50
	Half Loaf	R 4	R3
Milk	1 litre	R 6	R5.50

If we once again return to Lewis's (1954) claim that the informal sector would gradually take on the characteristics of the formal sector in order to survive in a more globalised food economy, this trend towards a more formal business model is evident within the Somali tuck shop owners. A source of market failure within the informal sector is the fact that they sell goods at a comparatively high price because this sector is unable to take advantage of economies of scale in the same way as a formal food retailer can (Tustin and Strydom, 2006).

The saturated market in which the tuck shop sector operates means that local tuck shops are very vulnerable to shifts in the consumer base (Ligthelm, 2004). Especially given that these businesses are serving a finite number of households with little opportunity to attract consumers from outside of their immediate area. The ability of each of these tuck shops to survive within a saturated market relies upon their equal share of the market. This has meant that the introduction of increasing numbers of Somali owned tuck shops in the area with their more growth orientated business model has compromised the ability of local owned tuck shops to maintain the market share needed for their businesses to survive. Thus, tensions have developed between local tuck shop owners and Somali tuck shops. A tuck shop owner in Gonubie Road expressed disdain for the Somalis. His tuck shop is situated within an informal structure in front of his house, which is facing onto a T junction. A Somali-run tuck shop has opened up a mere 15m down the road, within a container. He expressed the view that Somali tuck shops are vindictive towards all local-run tuck shops as he claims these men *"sell for the same price they got it for"* with the aim of forcing all local tuck shops to close down. He described how his tuck shop was doing very well in the beginning but then a number of new tuck shops were opened nearby by foreigners.

"They find people who are struggling and rent a portion of land from them right on the side of the road, where they proceed to open their tuck shop. But what people don't realise is how devastating their presence is for the local coloured businesses" (Gonubie Road Tuck Shop Owner, 03/08/10).

Although, on the surface Somali and local tuck shops appear to be similar in size and function, it is clear that there are large differences in the manner in which these businesses are run and their role in the local community.

4.2.5 Conclusion:

It is clear that transitions in the food economy have led to a diverse mix of formal and informal food retailers being present within the local food economy. It was found that Gatesville shopping centre contains a mix of formal and informal food retailers, which sell a wide variety of foods at relatively cheap prices, whereas the informal retail sector within the study area sells a limited variety of foods

are available for comparatively higher prices. However, despite the lower prices and greater diversity of foods offered by the formal supermarkets, informal food retailers are still prevalent within the local food economy, which indicates that households are unable to access all their food from supermarkets and thus, still rely on the local food economy to meet their food requirements. This indicates that the spatial availability of diverse and affordable foods does not translate into actual accessibility in this case.

Given that households are not able to access food from supermarkets due to constraints in their asset bases, which will be discussed in the following section, the presence of the local informal food economy is important in preventing this community from finding itself within a food desert. However, Alwitt and Donley (1997) found that the inability of low income communities to access larger food retailers allows local retailers to charge higher prices for food stuffs. This was found to be true in this case study, with tuck shops selling foods for higher prices per gram than supermarkets. Hence, although this community is not situated within an absolute food desert, it is in a food desert in terms of the variety and affordability of foods spatially available.

It is evident that there is much variation in the business practices of informal food retailers, ranging from the growth orientated fruit and vegetable stalls at Gatesville and Somali-run tuck shops to the survivalist local owned tuck shops within the study area. This thesis engaged with the ways in which food retailers operate in more depth than is generally found in spatial analyses of food access. This analysis revealed how the business models of retailers and the nature of the markets in which they operate influence the types of foods which are sold and prices of these foods and thus, the spatial availability of diverse and affordable foods. However, it is difficult to ascertain the actual accessibility of food through the local food economy in the absence of an understanding of the assets available to the household. The following section will investigate the household characteristics and entitlements which inform food access.

4.3: Household Entitlements and Food Access

4.3.1 Introduction:

The following section will discuss food access on a household scale and assess how the entitlement set of households' impacts upon their food access. The various data pertaining to household assets and characteristics will be analysed in terms of the HFIAS data, in order to ascertain which factors were most influential on the households' ability to access food. This analysis will include the monetary and material asset base of households, as each of these assets inform the access of these households to food. This thesis will expand household-level analysis to include an analysis of the purchasing patterns of households, in terms of the frequency and site of their main food purchasing, in terms of household food security. Purchasing patterns have not been widely included in household-level food access studies. It is intended that this analysis will aid in establishing trends in the ways in which households interact with the spatial food economy and their food security. Although, only 25 households were sampled some clear trends were evident with regards to the various asset bases and characteristics of these households and their associated levels of food access.

4.3.2 Prevalence of Food Insecurity

Food insecurity is defined as when, "people do not have consistent physical, social and economic access to sufficient, safe and nutritious food to meet their dietary requirements and for an active and healthy life" (Maxwell and Frankenberger, 1992:18). The households interviewed were analyzed in terms of the HFIAS and divided into four food security categories in accordance with their weighted responses to nine questions. This method enables the *extent* of food insecurity to be gauged, a tool which is very useful when large proportions of households are classified as food insecure according to the above definition, but experience insecurity to varying degrees. This was the case in the study area with 21 of the 25 households being classified as food insecure. Table 4.4 below illustrates how the household dataset was distributed amongst these four categories.

Table 4.4: Number of Household per HFIAS category

Category	Number of Households	Description (Coates, Swindale and Bilinsky, 2007)
Food Secure	4	“A food secure household experiences none of the food insecurity (access) conditions, or just experiences worry, but rarely.”
Mildly Food Insecure	5	“A mildly food insecure (access) household worries about not having enough food sometimes or often, and/or is unable to eat preferred foods, and/or eats a more monotonous diet than desired and/or some foods considered undesirable, but only rarely”.
Moderately Food Insecure	9	“A moderately food insecure household sacrifices quality more frequently, by eating a monotonous diet or undesirable foods sometimes or often, and/or has started to cut back on quantity by reducing the size of meals or number of meals, rarely or sometimes”.
Severely Food Insecure	7	“A severely food insecure household has graduated to cutting back on meal size or number of meals often, and/or experiences any of the three most severe conditions (running out of food, going to bed hungry, or going a whole day and night without eating), even as infrequently as rarely”.

All of the households whom were categorized as food insecure felt that they were in constant risk of food insecurity and worried daily about whether there would be sufficient food. Although, none of the households reported going an entire day without food or going to bed hungry, sixteen households did report having to skip a meal once or twice a week and a further seven reported running out of food completely at least once in the last month, as reflected Table 4.4. The household survey undertaken by AFSUN’s within the greater Cape Town found that 85% of the households reported having times within the month when they had to skip a meal or only had a limited variety of foods to eat which would place them in the moderately to severely food insecure bracket (Battersby, 2011a). Food insecurity within the study area appeared to be less pronounced

with only two thirds of the food managers falling into these categories. According to the 2001 census data as illustrated in Figure 1.2, the socio-economic status of Manenberg is between the worst off and middle income categories (City of Cape Town, 2001), which may explain why the households interviewed were more food secure than the average for households living in the six low-income neighbourhoods which were captured in the AFSUN survey.

There are a number of different household characteristics which could be analyzed together with this HFIAS data to indicate which components of the household asset base are most pertinent in determining household food access. Table 4.5 presents the characteristics of the 25 households interviewed which will form the basis of this analysis. The households are organized according to the four HFIAS categories, with the green depicting those who are food secure and the varying shades of red depicting the three levels of food insecurity; mildly, moderately and severely respectively.

There was a range of monthly income evident in the household data set with two households in receipt of more than R10 000 a month and three receiving less than R2000 a month. A household which receives an income of between R4000 and R8000 a month is considered to be lower-middle income in a South African context and a household income of less than R4000 a month is considered low income, according to the Bureau of Market Research (2010). Sixteen of the twenty five households fall within the low-income bracket with earnings of between R1000 and R4000 a month, the majority of the remaining households are lower-middle income and two would be classified as middle income with earnings of more than R8000. The sources of household income were also investigated, as the reliability of income flows affect household food access. Thus, the type of employment and extent of grant receipt are also included in the following analysis.

The food budget refers to the amount of money which is available for food purchases over a defined amount of time and reflects how much of the income is made available for food purchases (Frankenberger, 1992). Food managers were asked how much money was generally made available for food purchases on a daily, weekly or monthly basis, depending on how frequently the purchased food. These figures were then averaged out into weekly food budgets. Household food budgets are strongly influenced by household income, however these two factors cannot be assumed to be directly related. A household with a higher income cannot be assumed to have more money available for food purchases, due to the many other demands on the household income base. There was a range of food budgets evident within the data set, with one household surviving on less than R200 a week to buy food and others living comfortably on more than R700 a week. Per capita food budgets ranged from R30 to R175 per person per week which translates to R120 to R700 per person per month. According to the National Agricultural Marketing Council (NAMC) (2011) food basket,

which refers to the cost of those food items which the average South African adult purchases every month, it is estimated that an adult requires R353 a month to purchase this basket of food at national average food prices.

Household sizes ranged from 3 to 11. Half the households interviewed had four to five members. The majority of households included three different generations and the larger households contained a high proportion of children. As mentioned in the methodology, a household was taken to be the collection of people who ate from the same pot on a regular basis (UNDP, 2004), and thus were catered for in the household food budget. Household size and structure is important in understanding the way in which households organize themselves around food and the flexibility inherent in these arrangements.

The purchasing patterns of households were also included in the analysis, and these included the location where the bulk of each household's food purchases took place and the frequency with which the household visited these locations. The mobility of the households was assessed according to what mode of transport each household utilized when visiting the location of their main shop. The majority of households used a minibus taxi, with only six having access to a car and seven walking to and from food retailers.

Table 4.5: Household Food Insecurity and Household Characteristics and Entitlements



Interview Number	Monthly Household Income	Size	Weekly Food budget (R)	Weekly Per capita Food Budget (R)	Employment	Grants	Location of Main Shop	Frequency of Main Shop	Mobility
6	R 5,880	4	600-700	175	1 Full Time	1 x child grant; 1 x pensioner	Mixed Supermarkets	Monthly	Taxi(House Call)
9	R 6,740	4	600-700	175	2 Full Time	1 x pensioner	Mixed Supermarkets	Monthly	Car
20	R 5,600	4	200-300	175	1 Full Time	2 x pension	Gatesville Shoprite	Monthly	Car
22	R 12,800	8	600-700	88	4 Full Time	-	Mixed Supermarkets	Weekly	Car
3	R 2,600	4	300-400	100	1 Full Time	0	Gatesville Shoprite	Weekly	Taxi
4	R 3,080	5	600-700	140	1 Casual	1 x child grant; 1 x pensioner	Gatesville Shoprite	Weekly	Car
13	R 6,480	6	600-700	117	1 x Full Time, 1 x Casual	2 x pension	Gatesville Shoprite	Weekly	Car
15	R 3,800	4	500-600	150	1 Full Time	-	Mixed Supermarkets	Weekly	Taxi(House Call)
16	R 2,800	5	200-300	60	1 Casual	-	Gatesville Shoprite and Tuck Shop	Weekly	Taxi
1	R 10,500	10	200-300	30	3 Full Time	2 x pension	Gatesville Shoprite	Weekly	Taxi
2	R 2,220	5	500-600	120	0	1 x pension; 2 x child grant	Elite and Tuck Shop	Weekly and Sub-weekly	Taxi
5	R 3,140	5	200-300	60	1 Temporary	1 x pension	Tuck Shop	Everyday	Walk

Interview Number	Monthly Household Income	Size	Weekly Food budget (R)	Weekly Per capita Food Budget (R)	Employment	Grants	Location of Main Shop	Frequency of Main Shop	Mobility
7	R 3,480	7	200-300	43	0	2 x pension	Gatesville Shoprite and Tuck Shop	Monthly and Sub-weekly	Taxi
11	R 3,940	5	200-300	60	1 Full Time	1 x pension	Gatesville Shoprite	Weekly	Taxi
12	R 3,340	4	300-400	100	1 Full Time	1 x child grant	Gatesville Shoprite and Tuck Shop	Monthly	Car
14	R 1,300	8	300-400	50	0	1 x child grant; 1 x disability	Usave/Tuck Shop	Weekly and Sub-weekly	Taxi
18	R 1,680	4	200-300	75	0	1 x pension; 1 x child grant	Elite/ Tuck Shop	Monthly and Sub-weekly	Taxi
25	R 4,210	11	400-500	45	1 Casual	1 x pension; 1 x disability	Elite/ Tuck Shop	Weekly and Sub-weekly	Taxi
8	R 4,750	4	200-300	75	1 Full Time	1 x pension; 1 x child grant	Gatesville Shoprite and Tuck Shop	Weekly and Sub-weekly	Taxi
10	R 2,540	5	200-300	60	1 Temporary	1 x pensioner	Tuck Shop	Everyday	Walk
17	R 1,870	3	200-300	100	1 Casual	1 x child grant	Tuck Shop	Everyday	Walk
19	R 2,270	7	200-300	43	1 Full Time	1 x child grant	Usave/Tuck Shop	Weekly and Sub-weekly	Walk
21	R 3,940	6	200-300	50	1 Full Time	1 x pension	Tuck Shop	Everyday	Walk
23	R 5,080	9	600-700	78	1 Full Time	2 x pension	Usave/Tuck Shop	Weekly and Sub-weekly	Walk
24	R 3,090	5	200-300	60	0	2 x pension; 1 x child grant	Tuck Shop	Everyday	Walk

4.3.3 Household Monetary Asset Base:

It is evident from Table 4.5 above that a high gross income is not the sole contributing factor in determining household food security, as there is no clear correlation between household income and HFIAS ranking. A higher income will certainly improve the likelihood of a household having better access to food within an urban setting, but as stated earlier, these two elements cannot be assumed to be directly correlated. Crush and Frayne (2010b) found that although food is the most basic of needs, after the more fixed demands on income, such as rent and electricity, the more flexible food budget is left to bear the brunt of deficiencies and shocks within the household cash income. Thus, a household which is committed to greater fixed demands may not be able to direct as much income as they would like into the food budget. Hence, households who may be lower down on the income scale may feature higher on the HFIAS as they have more freedom to spend income on food. Therefore, it was found that the food budget serves as a better indicator of the level of household food access than the gross income. Figure 4.9 below illustrates how households of various HFIAS levels were divided according to food budgets.

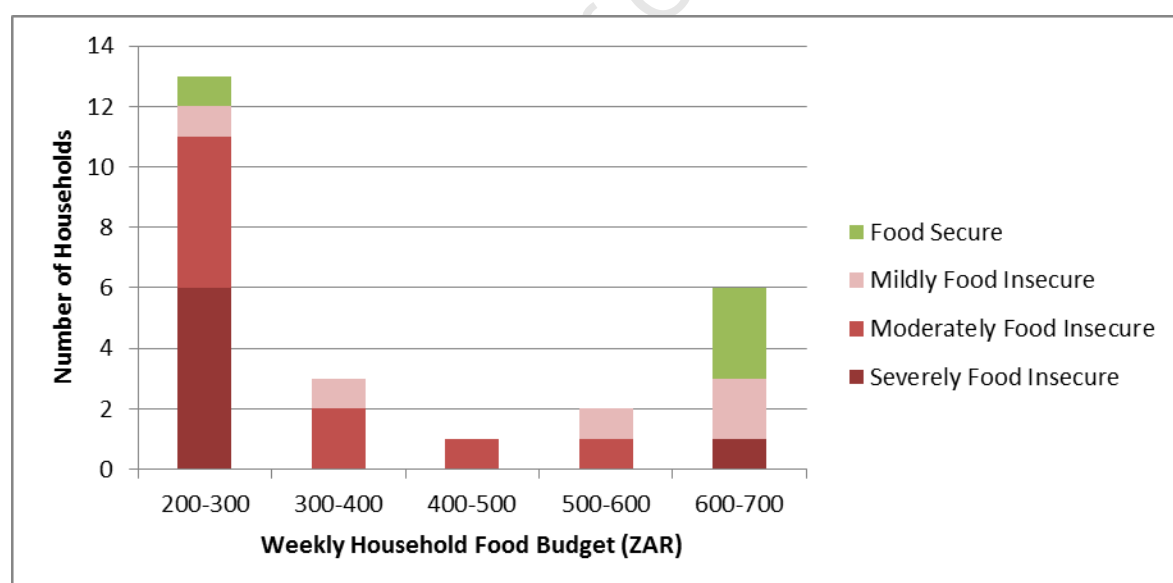


Figure 4.9: HFIAS and Weekly Household Food Budgets

There is a slight correlation evident between the size of the food budget and the level of household food security. Almost all of the households, who fell within the lowest food budget bracket of R200-R300, were severely or moderately food insecure and almost all those households whose food budgets fell in the R600 – R700 category fell in the top two HFIAS categories. Household 23 is anomalous in that it has a food budget of R600 – R700 but is severely food insecure. This could be

due to fact that this household has nine members, which may render this relatively high budget insufficient. Thus, this household is an example of how the *sufficiency* of household food budgets is affected by the size of the household.

The per capita weekly household food budgets are presented in Figure 4.10 below, as they relate to the HFIAS. Again, only a slight correlation is evident with all of the households with above R150 per capita food budget being food secure and those with below R50 being moderately or severely food insecure.

