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Urban food insecurity in Cape Town, South Africa: An alternative approach to food access

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This paper presents data from the African Food Security Urban Network's 2008 baseline survey of Cape Town. This survey found that 80% of the sampled households could be classified as moderately or severely food insecure. In urban areas the main driver of food insecurity is not availability but access. Access is typically viewed as being directly related to income. Households were found to use formal food markets, but more frequently depended on informal sector markets and informal social safety nets. The more food insecure and income poor a household was, the more likely it was to be dependent on less formal means of securing food. This suggests that there is some form of market failure in the formal food system. This paper therefore advocates for a food systems approach that validates and supports the role that the informal sector plays in urban food security.

Keywords: urban food security; food access; supermarket; market failure

1. Introduction

Food insecurity is a major developmental problem in southern Africa and has been the focus of many NGO and state development initiatives. The seriousness of this problem is evidenced by the eradication of hunger being part of the first Millennium Development Goal. In South Africa, food security was identified as a key focus area in the 2009 General Election Manifesto of the ANC (African National Congress), building on the already existing Integrated Food Security Strategy. However, this paper argues that much of the existing research and policy focus is misdirected and has failed to recognise the role of the market in determining food access.

The paper argues four fundamental points, drawing on data collected for the African Food Security Urban Network's baseline survey of food insecurity in Cape Town and supporting literature. I argue firstly that urban food insecurity has been neglected and needs further research and policy focus. Second, I argue that food security policy needs to focus more on issues of access and not simply availability. My third argument is that issues of access need to be considered beyond the household scale and take into account the structure of food markets as well as income and expenditure and other household-scale characteristics. Finally, I argue that if households' ways of navigating formal and informal food sources are acknowledged as being integral to urban food security, then it becomes clear there is a need to re-assess policy formulations of the connections between the formal and informal sectors. Research on the informal sector and its connection to the formal has tended to focus on employment and economic development. I argue that if these sectors are viewed through a consumption rather than production lens, then this raises a different set of policy considerations.

The following section discusses the current dominant construction of food security in the policy and development realm. This is followed by the methodology and contextual background for the study. The data from the survey are then presented to highlight the extent and characteristics of urban food insecurity in Cape Town. An analysis of the sources of food accessed by survey participants follows, to support the argument for the wider food system to be considered as a determinant of food security through. The paper concludes by calling for future food security policy to give greater consideration to the connections between the formal and informal food sectors.

2. The construction of food security

Much of the food security policy and development focus has been on rural areas and has had a strong bias towards production-based solutions. In their document on the invisibility of urban food insecurity, Crush and Frayne (2010) review the major recent framing documents of the FAO, World Bank, G8, NEPAD and UN addressing food insecurity and identify a persistent focus on rural food insecurity and assisting small-scale farmers. In South Africa, the Integrated Food Security Strategy is housed in the Department of Agriculture, Forestry and Fisheries (DoA, 2002). The ANC included food security as one of its top priorities in its 2009 Election Manifesto, but located it in the section on rural development (ANC, 2009).

These responses to food insecurity are based on two misconceptualisations of the problem. The first is that food insecurity is mainly a rural problem and the second is that it is mainly a problem of food availability. The rural framing of food insecurity is linked to the persistence of the anti-urban bias in development studies, where poverty is seen as a predominantly rural issue (UN-HABITAT, 2001:12). However, the locus of poverty is shifting. More than half the world's population now lives in urban areas, and sub-Saharan Africa is the most rapidly urbanising region (UN-HABITAT, 2009:25). The proportion of poor populations living in urban areas is increasing worldwide, not only because the poor urbanise faster than the non-poor (Ravallion, 2002:442) but also because conditions in many urban areas are driving many urban residents into poverty (Mehta, 2000). In the light of these demographic shifts, the city can be considered the new development frontier. Urban food security therefore requires more research and policy attention.

The second misconceptualisation has been the framing of food insecurity as primarily a problem of availability. This construction of food security was challenged as early as 1976 in Sen's 'Famines as Failures of Exchange Entitlements', in which it was noted that major famines have taken place without any reduction in the ratio of food to population (Sen, 1976, 1982). This observation led researchers who had previously focused on macro-scale availability to start considering household-scale access and utilisation issues too.

The FAO Statistics Division defines three core concepts, as follows: '*Food availability* relates to physical availability of quantities of food from own production or [from a] business, commercial imports or donors available for human consumption. *Food access* refers to the adequate income or other means to acquire food quantities needed. *Food utilisation* refers to proper use, processing and storage techniques; adequate food and nutrition knowledge practices towards a better nutrient absorption and metabolic utilisation' (FAO, 2006:4, italics added).

