

City Without Choice: Urban Food Insecurity in Msunduzi, South Africa

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Abstract The official moniker of the city of Msunduzi in Kwazulu-Natal is “city of choice.” The economic revival of Msunduzi over the past decade has been driven by the influx of capital to a city that claims to offer significant advantages to the investor. This paper examines whether this marketing ploy has enlarged the choices of the poorer residents of the city, with particular regard to their food security. Using data from the 2008–2009 African Food Security Urban Network (AFSUN) baseline survey, the paper shows that Msunduzi’s residents experience higher levels of food insecurity than like neighbourhoods in Cape Town and Johannesburg and many other cities in the Southern African Development Community (SADC) region. Unlike a number of these cities, the food sourcing strategies of households are severely constrained. Urban agriculture and rural–urban food transfers are limited, and the informal food economy is much less significant than elsewhere. The control of the urban food system largely rests in the hands of supermarkets whose location and pricing policies put quality food outside the reach of most poor households. Although many are forced to buy supermarket food, through lack of choice, food shortages and a lack of dietary diversity are endemic. Worst off are female-headed households whose levels of unemployment are higher than average and whose incomes are lower than average.

Keywords Urban food poverty · South Africa · Msunduzi municipality · Female-headed households

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Introduction

Like all South African cities, Msunduzi shows visible signs of the apartheid legacy including “uneven development between city and suburbs, the spatial allocation of land – which still runs along strongly racial lines – and the serious underdevelopment in traditionally ‘black’ townships” (Robbins & Hobbs 2012, p. 37). The implications of such uneven development have been explored in relation to issues such as housing, water, electricity, sanitation and pollution (Smith & Green 2005, Goebel et al. 2010, Goebel & Dodson 2011, Boayke & Akor 2012). However, food security has been given precious little attention in research and policy formulation in relation to poverty and livelihoods in Msunduzi (and urban KwaZulu-Natal more generally.)

The Msunduzi Integrated Development Plan (2011–2016), for example, has almost nothing to say about food security, other than repeating President Jacob Zuma’s call for a national development strategy based on land reform and rural food security (Msunduzi Municipality 2010, p. 21). The 2010 Msunduzi Draft Strategic Environmental Assessment does note that the Municipality should “take steps to eradicate hunger, malnutrition and food insecurity by 2015” (SRKConsulting 2010, p. 37). The report proposes (a) an ‘urban greening programme’ using indigenous trees and fruit trees to enhance food security; and (b) that most of the daily food needs of Msunduzi are sustainably grown, processed and packaged in rural and urban agricultural schemes in the city and surrounding rural areas. However, it contains no information or analysis on the extent and determinants of food insecurity in Msunduzi or awareness of the city’s dependence on non-local sources for its food. Rather than being based on substantive information about the state of food security, then, the recommendations are generic solutions that reflect broader, problematical thinking about urban food security in South Africa and elsewhere (Crush & Frayne 2011a).

The official motto of Msunduzi is “City of Choice.” As we will show in this paper, such a moniker is singularly inappropriate for the many thousands of food insecure households surviving on the margins of the city. This conclusion is based on the findings of the AFSUN food security baseline survey, which was implemented in Msunduzi in late 2008. The survey was administered to a sample of 556 households located in different types of lower-income neighbourhood including new and old townships, informal settlements and peri-urban areas with “traditional” housing. This paper first provides a detailed empirical analysis of the prevalence and determinants of food insecurity at the household level in Msunduzi. Second, it identifies which households are most vulnerable to food insecurity. Third, it examines whether urban agriculture might mitigate food insecurity in Msunduzi as proposed by the Msunduzi Environmental Assessment. The paper shows that both urban agriculture and rural–urban food transfers are of little importance in Msunduzi.

Profile of Surveyed Households

The Msunduzi Municipality (hereafter “Msunduzi”) is the capital of the South African province of KwaZulu-Natal, combining Edendale, one of the largest urban townships in the province, and Pietermaritzburg, the previous capital. The 2011 Census recorded over 600,000 people in 164,000 households within the Msunduzi municipal boundaries

(SSA 2012). The censuses of 1996, 2001 and 2011 provide basic data on the Msunduzi populace and show how the profile has changed in the postapartheid years. The 2011 Census also provides a point of comparison with the subsample of households in the AFSUN survey. The total population of Msunduzi grew from 521,000 in 1996 to 617,000 in 2011 (an increase of nearly 20 %) (Table 1). The black population of the city increased by 120,000 between 1996 and 2011, while both the white and Indian/Asian populations declined. Proportionally, the black population increased from 73 % in 1996 to 81 % in 2011. The total number of households in the city grew from 117,149 in 1996 to 130,292 in 2001 and to 163,993 in 2011.