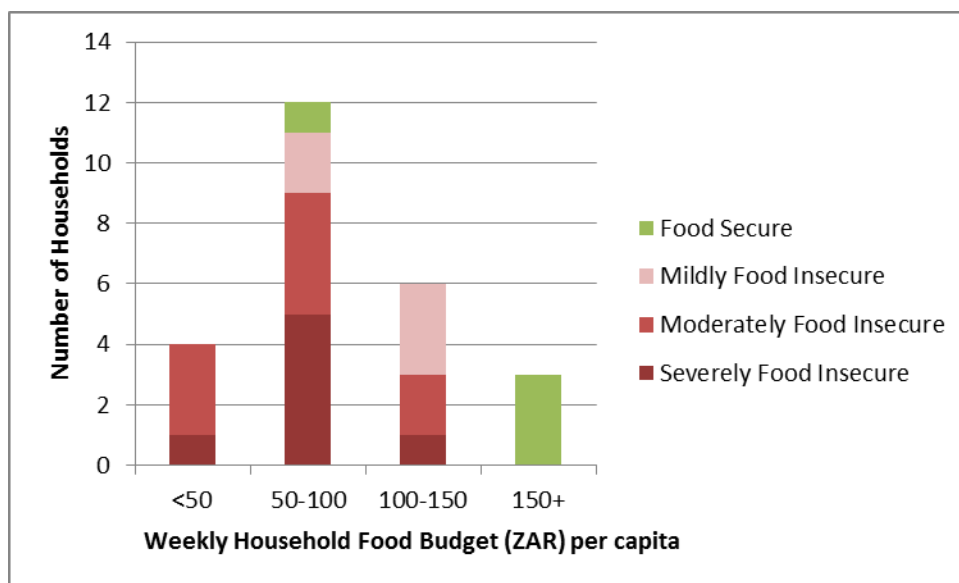


Figure 4.10: HFIAS and Weekly Household Food Budget per capita

4.3.4 Purchasing Patterns and Household Entitlements

There are considerable differences in the quantity and diversity of food which can be purchased with the same food budget depending on which retail outlets households procure food from. For example, given the same monthly food budget, households which are able to procure most of their food requirements from supermarkets can take advantage of lower prices to buy larger quantities and a greater variety of food than a household which is restricted to shopping locally. Thus, purchasing patterns have the potential to be a very useful indicator of household food access, as they have the ability to reflect the actual access of the household to food. Crush and Frayne (2010a) found that household purchasing patterns provided the strongest correlation with the HFIAS levels within the AFSUN survey.

This leads onto the final indicators to be discussed in conjunction with the HFIAS data, which are frequency and site of household food purchases. The following graph (Figure 4.11) presents the various retail sites where households purchased the bulk of their food according to the HFIAS categories. It is evident that these indicators are more closely correlated to the HFIAS levels than household income, food budget or size.

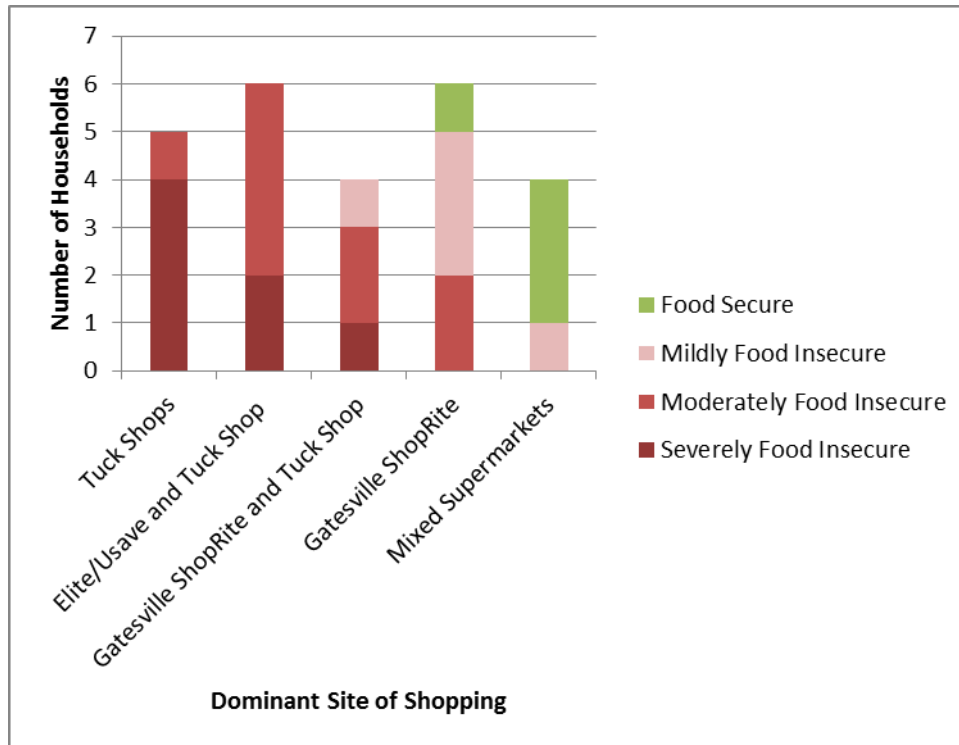


Figure 4.11: HFIAS and the dominant site of shopping

Figure 4.11 shows a definite correlation between the dominant site of shopping for a household and its level of food security. Those shopping solely or partly at local tuck shops are the more food insecure and those shopping mainly at supermarkets are the more food secure households. The mixed supermarkets category refers to those households who shop at a number of different supermarkets in order to take advantage of specials on offer. Six households shopped solely at the Shoprite in the Gatesville shopping centre and a further four bought the bulk of their food purchases between this shopping centre and local tuck shops. Elite and USave are cheaper supermarkets situated near the Gatesville centre and are utilized by households in the lower two HFIAS levels, in conjunction with tuck shops, to procure their household food requirements.

A trend is evident between the frequency with which households purchase food and the site of shopping, as illustrated by Figure 4.12 below.

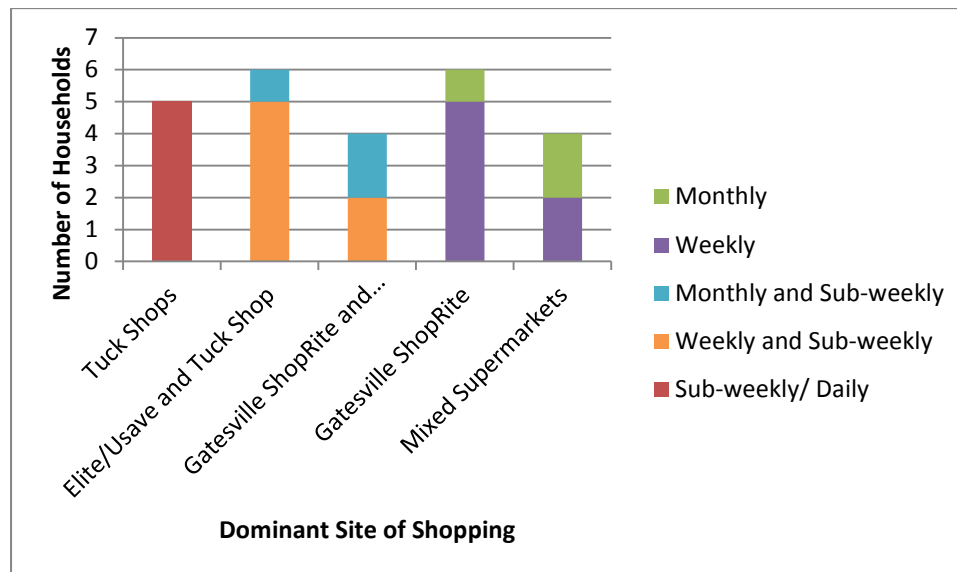


Figure 4.12: Dominant Site of Shopping and Frequency of Shopping

The five households who reported shopping for the bulk of their food requirements on a sub-weekly or daily basis listed local tuck shops as the site for the bulk of food purchases. The AFSUN survey yielded similar results, whereby “the heavy use of ad hoc sources of food on a regular, almost daily, basis is consistent with the behaviour of people with limited food income” (Frayne et al., 2010). Those shopping on a monthly and weekly basis shop at formal supermarkets, with those shopping at mixed supermarkets shopping more on a monthly basis than those shopping at the Gatesville Shopping Centre.

Although household size and the household food budget are both important determinants of household food security, it is evident that they do not appear to correlate directly to household food security. This could be because the effect of these factors on household food security is not strictly direct, but rather their influence is mediated through the household’s purchasing patterns.

For example, although household size influences the sufficiency of the food budget to meet the food requirements of the household, the food security of the household is not a direct result of its per capita food budget. This measure does not engage with how the food budget is utilized to purchase food. It is cost effective for a household of any size to buy their foodstuffs in bulk due to the economies of scale accessible through the supermarket sector. However, if one shops at a supermarket, one is required to buy at a larger unit size, as well as pay for travel costs. Therefore, shopping at a supermarket requires a certain gross food budget to ensure its feasibility. Thus, the

costs associated with shopping at supermarkets render analysis based on per capita food budgets as less effective in analysing food access than the size of gross food budgets. The reliability of the gross food budget is also important in determining purchasing patterns.

Thus, the household monetary asset base should perhaps be analysed in terms of its impact on the purchasing patterns in order to truly discern their impact on food access. The lack of correlation between the household gross and per capita food budgets, as well as household income, illustrates the dangers of relying on individual or collections of household characteristics or entitlements as proxy indicators for household food access, which has been the case of many household level studies on food access, as discussed in Section 2.3 of Chapter 2.

4.3.4.1 Income flows and Purchasing Patterns

When the household food budget is considered in relation to purchasing patterns some additional factors become important. West and Price (1979) found that the size of the household food budget alone does not determine food purchasing patterns, but rather a combination of both size and reliability. There are considerable differences in the purchasing patterns of households within the same food budget category and this could be attributed in part to the nature of household income flows. Factors such as how much of the food budget is available to the household at any one time during the month and how reliable is this food budget are important in determining how that household engages in food purchasing. For a low-income household, buying foods in bulk can mean that money is sunk into illiquid assets which they may come to regret when demands surface later on. An irregular household income can cause food managers to prefer to buy smaller quantities of foods from local retailers to ensure that the household does not sink all of its financial assets into food. Thus, the predictability of household income flows was closely related to the frequency with which households purchased food. Thus, those households with more predictable income flows may prefer to buy their food requirements in bulk on a monthly or weekly basis, and those with more unpredictable income flows may prefer to buy food on a sub-weekly or daily basis.

Different means of gaining income and different types of employment will yield different income flows, which will in turn determine the predictability of the household's food budget. The AFSUN survey found that there was a strong correlation between full time employment and food security (Crush and Frayne, 2010b). There was a range of different types of employment evident, from full time work to very casual work, whereby an individual would only work one or two days every two weeks as they were needed. These different types of employment have important implications on the nature of cash flow in the household and by extension the food budget.

Respondent 25 is casually employed at a local fish factory, and is thus not paid a fixed wage but rather is compensated for the hours she spends out at sea catching fish, and thus her income can fluctuate dramatically from week to week. This has obvious implications for the household food budget as she is the only household member who is formally employed. The following quote illustrates some of these concerns,

“Not every week. Some weeks, like this week, I’m going to worry because I don’t enough money to go and buy the food that I used to buy, because we had a lot of shore time. A lot of shore time last week so the wages aren’t that good. So basically for this week I had a lot of problems, like bread money, and you know I’m also smoking, I need cigarettes also” (Interview 25, 07/11/10).

It was found that the three food secure households who were able to buy the bulk of their food from supermarkets on a monthly basis all had one or more fully employed household member. Four of the five households who reported buying food on a daily basis each contained one household member who was engaged in temporary or casual employment. Thus, some trends are evident when analysing the type of employment present in a household and the frequency and site of shopping.

It is important to note that social grants and pensions are also an important source of income in almost all households in this area, with the vast majority of households having at least one pensioner and there was also a strong presence of disability and child grants as seen in Table 4.5. The receipt of social grants means that these households receive a regular monthly income which can be used to buy their basic groceries on a weekly or even monthly basis, thus better utilizing their food budget to obtain the maximum amount of food. Despite having no one in the house who is employed, household 7 is able to visit Gatesville Shopping Centre on a monthly basis to purchase a large proportion of their food requirements. Crush and Frayne (20010a) found that households receiving one or more grants could have a larger and more regular income base on which to draw the household food budget, than households whom rely on wages, especially if these wages are low as is the case in many low-income households on the Cape Flats.

4.3.4.2 Mobility and Purchasing Patterns

The financial asset base of the household in the form of the food budget is not the sole determinant of purchasing patterns and thus food access. Strong linkages are evident between the frequency and site of shopping and the type of mobility which the household has access to. The extent to which households can afford the travel costs involved in shopping at the bigger supermarkets, together with the ease with which a household can transport large quantities of food will determine how willing they are to visit these shopping centres and buy in bulk. As shown in Figure 4.13 below, all of

the five households who own a car or have access to one bought the majority of their food purchases at supermarkets, four of which travelled to multiple shopping centres to purchase their monthly or weekly food requirements. Twelve of the remaining fourteen shoppers who shop at supermarkets utilize minibus taxis. Gatesville Shopping Centre and USave and Elite shopping centres are all between 3 and 4km from the study area respectively and the minibus taxis charge R10 for a round trip to each of these centres. Two shoppers who bought the majority of their food purchases at Gatesville Shopping Centre paid extra in order for a house call, whereby the taxi drops them outside their homes. A further two shoppers reported walking to USave shopping centre on a weekly basis to purchase food, in order to avoid transport costs.

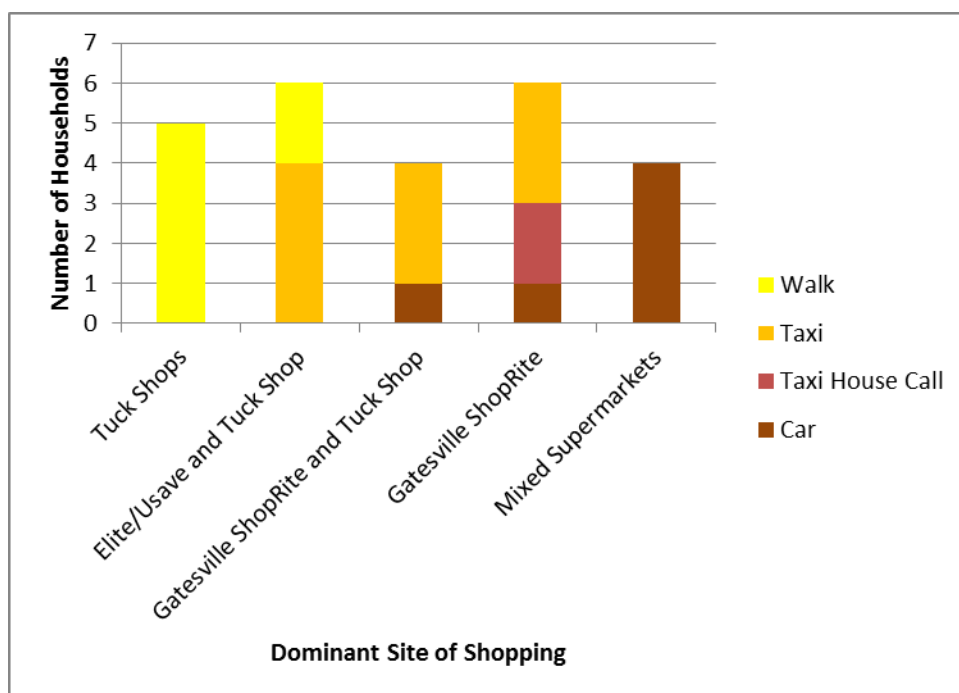


Figure 4.13: Mode of Transport and Dominant Site of Shopping

The frequency with which food managers visit shopping centres was also closely related to the mobility of these food managers. Those food secure households who shop on a monthly basis all have access to a car which enables them to transport large quantities of food home, thus allowing them to buy all of their monthly food requirements in one shop. However, those households who travel by minibus taxi would struggle to transport enough food for a month home and thus would need to visit the supermarkets on a weekly basis if they were to purchase the bulk of the household's food requirements.

It is evident that the analysis of household monetary and material assets in terms of how they influence the frequency and site of shopping enables a fuller understanding of the influence these

entitlements have on household food access. The consideration of household characteristics and assets in terms of purchasing patterns has revealed the importance of the mobility of households, together with the predictability of their income flows, on food access.

4.3.5 Conclusion:

The intention of this analysis of the characteristics and asset bases of the households interviewed was to reveal how the basic socio-economic characteristics of households relate to its level of food access. It can be assumed that the size of the household food budget together with the number of household members is important in terms of the sufficiency of the food budget to provide for its dependents. However, neither of these indicators is strongly correlated with the food access of households. This household level analysis indicates the limitations associated with assessing food access in terms of proxy indicators such as household income and size, as is common in household level analyses of food access.

It was found that purchasing patterns of households, in terms of the site and frequency of food shopping, was the most closely correlated to the HFIAS. When household financial and material asset bases were considered in relation to these purchasing patterns some additional factors became important, which enabled a more comprehensive analysis of the impact of these entitlements on household food access. Thus, an analysis of household entitlements in terms of their influence on how the household interacts with the food economy to purchase food, in terms of the frequency and site of shopping, provides a better understanding of how these entitlements relate to food access.

4.4 Conclusion:

It is evident that there are limitations as to what household level and spatial food economy studies can show regarding food access, when considered in isolation. Neither of the sections within this Chapter presents a comprehensive argument with regards to the factors (spatial or household) which impact food access.

The analysis of the structure of the food economy in Section 4.2 revealed the spatial availability of foods of different varieties, qualities and prices. Discussions around the food economy are useful in understanding how the diverse food retailers within both the formal and informal food economies integrate to form the food economy. However, this information presents a flat, one-dimensional account of food access, as it fails to engage with how the food economy is engaged with by the household to access food. The structure of the food economy, together with the specific characteristics of specific types of retailers, cannot be fully realized in terms of food access in the absence of an understanding of how the household engages with this economy. Informal retailers, and even more so survivalist enterprises, are able to better understand the needs of the poor and have an enhanced ability to respond to their needs and are thus, more easily shaped by the consumer environment in which they are situated (Delormier et al., 2009). Thus, reading the local food economy can provide clues as to how low-income consumers in this area go about purchasing foods – their priorities and rhythms. However, the household assets and characteristics which these retailers are responding to cannot be assumed without conducting a household-level analysis of food access.

The household-level analysis presented in Section 4.3 was useful in establishing the nature of household characteristics and entitlements amongst the study population. These household-level factors could then be assessed in terms of their correlation to household food insecurity. Although, some correlation is evident between household size and food budgets, and HFIAS data, this thesis maintains that these household characteristics do not determine household food access to the extent that they can be used as proxy indicators for household food access. Purchasing patterns were found to provide a much stronger correlation to household food access. This thesis argues that the reason household purchasing patterns provide a good indicator of household food access is because they reflect *both* nature of food economy and household asset base.