In urban areas in particular the problem is primarily one of access. City dwellers tend to be far more dependent than their rural counterparts on the cash economy to acquire food. Maxwell et al. found that in Accra, Ghana, urban households purchased 90% of the food they consumed (2000:xii). Given this dependence on the market, any weaknesses in the urban food system are likely to drive households into food insecurity.

Integral to Sen's work is his contention that access is not simply an issue of income to purchase food. As framed by Sen, food insecurity is a failure of entitlement, where entitlement is understood as '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' (1984:497). This establishes food insecurity as a problem of access and recognises that access is determined by a range of entitlement types. Sen's (1981) core entitlement categories are production (growing food), trade (buying food), own labour (working for food) and inheritance and transfer (being given food). According to this framework, financial access is only one of a range of means by which households gain access to food. I would argue too that the extensive work conducted on 'food deserts' in Britain and North America (see for example Cummins & McIntyre, 2002; Shaw, 2006; Cannuscio et al., 2010) further challenges the conflation of income poverty with food insecurity, and highlights the way the location of the market and the type of market affect households' abilities to access adequate, affordable and nutritious food.

Despite the cogent criticisms of using income poverty as a proxy for food security, this approach persists. A number of large-scale surveys, such as the South African October Household Survey, General Household Survey and Income and Expenditure Survey, and their equivalents across southern Africa, do capture data that have been used to infer levels of food insecurity. However, the indicators used are still predominantly proportions of income spent on food rather than direct measures of food insecurity. Where research has revealed access failure, its findings are usually based on counting individuals who miss meals because they are short of money; in other words, access is still constructed as being driven by financial issues alone.

This paper is based on the findings of a survey conducted specifically to measure urban food insecurity and to understand the household and extra-household factors that shape food access. It examines how households access food in Cape Town and where they source it. The data demonstrate the importance of the informal food sector¹ as a means of accessing food. The paper argues that urban food insecurity is a manifestation of market failures in the formal and informal food markets, and of the persistent disconnect between these two sectors of the urban food system.

3. Methodology

In 2008 the African Food Security Urban Network (AFSUN) conducted an 11-city baseline survey to assess the extent of urban food insecurity in southern Africa and to generate data on the drivers and impacts of this problem. The cities surveyed were Blantyre, Cape Town, Gaborone, Harare, Lusaka, Johannesburg, Manzini, Maseru, Maputo, Msunduzi and Windhoek. Data were captured on 6453 households and 28 771 individuals. The project was funded by the Canadian International Development Agency and had an explicit poverty focus. To make it possible to consider extra-

household dynamics, such as access to services, markets and employment, in the analysis of the drivers of food insecurity, the surveys across the 11 cities sampled households in poor areas of the cities rather than poor households across the cities. The areas were selected by the research leader in each city and approved by the project's wider research committee. This paper focuses on the data generated by the Cape Town survey.

The survey sampled 1060 households in three areas of Cape Town: Ocean View, Ward 34 (Brown's Farm, Philippi) and Ward 95 (Enkanini and Kuyasa, Khayelitsha) (see Figure 1). These three sites were selected in order to capture some of the diversity of the experience of the urban poor in the city with regard to food security. The Ocean View population has strong links to local fisheries and was selected to examine the role of fisheries in food security. Ward 34 is near to the Philippi Horticultural Area and was selected to contribute to the debate on the potential role of urban agriculture as a source of food for the urban poor. Ward 95 is on the periphery of the city and is populated largely by recent migrants to the city. This site was selected to examine the role of rural-urban linkages in urban food security. However, in many ways these local characteristics played a smaller role in shaping food security related survival strategies than other more widespread urban challenges.

A systematic sampling strategy was used to survey 400 households per site. Given concerns about the age and integrity of the available data on household numbers in the selected areas, recent aerial photographs were sourced from the City of Cape Town and counts were done on the number of residential structures in the chosen areas. This approximation of total household numbers (including backyard shacks) was then divided by 400 to give the sampling interval. After a starting point had been chosen, fieldworkers then sampled every x number of houses according to the sampling interval in each of the three areas. Where there was no response at the assigned housing unit, the