Average household size declined from 4.5 in 1996 to 4.1 in 2001 to 3.6 in 2011. This is consistent with the findings of a national study, which found evidence of rapidly shrinking size of households throughout South Africa (Van Zyl et al. 2008). However, the average household size of the surveyed households was much larger than the city average in both 2001 and 2011. The mean size of the surveyed households was 5.2, suggesting that poorer urban households may not be “unbundling” as quickly as those in the city as a whole. In the survey sample, 53 % of the households were female-centred, confirming that they are disproportionately represented in the poorer areas of the city. Much less numerous were nuclear households (at 22 % of the total) and extended and male-centred households (13 % and 12 % respectively).

The 2011 Census showed that the population of Msunduzi is extremely youthful, with around half of the residents under 30 and nearly 40 % under 20. The survey sample was even younger, with almost 70 % of household members under 30, one-third under the age of 15, and 12 % under the age of 5 (Fig. 1). In other words, households in the poorer parts of the city have significantly higher numbers of youthful members. This has particular implications for food security since children are especially prone to the worst effects of undernutrition, including wasting and stunting. Large numbers of household members in Msunduzi do not generate income and are dependent for food on the household head. As a group, they are also highly vulnerable to the negative impact of HIV and AIDS on the adult members of the household (Crush et al. 2011a).

A recent ILO review of the local economy notes that 5 to 10 years ago, Msunduzi was in serious economic decline with no new outside investment and rising unemployment and poverty (Robbins & Hobbs 2012). The area’s shoe manufacturing industry had collapsed under the weight of cheap imports, shedding over 4,000 jobs between 1990 and 2003. To address the challenge, the local government embarked on an

Table 1 Population of Msunduzi, 1996–2011

	<u>1996</u>		<u>2001</u>		<u>2011</u>	
	No.	%	No.	%	No.	%
Black	381,099	73.0	424,654	76.9	501,506	81.3
Indian/Asian	68,113	13.1	64,821	11.7	60,591	9.8
White	56,154	10.8	44,954	8.1	36,860	6.0
Coloured	16,096	3.1	18,408	3.3	17,758	2.9
Total	521,462	100.0	552,837	100.0	616,715	100.0

Source: Statistics South Africa

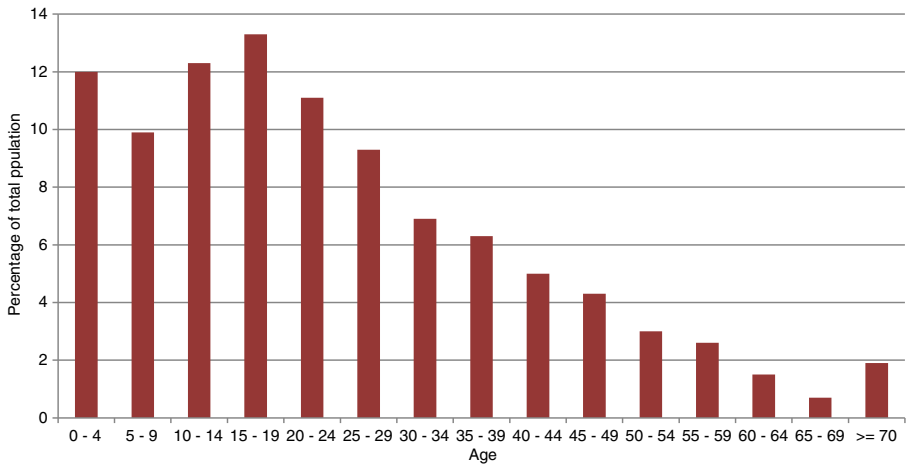


Fig. 1 Age distribution of survey household members

aggressive campaign to market the city and attract investment. According to the ILO, the results of this pro-growth strategy were “startling”, with several thousand new jobs being created and declining levels of unemployment (Robbins & Hobbs 2012, p. 45). Unemployment in the city as a whole fell from 48 % in 2001 to 33 % in 2011. The relevant question is whether this economic “mini-boom” has had a positive impact on the livelihoods and food security of the urban poor.