It is evident that further analysis is required in order to establish the means through which households' access food through the food economy. Chapter 5 will further explore the spectrum of purchasing patterns of households at different levels in the HFIAS. This investigation is intended to

reveal how households with different entitlements interact with the food economy and how the food economy responds to their different needs and challenges regarding food access. In terms of the spatial analysis, the strategic navigation of this food environment by its residents will yield understanding of how the transitions in the food economy affect the urban poor and how this transition may develop into the future. Through this analysis it is hoped that the question of whether the functions of the informal food retail sector will remain relevant if the socio-economic nature of the area changes will be answered. In terms of the household-level analysis, how the asset bases of households are utilised to access food through the local economy will provide a better understanding of which household entitlements are most important for food access.

However, it is important to note that the food economy is not the only channel through which households can access food. The social food economy, whereby food is gained from non-market sources, is also a means through which many low-income households access food. This food channel relies on a different set of household entitlements and is not responsive to income or the household material asset base (West and Price, 1979). Access to food through the social economy will be discussed in Chapter 6. Furthermore, it is important to consider Cannuscio et al.'s (2010) concept of Foodways in understanding how people go about interacting with these local retailers. The social dynamics evident in the local food retail economy influence the manner in which food is purchased and sold and are thus, important in analysing food access.

Chapter 5: Purchasing Patterns and Food Access

5.1 Introduction

Research has shown that the increasing supermarketisation of the South African food economy has led to the increasing defragmentation of shopping practices (Smith, 1998; Reardon et al., 2003; D'Haese and Huylenbroek, 2005; McGaffin, 2010). Section 4.2 described how the local food environment comprises of a mix of both formal and informal food retailers, of varying size and scope, which engage in a variety of business practices. Section 4.3 proceeded to describe how different households have different means, both in terms of financial and material assets available to them and how these assets influence food access. This section found that the purchasing patterns of households, in terms of the site and frequency of their main food purchases, were the household characteristics which showed the most correlation to their level of food access. The entitlements which most influenced these purchasing patterns were found to be household mobility and the size and predictability of household income.

The following Chapter will draw on both the spatial and household level analysis presented in Chapter 4 to explore the interaction between the household and the food economy. This analysis will reveal how households navigate both their asset base and the spatial food environment to access food. It was found that the differing financial and material asset bases of households were most obviously expressed in the frequency of shopping trips, and the associated implications on the site of food shopping and the quantities of food items bought; rather than the type of food items being purchased. The spectrum of purchasing patterns of households at different levels in the HFIAS will be discussed in detail in Section 5.2.

In addition to decisions around the site and frequency of shopping, food managers also make strategic choices regarding the quality, quantity and variety of the different food items which they buy, based on a set of priorities derived from their asset base. It was evident that the quality considerations related to bread, fresh produce and meat lead to the purchasing patterns associated with these foods following a different trend to that of dry, processed foods. The local food environment contains different types of retailers for different foods which respond to the food-specific quality demands of the local community. Section 5.3 will discuss the food retailers and purchasing decisions relating to these food groups.

It is intended that the following analysis of food purchasing decisions will enable trends to be identified as households adapt their purchasing patterns to suit both their asset base and their surrounding food economy. In addition, such an analysis will allow for greater understanding regarding how the transitioning food economy meets the food access needs of these households and how certain types of retailers have responded to the food access constraints experienced by households with differing asset bases.

5.2. Spectrum of Purchasing Patterns: Formal and Informal

5.2.1 Introduction

Figure 5.1 below is based on data collected from the interview set and illustrates conceptually how the spectrum of purchasing patterns is correlated to the various HFIAS levels of households. Three groupings have been established from the findings presented in Figure 4.11 in Section 4.2, and these groupings depict the degrees of Household Food Insecurity and the frequency and site of shopping. These groupings make up the purchasing pattern spectrum.

- Food secure and mildly food insecure: Households who procure the bulk of their food from the formal economy
- Mildly and Moderately food insecure: Households who procure the bulk of the food from a mixture of both formal and informal economies
- Moderately and Severely food insecure: Households who procure the bulk of their food from the informal economy

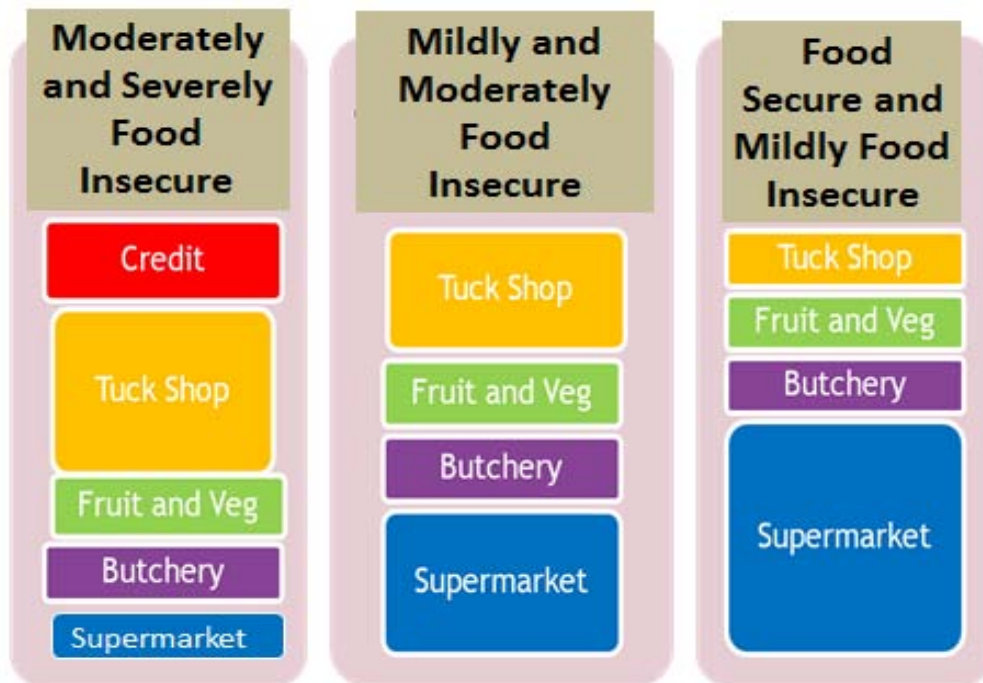


Figure 5.1: Spectrum of Purchasing Patterns

Figure 5.1 shows that the more food secure a household, the greater the proportion of their food is purchased from supermarkets, with the most food secure households purchasing very few food items from local tuck shops. The most food insecure households were found to rely on local tuck shops for the bulk of their food requirements and also purchase some of their food on credit from these tuck shops. These households sporadically purchase a few food items from supermarkets when they have the opportunity to do so. The purchase of food from butcheries and fruit and vegetable stalls remains constant despite changes in the household asset base, although in real terms the quantity and quality of food bought will increase as food budgets increase. These more specialised outlets will be discussed in Section 5.3. The strategic choices underlying these three categories in the HFIAS and their associated mix of formal and informal food economies will be analysed in detail below.

The frequency with which households conducted their food purchases varied greatly within the interview set, with each household forming part of spectrum from the day-to-day shoppers to the monthly shoppers. These differences in frequency of visits correlated directly to the different types of food retailing outlets, with the larger, formal outlets being visited weekly or monthly and the smaller, informal food traders being visited on a much more regular basis. The least food secure households were found to buy food on a sub-weekly or daily basis from local tuck shops, in order to avoid transport costs and in response to more irregular and insufficient income flows.

5.2.2 Purchasing Patterns and Household Entitlements

Given the close correlation between the purchasing patterns of households and their level of food access, an analysis of the purchasing patterns evident within a community and the reasoning behind them can aid in establishing which household characteristics and entitlements are most influential in terms of food access. These purchasing patterns reflect the asset base of the household as it relates to procuring food through the market economy and thus, provides an excellent platform from which to understand how these households navigate their food environment to access food.

Economies of scale can yield great benefits for the low-income shopper, whereby shoppers save money by buying in bulk, and are thus a major factor when considering where to purchase food. When comparing prices with the larger supermarkets in the area, the majority food items sold in tuck shops were more expensive by R1 or R2, as discussed in Section 4.2.2 of the previous Chapter. Even for those households who were on the higher end of the spectrum, this mark-up was a consideration when deciding where to do their shopping as expressed by Respondents 20 (food secure) and 21 (severely food insecure) whose weekly food budgets are R200-R300 and R600–R700 respectively. Both of these Respondents try to avoid purchasing food from local tuck shops due to their comparatively high prices.

Respondent 20: "I didn't usually buy by the shop. It's just everything usually a bit more expensive than that one. A rand is a rand or a 50c is a 50c, so I usually buy only my bread and my milk there" (Interview 20, 21/10/10).

Interviewer: "How often do you buy from spaza shops?"

Respondent 21: "It's not a lot. We always try to have in stock rice and sugar so we don't have to buy there, because if you buy one packet there you might as well get the other money and go buy the 2kg. Say if you buy a 1kg sugar you will pay like R9 or R10 and at the Shoprite its R20 for a 2.5, so if you get the money together then you can one time go buy the 2.5 instead of buying the 1kg"(Interview 21, 07/11/10).

As discussed in Section 4.3.4 of the previous Chapter, the ability of households to take advantage of the cheaper foods available in supermarkets was strongly influenced size and predictability of household income and the access of households to transport. Hence, these entitlements were found to be the most dominant factors influencing purchasing patterns and consequently food access. A deeper understanding of how these entitlements affect the site and frequency of food purchasing will aid in explaining the trends presented in Figure 5.1.

5.2.2.1 Income size and predictability

As discussed in Section 4.3.4.1 insufficient food budgets inhibit the ability of food managers to take full advantage of the lower priced foods available from supermarkets. The minimum unit size of foods sold in supermarkets is larger than that of the tuck shops as shown in Table 4.1, and thus shoppers would require a larger amount of money to procure the variety of food which a household requires. The smaller quantities available at tuck shops allow for a larger variety of foods can be bought from tuck shops for the same amount of money. In addition, there are transport costs associated with visiting these shopping centres and then transporting their purchases home. Therefore, shopping at a supermarket requires a certain gross food budget to ensure its feasibility. Households with smaller food budgets may prefer to buy a greater variety of foods in smaller quantities from local tuck shops, thus avoiding transport costs, rather than travelling to supermarkets to buy only a few items in larger quantities.

Some household food budgets allow for the transport costs of travelling to the supermarket, but are not large enough to allow the household to take advantage of buying in bulk. These households are unable to buy enough of any food item for the whole month and thus, have to make more frequent trips to the supermarket. This is illustrated by the following quote by Respondent 25, when asked whether she bought any food items in bulk from supermarkets,

"No, I can't buy big amounts because it's only me that's working. It's too expensive for me so I have to go every Saturday and basically I buy the same things because there's no money to buy other stuff" (Interview 25, 07/11/10)

The ability of households to employ economies of scale when purchasing food was also strongly influenced by the predictability of their food budget, rather than being a product of purely the size of food budgets. Sinking income into illiquid assets, such as bulk food items, could mean that the household is only left with one or two food items instead of having the option to buy smaller amounts of the variety of foods needed to make a meal. Thus, the predictability of household income flows was closely related to the frequency with which households purchased food. Those households with more predictable income flows may prefer to buy their food requirements in bulk on a monthly or weekly basis, and those with more unpredictable income flows may prefer to buy food on a sub-weekly or daily basis.

5.2.2.2 Mobility

Clifton (2004) found that barriers to mobility for the poor exacerbate the limited financial means available to the household. The cost of transport was found to be a definite consideration for all food managers when planning the frequency with which they shop at these outlets. This dilemma is reflected in the quote from Respondent 5 below, when asked why she did not shop at the supermarket,

“Yes there's cheaper, the stuff is cheaper, but you must have bus fare to go there” (Interview 5, 08/09/10).

It was found within this case study that transport costs are a restrictive force on poorer households who are unable to shop in bulk.

Owning a car makes for a much easier shopping experience and allows households to engage more in bulk buying and thus take full advantage of the specials available at the different supermarkets. As Clifton (2004) states, “flexibility afforded by the automobile widens the spatial and temporal aspects of mobility, allowing for a more extensive search for goods and services” (p. 1). A car widens one’s accessible shopping area, thus ensuring that food managers can take advantage of the full range of specials offered at the various shopping centres. Four of the food managers who have access to a car reported visiting a variety of supermarkets. This notion is evident in the quote below from Respondent 9,

“No, my daughter drives. Ja she doesn't go to work in the car, she actually bought the car convenient for us because I can't carry so it's just mostly to church and to buy the food. She takes me to shopping. Yes, she always bring the pamphlets, and she says mommy look there and look here, maybe Elite got a special this week or Shoprite's got that special and Pick and Pay's got that special, now she'll take me to all of them” (Interview 9, 13/09/10).

The majority of the remaining households make use of minibus taxis to access these supermarkets. These taxis drive along main roads with no time schedules, but they are frequent enough to make this a convenient transport option. The cost involved in utilizing this mode of transport is not the sole factor influencing the purchasing patterns of shoppers. There are many inconveniences associated with using taxis to access supermarkets. The stress inherent in using public transport to do one’s weekly or monthly shop forms an important part of urban foodways (Cannuscio et al., 2010).

Food managers described how space is limited within these taxis as drivers want to transport as many people as possible to increase their income from a single trip. In addition, taxi drivers will wait as long as it takes for the taxi to be full before continuing on their route, which can cause the commute to and from the shopping centre to be very time consuming. As many of the other taxi

users are also shoppers who have large numbers of bags, shoppers also run the risk of losing one of the bags along the way, which is a devastating loss for a low-income household. Respondent 15 states,

“And sometimes you lost your stuff in the taxi when you got a lot of stuff, you know, because if there’s a sale like on a Saturday morning everybody who’s going to Gatesville is going for shopping. It’s a place for shopping, so everybody, maybe you’ve got your six bags, I’ve got my six bags, and it’s all the same bags. Ja, there’s a mix up with the bags and maybe you will lose one of your bags and maybe your most expensive bag with all your meat” (Interview 15, 03/10/10).

Respondent 1 solves this problem through paying extra money to ensure a more comfortable trip,

“No, sometimes I pay for two or three seats. It depends on what I buy. It depends on what you buy and if you want to sit comfortably, you’ll have to take an extra one or two seats” (Interview 1, 08/09/10).

Food managers reported that they only have a short walk from where they get off the taxi along the Main road to their houses. However, many food managers cited the difficulty of carrying heavy packets full of shopping on and off the taxis. Some shoppers make use of bag carriers, who are young children who stand outside the shopping centers or along main roads and offer to carry bags for R2 or R5. Others call household members to meet them on the main road to help with the bags, in order to avoid having to pay this extra fee. Two of the more food secure households, mentioned the option of paying the taxi an extra R15 to make a ‘house call’ whereby the taxi drops you right outside your front door, however this fee is unaffordable for the majority of taxi-users.

All of the households who walked to purchase the bulk of their food purchases were severely food insecure and presumably could not afford the taxi fare to take advantage of the cheaper prices in the supermarkets even for their very basic food needs. These households purchase either from local tuck shops or USave, which is 3km from the study area.

The mobility constraints of low income shoppers also aid in understanding the importance of having access to a variety of food retailers within one shopping centre, such as Gatesville, as this enables food managers to take advantage of the specials offered at each of these retailers without having to travel by taxi to another centre. Not only does the Gatesville centre contain a supermarket, butcher and a variety of speciality food stores, it also has a vibrant informal food market where food managers can buy fresh produce, a product which was generally preferred to be bought from informal food retailers. Some households actively engaged in ‘shopping around’ within the Gatesville shopping centre and dedicated much time to this activity, as illustrated by Respondent 12, who takes a family member along in order to conduct a more efficient and thorough search for the best value-

for-money purchases. One person reviews prices at the butchery and the other at the supermarket in order to ensure that foods are bought at the lowest prices available.

Interviewer: "Does your husband go to the Gatesville supermarket by himself?"

Respondent 12: "Yes, he goes by himself, but when he has to go to the butcher and the shop, he takes this young guy with him, my brother, then he take him with".

Interviewer: "To help carry the groceries?"

Respondent 12: "No, No, to help him, then he said you go and see at the butcher how much is that and that and then you come tell me at the shop how much is it" (Interview 12, 03/10/10).

It is evident that both the access of households to transport and the size and predictability of food budgets have considerable implications on the site and frequency of food purchasing. The following section will discuss the spectrum of purchasing patterns depicted in Figure 5.1 in order to better establish how constraints in household asset bases affect how these households navigate the local food economy to access food.

5.2.3 Spectrum of Purchasing Patterns: Detailed Description

5.2.3.1 Predominantly Formal:

Alwitt and Donley (1997) found there to be an increasing incidence of 'outshopping' in poorer areas, both rural and urban, where people obtain their goods and services outside of their neighbourhoods, thus incurring added costs in terms of time and money. There is a strong presence of 'outshopping' within the study area, with 20 of the 25 food managers reporting that they visited supermarkets outside their local neighbourhood on a monthly or weekly basis. However, it was found that only 10 of these households purchase the bulk of their household food requirements at these supermarkets, with milk, bread and fresh produce being purchased at informal retailers. These 10 households fall into the 'predominantly formal' category and are almost all situated in the food secure or mildly food insecure HFIAS levels, as illustrated by Figure 4.11 in the previous Chapter. These households spend almost all of their food budgets at supermarkets. Respondent 20 describes how her expenditure is spread over the various retailers at the Gatesville Shopping Centre,

"I usually spend about 400 at Shoprite and 300 at Elite, that's just for the basics, you know, and then go to the vegetable stall and that will come out at about R100" (Interview 20, 21/10/10).

For households who fall into this category on the purchasing pattern spectrum, tuck shops are not major sources of food, but these households still utilise these facilities almost daily, as tuck shops provide convenience and top-up shopping. The mark-up charged by tuck shops on items, such as bread and milk, is minimal, as these items are able to be sold in large quantities. Thus, almost every food manager interviewed, across the HFIAS, bought their bread and milk requirements daily from a nearby tuck shop. Tuck shops are also utilised occasionally by households in the 'predominantly formal' category to buy other items which they may have run out of in between weekly shops, as expressed by Respondent 13,

"Sometimes my husband bring like mince, polony and sausage and meat, then I don't go to the shop, then I just buy the potatoes there by them" (Interview 13, 03/10/10).