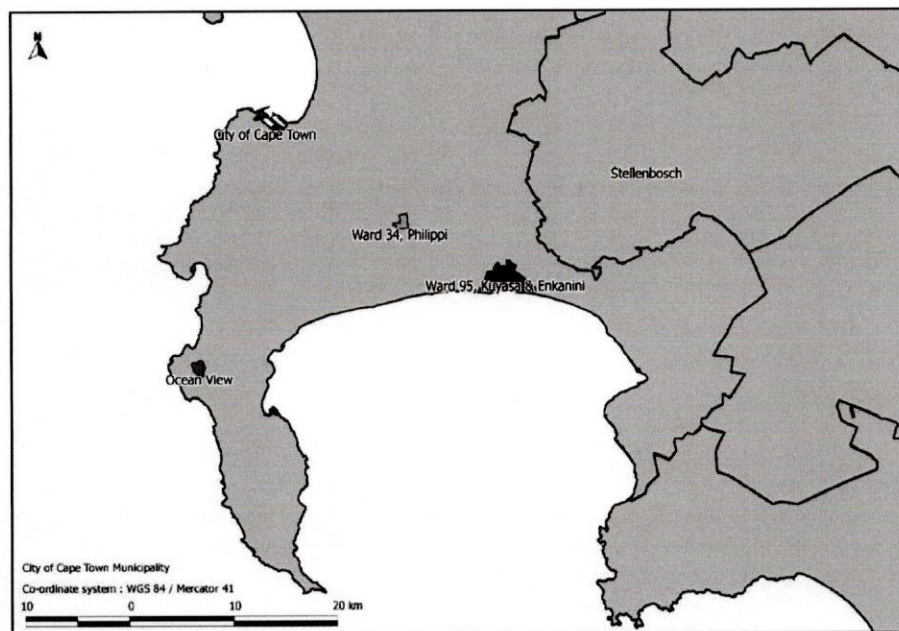


Figure 1: Location of field sites of the AFSUN survey

fieldworkers then went to the house next door. In the dataset, Ocean View is under-represented with just 266 surveys, compared to 389 in Ward 34 and 394 in Ward 95.

The survey was conducted in September and October 2008 using fieldworkers from the local community, the University of the Western Cape and the University of Cape Town. These fieldworkers received two days' training before fieldwork began. Field supervisors were responsible for collecting and checking the data and fieldwork practices throughout the research period.

The survey itself was designed to collect basic demographic information and answer four questions:

- What are the levels of food insecurity among poor urban households?
- What is the relationship between poverty and urban food insecurity?
- How do the urban poor get their food?
- What factors influence urban food insecurity?

The survey drew on three tools designed by USAID's FANTA Project (Food and Nutrition Technical Assistance): the Household Food Insecurity Access Scale (HFIAS), the Months of Adequate Household Food Provisioning Scale and the Household Dietary Diversity Scale. The HFIAS uses a series of nine questions to assess insufficiency of food intake and its physical consequences, poor quality of food and anxiety and uncertainty about food supply, on the basis of a 30-day recall (for more information see Coates et al., 2007). The Months of Adequate Household Food Provisioning Scale was used to capture temporal dimensions of food insecurity. Participants were asked to think back over the past 12 months and identify the months in which they did not have sufficient food to meet their household needs (for more see Bilinsky & Swindale, 2007). Finally, the Household Dietary Diversity Scale was used to capture types of food consumed. Participants were asked to recall all foods consumed by the household in the previous 24 hours. These foods were disaggregated into 12 core food types to provide a dietary diversity score on a scale of 0 to 12 (for more see Swindale & Bilinsky, 2006).

4. The extent and characteristics of food insecurity in Cape Town

Across the 11 cities surveyed, 77% of households were either severely or moderately food insecure (Frayne et al., 2010:44). In Cape Town this proportion was marginally greater at 80%. These very high levels of urban food insecurity, comparable to those in rural areas, challenge the continued perception of food insecurity as a predominantly rural problem.

A recent study in Klipplaat in the rural Eastern Cape using the same food security measurement tool found that 100% of participant households were severely or moderately food insecure (Ballantine et al., 2008).² However, while food insecurity appears to be more extensive in rural than urban areas, our survey found that the severity of food insecurity in poor areas of Cape Town was greater than that in the rural area sampled (see Table 1). In Klipplaat, 69% of households were severely food insecure, but this proportion was as high as 80% in Ward 95 in the Cape Town survey. As stated in the introduction, the severity of urban food insecurity is largely due to city dwellers' dependence on the cash economy (Ruel et al., 1999). When income generating potential declines or food prices increase they become prone to food insecurity, and since

Table 1: Comparison between food security in Cape Town (n = 1058)^a and Klipplaat (n = 459)

Location	Food security status (% of households)	
	Severely food insecure	Moderately food insecure
Ocean View	45	18
Ward 34	71	12
Ward 95	80	9
Klipplaat	69	31

^aTwo omitted in data cleaning.