In the AFSUN survey households, only 21 % of the adult population were in full-time employment, with another 18 % working part-time or casually. This leaves 61 % who were either unemployed and looking for work (35 %) or unemployed and not looking for work (26 %). Since the Census applies a strict definition of unemployment (unemployed and looking), the rate in the surveyed households is similar to that for the city as a whole in 2011 (33 %). The unemployment rate in the survey sample was higher amongst females than males (38 % versus 32 %). The other significant gender difference was in the relative proportions in full-time employment: 28 % of male household members and only 15 % of females. Since wage employment and income is a major determinant of urban food security, this suggests that female-centred households may be significantly more vulnerable to food insecurity.

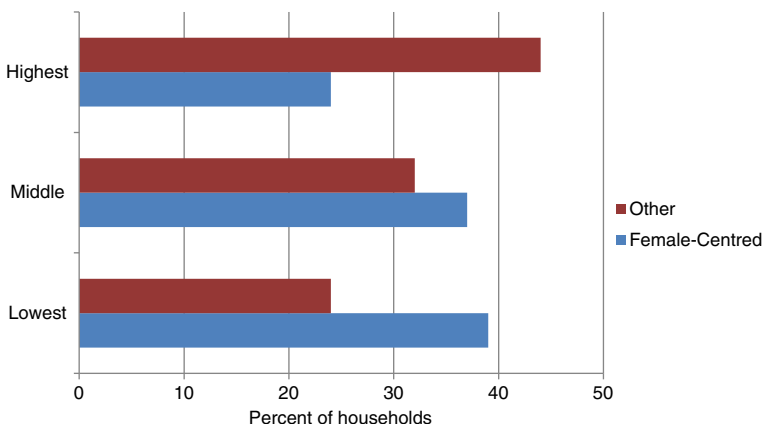
The Census found that the average annual household income in Msunduzi increased from R50,178 in 2001 to R108,926 in 2011, another indicator of improvement in the local economy over the past decade. In stark contrast, the average 2008 household income for the surveyed households was only R24,420, which was half the city average in 2001 and only a quarter of the average in 2011. What explains why these households are significantly worse off in terms of earnings than the city average? The majority of the jobs performed by household members are low-paying and menial in nature and households do not have many alternative income streams. As a group, the surveyed households had three main sources of income: social grants, wage employment and part-time work (Table 2). Social grants (in the form of child grants and pensions) were an income source for two thirds of the households. A total of 38 % of households obtained some income through wage work, and 32 % earned income from casual labour. One significant difference between female-centred households and other households was the proportion receiving income from wage work (28 % versus 48 %).

Table 2 Sources of household income

	Female centred	Other	Percent of total households	Average annual income from source
Main sources:				
Social grants	68.2	60.9	65.5	R 9,636
Wage work	28.4	48.1	38.1	R 31,932
Casual work	29.0	34.2	32.2	R 13,788
Other sources:				
Informal economy	12.5	11.5	12.4	R 13,488
Rentals	3.4	2.7	2.9	R 3,060
Remittances	3.0	2.3	2.7	R 5,880
Gifts	1.7	0.4	1.1	R 19,200
Sale of farm produce	0.3	0.8	0.5	R 7,800
Formal business	0.0	0.4	0.1	R 120,000

Other sources of income were relatively insignificant. This confirms that access to employment is the critical determinant of household income. In turn, this means that female-centred households are at a significant disadvantage. However, even amongst those in wage employment there was a marked gender difference. Female-centred households with a wage worker, for example, earned an average of R21,976 per annum compared with an average of R38,148 per annum for other households. Gender differences are also apparent in the income tercile data where female-centred households are disproportionately represented in the lowest income tercile (Fig. 2). Households unable to place a member in wage employment face a considerable struggle to make ends meet through a combination of low-paying casual work, social grant income and, for a few, scraping by in the informal economy.