When asked why they did not utilize these local food retailers more, each food manager responded that the prices at the tuck shops were too high and the food bought at supermarkets was better value-for-money. Some households even chose to incur the added weight of bringing home a weekly six pack of long life milk from the bigger shops instead of buying daily from the tuck shops and paying higher prices.

It was found that food managers were not tied to these centres through a sense of customer loyalty or familiarity; the most important consideration appeared to be the drive to take advantage of specials on food items. Four of the 10 households who fell into the 'predominantly formal' category, shopped at a variety of different shopping centres in order to take advantage of available specials. The most popular means of deciding which supermarket to visit was checking the 'Athlone News', a free newspaper containing information about food specials in the local supermarkets, and planning their shop accordingly. The vast majority of food managers interviewed stated that they check for specials weekly. When asked what it was that prompted her to choose a certain shopping center, Respondent 22 replied, *"because sometimes you see in the papers, then you see specials and now you have the money so you one time go there" (Interview 22, 07/11/10).*

Thus, food managers in this area prefer to keep their options open in terms of where they shop, what time and how much they spend, in order to take full advantage of the specials. The elasticity regarding which supermarket to shop at demonstrated by the respondents means that there is definitely a high incentive for supermarkets to offer a multitude of specials in order to attract low income consumers looking to do their weekly or monthly bulk food purchases. Mason and Wilkinson (1977) found that by offering a basic food item at a drastically reduced price, supermarkets can

ensure a considerable response from low income consumers. The importance of taking advantage of specials in accessing food further supports the assertion that a regular and predictable food budget can save a household a relatively large amount of money, as food managers can ascertain how much of the food budget can be spent on buying certain items in bulk in accordance with available specials whilst ensuring that there is still enough to meet the total household food requirements.

5.2.3.2 Mix of Formal and Informal:

Amongst the twenty five households interviewed, there was a group of 10 households who navigated both the formal and informal economies on a near equal basis to access food, as shown in Table 4.5. These food managers generally shopped at Elite, USave or Gatesville on a weekly or monthly basis but only to buy a few basic food items in bulk and then purchase the remainder of their food requirements on a more regular basis from local tuck shops. When asked what was meant by 'basics' Respondent 23 listed, *"like sugar, rice, fish oil, butter"* (Interview 23, 07/11/10). It was found that these households bought both smaller quantities, as well as a lesser variety of food items at supermarkets than more food secure households. Respondent 23 explains how these households go about spreading their purchasing patterns amongst both the formal and informal food economies. This household buys its basic food for the week in bulk at the larger supermarkets and then buys the foods required for dinner daily from local tuck shops, as illustrated in the following quote,

Respondent 23: "We like buy our sugar, fish oil, rice, butter we buy like for the week. But today we decide what we going to make tonight so then we buy the stuff. Say we going to make spaghetti tonight and if we don't have the mince in the fridge then we buy mince and spaghetti or whatever we going to put in the spaghetti" (Interview 23, 07/11/10).

This mixed strategy enables the food manager a greater amount of flexibility in their use of the food budget. The household food budget is under continuous assessment, thus allowing appropriate purchasing decisions to be made on a daily basis. This relieves some of the pressure of accurately judging how much money will be available for food over a period of time and buying food accordingly, when the household income is prone to fluctuations. Upon being asked whether they purchase food from local tuck shops, Respondent 23 stated, *"sometimes yes when we run out of rice, then we have to buy there by them"* (Interview 23, 07/11/10). The flexibility inherent in more frequent shops protects the household from the dangers of overspending on food, whilst still enjoying the benefits of buying the household basics in bulk and taking advantage of some of the available specials. Respondent 23

states that they often make spontaneous trips to nearby shopping centres, *“because sometimes you see in the papers then you see specials and now you have the money so you one time go there”* (Interview 23, 07/11/10).

In addition, buying the household’s basic foods in bulk offers some security to the household, as it mitigates against acute food shortages when the food budget runs out, as expressed by Respondent 14, *“Yes, in bulk, I mean if you got rice and potatoes then you got food for your house and coffee and tea”* (Interview 14, 03/10/10). It is thus an effective shopping strategy for households whose food budgets are unpredictable.

The mobility constraints of these households could also have an impact upon their decisions to spread their purchases between supermarkets and more local food retailers. Two households reported shopping at supermarkets monthly and travelling by taxi. It was found that each of these households buy only the most basic food items at the supermarkets, such as rice, sugar and flour, taking advantage of cheaper bulk prices and specials. This could be due to the inability of these households to transport more of their monthly food requirements home on a taxi. These households then buy the rest of the household’s food at the local tuck shop, thus avoiding incurring the travel costs of additional trips to the supermarket.

5.2.3.3 Predominantly Informal:

Five of food managers interviewed stated that they very rarely visit formal food retail outlets and bought proportionally very little of their total monthly food at these outlets, despite the higher prices associated with shopping locally. Four of these households were severely food insecure and one was moderately food insecure, and each had a weekly food budget in the lowest bracket of between R200 and R300. It was found that these lower food budgets do not allow for food items to be bought in the unit sizes available in supermarkets and the transport costs to get there. Four of the five households had only one member casually or temporarily employed which could mean that their household income fluctuates and is unpredictable. Thus, these households may not be able to know whether their food budget will fully cover the foods required by the household and thus, cannot afford the risk of purchasing foods in bulk at the supermarket. Hence, these households choose to make all or the vast majority of food purchasing decisions on an almost daily basis. Respondent 19 describes how she copes with her volatile food budget,

"I don't plan to buy food. Ja, I'm gonna make that tonight and make that tonight. I don't plan....So you think of a meal and then you buy all the things you need for that meal" (Interview 19, 21/10/10).

This food manager spends about R200 a week on basic groceries, a further R50 on meat and R20 on vegetables. This food budget of between R200 and R300 a week is characteristic of a large proportion of the moderately and severely food insecure households interviewed, as illustrated in Figure 4.10 in section 4.2. The food situations of many such households endure changes on a daily basis and they are required to meet their household food requirements through regular trips to the local tuck shops to buy small R1 or R5 packets of rice, coffee and sugar, as is the case with household 17, who is Severely food insecure,

"No, because we don't have money we buy the one Rand coffee and sugar every day" (Interview 17, 21/10/10).

Another Severely food insecure household, Household 21, will buy R5 potatoes and onions from the tuck shop whenever there is food available for a hot meal. This is a depiction of the general purchasing patterns of a household who lives not knowing what food will be available from day to day.

Being restricted to shopping on a daily basis has implications on where food shopping takes place, with every household who reported shopping on a daily or sub-weekly basis were heavily reliant on local tuck shops for access to food, with travel costs to bigger food retail outlets being infeasible for such frequent shopping trips. The higher prices of foods within tuck shops do mean that the food budget does not yield as much food as it would if they had the opportunity to buy in bulk; however given the erratic cash flow situation evident in these households, shopping in small quantities at local tuck shops is an efficient means of sourcing their food needs. These households buy many of their basic groceries in small quantities from local tuck shops and vegetables from people selling door-to-door or from the bakkies that pass by regularly. Even spices are sold by walking vendors from time to time.

The practice of 'bulk breaking' by tuck shops is an important means of food access of households within this category, as it enables households to access food which they would not have if they were only able to purchase foods in the minimum unit sizes available in supermarkets. Tuck shop owners understand this need for bulk breaking as expressed by the owner of a tuck shop in Venster Street,

"Everything we sell here is small amounts. We can't buy big amounts because the next door neighbour won't have that big amount. We all poor. We feed them with small amounts" (Venster Street Tuck Shop Owner, 08/08/110).

Many tuck shop owners reported that the items which they sold in smaller quantities were the most popular with the local community, after junk food items. The items generally sold in R1 or R2 packets were sugar, coffee and rice, along with single tea bags and half loaves of bread. Some tuck shops also stocked smaller packets of rice and flour, and one or two selling half or quarter litres of fish oil. The tuck shop owner in Hex Crescent elaborates on this aspect of the tuck shop business,

“Coffee and sugar, R1, R2 packets, I tell you the people around here goes for that I can say. There’s a lot of them that cannot really afford to buy that big ones. They buy a smaller version of whatever they can get, even in the butter I do that, R2, R3.50, half or a full one. Ja, that’s how the other spaza shops make their money – in smaller packets. I never used to do that but there was such a big demand for it so...Ja and it actually helps, it helps Ja, helps me also” (Hex Crescent Tuck Shop Owner, 12/08/10).

Local tuck shops further cater to the food access needs of the local community through the credit system, which is an important means of consumption smoothing for Moderately and Severely food insecure households. Household 7, could not meet their food requirements without credit, as illustrated in the following quote,

Respondent 7: “Some just, like now we haven’t got money to buy bread and then I got to my friend’s got a mobile [tuck shop] then I ask her for bread on credit yes, and when we pay then we must pay her back again”.

Interviewer: “Does she charge some interest?”

Respondent 7: “No”

Interviewer: “Does she only give bread on credit or other food as well?”

Respondent 7: “Bread, sugar, milk, whatever you need then you can go ask them, but you pay back when you got money” (Interview 7, 13/09/10).

Eight of the ten tuck shop owners interviewed reported giving food out on credit regularly, these tuck shop owners were all locals whereas the remaining two were Somali. Six of the eight tuck shop owners offering credit reported selling about R400 of food a week on credit, with two giving out much less than this to a small number of neighbours. These findings point to a large amount of food being given out on credit by tuck shops, when one considers the large number of tuck shops within the study area. Thus, it can be assumed that a considerable portion of households buy food on credit and do so regularly. This would indicate that the credit system is not solely used by the local community as a means of surviving income shocks, but rather employed as a regular means of smoothing consumption.

However, within the interview set, only two food managers stated that they purchased food on credit on a regular basis from tuck shops and only three stated that they bought the majority of their food at tuck shops. However, the number of tuck shops, together with the accounts from tuck shop owners of the number of people to which they regularly give food on credit and the profitability of breaking bulk, would imply a much larger proportion of households engage in these purchasing behaviours. Thus, the interviews conducted with tuck shop owners' act as a data validity test, as the reported purchasing behaviours of food managers should be reflected in the local food economy, in terms of the types and quantities of foods sold. This discrepancy in the information provided by food managers and the food items found in the local tuck shops calls in to question how honest respondents were in admitting to the frequency with which they use tuck shops to provide their basic food needs beyond bread and milk. Respondent 8 claimed that the majority of this household's food was bought at the Gatesville Supermarket, however during the interview one of the household members returned with R5 packets of rice and sugar. The Respondent appeared to be very embarrassed and then admitted that this household did have to buy much of their food from local tuck shops due to budget constraints. Thus, it is possible that food managers were embarrassed by the fact that they procured foods from local retailers and therefore, preferred to focus on their trips to the supermarket.

It is evident that tuck shops are responsive to the nature and extent of their food budgets, through the provision of credit and the bulk breaking of foods. Furthermore, the proximity of tuck shops to the local community negates the need for access to transport, thus, allowing households who are unable to shop at supermarkets to access food easily and immediately when money becomes available. Hence, these informal food retailers fill a vital role in providing access to food for the most vulnerable of households. However, the higher price of food items sold in tuck shops as compared to supermarkets does mean that these households are restricted to getting lower value-for-money in terms of their food budgets.

Thus, although, the local food economy prevents households from finding themselves within a food desert in terms of absolute access to food, given their budget restrictions and immobility, the higher costs and limited variety of food available in these local retailer outlets does mean that households, who are unable to access supermarkets are in a food desert in terms of affordable and nutritious food.

5.2.4 Conclusion

Through this purchasing pattern spectrum it is evident that both the formal and informal food economies are strategically navigated by the household to access food, and the way in which they are navigated is a function of the asset bases of these households. The nature of household income and consequently, household food budget affects the extent to which households can buy their food requirements in larger unit sizes and thus, take advantage of lower prices. A household food budget which is based on irregular and insufficient income flows translates into ad hoc purchasing patterns which take place on a largely day-to-day basis within the informal economy, where food can be bought in smaller quantities. In addition, difficulties and costs associated with visiting supermarkets and transporting purchases home also affects the extent to which food managers can purchase the bulk of their food requirements from supermarkets.

These constraints in the asset bases of households have enabled these local informal food retailers to establish themselves within a niche in the food economy. These retailers cater to the needs of the more food insecure urban household in a way which formal supermarkets cannot. Thus, although, the food economy in this area has been affected by supermarketisation with a number of formal food retailers being well established within this area, there appears to be no current danger of supermarkets edging out the informal retail sector entirely for the foreseeable future. This is due to the inability of supermarkets to sufficiently meet all the needs of the low-income consumer, especially the poorest consumers.

5.3 Purchasing Patterns for Specific Foods

5.3.1 Introduction

The spectrum of purchasing patterns reflects a definite movement of households towards accessing the bulk of the food requirements through the formal economy as their asset base allows, which in turn correlates to improved food security. However, there are certain food types for which food managers do not follow this general trend. As depicted in Figure 5.1 above, some foods are bought consistently within either the formal or informal food economies regardless of households' position on the HFIAS. It was found that food managers prefer to source fresh produce and bread from informal retailers and meat from formal butcheries in each of the three categories. The reasons behind these choices were linked to the value food managers placed on the quality of these food items. Reardon et al. (2003) also noted that consumers had very different purchasing patterns for different types of goods, particularly fresh produce and meat. Food managers were found to place far greater importance on the food quality of bread, fresh produce and meat, compared with dry and processed foods, which translated into these food items having unique purchasing patterns associated with them. Increases in the household asset base resulted in food managers substituting for better quality foods within these food groups, rather than shifting to a formal shopping outlet as was the case with other foods. Similar findings are evident in the research conducted by D'Haese and Huylenbroeck (2005) and Huang and Lin (2000). The following section will analyse information gained through the interviews with food managers to establish how the quality considerations within these food groups influence purchasing patterns, as well as how the local food environment responds to these considerations.

5.3.2 Bread:

As stated previously in this Chapter, all of the households interviewed purchased bread on a daily basis from local tuck shops, usually one to two loaves per household per day. Although, bread is 50c to R1 cheaper at the larger supermarkets, these retailers are generally visited on a weekly basis and transporting up to fourteen loaves home for the week would be very bulky. Another factor influencing this trend of purchasing bread locally is the shelf life of bread and the emphasis placed on the quality and freshness of bread by food managers. The Sasco truck delivers to the tuck shops daily and thus the bread sold in tuck shops is guaranteed to be fresh. As discussed in Section 4.2.4.2.1 of Chapter 4, bread is one of the most profitable items sold by tuck shops and because of the large volume of bread which they sell, they are able to keep the mark up lower and still gain a

profit, which benefits the consumer. Thus, buying a household's daily requirement of bread fresh every day from a tuck shop is only slightly more expensive, a trade-off all households seem to be willing to make.

There is also the added element of Cannuscio et al.'s (2010) 'food related routines', whereby the buying of daily bread from a local retailer could be an act of significance for the food manager, beyond just the convenience of purchasing food close to the house. Cannuscio et al. (2010:389) describes these routines as being "stooped in camaraderie and pleasure" and providing an important means of socially engaging with the surrounding community. As will be discussed in Chapter 6, the local food economy is certainly embedded within the social fabric of the study area and tuck shops provide a series of meeting points for this community, which has very few public spaces available to it. Thus, it is important not to discount the importance of the tuck shop as a source of social value and how this might influence food purchasing decisions.

Tuck shops were found to stock a variety of different quality breads of different brands, which was in contrast to all other foods in stock which were only available in one brand. The lowest quality bread, Daily Bread and Sasco, was available for R5 in most tuck shops and the more expensive brands, Albany Bread and Blue Ribbon, which were sold for R7 for a white loaf and R10 for a wholegrain loaf. Those households who were more food secure reported buying the better quality breads and the less food secure households tended to buy the cheaper brands. The following quote from Respondent 24 expresses the desire of food managers to substitute for higher quality bread as food budget allowed. This food manager was asked why she did not purchase Daily Bread, which was cheapest brand,

"No, we don't like that one. Now we buy Sasco now at the moment, because Sasco is cheaper, but if we have our way it would be Albany bread. R10 a loaf, depending which one you take, of course. If it's a wholegrain its R10, have to come up with that R10" (Interview 24, 07/11/10).

5.3.3 Meat:

Although, meat is a relatively expensive food group, it was found to be viewed by food managers as an important part of diet and thus a high proportion of the household food budget was dedicated to meat purchases across the HFIAS with even the most food insecure of households buying meat when the food budget allowed for it. All households reported buying meat from a formal butchery, regardless of their HFIAS level and the type, quality and quantity of meat purchased changed as the

household asset base improved, rather than the site of meat shopping. Households on the lower end of the HFIAS reported buying cheaper cuts of meat, as well as bones and chicken neck and feet, as described by Respondent 7, who is from a Moderately food insecure household,

Interviewer: "What kind of meat do you usually buy?"

Respondent 7: "Buy them chicken and so yes and sometimes you see there's specials and we can afford to buy, then we buy and the chicken necks and all that jazz of things. So we survive you know".

Interviewer: "How often do you eat meat?"

Respondent 7: "Once a week I'm buying only the meat, the beef pieces, because there's no money for meat really".

Interviewer: "So the beef pieces, is it the bones?"

Respondent 7: "It's the bones".

Interviewer: "So you buy once a month?"

Respondent 7: "Ja, and then I divide it for the dinners, so during the month to survive yes" (Interview 7, 13/09/10).

It was found that 4 of the 42 tuck shops sold cheaper types of meat such as polony, chicken necks and feet and sausages, which were presumably bought by households on the lower end of the HFIAS. There was a shift to higher quality meats as households moved up the HFIAS, with households in the upper two HFIAS levels being found to buy more red meat and better cuts of meat. Butcheries respond to these shifts in meat demand by providing a variety of different cuts and grades of meat at a variety of quantities, in order to account for both the different asset bases of households, as well as the fluctuations within the asset bases of individual households which translate into demands for lesser quality meat. Thus, similar to bread, households were found to substitute lower cuts of meat for higher quality meats as their food budget allowed. However, unlike bread, meat was not a staple and thus even the cheapest meat falls beyond what is affordable for some households. As is the case with household 24 who is severely food insecure,

"It's normally, we go for the cheapest and that would be chicken, but at the moment the meat is quite pricey so we don't go for meat that often. We go with whatever suits our pocket" (Interview 24, 07/11/10).