Sources: AFSUN survey; Ballantine et al. (2008:6).

they have no alternative sources of food they are often more food insecure than rural people. While some rural areas in South Africa may have equally limited alternative sources of food, the international literature (for example Ruel et al., 1999; Maxwell et al., 2000) argues that the urban poor generally depend on the markets as a source of food more than the rural poor.

A further manifestation of food insecurity is limited dietary diversity. The median household dietary diversity score for the sampled Cape Town households was six out of 12. This apparently diverse diet masks the fact that three of the food types most commonly consumed are largely non-nutritive: fats, sugar or honey and 'other' ('other' was usually tea and coffee) (see Table 2).

These findings are supported by those of a study by Oldewage-Theron et al. in informal settlements in the Vaal Triangle, South Africa, where the top 10 most frequently consumed food stuffs were three maize meal products, sorghum porridge, white bread and five types of beverage. The only protein sources in the top 20 foods most frequently consumed were soybeans (11th) and chicken and vegetable stew (13th) (Oldewage-Theron et al., 2006:798). Poor dietary diversity is a good indicator of malnutrition and dietary

Table 2: Foods consumed by sampled Cape Town households (n = 1058)^a

Type of food	% of households consuming food type in previous 24 hours
Cereals (foods made from grain)	93.2
Roots or tubers	67.6
Vegetables	61.9
Fruits	33.8
Meat or poultry or offal	57.2
Eggs	28.6
Fresh or dried fish or shellfish	16.0
Foods made from beans, peas, lentils, or nuts	27.8
Cheese, yoghurt, milk or other milk products	45.3
Foods made with oil, fat, or butter	71.9
Sugar or honey	82.8
Other foods	88.4

^aTwo omitted in data cleaning.

deficiencies. The long-term physical and cognitive development impacts of hunger and malnutrition are significant, as is the increased vulnerability to communicable and non-communicable diseases (see for example WFP, 2007).

Limited dietary diversity is generally viewed as being linked to limited household finances. As noted earlier, food insecurity indicators included in large-scale general surveys (such as those conducted by StatsSA) tend to relate to proportion of income spent on food. These household-scale factors are important, but this paper argues that extra-household factors, such as the location and type of markets available, are an equally important indicator. Just under half the surveyed population said they either had to eat foods they really did not want to eat (48%) or had to forego foods they preferred (48.6%) because of limited resources. Well over half (63%) said they ate a limited variety of foods due to a lack of resources. In the Cape Town survey, households spent an average of 30.1% of declared income on food, rising to 53.2% in the poorest tercile of households. These figures are very similar to those reported by May and Rogerson from a series of earlier surveys in poor areas of various South African cities (1995:169). However, they are higher than those in the 2005/06 South African Income and Expenditure Survey, which indicate that the poorest decile of South African residents spend 36.1% of their income on food and non-alcoholic beverages, whereas the richest decile spend just 7% of these items. Over one-third (34.1%) of the food expenditure of the poorest decile is on bread and cereals (StatsSA, 2008:76).

The AFSUN survey was conducted towards the end of 2008, at a time when food prices around the world increased rapidly (Headey & Fan, 2008). In South Africa food inflation between October 2007 and October 2008 was 16.7%, which is 4.6 percentage points higher than general inflation (NAMC, 2008). Given the proportionally high expenditure of the poor on food, they are most negatively affected by this food inflation. In the Cape Town survey, when asked how these food price increases had affected their household economic conditions over the past 12 months, 31% said they were worse off and 45% said they were much worse off. Not only does the absolute proportion of income spent on food increase more than for wealthier households, but the differences in diet between wealthy and poor may also mean that they are further disproportionately affected by food price inflation.

During the last period of rapid price increases in 2002 in South Africa, the Food Pricing Monitoring Committee appointed by the South African Government calculated that poor households experienced a year-on-year food price inflation of 23.1%, while for richer households it was 19% (Food Pricing Monitoring Committee, 2003:iii). This difference was attributed to the different diets of wealthy and poor households, with poor households more affected by changing prices of maize meal, and wealthy households by those for rice and bread (Food Pricing Monitoring Committee, 2003:77). These figures were calculated using the government's CPIF (the food items included in the Consumer Price Index), which calculates the inflation of prices, based on a basket of goods sampled across the country. However, as Vink and Kirsten note, CPIF calculations tend to ignore sales through informal outlets in urban areas, and formal and informal sales in rural areas (2002:60). As the next section shows, these outlets are very important sources of food for the poor, but tend to be more expensive than formal retail outlets and stock a more limited range of foods. The poor are therefore likely to be considerably worse affected by food price inflation than the official government data sources suggest. The issue of the neglect of the informal food sector in government documents and its impacts on urban food security are addressed more extensively in Section 6 below.