Only 12 % of surveyed households obtain income through informal activity. Other studies of Msunduzi have addressed the low rate of participation in the informal economy and suggested that such activity that exists is focused on the CBD and arterial

**Fig. 2** Income terciles of female-centred and other households

streets. Quazi (2011, pp. 28, 32), for example, notes that these areas have “dense informal activities.” At the same time, the author correctly notes that the informal economy in Msunduzi is small compared to other city centres and that the data is actually quite sparse. In 2006, another study noted that there were only 2,500 informal traders in the city but that competition for space in the downtown was intense (Gengan, 2006). Two thirds of businesses in the informal economy were estimated to earn less than R1,000 per month. The ILO reports that the municipal response to informality has been “inconsistent and contradictory” and that the pro-growth strategy of the city bypasses informal entrepreneurs (Robbins & Hobbs 2012, p. 39). The money earned is barely enough to even warrant the label “survivalist” and can be more accurately described as “disguised unemployment.”

Levels of Food Insecurity

The prevalence of food insecurity in Msunduzi was measured with the indicators developed by the Food and Nutrition Technical Assistance (FANTA) project of the Academy for Educational Development in Washington, DC (Swindale & Bilinsky 2006, Coates et al. 2007). The Household Food Insecurity Access Scale (HFIAS) ranges from 0 (completely food secure) to 27 (totally food insecure). The mean score for the Msunduzi households was 11.3 (with a median of 11), which indicates high overall levels of food insecurity. Only four of the 11 SADC cities surveyed by AFSUN (Manzini, Harare, Maseru and Lusaka) had higher scores than Msunduzi. Nearly 30 % of the Msunduzi households had HFIAS scores of 15 or above and 13 % had scores of 20 or above. The HFIAS varied with the size and type of household, as well as household income. The largest households (<10 members) averaged 14.3 compared to 10.9 for the smaller households (with 1–5 members). Households in the lowest-income tercile scored 14.5 compared with only 8.4 amongst those in the upper tercile. Female-centred households had a higher-than-average HFIAS score, at 12.2. This is consistent with the fact that they generally have less access to wage employment and low earnings when they do obtain jobs.

The Household Food Insecurity Access Prevalence (HFIAP) measure assigns households to one of four household food insecurity categories: food secure; mildly food insecure; moderately food insecure and severely food insecure. Sixty percent of the Msunduzi households fell into the severely food insecure category and another 27 % were moderately food insecure (Table 3). Only 7 % of the households in the survey were completely food secure, which means that they experienced no worries about food, experienced no shortages of food and were able to consume the types of food that they preferred.

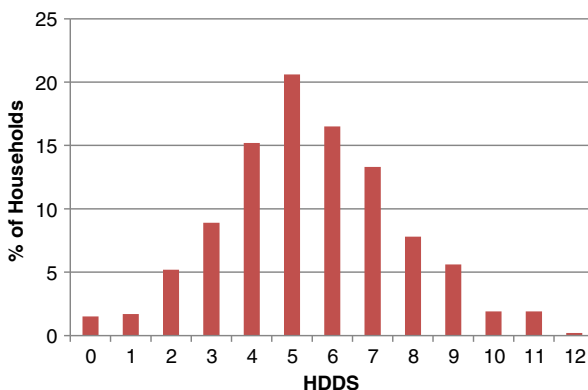
As with the HFIAS, there were significant differences within the survey sample (Table 3). For example, more female-centred households experienced food insecurity than other household types: 64 % of female-centred households were severely food insecure compared with 56 % of other households, and only 5 % of female-centred households classified as completely food secure compared to 9 % of other households. Income exercises the greatest effect on levels of food insecurity. As many as 78 % of households in the lowest income bracket were severely food insecure and only 1 % were food secure. The equivalent figures amongst households in the upper income bracket were 44 % and 22 %.

Table 3 HFIAP scores by household type, size and income

	Food insecure (Percent)			Food secure (Percent)	N
	Severe	Moderate	Mild		
Household type:					
Female-centred	64	27	4	5	291
Other households	56	27	8	9	257
Household size:					
1–5	59	26	7	8	345
6–10	58	31	5	7	178
>10	88	4	0	8	25
Income Terciles:					
Lowest	78	21	1	1	143
Middle	64	28	4	4	159
Highest	44	34	11	11	150

The Household Dietary Diversity Score (HDDS) addresses the dietary quality component of food insecurity. The mean HDDS for the survey households was 5.5 out of a possible 12, which means that the average household ate food from six of the 12 major African food groups in the day prior to the survey. In total, over half of the households (53 %) ate from 5 or fewer food groups (Fig. 3). The food groups that the majority of households ate from included cereals (primarily maize) (96 %), sugars (80 %), oils and fats (61 %), and roots and tubers (mainly potatoes) (53 %). Over 40 % had eaten vegetables and meat or poultry but, in general, the diet is not particularly diverse and is heavy in fats, sugars and starch.