Most of the butcheries purchased from were either situated within or nearby the supermarket where the bulk of their food purchases were bought and thus bought meat with the same frequency that they did their larger shops at the supermarkets. However, a third of food managers did report travelling to one of three butcheries located in nearby suburbs, specifically to buy meat. These butcheries were described as offering good specials and good quality meat and were visited on a less frequent basis, once or twice a month. Two of the food insecure households reported sending a

teenager to buy meat on foot in order to avoid additional transport costs. Most food managers have large freezers capable of freezing large quantities of meat and thus storage space was not a constraint on buying meat in bulk. Many food managers reported buying one type of meat in bulk and then dividing it between meals, as mentioned in the earlier quote from Respondent 7. Respondent 20 describes the reasons behind her decision to purchase certain kinds of meat from one of these butcheries located in a nearby suburb,

Respondent 20: "No, I originally go to the butcher but the meat I will watch where it's on a special. Like I'll buy a (half a lamb) for the mutton, maybe it's R42 a kilo and I'll go there. Like at Spar it was R40 a kilo so I was there this month, you understand. Maybe it's a butcher in Gatesville next month or Pick and Pay's cheaper or wherever then we buy the meat, but like my mince and things I buy only at this butcher"

Interviewer: "Why is that?"

Respondent 20: "Because they very clean. It's very nice meat, very nice. Look mince you can't really wash so you've really got to have nice clean, you know, have a nice clean butcher, but with the mutton and the beef and the steaks, you can still wash that" (Interview 20, 21/10/10).

This quote illustrates how the specials which the various butcheries offer do impact upon food managers' decisions on where to shop; but at the same time how quality considerations associated with meat restrain the extent to which food managers might be willing to purchase meat outside of their regular butcher in response to specials. Thus, the value placed on meat quality translates into more constant decisions around the sites of shopping compared with other foods.

5.3.4 Fresh Produce:

Similar quality considerations are true of fresh produce. The low shelf life and inherent unpredictable quality of fresh produce determines both the manner in which food managers choose to purchase it, and the manner in which retailers choose to sell it. However, in the case of fruit and vegetables these considerations have resulted in a very different trend than that of meat. Every household interviewed, except two, chooses to buy their fresh produce from informal, roadside stalls rather than the formal shopping centers. Similar findings were recorded in Weatherspoon and Reardon (2003). It was found that this trend was largely based on the finding that food managers are more likely to trust the fresh produce of an informal trader whom they know well rather than a large supermarket.

Within the informal economy, fresh produce was sold by a variety of retailers, each catering to households of differing means. Food managers higher on the HFIAS mainly purchase fresh produce from the large stalls located outside Gatesville when they do their weekly or monthly shopping. There are only two fixed fruit and vegetable stalls located within the study area, one of which is shown in Figure 5.2 below, and a variety of mobile retailers who sold fresh produce door to door or from the back of a bakkie. None of the tuck shops stock a variety of fruit and vegetables, with only 9 of the 42 tuck shops stocking R5 packets of potatoes and onions. These are only bought regularly by those households who are Moderately or Severely food insecure and who buy the bulk of their food requirements on a daily basis.



Figure 5.2: Fruit and Vegetable Stall in Manenberg

When asked why they prefer to buy fresh produce from these stalls as opposed to the Shoprite supermarket at Gatesville, Respondent 23 stated,

“Because they sometimes cheaper than Shoprite and sometimes if you buy stuff at Shoprite its, say like you get in a packet like five carrots but now you go buy by them [the stalls] and you get six or seven carrots for the same price. Ja, they sell good quality vegetables. It’s only the potatoes because they can’t see in the potatoes so sometimes you buy and its nice outside but sometimes inside it’s not so” (Interview 23, 07/11/10).

Many other food managers reported that these stalls sold fruit and vegetables that were of high quality and good value for money. As discussed in Section 4.2.4.1 of the previous Chapter, these informal retailers are able to sell fresh produce in a way which is responsive to the needs of the

surrounding low-income community and this ability is a product of their informality. Informal retailers are able to respond better to conditions in both the supply and demand markets and adjust type of produce sold and their prices easily. This high level of responsiveness means they are better able to sell their fresh produce stock before its shelf life expires and there is therefore less wastage. Furthermore, informal retailers have a better sense of the thresholds of acceptability regarding quality for their customers, in terms of what is considered edible/acceptable. This allows them to sell goods which wouldn't meet the food standards of supermarkets. These stalls thus have the ability to sell reasonably priced fresh produce at a variety of quality grades, which is beneficial for the local community.

One of the most important characteristics of these informal fresh produce stalls, as noted by the food managers, was the fact that customers have direct access to the retailer and can thus demand a refund when the fresh produce is of insufficient quality. Although these retailers have a much larger customer base than the tuck shops, they would still develop a rapport with their regular customers and would thus perhaps have a sense of duty to ensure customer satisfaction and loyalty. These stalls provide a much more direct interface between customer and retailer compared with the formal supermarkets. Hence, the willingness of these retailers to exchange inadequate fresh produce for better quality items provides a guarantee for customers which they do not have when shopping at formal supermarkets. This guarantee is especially important for low-income consumers as they can be assured that their scarce financial resources will yield the food that they require, not because of a necessarily consistent high quality of goods but rather because of a retailer who will yield to the customer when they return something that is of unsatisfactory quality. This sentiment is evident in the following quote by Respondent 20,

Interviewer: "Do you buy fresh produce from the supermarket also?"

Respondent 20: "No, because if it's bad stuff they don't take it back. Now that stall I'll take my things back if it's not right, and I take it back and I say look, I don't give you bad money. And every day I'm there practically, you know, they see me. I buy maybe a parsley today or I forgot something tomorrow and on my way back I'll buy something, so they won't argue with me, you know, and they say 'Ma here's a few oranges' and I say, 'No I don't want just give me proper things when I come here'"(Interview 20, 21/10/10).

There can be considerable repercussions for a fresh produce retailer who fails to ensure good quality products. This is especially true of the smaller fresh produce retailers situated within the study area, who have a much smaller customer base. Respondent 20 describes the relationship which she has with the fresh produce stall across the road from her house, and indicates the serious nature in which bad quality fresh produce is viewed by food managers in this area.

“You know this people they haven’t had the stall too long and I sent my husband, I think we needed about two or three potatoes, and I said, ‘I feel so bad, I’m going to buy potatoes tonight but I just need two or three potatoes’. So then I gave him a R5 and I said ‘You should actually go to this lady’ but then he bought the potatoes here and the potatoes wasn’t good and then I thought I’m not going to fall out with you people, I’m just not going to buy there so I just don’t buy there” (Interview 20, 21/10/10).

Putnam (1993) found that dense social ties enable processes such as gossip to establish reputations of local food retailers, which can have a regulatory effect on the local food economy. Similarly, Granovetter (1985) stated that a closely knit customer base can generate, “clearly defined standards of behaviour easily policed by the quick spread of information of malfeasance” (p. 492). These informal means of ensuring that local retailers are accountable to their customers in terms of food quality plays an important role in how households choose to procure fresh produce.

A shift is evident with regards to fresh produce as households move higher up the HFIAS, not only in terms of quality but also the diversity of fresh produce purchased. Households higher up on the HFIAS tended to purchase a variety of fresh produce from the Gatesville or local stalls, with the more food insecure households relying on the potatoes and onions available in local tuck shop, which were often the only vegetable served at evening meals. Vegetables are not generally seen as an essential part of a meal, and were found to be largely considered to be subsidiary to meat and starch components, as depicted in a quote by Respondent 25, *“Only meat and rice and potatoes sometimes, when there is veg then we do the veg yes” (Interview 25,07/11/10)*. When asked whether the reason for households’ not prioritizing vegetables within the evening meals, Respondent 14 stated, *“Yes they do like vegetables but it’s too expensive. Ja, it’s too expensive yes” (Interview 14, 03/10/10)*. This was the sentiment of many such Moderately and Severely food insecure households.

5.3.4 Conclusion:

It is evident that different food groups follow different trends with regards to the purchasing patterns associated with them. In the case of bread, meat and fresh produce this is linked to quality considerations, which have manifested in very different food purchasing decisions with meat being purchased only from formal retailers and fresh produce and bread being purchased from informal retailers. The shifts evident in the purchasing of these food groups as the household asset base increased were shifts towards better quality foods or an increased variety of foods rather than a shift in the site of shopping. Thus, the site of shopping for these three food groups remained largely constant for households throughout the HFIAS. The local food retail environment has responded to these quality considerations as well as their own abilities and efficiencies with regards to the provision of these types of goods (as was discussed in Section 4.2). These retailers offer a variety of

different grades of foods in order to cater for the demands of all households. Thus, the purchasing patterns and retailing of the food groups discussed illustrates the reciprocal relationship between retailer and customer (Delormier et al., 2009).

5.4 Conclusion:

The foundation of understanding provided by Chapter 4, relating to both the assets available to households, as well as the nature of the local food environment, have enabled an depth discussion of how the household navigates its food environment to access food. The spectrum of purchasing patterns discussed in this section was revealed through an investigation of both the spatial distribution of available and affordable food and the household assets which determine access to food. These two facets interact to determine the food access of the urban household.

It is evident that how food managers strategically navigate the local food economy is based on their entitlement set. This in depth account of how households navigate their food environment provides a better understanding of the influence of household entitlements on food access. The household entitlements considered as important in terms of food access change as focus is placed on the ability of the household to interact with food economy. The spectrum of purchasing patterns discussed illustrates how the size and predictability of household food budgets, together with the mobility of households are highly influential in determining household purchasing patterns and thus food access. This thesis argues that in order to assess household entitlements in terms of their impact on food access, how these entitlements affect the households ability to navigate its local food environment must be considered.

Furthermore, this analysis of the interaction between the household and the spatial food economy has allowed for a better understanding how the food economy operates. It is clear that the ability of the local informal food economy to respond to the demands and characteristics of their local community is crucial in ensuring the resilience of these businesses into the future. Thus, the extensive nature of informal food retailing despite the presence of supermarkets speaks of their filling a need – both with regards to their customers and the retailers themselves.

The purchasing patterns relating to specific food groups illustrate the need to understand the priorities associated with these food groups in order to understand how they are accessed through the food economy. It is evident that the quality considerations associated with these food groups shape and reshape how local retailers sell these items. This reciprocal relationship was discussed in

Chapter 2 (Delormier, 2009). Atkinson (2008) found that consumers had a much greater sense of being 'seen' by their local informal retailers instead of being just another nameless consumer and this enables the tuck shops to develop a far more loyal consumer base than the larger supermarkets, where consumers are loyal only to their search for the best bargains. The following Chapter (Chapter 6) will explore the concept of the social embeddedness of retailers within a local community and the implications this embeddedness has on how these businesses operate and in turn how they better serve the needs of their customer base.

The understanding of how food economy is navigated presented in this Chapter allows for a better understanding of how it will change in the future. It is evident that the presence of supermarkets in the local food economy has not made the local informal food retailers redundant. However, transitions in the food retail economy are not the only factor influencing the purchasing patterns of households. Changes in the socio-economic characteristics of the local community could result in shifts in the proportions of households at each stage of the HFIAS, which will impact upon how they navigate the local food economy. Based on the findings presented in Chapter four, increases in employment and resultant increases in absolute incomes and regularity of these incomes within low-income communities could lead to drastic reductions in the proportion of household food expenditure in the informal sector. As food managers are better able to take advantage of shopping in bulk on a weekly or monthly basis at supermarkets, the proportion of their food budgets being spent within the local informal economy will decline. Although, such a shift does stem from more households enjoying more stable and plentiful access to food, there are consequences which could adversely affect the local economy. The increasing use of supermarkets in the food economy of low-income areas means that with an increase in incomes there is an increased amount of money leaving the local economy, as food managers' shift to shopping outside of their neighbourhoods (Potts, 2008). A community which engages in more local-based shopping practices will enable money and associated multiplier effects to be enjoyed by the local community.

Although, there was no mention amongst tuck shop owners of supermarkets causing their businesses to struggle; the introduction and increase of Somali tuck shops into the area, on the other hand, was widely cited as the reason for any recent downturns in business. The effect of the increased presence of Somali tuck shops on the local food economy and consequent food access of local households will be discussed in Chapter 6.

Chapter 6: The Social Economy and Food Access

6.1 Introduction:

The ability of the household to manage their assets will determine to what extent that household can cope within their often volatile food situation (Moser, 1997). As stated in the literature review, the concept of vulnerability is useful in describing the dynamic nature of poverty, as an absolute measure, such as household income, may not allow for an accurate account of the situation of households (Moser, 1997). The concept of vulnerability is also relevant in the study of household food insecurity. Households within similar income brackets can experience very different levels of vulnerability to food insecurity. This is because there are a variety of other household entitlements which impact upon food access, other than the level of income (West and Price, 1979). As illustrated in the previous Chapters, low-income food managers are strategic managers of complex asset portfolios, which include financial, material and social assets and there are a variety of strategies associated with these assets, which are engaged in to ensure sustained food access. Chapter 5 explored how households utilize their financial and material assets to access food and it was evident that those assets which influence the capability of the household to do the bulk of their shopping at supermarkets had the most influence on the food access of that household.

It is important to recognize that the social economy is also a significant source of food for many low-income households. It was found that a considerable amount of food transfers and exchanges took place within the social economy, whereby stocks of social capital was exchanged both between households and between households and local tuck shop owners to access food. The following Chapter will review the importance of social capital in accessing food, through social networks which exist between neighbours and family members, as well as those existing between retailers and customers. Social capital forms an important component of the asset base of a household and in some cases can even be more essential than their financial asset base, as these extra-monetary entitlements determine

the extent to which households have the capability to employ coping strategies to reduce their vulnerability to food insecurity.

The following Chapter will discuss how the social capital asset base impacts upon the ability of households to access food and thus decrease their vulnerability to food insecurity. The social asset base is more difficult to measure than the financial and material assets of households, the following discussion will be based largely on qualitative data.

6.2 Coping with Food Insecurity:

The interviews conducted revealed that 21 of the 25 households interviewed could not access sufficient food at least once a month, and many of them on a weekly basis. The households interviewed during this research engaged in a multitude of coping strategies to ensure they could meet their food requirements when a lack of income prevented them from engaging in market based means of accessing foods. Some of these coping strategies took place within the confines of the household in the ways in which limited food resources were managed and are referred to by Devereux (1993) as 'consumption-modifying strategies'. These strategies would include eating less preferred foods or eating smaller meals and/or skipping meals when household resources were low, which were common to the 21 food insecure households. The second type of coping strategy which Devereux (1993) proposes are 'income raising', or for the purposes of this study 'food raising' strategies and involved utilizing a variety of food networks and channels within the social economy to access food. Within this study area, it was found that households engage in these 'food raising' strategies through horizontal and vertical relationships with other households. Lie (1991) defines horizontal ties of exchange as reciprocal relationships where food exchanges occur in both directions and vertical ties of exchange as one-sided relationships where food only flows in one direction. The extent and form in which these income raising strategies were employed by households will be discussed in this Chapter.

It was evident through this research that networks of social capital also included local informal food retailers. It was found that the access of households to purchasing food on credit from local tuck shops was determined by social ties. This feeds into discussions around the social embeddedness of retailers, which was outlined in Section 2.7.1 of Chapter 2. Lie (1991) develops Polanyi's (1957) early ideas to state that, "all economic activities and

institutions are embedded in social relations” (p. 219). Based on the theories of social embeddedness, the fact that, in the case of local tuck shops, there is no separation between the site of business and the community in which these retailers live in, and the fact that these retailers share the same socio-economic challenges as those whom they sell to, will lead to a heightened level of social embeddedness within the local food economy. The impact of this social embeddedness on household food access was found to be considerable and the following section of this Chapter will describe the characteristics of tuck shops which allow stocks of social capital to be exchanged by households in order to access food. Polanyi’s (1957) concept of social embeddedness will be used to explore how these social networks interact with the market food economy to form the credit system.

6.3 Social Capital as an Asset

As stated in section 2.6.1 Of Chapter 2, ‘Social Capital’ refers to the extent to which the community itself can be considered an asset that decreases vulnerability or increases opportunity (Moser, 1997). In the context of food access, it refers to the extent to which households’ access food through social networks. The AFSUN survey conducted in eleven cities in Southern African found that one in five households had received food from relatives or neighbours within the previous week (Crush and Frayne, 2010a). Accessing food through the social economy was also found to be prevalent within the Manenberg case study, with 16 of the 25 households regularly engaging in food raising based on the exchange of social capital. Within Manenberg, the social networks within which food is exchanged are based largely on kin or local neighbour networks and not along rural-urban links or place of origin, as is generally the case in more newly urbanised communities (Moser, 1997).

Ahmad (1991) found that the extent to which a household is embedded in a dense social network can translate into more resilience in the face of food shortages, as households can fall back on family and neighbour ties to access food. On a community level these networks of social capital can lead to a state of ‘social security’, which refers to, “public action, including that by communities, to protect the poor and vulnerable from adverse changes in living standards” (Ahmad, 1991: 105). Within the Manenberg community, it was found that the way in which households structure themselves around food, as well as the business practices of the local food economy, provide a means of decreasing the vulnerability for the

poor to food insecurity. These informal arrangements within the community provide a system of insurance and social security, as described by Ahmad (1991).

6.3.1 Horizontal Food Relationships

As discussed in Section 4.3.2 of Chapter 4, households within the study area were not self-contained units but were large and fluid and comprised of multiple generations and extended family, many of which do not live in the house physically, and all of which ate regularly from the same pot. Thus, household food flows are dynamic within this community, with extended family units constantly reshaping themselves around food and engaging in horizontal or reciprocal ties of exchange. The organization of the household around the procurement and preparation of food can form an important means of reducing vulnerability to food insecurity. Ahmad (1991) describes 'communal cooking' as when family members, who lived in separate houses but close by, would cook together regularly, thus pooling food resources. Almost half of the households interviewed engaged in communal cooking. Household 9 mitigates against food shortages by combining food resources with another household. In this case, a mother and a daughter live a short distance apart and buy their groceries separately but cook together on a very regular basis,

"Because me and my daughter, we put the food together man, if she's short she can get from me and if I'm short I get" (Interview 9, 13/09/10).