5. Sources of food

The CPIF calculations draw largely on the formal retail sector, which leads to the assumption that most food is sourced through formal markets. The data from our survey indicate that the methods households in poor areas use to source food are far more complex and are shaped by a number of household and extra-household factors. These data begin to highlight the complexity of the urban food system and the need to consider the role of urban form and urban governance in shaping food security.

Table 3 shows the ways the surveyed households in Cape Town sourced food. As is evident, although most households in the sampled areas had used supermarkets to access food during the past year, on a day-to-day basis they were far more likely to buy food from informal sector sources, despite supermarkets often being cheaper per unit than shops in the informal sector. For example, in 1994 the mark-up on brown bread at national supermarkets was found to be around 13%, while for the same product at spaza shops it was between 20% and 26% (Wilkinson & Makgetla, 2002:6). D'Haese and Van Huylbroeck found that the reason for the higher prices in the informal sector was partly that spazas were buying their goods from wholesalers and supermarkets and therefore passing on additional costs to their customers (2005:108). Besides the higher prices, the quality and safety of products sold through informal markets are considered to be lower (McLachlan & Thorne, 2009:13). The apparently uneconomic food source choices of the urban poor can, to a large extent, be attributed to market failures in the urban food system. There is no profit motivation for supermarkets to attempt to meet the food security needs of the urban poor. As Rocha notes, although food security is a public good (and a constitutional right in

Table 3: Sources of food (all households) (n = 1057)^a

Source of food	Frequency of access from source (% of households)				
	At least five days a week	At least once a week	At least once a month	At least once in six months	Less than once a year
Supermarket	3.7	23.1	65.0	1.3	6.2
Small shop/restaurant/take away	27.4	34.1	10.5	1.9	0.7
Informal market/street food	19.2	35.9	7.2	1.9	0.9
Grow it	0.8	1.0	1.3	0.8	0.7
Food aid	0.2	0.5	1.1	0.5	0.4
Remittances	0.5	1.6	2.5	0.5	0.4
Shared meal with neighbours and/or other households	5.1	17.5	17.9	3.2	0.7
Food provided by neighbours and/or other households	3.6	12.5	14.2	2.6	0.9
Community food kitchen	1.3	2.2	1.9	0.3	0.2
Borrow food from others	2.4	10.8	11.9	3.1	0.8
Other source of food	0.1	0.0	0.1	0.1	0.1

Notes: This table refers to an aggregate of all sampled households in Cape Town. ^aThree omitted in data cleaning.

South Africa),³ food itself is a private good and its production and sale is driven by market efficiency, not social efficiency (Rocha, 2007).

Supermarkets are a recent arrival in low-income areas of South African cities, having begun to locate in townships in the early 2000s (Weatherspoon & Reardon, 2003:338) as a result of the higher disposable income of many township residents and the improved infrastructure in these areas (Tustin & Strydom, 2006). As Clarkson et al. (1996) point out, supermarket chains use multiple models to determine location. These are all, unsurprisingly, based on profit maximisation and not on community need. Supermarkets are therefore often not spatially accessible for the urban poor. Ocean View, for example, has no supermarket and residents have to travel several kilometres on public transport to get to the shop, thus adding to the cost of their food. Even in the Philippi site (Ward 34), where there was a supermarket, many of the sampled households had to use public transport to get to the shop. For the supermarket too, the profit-making imperative is in conflict with the food security needs of the population. Supermarkets trade in larger unit sizes than spazas, which means that although this food is cheaper per kilo, in bulk it is unaffordable for the poor. Likewise, supermarkets cannot operate systems of informal credit as spazas do (Ligthelm, 2005:210). Supermarkets, as private sector entities, cannot be expected to address the food security needs of the urban poor, but there are concerns that their increased presence may further undermine the food security of the poor. It has been suggested that the movement of formal retailers into township areas may put small informal traders out of business.

The African Cooperative for Hawkers and Informal Businesses has stated that about 150 informal retail stores in Soweto alone have been forced out of business, partly because of the entry of large retail chains into the township (Bissiker, 2006). Initial findings from a Demacon survey on the impact of Jabulani Mall in Soweto are less conclusive, with 76% of informal traders and retailers reporting no change, but the weighted percentage spent at local traders went down from 25% to 14% (McGaffin, 2010:4).