Questions about household responses to food insecurity provided further insights into food availability, dietary quality and the satisfaction of food preferences. Over the previous month, around half of the households (51 %) had sometimes/often worried that the household would not have enough food. To what extent does worrying about the lack of food translate into actually going without? One third reported that the

**Fig. 3** Distribution of dietary diversity scores

household had sometimes/often had no food to eat of any kind because of a lack of resources. Around 20 % said the household had sometimes/often gone to bed hungry and 16 % said that it had gone a whole day and night without food. The majority of households were dissatisfied with the quality of their diet. For example, 58 % said that the household had sometimes/often eaten a limited variety of foods due to a lack of resources. An even higher number (64 %) said that the household members were sometimes/often unable to eat the kinds of foods they preferred because of a lack of resources. Finally, 60 % had sometimes/often eaten foods that they really did not want to because of a lack of resources to obtain preferred food.

Sources of Food

Virtually all households in Msunduzi purchase the food that they consume, which means that there is a strong relationship between food security and household income. What distinguishes Msunduzi from many other cities, however, is the extraordinary high levels of reliance on supermarkets, especially compared with the informal food economy. Msunduzi has an extremely high concentration of supermarkets for a city of its size. A 2010 study of the supermarket sector showed that all of the major South African chains are well-represented: Pick n Pay (3 outlets), Shoprite (4), Spar (7) and Woolworths (4) (Naidoo et al. 2010). A local company, Save Cash and Carry, also has two supermarkets. The supermarkets are integrated into centralised procurement and distribution systems, generally sourcing their produce via company distribution centres in Msunduzi or Durban, rather than from local producers. Some Spar and Save Cash and Carry outlets do source fresh produce from local white-owned commercial farms and the Mkondeni Municipality Market. There is little evidence that rural smallholders supply any of the produce sold in supermarkets. None of the major supermarkets are located in poorer urban neighbourhoods.

Despite the lack of proximity of supermarkets, they still constitute the major source of food for poor households. In the 11 cities surveyed by AFSUN, 79 % of households normally purchase some of their food direct from supermarkets (Crush & Frayne 2011b). In Msunduzi, the equivalent figure is 97 %, or almost every poor household regardless of type, income, size or degree of food insecurity. Only 40 % of Msunduzi households source food from smaller retail outlets (compared to 68 % for the sample as a whole), which suggests that the supermarkets may be having a significant negative impact on the viability of the small independent food retail sector.

Three quarters of the households source food from supermarkets on a monthly basis, which tends to coincide with the payment of social grants and monthly wages. In an increasing number of South African cities, social grants are actually paid out at supermarkets. The monthly pattern of patronage suggests that households primarily obtain non-perishable items and staples in bulk at supermarkets. The 20 % of households who shop at supermarkets at least once per week are probably buying meat, chicken and vegetables. In comparison to most other cities, where poor households rely on the informal food economy for their daily food needs, the Msunduzi households have amongst the lowest rates of patronage of informal sources in the region. Some 42 % of households in Msunduzi regularly source food from the informal economy, for example, compared with 72 % for the region as a whole. The small size of the informal

economy in Msunduzi, and its concentration outside residential areas, is clearly a major factor explaining the low patronage pattern.

Urban agriculture has been consistently advocated as a way of ensuring greater food security for poor households in South African cities (Crush et al. 2011b). In Msunduzi, this argument is premised on the belief that newcomers have rural farming skills, which can be used to good effect in the city (RUAF 2007). Furthermore, some claim that “the land constraint is much less than in other large urban centres in South Africa. Individual households in most cases have some land available around their houses for cultivation” (Njokwe & McCosh 2005, p. 4). Despite these optimistic views about the potential role of urban agriculture, the AFSUN survey actually found that urban agriculture was insignificant in the poorer areas of Msunduzi.