The practice of communal cooking appeared to be common in the case of backyarders, with each of the three backyarders interviewed cooking together with the people living in the main house. The lack of availability of cooking facilities encouraged communal cooking with two of the three backyarders interviewed not having a stove or oven. Respondent 17 is a backyarder who does not own a stove or an oven and thus, either cooks in the main house belonging to her mother or goes to her aunt's house for dinner, which is three to four times a week. Her and her aunt help each other with the cooking and generally make a single large pot of food to feed both her aunts household of seven and her household of three. When one household's food resources are depleted they can rely more heavily on the food resources available at the other household and vice versa. The extent of reliance on these horizontal ties of exchange was evident when Respondent 17 was asked if she sometimes worries if the household will have enough food, she responded,

"Ja, like now for instance, before she told us we can come eat there I was starting to worry what we going to eat today and what about tomorrow morning" (Interview 17, 21/10/10).

Thus, communal cooking provides a means of risk avoidance whereby households who are living in constant threat of running out of money for food can combine resources with other households as a form of consumption smoothing. This coping strategy is vital in a low-income community where many households do not have any means of saving or mitigating against income shocks.

Furthermore, there are additional benefits to communal cooking. For example, Respondent 23 noted that communal cooking saves on electricity as cooking a large pot of food consumes less electricity than cooking two separate smaller pots. Also, combining food budgets to shop for a larger number of people means that greater advantage can be taken of specials and buying in bulk.

Sahlins (1965) introduced the concept of a 'continuum of exchange' of non-market transfers, which is, "sustained largely by long term self-interest of households in search of mutual insurance against livelihood insecurity" (Moser, 1997: 5). Kaufmann and Lindauer (1985) expands on this idea to propose the existence of a type of implicit social contract between households in low income areas, whereby households engage in transfers as a means of achieving their own economic objectives, rather than merely an act of pure altruism. Therefore, each household strives to be part of a functioning social network, which comprises of the households extended family as well as a number of friends and neighbours. The terms of the implicit social contract are such that, "the member households, who at a certain point in time happen to be in a relatively more advantaged economic position, have a commitment to transfer resources to households who happen to be in a disadvantaged position" (Kaufman and Lindauer, 1985: 338). This sense of the precariousness of the household is crucial to the development of strong social networking. Those words "happen to be" reflect the elements of chance and unpredictability which low-income households live under; hence the social network becomes the only means by which these households can achieve security in terms of their basic needs. These theories around social capital and how it operates on a household and community level are relevant to an understanding of household food access within the study area, where households organise themselves around food in order to allow for these horizontal food relationships to form and thus, a degree of security to be achieved.

6.3.2 Vertical Food Relationships

Those households who are more food secure engage in vertical or one-sided food relationships, whereby they regularly provide food for households or individuals who are less food secure. Household 19 continually relies on the charity of friends for access to food,

“Sometimes I sit here and think what am I going to do tonight, what am I going to do tonight, so about an hour go then I go out. I go to one of my friends and I go ask her for money¹” (Interview 19, 21/10/10).

Although not as common as horizontal relationships, these vertical channels of food exchange are evident in Manenberg and take the form of meal sharing or the transfer of food items or money intended for food purchases. Wealthier households were found to consistently share meals with extended family and, on a more sporadic basis, with other members of the community. Children are the most common recipients of one-sided meal sharing, with 12 of the 25 households involved in vertical meal sharing with either children of extended family members or the friends of their own children. This was especially true of grandparents and their grandchildren, whereby children moved between their own household and that of their grandparents to access food, thus decreasing the risk of food insecurity. This dynamic is reflected in the quote below by Respondent 3,

“Great grandchildren, they come in and out. They come to eat here because her grandson is in Joburg now. He went to go work there but his children come to us. Their mother is working but they come to us and ask for food and you cannot say no” (Interview 3, 08/09/10).

Hence, children are commonly in a much better position than adults in terms of food security, due to their access to wider social networks, which means that they are not restricted to sourcing their food from just one household.

There was also some mention of spontaneous meal sharing with neighbours and friends and this form of vertical ties of exchange seemed to be rooted in the culture of the area. A well-known saying amongst food managers in this area is outlined by Respondent 5 below,

“My mother used to say if you make a pot of food, you make food for the people who comes in, don’t forget about them” (Interview 5, 08/09/10).

Variations of this principle were mentioned by 7 of the food managers and Respondent 23 outlines how this principle influences this household's attitude towards meal sharing,

Respondent 23: "Sometimes there is left for the next day then my mommy will give my daddy sometimes and then we will give the children, but usually the pot is finished at night. And sometimes someone will come over to ask for food then we give them. And my granny taught my mommy that and she taught us that. That you don't make food for the people in the house, you always make for those that come in, so we have to make big pots of food".

Carol: "That's what my mother also taught me to do yes".

Respondent 23: "Say now we sit here by the table and we eating and you now come in. It's going to look ugly if we eating and you don't, so that's why we always make for the people that come in. Like ede, you must see how it was here. We had three tressles outside and people were sitting inside also because we had my cousin from Mitchells Plain, his wife and his children, and my daddy's friends came. And there was people here in the road and my mommy say, kom sit hier binne en kom eet man [Come sit inside, come and eat man]. My mommy's always like that."

Interviewer: "Do people come and eat here if they don't have anything to eat?"

Respondent 23: "Ja"

Interviewer: "Are they generally children or adults?"

Respondent 23: "Adults and children"

Interviewer: "Do you always have something to give them?"

Respondent 23: "Yes, even if we don't have, we share the little" (Interview 23, 07/11/10).

Although, one-sided meal sharing was the most common form of vertical food relationships, there was also evidence of informal transfers within the study area, whereby either of food or money intended for food purchases is transferred from one household to another rather than being shared together, as per Lie's (1997) definition of informal transfers. These transfers generally occurred between persons who were further removed from each other, such as friends rather than family members or even passers-by. These acts of altruism were common to food managers from the food secure households and these food managers appeared to take pride in their ability to provide food for the community beyond their household, as expressed by Respondent 20 below,

"I don't really have to but I do. If I've got I do and on a Wednesday I make a pot of soup and we dish out to the underprivileged. You see, we living in the area we can see where the poverty is" (Interview 20, 21/10/10).

In the following quote, Respondent 12 describes how their desire to uphold their social responsibility influenced their own purchasing and cooking decisions,

"Mmm, but you must remember that all the time I go shopping it's not for me alone. No, there's a lot of people in the road that's not working and then they come ask and I don't have it then I'm feeling very sad" (Interview 12, 03/10/10).

It was found that the motivation behind the vertical ties of exchange demonstrated by households was linked to religious convictions, feelings of moral obligation to the surrounding community and/or extended family and notions of what it means to be a good neighbour or mother. When vertical ties of exchange were first spoken of by economists, Polanyi (1957) described these types of relationships as being linked to these types of motivations. In understanding these vertical food relationships, the vital nature of food must be considered as this determines the value placed on this commodity and thus how it is exchanged both in and out of the market economy. Ariana Aranha of the Belo Horizonte Food Security Program states, "Food is not a material commodity. It cannot be treated as a material commodity. It is as essential as the air we need to breathe. If people don't eat they don't live" (Gopel, 2009: 3). The quotes presented thus far indicate that there is a culture of food sharing in Manenberg. The informal social food networks, both horizontal and vertical meal sharing and food transfers, have a profound effect on the nature of the community as a whole, in how it is organised around food and its ability to sustain food access despite the income variability's experienced by so many households. In a community where so many are constantly in danger of going hungry, flows of charity in the form of food form an important part of community life.

It is clear that being embedded within the social economy, within which horizontal and vertical food relationships occur, can reduce household vulnerability to food insecurity. These non-market flows of food and pooling of resources provide a means through which households can mediate their irregular and/or insufficient income base. However, it is not only households who are embedded in these social networks and transfer food as a result of altruistic and risk sharing behaviour. The tuck shop credit system also fits within Moser's

(1997) notion of social capital being an asset which decreases vulnerability and increases opportunity within communities.

6.4 The Credit System

It was found that the credit¹ system operating in the local food retailing sector is based on networks of social capital, whereby tuck shops transfer food along channels of social capital much like a household. As discussed in Section 5.2.3.3 of Chapter 5, this credit system provides an important means of accessing food for those for which food is economically inaccessible due to insufficient and irregular monetary resources. It was found that tuck shop owners only allow those regular customers whom they know to purchase food items on credit. Thus, for households who rely heavily on credit, building social capital with a tuck shop owner is a considerable asset in terms of food access.

It is evident that the credit system is beneficial for the consumer in terms of food access; however it is less obvious as to how this system benefits the retailer. The extensive provision of credit within the local informal food economy did not appear to be founded in a profit motive. Tuck shop owners did not charge a markup on those goods which are offered on credit, which is the case in the formal food economy. For example, food managers spoke of how butcheries offering credit place a high markup price on the foods offered on credit, presumably to generate profit and also account for the risk of non-payment. In contrast, it was found through interviews with tuck shop owners, that 6 of the 8 tuck shop owners who offered food on credit lost relatively large amounts of money through this business practice. An investigation of the reasoning behind the credit system is important in understanding how the local food economy responds to the food access needs of the local community and in turn, the opportunities available to the household to cope with their specific food access constraints.

Hinrichs (2000) identified that the reasoning behind the credit system provides a good example of how the objectives associated with the market sensibilities and social embeddedness of the retailer jostle side by side. The survivalist nature of these retailers has

¹ Networks of credit are also evident within the formal food economy as well, with one or two butcheries offering credit but at a much higher markup than that offered by tuck shops.

considerable implications on how these businesses go about creating and sustaining their profits and thus inform their market sensibilities (Neves and du Toit, 2012). The business model of these tuck shops needs to negotiate the trade-off between profit maximization and profit sustainability and thus, the provision of credit might be necessary to ensure that the market share of these businesses is maintained. It was found that the willingness of tuck shop owners to provide credit is the result of recognition of both the role which their businesses play as a node in the community food network and their reliance on the support of this community for the survival of their tuck shop. Their business practices are mediated through both a desire to create a profit and desire to build social capital, a dynamic which is not found in the formal retail sector.

6.4.1 Social Embeddedness:

As discussed in Section 2.7.1 of Chapter 2, the 'social embeddedness' of retailers occurs when the relationship between the retailer and the consumer is, "immediate, personal and enacted in shared space" (Lyson and Green (1995) in Hinrichs, 2000: 295). The degree of social embeddedness of retailers impacts upon the degree to which retailers are responsive to the demands of their customer base, which is evident in the type and quality of the goods sold, as well as the manner in which they are sold (Neves and du Toit, 2012). Interviews with tuck shop owners revealed that the social embeddedness of local tuck shops in social networks influenced their willingness to provide credit, a phenomenon which Ligthelm (2005) also identified in his extensive research of Spaza shops. Hence, the concepts of survivalist businesses and social embeddedness are useful in understanding how these social networks interact with the market food economy to form the credit system.

The social embeddedness of tuck shops in a low-income and food insecure community means that these businesses often come under pressure to aid those households who have insufficient food. Neves and du Toit (2012) found that one of the key factors in running a sustainable informal sector enterprise was the management of pervasive demands for credit by vulnerable households and the consequent low rates of repayment. Hence, tuck shop owners need to manage these socially redistributive claims and networks, in order to protect the sustainability of their businesses. One of the means through which informal traders manage customer demand for credit is through building 'weak links' networks, which are formed through their familiarity with customers due to their shared living space. These

networks will enable the use of social surveillance and pressure to collect debt (Granovetter, 1985). This strategy was evident within the local food economy of the study area. It was found that credit is not available to all customers, with each tuck shop owner regarding both how well they knew the customer and the frequency with which they supported the tuck shop as important factors in determining whether a customer was to receive credit. The quote below from the fruit and vegetable Stall Holder at Gatesville Shopping Centre illustrates the reasons why they prefer to give credit to people they know,

Interviewer: "Do you lose money from offering credit?"

Stall Holder: "No, it's ok, we don't risk it. You must know who to give to. You can must see you, that guys that got fisheries and this and that. No, you don't give to anyone. As I built up my relationship with my customer now I know" (Stall Holder, 12/08/10).

It is evident that the credit system operates along lines of close community bonds and trust. Studies have shown that the social embeddedness of retailers within the community can aid in making the credit system a more feasible endeavor for local retailers, compared with large scale food retailers (see for example Granovetter, 1985; Kaufman and Lindauer, 1985). Granovetter (1985) describes how there is a preference among retailers for transacting with individuals of known reputation and how information from one's own past dealings with a customer is valuable in reducing the risk of malfeasance. Thus, there is an incentive on the part of the customer not to cheat as the cost of which would be damage to one's reputation and consequently reluctance for local retailers to extend the offer of credit again (Granovetter, 1985). Hence, there is an increased likelihood of credit agreements being honoured as the tuck shop owner's embeddedness within the community offers assurance of payment, both in the form of trust and access to information regarding the consumers to whom they offer credit. Thus, the social embeddedness of retailers in the local community can contribute towards making the credit system feasible despite the precariously resource bases of those households receiving credit.

However, despite the assumed positive affect of the social embeddedness of tuck shops on the rate of repayment, it remains that 6 of the 8 tuck shop owners offering credit stated that they continuously lost relatively large amounts of money because of unfulfilled credit agreements. The following quote from a tuck shop situated in Grootkop Street describes some of the troubles encountered by tuck shop owners when offering credit,

Interviewer: "Do you offer food on credit?"

Tuck Shop Owner: "Yes, I have a problem with that because people take whatever they need and then it comes to pay time and then they don't pay at all".

Interviewer: "How often does that happen?"

Tuck Shop Owner: "It happens every week with me, and then... you give. They hungry and they need it and then they don't pay at all. Sometimes at the end of the month I lose a lot".

Interviewer: "How much?"

Tuck Shop Owner: "R3000 that's still outstanding. Ja, what I do is like a bread, I make like a 25c profit. Now imagine if, say I take 30 breads, 10 goes out on the book. I don't see profit there. I'm losing there as well, but what can you say if somebody is hungry?"(Grootkop Street Tuck Shop Owner, 14/08/10).

It appears that this tuck shop owner has a sense of responsibility to those people in the local community who are food insecure. This is likely linked to the fact that, in the case of tuck shops, there is no separation between the site of business and the site of residence, which means that the customer base of tuck shops is made up of family, friends and neighbours. Tuck shop owners reported that the most common food to be bought on credit were the most basic food items, such as bread and milk, which indicate that households are using the credit system to procure the most basic of food to survive, as opposed to luxury foods. Thus, tuck shop owners may be unwilling to make a profit from marking up these items on credit due to a sense of responsibility to those less fortunate, or perhaps they recognize that households requiring basic foods on credit would not be able to repay what they owe if there was a markup on these items. Block (1990) presented family, friendship or ethnicity ties, as well as understandings of morality and spirituality, as the reasons behind why economic goals are often not the only considerations. In the previous section, the way in which these motivations affected the altruistic behavior evident amongst extended family and neighbours was discussed, whereby people would share and give food to those in need. Thus, the social embeddedness of these retailers could explain an increased willingness and ability to offer a service which benefits those households who are food insecure and is responsive to the needs of the surrounding community.

However, tuck shops are not only engaged in these more vertical ties of exchange, as the survivalist nature of these businesses means that reciprocal relationships are important to the sustainability of these businesses. Ligthelm (2004) found that tuck shops are strongly integrated with the household and thus the wellbeing of the household is closely tied to the success of the business. This means that these tuck shops are reliant on maintaining the same networks of social capital as the households within which they operate. Hinrichs (2000) found that the fact that all of the retailers in the local informal food economy are themselves within the low-income bracket leads to further motivation to prioritize social ties in the way in which they conduct their businesses in order to ensure they are not cut off from networks of social capital.

6.4.2 Survivalist Business Model:

There is evidence to suggest that the provision of credit is also a means through which informal retailers can ensure the sustained support of their business and thus, maintain their market share. The survivalist nature of these businesses and the saturated market in which they operate make this reciprocal relationship necessary. The ability to maintain market share is a difficult task, given the precarious nature of the tuck shop industry. Four failed tuck shops were observed within the study area, whereby the tuck shop sign remained but the shop was no longer operating. Ligthelm (2008) argued that the fact that tuck shops are generally established as a means to escape poverty and unemployment instead of a desire to exploit business opportunities means that there are high business mortality rates within this sector. Given that owning a tuck shop is a very marginal profession and there are limited alternative employment opportunities for tuck shop owners (Ligthelm, 2004), it can be assumed that these retailers will conduct their businesses in a way which ensures that their market share is maintained, even if this means that their profit margins are minimal.

The quote below from a tuck shop owner in Hex Crescent describes how the offering of credit is couched within this retailer's ethos regarding the building of good customer relations and how the relationship between the retailer and the customer provides the basis of a successful credit arrangement,

Tuck Shop Owner: "Yes, and you must know how to work with your customers too. Ja, you must nice and talkative"

Interviewer: "So they come back again?"

Tuck Shop Owner: "Ja, they come back"

Interviewer: "Do you ever give on credit?"

Tuck Shop Owner: "Ja, we do give on credit".

Interviewer: "Quite often?"

Tuck Shop Owner: "Ja"

Interviewer: "To people you know?"

Tuck Shop Owner: "Ja that we trade long with. Not if I see you today and you ask for credit. No, you must buy like, if I see this guy now that always come".

Interviewer: "Then you give him some credit?"

Stall Holder: "Ja" (Hex Crescent Tuck Shop Owner; 12/08/10).

Ligthelm (2005) found that because the customer base relied upon by tuck shops is much smaller and thus more regular than bigger food retailers, it is so interconnected that it almost resembles a single cohesive unit in terms of its needs and opinions. The nature of this consumer base could also provide an incentive for retailers to foster good will with their customers; for fear that failure to do so would not only undermine their customer base, but also isolate them from their immediate community.

A tuck shop in Ruimte Road provides an example of the benefits of serving the needs and interests of the surrounding community through one's business practices. This tuck shop is owned by a retired Muslim couple, who are established members of the community, having lived in this area for over 40 years. They give sweets and chips to the children free-of-charge on Fridays, as well as providing food on credit to many local residents. Furthermore, they make a large pot of soup every couple of months, which they distribute amongst the neighbours. This was one of the busiest tuck shops observed during the research, with a constant stream of customers visiting the tuck shop throughout the interview. Thus, a tuck shop owner who builds social capital within their surrounding community and uses the credit system as a means of expressing good will could lead to extensive and sustained community support for their business.