If the entry of supermarkets does cause informal traders to close down as profit margins shrink, the credit-based system of food purchase will be eroded. If it encourages the traders to move closer to the supermarkets to maximise profits, as McGaffin's research suggests, the spatially marginalised urban poor may find themselves further from sources of food and therefore incur time and transport cost penalties that may threaten their food security.

While the supermarket sector is becoming increasingly important in the South African retail sector – with the 1700 supermarkets having sales equivalent to those of 350 000 spaza shops (Reardon et al., 2003:1142) – the informal market remains the main source of food for the poor. Table 4 shows that the more food insecure households are, the more likely they are to depend on the informal market and other informal sources of food (including informal social safety nets). Similar research in the impoverished rural Eastern Cape found that 81% of households in the upper income tercile of the survey shopped at supermarkets, compared to just 47.6% of the lowest income tercile (D'Haese & Van Huylenbroeck, 2005:107). Should informal traders be put out of business by the movement of supermarkets into the area, it is the most food insecure households that will be disproportionately affected.

Table 4: Sources of food according to food security status (n = 1057)^a

Source of food	Food security status	Frequency of access from source (% of households)				
		At least five days a week	At least once a week	At least once a month	At least once in six months	Less than once a year
Supermarket	Food secure	5.3	39.8	53.4	0.5	0.0
	Food insecure	3.1	19.6	68.0	1.5	0.0
Small shop/restaurant/ take away	Food secure	30.1	32.5	9.7	2.4	0.0
	Food insecure	27.0	35.1	10.4	1.7	0.9
Informal market/street food	Food secure	17.0	36.9	7.8	2.9	1.0
	Food insecure	19.6	36.1	6.9	1.5	1.0
Grow it	Food secure	1.5	1.0	0.5	0.5	0.5
	Food insecure	0.6	1.1	1.6	1.0	0.7
Food aid	Food secure	0.0	0.0	0.5	0.0	0.0
	Food insecure	0.2	0.6	1.2	0.6	0.4
Remittances	Food secure	0.5	1.0	1.9	0.5	0.0
	Food insecure	0.5	1.8	2.8	0.5	0.5
Shared meal with neighbours and/or other households	Food secure	3.9	11.7	8.3	0.5	0.5
	Food insecure	5.4	19.3	20.1	3.1	0.6
Food provided by neighbours and/or other households	Food secure	1.5	6.8	3.4	1.0	1.0
	Food insecure	2.9	14.0	16.6	3.1	1.0
Community food kitchen	Food secure	0.0	1.5	0.0	0.0	0.0
	Food insecure	1.7	2.3	2.2	0.4	0.2
Borrow food from others	Food secure	1.0	1.9	1.5	1.9	0.5
	Food insecure	2.8	12.9	14.2	3.3	1.0
Other source of food	Food secure	0.0	0.0	0.0	0.0	0.0
	Food insecure	0.1	0.0	0.1	0.0	0.1

Notes: This table refers to all sampled households in Cape Town disaggregated according to food security status. ^aThree omitted in data cleaning.

The high levels of food insecurity measured in the Cape Town survey and the heavy dependence on informal social safety nets (such as borrowing food from neighbours) suggest that there is a market failure in the urban food system, and that this failure is part of both the formal and informal food retail sectors. In the following section, I suggest that part of the reason for the food market's failure to meet the needs of the urban poor is the way the informal sector has been viewed by policy makers and researchers. I therefore argue that if we are to improve urban food security we must: a) recognise the role of the informal market as a source of food for the urban poor, b) understand the connections between the formal and informal food sectors, and c) develop strategies to improve the sectors both independently and as a holistic food system.

6. The informal food sector

The previous section has shown that the informal food market is a vital source of food for the urban poor. However, this market has been largely neglected in official documents aimed at ensuring food security in the country. The Integrated Food Security Strategy (DoA, 2002) does not once mention the informal sector. It does speak about reducing vulnerability to market fluctuations and strengthening market systems, but nowhere is there any indication that the informal sector is considered as part of this market. Likewise, the ANC's 2009 Election Manifesto, which highlighted food security as one of its top priorities, did not reflect any consideration of the informal sector. Concern for food prices was included, but only with reference to the formal sector (ANC, 2009). As highlighted earlier, the CPIF calculations largely neglect informal sector price changes (Vink & Kirsten, 2002). This therefore ensured that the major report commissioned by the government on food pricing in 2003 also neglected the informal sector (Food Pricing Monitoring Committee, 2003). Finally, the important work by the Department of Health on the Integrated Nutrition Programme neglects the informal sector in its call for affordable food prices and VAT exemption on basic foodstuffs (DoH, 2002:31).