First, only a minority of households were using their supposed agricultural skills and available land to engage in food production. While 30 % of households said that they eat food that they have grown themselves during the course of the year, only 14 % said they do so on a regular basis (at least once per week) and only 11 % cited urban agriculture as a regular food source. Second, of those growing food, the vast majority were doing so in their own gardens. There is very little of the kind of field agriculture on public and private open space seen in cities such as Harare and Lusaka (Simatele & Binns 2008, Mutonodzo 2009). Third, there is virtually no household agricultural production for sale in Msunduzi.

There is a growing literature that emphasises the importance of ongoing informal rural–urban links and their role in providing food for urban residents (Frayne 2010). AFSUN found that in many cities, informal food transfers are an important “pathway” for urban households to access food. These transfers are primarily from rural areas where relatives still live and farm or from other urban areas where they live and work. Rural–urban transfers of food turned out to be far more important than urban–urban transfers. However, the volume of these informal food transfers, the frequency with which they occur and the types of produce transferred varied considerably from city to city.

In some cities, such as Windhoek, Lusaka and Harare, over 40 % of households surveyed receive food from outside the city. In these cities, virtually all of the transfers are from the rural areas. In the case of the three South African cities in the survey, the proportion of households receiving food transfers is very much lower (less than 25 % in Johannesburg, Cape Town and Msunduzi). There are at least two reasons for the lower South African figures. First, South Africa is easily the most urbanised of all the countries and many urbanites have tenuous links with the rural areas. Second, rural agriculture by smallholders in South Africa is in an advanced state of disintegration. Rural families do not produce enough to feed themselves, let alone send food to relatives in the towns.

Only 24 % of the surveyed households in Msunduzi receive food from family and friends outside the city, but where does the food come from, how often is it sent and do the transfers improve dietary diversity and alleviate food insecurity? Despite Msunduzi’s location in one of South Africa’s more rural provinces, only 4 % of households had received food from relatives and friends in the rural areas in the previous year. In other words, informal rural–urban food transfers are virtually non-existent. The other 20 % received transfers not from the rural areas but from family and friends living in other urban areas. This does point to an interesting phenomenon

requiring further research in a rapidly urbanising society: that is, the existence of informal food networks linking cities and households in different cities. The kinds of foods transferred tended to conform to the main food groups already eaten in Msunduzi: cereals, potatoes, meat and poultry and vegetables. In other words, the food is transferred primarily to make up shortfalls in the existing food basket rather than diversifying or improving the quality of the diet.

Conclusion

Msunduzi is a city in which there is plenty of food but the majority of the urban poor have little food choice and regularly go hungry. Nearly 90 % of households were found to be severely or moderately food insecure. One third of the households reported that they sometimes or often have no food to eat of any kind. The situation was just as bad on other indicators: nearly 60 % eat a limited variety of foods due to a lack of resources and eat smaller meals than they need. Nearly half cut back on the number of meals for the same reason. Dietary diversity is also extremely low. Household size did not make a great deal of difference to levels of insecurity but female-centred households are more food insecure than other households.

For female-centred households, the fundamental food insecurity determinants include income and employment. In the short term, the role of the social protection system is very significant. The Msunduzi study found that a large number of households were accessing social grants and that these even served as the sole source of cash income for some. While this illustrates the importance of social grants for the survival of poor households, one can ask why this particular strategy cannot guarantee food security. Part of the reason for this is that the amounts paid out in social grants are relatively small and insufficient to meet all of the competing draws on limited household income. They may take the edge off hunger but they do not eliminate food insecurity.

Msunduzi is a classic case of a city whose food supply system is dominated by modern supermarket supply chains. The informal food economy is relatively small, urban agriculture is not especially significant in the city and informal rural–urban food transfers are lower than in many other cities. In this respect, Msunduzi offers other African cities a picture of their own future. Supermarket expansion is occurring at an extremely rapid rate throughout Southern Africa, tying urban spaces and populations into global, regional and national supply chains. While supermarkets offer greater variety and fresher produce than many other outlets, they clearly do not meet the needs of the poor. Their pricing structures and profit margins are such that poor households in Msunduzi tend to patronise them only on payday and social grants day when they buy staples in bulk. However, unlike in other cities, with vibrant informal food systems that make food more accessible to the urban poor on a daily basis, Msunduzi's 'food deserts' are notable for the relative absence of informal food sources. In this respect, they more closely resemble the food deserts of Europe and North America (Battersby 2012).

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