As discussed in Section 5.3.4 of Chapter 5, the small and cohesive nature of the consumer base of tuck shops also created an incentive for local retailers to sell good quality fresh produce. Charman et al. (2012) found that survivalist businesses operating in a saturated market have to compete through non-price means, due to the intense competition which

they encounter. Thus, although the provision of credit does cause many tuck shops to lose money, if it ensures that the market share of the business is sustained, then this business practice would support the ability of the survivalist business owner to preserve their livelihood.

Hence, when explored in terms of social embeddedness and the survivalist nature of the tuck shop industry, the credit system could be deemed to be an effective means of providing a sorely needed consumption-smoothing mechanism to the local community, with relatively little risk and a means of building a loyal customer base. The impact of these characteristics of the local informal economy has considerable implications for the food access of the local community, as many households rely on their ability to make claims on local tuck shop owners to access food and mitigate risk.

Further research would be required to conclusively measure the effect of business practices which foster social capital on the sustainability of tuck shops. However, an indication of the benefits and necessity of building community support through one's business practices can be derived through a comparison between those tuck shops offering credit, which are all owned by local coloured residents of Manenberg, and those tuck shops owned by Somali immigrants who follow a very different business model, which does not include credit provision. Charman et al. (2012) have found that the increase of these foreign-owned tuck shops within Cape Town, and their associated business models, is changing the face of the informal food economy in many low-income neighbourhoods. Therefore, how this new block of tuck shop owners conduct their businesses, as well as how they are treated and managed by the local community and formal public authorities, is important to the experience of food access within these communities.

6.4.3 Somali-Owned Tuck Shops:

As discussed in Section 4.2.4.2.3 of Chapter 4, Somali tuck shop owners operate their businesses as an organized group which enables them to sell foods at a consistently lower price than the surrounding local tuck shops, which has caused many local tuck shops to go out of business. Neves and du Toit (2012) describe the price competition engaged in by these tuck shops as "violating prevailing retail practices" of informal food economies (p. 140), an act which has resulted in much hostility being directed towards these foreign tuck shop owners causing them to close down. In 2008, a local informal trader association in Cape Town demanded that Somalis raise their prices to match local prices or be forced out

of townships (IOLnews, 22/07/12). Therefore, the benefit of the increased availability of cheaper foods within the local food economy made possible by Somali tuck shop owners cannot be analyzed outside of the politics surrounding their presence within the local community.

It was evident that the Somali tuck shop owners situated within the study area were not embedded in local networks of social capital as they have largely remained isolated from their surrounding community. This was also found to be the case in the low-income neighbourhoods in Cape Town which formed part of the study conducted by Charman et al. (2012). The isolation of these tuck shop owners is demonstrated by the fact that all of the Somali tuck shop owners interviewed showed little to no competence in Afrikaans, the first language of this community, and most of them had only very broken English, despite most having been residing in this community or the wider Cape Flats area for over three years. Hence, it is evident that these tuck shop owners have not assimilated into the local community, either due to their own unwillingness and/or that of the local community. The isolation of these tuck shop owners from local social networks meant that they did not engage with the redistributive claims of the local community and hence, did not offer credit. These factors have considerable implications on how their businesses are perceived and thus supported by the surrounding community.

Within Manenberg, issues of race and ethnicity were found to be prevalent considerations in the decisions of food managers relating to food purchases. The attitudes of local residents towards Somali tuck shops were not only reflective of a lack of connection between these retailers and their surrounding communities, but also of a strong sense of hostility. Many of the interviews with food managers and local tuck shop owners revealed a deep sense of resentment towards the Somalis. The following quote from Respondent 23 reveals the conflict of interest being navigated by local food managers regarding Somali tuck shops, whereby local residents are loathe to support these retailers but have to in response to food budget constraints. This quote demonstrates the tension between the desire of food managers to buy foods at the lowest prices available and their aversion to the increase of Somali owned tuck shops in their neighbourhood. Knowledge of the strong value placed by this community on fresh, good quality bread, as discussed in Section 5.3.2 of the previous Chapter, aids in understanding the prejudices harboured by this food manager against

Somali tuck shop owners. However, she goes on to concede that she has to make use of this tuck shop because of the insufficiency of her household food budget.

“Not always with the Somalians over there because sometimes their bread is old. They got stale bread sometimes. If you buy two bread, now they will give you a fresh bread and one stale bread..... But we have to go there because we got a lot of children here and they ask their bread R5.... And they cheaper, so actually everybody around here that got a lot of children buy their bread there” (Interview 23, 07/11/10).

The widespread opinion amongst food managers was that Somali tuck shops engage in dishonest and destructive business practice and sell poor quality goods. Cannuscio et al. (2010) found that food establishments which were not owned by locals were viewed as signifying the economic subordination of the community. Similarly, Charman et al. (2012) found that foreign tuck shop owners not seen to be contributing at all to the wellbeing of the community through their business practices, preferring to use their business for the benefit of their own ethnic group. These sentiments were evident within this case study, with Respondent 5 making the following statement regarding Somali tuck shop owners, *“Hulle klaat die brood uit ons mont uit”* (Interview 5, 08/09/10) which translates to, ‘They take the bread out of our mouths’. She is expressing the perception that Somali tuck shops are undermining the local community’s means of surviving, which was held by most of the tuck shop owners interviewed.

It is evident that the negative perceptions of local food managers regarding Somali tuck shops influence their decisions on whether or not to purchase from these tuck shops, despite their lower prices. This finding disputes the assumption held by many food desert literatures, whereby the physical accessibility of low-income households to affordable food is viewed as an indicator of the food security of the community. Cannuscio et al. (2010) concept of foodways highlights the importance of the relationship between shopkeeper and shopper in influencing food managers’ decisions about where to shop, as shoppers generally prefer to shop in stores where their perception of the store is congruent with their own ideals. This is especially true when it comes to purchasing food from local tuck shops as this act is much more closely tied with the identity of the community than shopping at larger, formal food outlets situated outside the community. Hence, the implications of being outside social networks on the sustainability of these foreign-owned businesses are

considerable, with Somali tuck shops being left with a customer base which is disloyal and resentful.

Ligthelm (2004) found that the lack of community support for a tuck shop not only had the potential to undermine the profitability of these businesses but also to jeopardize their existence. He argues that failure to foster community support could incite strong feelings of resentment within the community, which could lead to tuck shop owners being isolated and their businesses falling victim to theft and violence (Ligthelm, 2003). In recent years there have been a number of cases of xenophobic attacks on foreign owned tuck shops in Cape Town (Charman et al., 2012). Thus, tuck shop owners cannot operate their businesses blind to the needs of surrounding community if they wish to remain in business, especially when these needs are for something as fundamental as food.

It is evident that the exclusion of Somali tuck shop owners from local social networks compromises both the sustainability of their businesses and consequently the sustainability of the availability of cheaper foods within the local food economy. The survivalist nature of local tuck shops may enable them to sustain their market share better than the more growth-orientated business models adopted by Somali tuck shop owners, due to the consequences of these Somali tuck shop owners failing to foster community support within a saturated market. Thus, the concepts of social embeddedness and survivalist are important concepts in analyzing how the local food economy operates and the experience of food access by local households.

6.5 Conclusion:

It is clear from this case study that the importance of the social economy in households' access to food cannot be ignored and that social capital forms an important part of the household's asset base. An understanding of the stocks and flows of social capital within this community as they relate to food has revealed the full extent of the household's food environment. However, the social economy has not featured strongly in food access literature and has not been viewed as an important means through which households' access food.

The flow of food through the social economy provides a useful lens through which community networks of social capital can be better understood. There is evidence of Ahmad's (1991) sophisticated system of insurance developing around food, through both horizontal and vertical ties of exchange, which reduce the vulnerability of households to food insecurity. Although, this social economy is robust enough to absorb the income/material asset shocks of individual households, widespread shocks can erode stocks of social capital and thus compromise the abilities of the community to protect the most food insecure (Ahmad, 1991). Changes in the food environment or in household financial or material asset bases can lead to a further decrease in their social capital asset base. High inflation, for example, would affect the purchasing power of the entire community and thus undermine the operation of the social economy. This is an important consideration when considering the ability of communities and households to cope with changes in their food situation. Hence, the importance of social capital should be recognised within household-level food access studies.

The study of the credit system of tuck shops has provided insight into how the social economy interacts with the market economy. It was found that the social embeddedness and survivalist nature of local retailers in the local community is important in understanding the credit system. The offering of credit was found to yield benefits in the form of continued support from the surrounding community. This was also evident in the responsiveness of tuck shops to the needs of the surrounding community in terms of the types, quantities and quality of the food sold as discussed in Section 5.2.3.3 of Chapter 5. These businesses have harnessed their embeddedness in the community to ensure the sustainability of their business in a saturated market. The resultant business practices have a profound impact on the access of the most vulnerable households to food. This Chapter outlined how the operation of these tuck shops outside of networks of social capital was found to compromise their support within the local community and thus their sustainability. Somali tuck shops do not operate along the lines of social embeddedness and thus, are not willing to cater to the food needs of the local community in terms of credit. Hence, it was found that Cannuscio et al.'s (2010) concept of foodways was important in understanding the decisions made by the household around which tuck shops to purchase food from.

The importance of the social dynamics evident in the local food economy in understanding how this economy functions further emphasises the need to engage with the interaction

between the household and its wider spatial context in order to assess food access. Without this lens the credit system seems counter-intuitive and even irrational, given the risk and expected poor rate of repayment. It is only when the characteristics of the local food economy are analysed together with how the household navigates its local food economy that some of the more complex channels of food access can be understood.

Chapter 7: Conclusion

7.1 An Integrated Approach to Food Access

The premise of this thesis was that 'Food Access', which refers to the *ability* of the household to acquire available food, is a product of the local food environment, as well as the asset base of the household itself. The literature review conducted within this thesis argued that the methodological and analytical tools needed to understand food access in terms of the interplay between these two components are not yet well developed. Within the food access studies available, there is a tendency to focus either on the household or on the spatial urban food environment.

Spatial food access studies have tended to focus solely on the structural nature of the food economy, which neglects the impact of the household's entitlements in determining the *actual* accessibility of food through the market economy, rather than solely the spatial accessibility. It was evident from this research that the spatial availability of cheaper and more diverse foods in supermarkets which were relatively close to the study area, did not translate into actual accessibility for many households. Household level food access studies have focussed on the household entitlements affecting food access and largely neglected its spatial food environment. Without acknowledging that the household interacts with its wider spatial context to access food, static measures of household entitlements are used as proxy indicators for food insecurity. Within this study those entitlements which impacted upon the household's ability to interact with its food environment were found to be the most influential in terms of food access. Thus, without taking into account how the household *utilises* its asset base to navigate the food economy, its entitlements cannot be sufficiently analysed in terms of their impact on food access. It is clear that gaps are evident within both the spatial and household level analyses of food access and that a more integrated approach would be useful in developing a more comprehensive understanding of urban food access.

Shaw (2006) and Cannuscio et al. (2010) have identified the need to recognise that the household exists within its wider spatial context and that the characteristics of both of these components determine food access. It was the intention of this thesis to explore how this approach could be used to gain a more comprehensive sense of the food access constraints faced by low-income households in an urban setting. The analysis of food access which includes both household assets together with the spatial food economy requires an expanded understanding of the food desert, which was

provided through the work of Shaw (2006) and Cannuscio et al. (2010) and a more thorough understanding of the household entitlements which impact upon its access to food, which was enabled through a wider application of Sen's (1981) capabilities approach to food access. The goal of this thesis is to respond to the need to search for new ways of explaining food access constraints as they relate to urban food environment and engage with the complexity behind food access.

Shaw's (2006) framework of Ability, Asset and Attitude, allows for the interaction between the household and the wider food retail environment to be included within an analysis of food access. This framework expands on the notion of food deserts to include the interaction between these two elements rather than separating them as exclusive facets within food access. Shaw's (2006) ideas on the components contributing to food deserts echo a Capabilities approach to the household asset base in that household assets are viewed in terms of the degree to which they enable the household in interacting with its food environment to procure food. Cannuscio et al.'s (2010) concept of 'Foodways' engages with the more complex social dynamics surrounding the production, purchase and consumption of food and thus, they too move away from the notion of food deserts being merely a product of the number and type of food outlets within a spatial area. The findings of any study based on the expanded view of food deserts presented by these authors will further understandings of the lived experience of food access, which will be valuable in developing an efficient, relevant and accessible urban food economy and by extension a built environment which caters to the basic needs of its residents.

Principles and methodologies from both literature focusing on the spatial food environment and literature focusing on the household were employed within this study to measure and analyse food access. A proximity, variety and diversity study was conducted within the local food economy to assess the spatial accessibility of affordable and diverse foods. Contributions were made to current understandings of the spatial food economies of developing city context, with the inclusion of the informal economy and the transitions evident within the food economies of low-income areas in developing cities. The household level analysis included the social asset base of households, as it was found that the social economy was an important channel of food access to the households interviewed.

The findings of this study reflected the idea that food access is a function of both the household asset base and the spatial food environment, with each of the food managers interviewed stating that they took both of these aspects into account when they made food purchasing decisions. The following Chapter will discuss how this more nuanced view of food access influences how the food economy is understood and thus how it is predicted to change with shifts within the food economy

itself and shifts in household entitlements. The effect of this approach on how household entitlements are understood in terms of food access will also be discussed. These shifts in how the food economy and household are understood in terms of food access will, in turn, have implications for how urban food security policies are developed, as well as how other policies affecting low-income neighbourhoods are thought to affect food access.

7.2 Household capabilities in accessing food

An expanded view of food deserts and of the household assets which influence food access means that the current use of macro data, such as household income and food prices and the number and type of food outlets in a certain area, to assess the spatial and economic accessibility of food is no longer sufficient. The adoption of a concept of food access which is based on the interaction between the household and their local food environment requires a shift in focus from static accounts of the household entitlements and their assumed impact upon food security to analysing how these entitlements impact upon the household's actual access to food. This understanding was demonstrated by both Shaw (2006) and Cannuscio et al. (2010).

In Chapter 4, household characteristics and entitlements, such as household size, income, mobility, type of employment, site and frequency of shopping, were assessed in terms of their correlation to the level of household food access, as revealed by the HFIAS. It was found in this study that the purchasing patterns of households were the most closely correlated to household food access. These purchasing patterns are a reflection of both the household entitlements and the nature of the spatial food economy, as was evident from the interviews conducted with food managers. Thus, this finding suggests that the most influential factor in terms of food access is how the household navigates the food economy to purchase food and not a static measure of its assets.

The spatial, content and temporal aspects of the food purchasing patterns of food managers were analysed further in terms of the HFIAS and it was found that the mix of formal and informal retailers which households purchased food from was strongly related to how food secure these households were. Those households who were able to buy the majority of their food from supermarkets were more food secure than those who were restricted to shopping locally in a more ad hoc manner. Chapter 5 used the in-depth account of household purchasing patterns to analyse how households strategically use their asset base to navigate their food environment to access food. This analysis provided insight into the constraints experienced by households and thus the factors contributing to the existence of food deserts, both in terms of the spatial and economic accessibility of food.

If purchasing patterns are found to be most closely aligned with the level of household food access, then the household entitlements informing these purchasing patterns should be investigated as being the most influential in terms of food access. Therefore, the household asset base should be assessed in relation to how it affects the capability of the household to interact with their food environment to access food. Both the monetary and material entitlements of households were found to inform purchasing patterns. The minimum unit sizes of supermarkets and the transport costs involved in accessing these retailers meant that the size and regularity of the household's food budget impacted their ability to purchase food from these food retailers. Thus, many food managers were excluded from using these outlets to purchase the majority of their food requirements due to the limited size or irregularity of their food budgets. Furthermore, the cost and inconvenience of using public transport to purchase food from supermarkets also restricted access. The mobility of food managers was found to influence which supermarkets were visited, frequency with which they were visited, and the quantities of the goods bought.

This research shows that purchasing a household's food requirements from supermarkets requires a certain level of capability in terms of the monetary and material asset base of households. Current food desert studies largely negate the fact that the spatial accessibility of retailers does not translate into real access, as these outlets still remain economically inaccessible for large sections of the urban population (Battersby, 2011b). It is only through analysing the actual food access of households through their purchasing patterns, instead of proxy indicators such as household income and/or food prices, that the true accessibility of these retailers could be determined. Furthermore, the factors influencing purchasing patterns are specific to each household which reinforces Battersby's (2011b) statement that there is a need to recognise that food insecurity cannot only be understood as being determined by a set of common challenges faced by a community, as is often the case in food desert studies.

It is evident that the recognition that food access is determined by the household's interaction with the spatial food environment allows for a more nuanced analysis of the household entitlement base. Elements such as, mobility and income regularity, have been seen as subsidiary to household income in terms of food access indicators and thus, have not been widely studied in household food access literature. The study of purchasing patterns reveals the actual capabilities of the household to access food, which is a reflection of both their asset base and the local food economy. Hence, the lens of purchasing patterns has given rise to the identification of a wider range of household entitlements which have an impact on food access. Further research into the purchasing patterns of communities

and the entitlements which underlie these patterns would lead to a deeper understanding of how the household entitlement base impacts upon food access in urban communities.

7.2.1 The social economy

Although, the urban household does access food largely through the market, it is still deeply couched within a network of social ties, which also form a channel of food access. Battersby (2010) found that low-income urban communities located in Cape Town access food from a wide range of sources, with the social economy forming an essential component of the urban food environments of these communities. The importance of the social economy within the food environments of the urban poor absent from food desert literature, which has largely been developed in the global North, as well as household level studies largely conducted in the South, which have largely focussed on the access of urban households to food through the market or home production (Battersby, 2011a). Thus, the more conventional studies on food deserts and household assets do little to encapsulate the social dynamics informing food access.