This neglect of the role of the informal sector in food security is a symptom of a wider ignorance of the sector's role in the South African economy. Budlender et al. (2001 in Devey et al., 2006:16) estimate that the informal economy contributes between 8% and 12% of GDP and the City of Cape Town's 2000/01 Integrated Development Plan estimates that the informal sector contributes 18 to 20% of the economy of the city (City of Cape Town, 2003:4). Martins and Ligthelm (2004, in Rolfe et al., 2010) estimate that 37.7% of retail sales (not including transport equipment, household fuel and power) were channelled through informal markets. Food sales are an important part of this informal sector. A survey of informal street traders operating in metropolitan Durban in 2003 found that 60% were selling food (KMT Cultural Enterprises, 2003:12, in Skinner, 2008:230). These traders not only secure livelihoods for themselves by selling food, but can also help improve food security for urban residents by providing food when purchase from the formal market is not possible. The Warwick Junction traders' market in Durban is currently under threat of closure and redevelopment. In an attempt to motivate for its survival, researchers have estimated that should it be closed the price of fruit and vegetables for residents of the area would increase by 118%, taking these items out of the price range of the urban poor (Maharaj, 2010).

It has been suggested that the South African Government, like others elsewhere on the continent, has only limited understanding of the role of the informal sector, underestimates its importance and fails to understand how it works. Potts (2008) and Devey et al. (2006) use former President Mbeki's rhetoric on the informal sector to highlight some critical problems in the way the South African Government perceives the informal sector. From 2003 onwards, Mbeki and other members of his government often spoke of the 'second economy', stressing the dualistic character of the South African economy, with the first and second economies being 'structurally disconnected' (Mbeki, 2003, in Potts, 2008:161). This second economy was further portrayed as contributing little to GDP (Mbeki, 2003, in Devey et al., 2006:1). Yet, as discussed above, the informal food sector (an important part of this second economy) does indeed contribute a significant amount to GDP, and plays a vital role in the food security of the poor.

While this rhetoric about 'two economies' drew attention to the challenges faced by the poor, it reinforced dualistic conceptualisations of the South African economy. The

emphasis on the different characteristics of the two sectors exaggerated the disconnection between the two and neglected the underlying economic forces by which both are shaped (Potts, 2008:152). The way the informal sector was conceptualised and articulated then shaped the imaginative space of policy development. The outcome of this is best expressed by Devey et al.:

The most critical weakness of government policy with respect to the informal economy is one of perception of the informal economy rather than one just of policy design. The 'second economy' arguments of the President and the government are based on the premise that the mainstream of the economy is working rather well, and government action is now needed to enhance the linkages between the first and second economy, and where appropriate to provide relief, such as public works programmes, to those locked in the informal economy.

This dualist conception of the economy is misguided not only because it hides some of the 'losers' of government's policies but also because it continues to keep elements of our economy invisible and therefore outside of the mainstream of economic and social debate. (2006:19–20)

In the urban food system there are many connections between the formal and informal sectors. These are most evident when the products sold in the food system and the purchasing behaviours of the consumers are considered. Most of the research on the informal food sector, in keeping with work on the informal sector in general, focuses on informal sector employment and the livelihood outcomes of involvement in this sector (for example Levin et al., 1999; Rogerson, 2000). While this is important, the connections between the two sections become clearer when other aspects are considered. In response to a question posed by the City of Cape Town about how much of the produce grown in the Philippi Horticultural Area (a commercial agricultural area within the city) enters the local informal food retail sector, Jackson traced the produce from these farms. She found that food from the farms enters both the formal and informal sectors through a complex series of connections, with produce of the same quality entering both sectors through different mechanisms. The actors involved in the food distribution sale often blur the boundaries between formal and informal. Her study reveals a series of connections and dependencies between the two sectors (Jackson, 2010).

Following the paths of the food itself illustrates the problems of constructing the food system in dualistic terms. Further, it can be seen that the consumers' ways of engaging with the two sectors have a fluidity often unacknowledged in the literature and policy. The Cape Town survey demonstrates that poor residents of the city negotiate both foodscapes and use them strategically to meet their food security needs. Buying from the informal sector is not simply the last resort for those unable to access the formal sector. As Reardon et al. note, consumers choose to buy different types of food in the formal and informal food sectors because of what they see as the benefits of each sector according to product and need (2003:1140). And the decision as to whether to buy from a formal or informal source may be as simple as the weather that day (Mbvundula, 2009).