Within this study, current understandings of the capabilities of household's to access food were expanded to include accessing food through the social economy, which meant that non-market networks of food distribution were included in the conceptualisation of the local food environment. Thus, food access within this case study was only understood to be influenced by food prices and distribution within the local food economy and the monetary asset base of the household, but also the presence of other channels of food distribution which rely on the household's stock of social capital. The means through which households accessed food through the social economy were outlined in Chapter 6. The majority of households were involved in some extra-market food transfer or food sharing arrangement with extended family and/or neighbours. These arrangements provided an important means through which the most food insecure households could reduce their vulnerability to food insecurity.

The prevalence of these extra-market channels of food access indicate that many households within the study area do live in a food desert in the sense that they cannot access sufficient food through the market and thus must engage in risk pooling strategies to mitigate food insecurity. Kaufmann and Lindauer (1986) argue that risk pooling through the mechanism of social networks must ideally be subsidiary to public mechanisms of risk aversion, such as unemployment and pension funds, as inter-household transfers are limited by the wealth base of those households and thus can never

offer total mitigation against risk. Similarly, Ahmad (1991) contends that although, this social economy is robust enough to absorb the income/material asset shocks of individual households, widespread shocks can erode stocks of social capital and thus compromise the abilities of the community to protect the most food insecure. Therefore, further research is required to assess how changes in the food environment or in household financial and/or material asset bases would impact upon the social economy of urban communities and thus, their ability to procure food when accessible food is not available through the market.

7.2.2 Policy Implications: Households Entitlements and Food Access

These findings have implications for how food access is understood and consequently, the policies and interventions around the food access of the urban poor. For example, given that the mobility of households was found to have direct implications for the accessibility of households to supermarkets and thus their food access, the nature and extent of public transport becomes important when assessing the access of communities who experience mobility constraints to food. Clifton (2004) states that efficient transport planning for the poor must extend beyond an employment focus, which is currently the norm within South African cities, to one which caters to their non-work related travel needs such as access to food outlets.

Another entitlement which has far-reaching implications for household food access is the regularity and predictability of household income, an important finding in terms of developing pro-food access public policy. It was found that a predictable food budget allows food managers to make better decisions around taking advantage of buying in bulk. Thus, truly effective food access policy must not only consider the impact of the size of the physical/material asset base of households but also the implications of the stability of this asset base on the capability of households to manage their asset base optimally to access food. The promotion of regular income streams for food insecure households, whether through employment or social grants, can greatly improve the ability of these households to maximise their financial assets in terms of food access. For example, it was found that the welfare system currently operating within South Africa is an important entitlement for many households when it comes to food access, not only because of its addition to household gross income but also its predictability.

Finally, the role of the social economy in reducing the vulnerability of households to food insecurity cannot be ignored. This is important when considering the impact of South Africa's current housing roll out scheme, whereby low-income households are placed on a waiting list to receive a house

from the government and then moved from their current neighbourhoods to new ones where government housing schemes have been erected (Department of Housing, 2011). Although, this programme is providing hundreds of thousands of people every year with houses, the implications of this programme on the vulnerability of these households to food insecurity could be considerable (Napier, 2003). The movement of households away from the social networks upon which they rely for food access could deprive them of an essential means of avoiding the risk of food insecurity. Thus, urban policy makers need to be mindful of the complex social networks through which households' access food, in order that urban policies which affect low-income households do not erode their capabilities in terms of food access.

It is important that food security policies and interventions are not limited to the household. Although, the employment promotion and social welfare programmes operating in South Africa are an effective means of improving the capabilities of households to access food, there is also opportunity to promote food access through programmes geared towards promoting an efficient and relevant urban food economy. Adding complexity to the concept of food access also enables a better understanding of how the local food economy is actually used by households to procure food and thus, a better understanding of the different facets of the food economy, in terms of their role and importance regarding food access. This better understanding of the local food economy can aid in developing and promoting a food economy which enhances the food access of the urban poor.

7.3 The Integrated Food Economy:

Transitions and trends in the local food economy need to be understood in light of how the household interacts with the food economy. The fact that supermarkets are economically and spatially inaccessible to many households calls into question the assumption that the supermarketisation occurring in low-income areas will cause the informal food economy to go into decline (Louw et al., 2004; McGaffin, 2010). This study found that an extensive informal food retail sector was operating with the study area, despite the presence of supermarkets in close proximity. Further exploration of how the formal and informal economies were navigated by food managers revealed that these economies have a separate and defined role within the local food economy.

7.3.1 Formal and Informal food economies

The fact that the informal food economy continues to have such a strong presence in the local food environment, despite the presence of supermarkets in close proximity, indicates that the physical accessibility of food does not solely determine food access, but rather there are household level factors at play which ensure the resilience of the informal food economy. This study investigated how the various components of the food economy respond to the different needs and challenges faced by households regarding food access. The ability of supermarkets to take advantage of economies of scale means that they can sell food items at lower prices than smaller scale retail outlets, which has meant that the spatial accessibility of nutritious and affordable food has increased with the presence of these supermarkets. However, as stated previously, the unit sizes sold in the supermarkets and the transport costs involved in accessing these retailers prevent them from being the sole source of food procurement for low-income households. There are market failures evident in both the formal and informal economies, given the nature of local household entitlements, and thus neither of these economies was found to entirely meet the food access requirements of households within the study area.

This thesis investigated the role which informal food retailers play in household food access and the reciprocal relationship between the informal food economy and local consumers. There are certain characteristics of informal retailers which have enabled them to continually form an important part of the local food economy despite competition from formal food retailers. It is important that the informal food sector is not regarded as one homogenous body of retailers. It is clear from the overview of the food economy presented in Section 4.2 of Chapter 4 that there is much diversity within the informal food economy. There are both survivalist (local tuck shops) and growth orientated (Gatesville fresh produce stalls) businesses operating in the informal economy, both of which play an important role in ensuring food access amongst low-income households. The business practices of the various informal food retailers, in terms of the type of food they sell, and the price and quantities in which it is sold, were investigated. These business characteristics were assessed in terms of their importance for household food access and thus, the extent to which they allowed these retailers to operate within a niche in the local food economy.

The nature and extent of these survivalist informal food retailers can be explained by the relevance and responsiveness of their retailing practices to the asset base of the low-income household. It is clear from this study that informal food retailers are sensitive to the purchasing patterns of local

food managers and the entitlements which underlie their purchasing decisions, which is enhanced by the survivalist and socially embedded nature of these businesses. Tuck shop owners were found to have an intimate understanding of the consumer, which means that these informal retailers are able to provide products which are relevant to the resource base of their consumers, such as the practice of bulk breaking and the sale of lower quality fresh produce. Furthermore, the close proximity of these retailers to the consumers means that no transport costs are required to access these retailers. As discussed in Section 6.4.1 of Chapter 6, the social embeddedness of these businesses allows and encourages them to provide credit; a service which more growth-orientated businesses would not consider to be an effective business practice, given the precarious asset bases of the customers. The credit system is an important means through which the most vulnerable of households can access food. Hence, these retailers were found to be a vital source of food for the most food insecure households in a number of ways. However, the majority of research pertaining to the informal food economy has centered on its importance in the livelihood strategies of the informal retailers themselves rather than its importance in determining the food access in low income communities (see for example Levin et al., 1999; Rogerson, 2000).

Although, informal food retailers are an important means of accessing food for the most vulnerable of households, the higher prices of food items sold by tuck shops, compared with those available in supermarkets, prevents these retailers from being a cost effective means of procuring household food requirements. It was found that households will opt to buy increasing proportions of their food requirements from supermarkets as their asset base allows, in order to take advantage of specials and the savings which can be generated through buying in bulk. It can be assumed from the purchasing pattern spectrum presented in Chapter 5 that as the asset base of households increase over time, increasing amounts of the food requirements of these households will be purchased outside the study area at formal supermarkets. These findings suggest that improvements in the standard of living of urban neighbourhoods would be more likely to cause a decline in the tuck shop sector, rather than purely increased numbers of supermarkets in low-income areas. Thus, transitions in the socio-economic nature of households should enter more into discussions around transitions in the food economy in response to supermarketisation.

7.3.2 Local and Somali retailer tensions

It is evident from the review of purchasing patterns in Chapter 5 that informal retailers do have a defined niche within the local food economy, given the current constraints faced by households in

terms of mobility and income. As stated in Chapter 5, there is more competition evident between these two types of informal retailers than between the encroaching formal food economy and the informal food economy. Instead, it is the Somali tuck shops with which local informal retailers must compete for market share. As discussed in Section 4.2.4.2.3 of Chapter 4, the Somali tuck shops have brought the benefits of economies of scale in procurement and price competitiveness into the local space and the fact that these tuck shops are as proximal to the consumer base as local tuck shops means that they are in direct competition for market share. As discussed in Chapter 6, Somali tuck shop owners are not socially embedded in the local community, which impacts upon the way in which they conduct their businesses as compared to local tuck shop owners. Despite the cheaper food available from Somali tuck shops, it was found that the negative perception held by the local community towards these retailers reduced their willingness to support them. This demonstrates that the spatial availability of affordable food is not the only consideration when assessing food access. The social dynamics which characterise how local households navigate the local food economy reinforce Cannuscio et al.'s (2010) argument that foodways are important in understanding how food is actually accessed.

The local food economy has been found to be a much contested space, as these foreign tuck shops are increasing in number in many South African townships (Charman et al., 2012). How these two clusters of tuck shops interact within the local community will greatly determine the nature of the food environment, both now and in the future, and thus, have implications for the extent and nature of food access in these communities. How the local food economy shifts as more Somali tuck shops start-up will impact the prominence of social capital in the access of households to food through the local food economy. The credit system may go into decline or take on another form as Somali traders seek to fill the gap, whereby the most food insecure need an option of last resort. How these two clusters of tuck shops interact within the local community will greatly determine the nature of the food environment, both now and in the future, and thus impact upon the extent and nature of food access in these communities. It will be interesting to see whether the social embeddedness of the local tuck shops will protect them against being pushed out by more competitive Somali traders. Granovetter (1985) states that, "small firms in a market setting may persist instead because a dense network of social relations is overlaid on the business relations" (p. 507). Further studies are required regarding how the increasing presence of Somali owned tuck shops affects the local owned food retailing sector, in order to ascertain the importance of social embeddedness in successfully running a local food retail outlet within a low-income neighbourhood.

7.3.3 Policy Implications: Urban Food Economy and Food Access

The food economy has not featured in food security policies in the South, with the public sector regarding urban food security to be an issue to be dealt with within the household. Maxwell and Smith (1998) argue that “the efficient and equitable operation of the food system” is essential for food security (p. 10). Thus, it is important to understand the dynamics within the local food economy when considering food access and how it can be promoted.

Although, supermarketisation does lead to the increased physical availability of affordable and diverse foods, the actual accessibility of these retailers is still limited amongst the urban poor. Therefore, there is a need for greater recognition of the importance of the informal food economy for the food access of the more vulnerable communities. Devey et al. (2005) argue that the informal food economy is an integrated and growing part of the economy, and will remain an important source of food for vulnerable populations as high levels of urbanization continue in developing cities. Therefore, the informal food economy may become increasingly essential as Cape Town tries to meet the food access needs of its growing population. Hence, in order for policies around food access to be effective and relevant for low-income neighbourhoods, policy makers need to view the food economy as being an integration of both formal and informal retailers. Roos (2012) argues that initiatives which aid tuck shops in becoming more efficient and effective food retailers have the potential to improve the socio-economic and food security situation in low-income communities.

The current transitions taking place within the local informal economy, with the increase in foreign-owned tuck shops, are also important in terms of the food access of these communities. Understanding the tensions between local and foreign tuck shops and their resultant implications for the food environment are important when considering the food access of low-income communities.

7.4 Final Comments

This thesis builds on the expanded view of food deserts presented by Shaw (2006) and Cannuscio et al. (2010) to provide a more complex analysis of urban food access, whereby food access is recognised as a product of both the spatial food environment and the households’ asset base. The fact that the food access of households was most strongly correlated to their food purchasing patterns indicates that the means through which the household navigates the local food economy is

the most influential factor in terms of food access. The purchasing patterns of the households interviewed are influenced by a number of household entitlements and are also influenced by the nature of the local food economy. Thus, this thesis has shown that the food access of households is a product of both of these elements. This thesis also highlighted the importance of the social and informal economies in the accessing of food by low-income households. Further study into the food access of different urban neighbourhoods is needed in order to get a better sense of what entitlements affect the capabilities of households to access food and what characteristics of the local food environment encourage and discourage food access.

In terms of food access policy, a number of researchers call for a sympathetic re-regulation of the urban food system in support of marginalised communities (Smith, 1998; Hubbard and Onumah, 2000; Cummins et al., 2004; Larsen and Gilliland, 2009). In order for this to be achieved there needs to be a greater recognition of the responsibilities of the public sector in initiating and maintaining an urban food system which is fair and which caters to the nutritional needs of the urban population. Alexander (1966) argues that the disjointed and oversimplified nature of urban planning as it stands now, fails to recognise the real systems within the city which enable it to live. Current food access studies and policies could also be said to be oversimplified and disjointed, with very few recognising the dynamic and complex relationship between the household asset base and the spatial food environment which informs food access. The findings of studies based on a more complex and nuanced view of food access, as demonstrated through this thesis, can aid in better understanding the trends identified by studies within both food desert and household-level literature.

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Appendix 1: Shop Profile

Shop Profile: Number _____

1. Location: _____
2. Type of food retailer: _____
3. Opening hours: _____
4. Do you sell anything on credit? _____
5. General observations:

6. Profile of customers (age, gender, employed):

7. Where do customers usually come from? _____
8. Busiest day, time of day: _____
9. Which products bring in the most money?

10. How many different types of fresh produce?

Types of Food; Prices and Quantities

<u>Types of food</u>	<u>Quantities</u>	<u>Prices</u>
Carbohydrates		
Bread		
Maize Meal		
Potatoes		
Rice		
Other		
Protein		
Milk		
Eggs		
Chicken		
Beef		
Other		
Fresh Produce		
Fats and Oils		
Other		
Sugar		
Tea		
Coffee		
Junk Food		
Chips		
Sweets/Chocolates		
Cool Drinks		
Spices		
Other		

Appendix 2: Household Interview Outline

Date of Interview: _____

Time of Interview: _____

Location of Interview: _____

Interview Number: _____

1. Which one of the following household types best describes the type of dwelling this household occupies? (To be answered by interviewer)

Housing Type	
Free standing house	
Flat	
Room in Backyard	
Squatter hut/shack	
Semi-detached house	
Room in house	
Room in flat	
Other (specify)	

2. Household Structure

- a. How many people?
- b. Ages?
- c. Employed?
- d. Where do they usually eat their main meal?
- e. Who in the household usually buys and prepares the food

3. Meal Recall

- a. What did the household eat for breakfast?
- b. What did the household eat for lunch?
- c. What did the household eat for dinner (3 day recall)?

4. Purchasing Patterns

- a. What do you buy every day? In what quantities? Where from? Why? How did you get there?
- b. What do you buy at least once a week?
- c. What do you buy at least once a month?

Carbohydrates	Fresh Produce	Protein	Foods containing Fats and Oils	Foods containing Sugar
White Bread	Bananas	Stewing Beef	Margarine	Tea Leaves
Brown Bread	Onions	Milk	Sunflower Oil	Instant Coffee
Maize Meal	Tomatoes	Sorghum Meal	Peanut Butter	White Sugar
Samp	Cabbage	Eggs		
Rice	Apples	Pilchards		
Potatoes	Oranges	Sugar Beans		
		Butter Beans		
		Chicken		

5. Household Dynamics

- a. Do your children eat similar food to the adults in your household?
- b. What do they buy? How often? From where?
- c. Do they get a meal at school?
- d. Do you often buy certain foods because you know that they will eat it?

6. Time

- a. How much time do you dedicate to shopping every week?
- b. How much time do you spend preparing food every day?

- c. Do you ever feel like you don't have enough time to shop/cook?/Would you like to have more time to shop/cook?
- d. How often do you prepare a cooked meal? Why?
- e. Do you spend a lot of time planning what kinds of foods you will buy and what meals you will prepare? Why?/Why not?

7. Mobility

- a. Are there any food retailers which you visit in transit to another location?
- b. How do you get to the supermarket XXX/ informal market; street foods OOO/ small shops YYYY?
- c. How much do you spend on transport to do a big shop at the supermarket/informal market?
- d. How much time does it take to get there and back?
- e. Do you shop by yourself or with others? Who?
- f. Do you struggle physically when shopping (carrying shopping bags embarking/diseimbarking public transport)?

8. Money

- a. How much do you spend on food?
- b. Do you sometimes spend food on credit in order to have enough food to eat?
- c. What kinds of food do you usually buy on credit? From where?

9. Storage and Cooking Facilities

- a. Do you have (access to) a fridge? Electricity? Gas?
- b. Do you have (access to) a freezer? How big?

- c. Are the fridge/Freezer ever too full to put in more food?
- d. Do you have (access to) a stove? How often do you use the stove? Why?
- e. Do you have access to an oven? How often do you use the oven? Why?
- f. Do you sometimes not use the oven/fridge/freezer because of the electricity/gas that it takes to run it?

10. Food Knowledge

- a. Where did you learn to cook?
- b. How are the meals you prepare different to the meals you ate as a child?
- c. Ave you changed the way that you cook in any way?
- d. Do you choose not to buy certain foods because you are unsure about how to prepare them? Do you generally stick to buying foods that you know? Why?
- e. Do you buy certain foods because they are a part of your culture?

11. HFIAS

<u>HFIAS for the last four weeks</u>	<u>Never</u>	<u>Once this past month</u>	<u>At least once per week</u>	<u>All the time</u>	<u>Don't know/ Refused</u>
a. Did you worry that your household would not have enough food?					
b. Where you or any household member not able to eat the kinds of food you prefer because of a lack of resources?					
c. Did you or any household member eat just a few kinds of food day after day because of a lack of resources?					
d. Did you or any household member eat food that you did not want to eat because of a lack of resources to obtain other types of food?					

e. Did you or any household member eat a smaller meal than you felt you needed because there was not enough food?					
f. Did you or any household member eat fewer meals in a day because there was not enough food?					
g. Was there ever no food at all in your household because there was not enough resources to get more?					
h. Do you or any household member go to sleep at night hungry because there was not enough food?					
i. Do you or any household member go a whole day and night without eating anything because there was not enough food?					
j. Do you or any household member eat a cooked meal less than once a day?					

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