The formal and informal food sectors in urban areas are fundamentally connected and need to be considered as part of the same overall food system. The challenge, however, is how to develop policies and strategies that recognise these connections and work to develop the strengths of both sectors in order to address the market failure. Given the levels of food insecurity and the heavy dependency of the most food insecure on informal social safety nets, it is clear that the food system at present

is not working for the urban poor. There is market failure in both formal and informal food markets.

This paper suggests that policies and strategies that recognise the role of the informal food sector in ensuring food security for the urban poor, and the connections between the formal and informal food sectors, can improve urban food security. At present, such policies and strategies are not evident.

Skinner (2000) notes that although the 1995 White Paper on National Strategy for the Development and Promotion of Small Business in South Africa identifies four categories of small business (one being survivalist, which includes most informal food traders), it provides recommendations for support strategies for only three of these categories. The survivalist category is omitted. Skinner therefore argues that it is the responsibility of local government to develop strategies for this sector. This has led to a number of different strategies being developed in different cities, with a range of departments taking the lead. In Cape Town an Informal Trade Management Unit was established, but its institutional location left it relatively powerless. In Pretoria, the responsibility fell to the Traffic Department (Skinner, 2000:61). Skinner demonstrates that those with responsibility for informal traders often do not understand the sector and are located in positions lacking any significant power. Ten years after Skinner's paper, many of the challenges identified persist. The Tshwane (Pretoria) Spatial Development Framework does not address informal trading and the Pretoria Municipality takes a strongly negative view of informal trading (Masonganye, 2010). As stated earlier, the Warwick Junction Market in Durban is currently under threat of being replaced by a shopping mall, shutting down a long established site for informal trade (Skinner, 2008:238; Maharaj, 2010).

The City of Cape Town introduced an Informal Trading Policy and Management Framework in 2003, in which the stated vision was to create 'a well-managed informal trading sector that is fully integrated into the economic, spatial and social development objectives of the City'. In its mission statement it said: 'Through a developmental approach, the City seeks to facilitate the access to job and entrepreneurial opportunities in the informal trading sector and the nurturing of a positive relationship with the formal business sector by providing a stable regulatory and flexible management environment that is predictable, empowering and sustainable' (City of Cape Town, 2003:6).

To this end, the Draft Spatial Development Framework Technical Report identifies the need to improve access to economic opportunities by small, medium and micro enterprises and informal traders as one of five sub-strategies in the strategy to consolidate and intensify development of the accessibility grid (City of Cape Town, 2009b). Furthermore the Economic and Human Development Strategy of 2006 had five focus areas: 'growing the formal economy, growing the formal and informal economies of the poor, establishing economic bridges to integrate first and second economies, ensuring access to services and building the human, social and natural capital of the poor' (City of Cape Town, 2006:14). The current draft Economic Development Strategy continues with a strategy to support informal trading in poor communities in line with the City's informal trading policy and by-laws (City of Cape Town, 2009a). The centrality of informal trade and the desire to connect formal and informal economies is encouraging; however, the Economic Development Strategy's main justification for supporting informal traders focuses on the need for sustainable livelihoods. The role that the goods sold by these traders play in ensuring the food security of the urban poor is not considered.

The State needs to recognise the informal sector for the services (including food security) it provides to the poor and not just as a source of employment. Until this is the case, the formal/informal dualism will persist.

7. Conclusions

The data presented in this paper demonstrate exceptionally high levels of food insecurity in Cape Town, caused not by limited availability of food but by difficulty in accessing it. This access problem is not simply one of limited financial resources but is also shaped by the structure of the urban food system. Food security policy and development projects have tended to focus either on increasing food production or on direct household interventions (such as food aid or social safety nets). This paper has argued that urban food insecurity is neither a problem of availability nor one that can be resolved just by household-scale interventions. Policy or development initiatives for addressing food insecurity need to consider the wider urban food system.

There is a fundamental disconnect between the interests of the market and the needs of the urban poor, with decisions about where to locate outlets and what products to stock being based on an economically rational model. In South Africa, the apartheid spatial legacy has meant that economically rational locations for supermarkets are generally far removed from the urban poor. The informal food market is more responsive to the needs of poor city dwellers, being dependent on this section of the population for their own survival, but the problems faced by this market make food more expensive per unit and there are concerns about quality, range and safety. Both the formal and informal food sectors therefore display characteristics of market failure. This paper has argued that the persistent emphasis on the duality of the formal and informal is not only misguided but may ultimately hinder poor city dwellers' access to safe, nutritious and affordable food. In the end the State must reconceptualise the links between the formal and informal food sectors if it is to ensure that citizens' constitutional right to access to food is fulfilled.

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