

URBAN FOOD PRODUCTION AND HOUSEHOLD FOOD SECURITY IN SOUTHERN AFRICAN CITIES

Jonathan Crush, Alice Hovorka and Daniel Tevera

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URBAN FOOD SECURITY SERIES NO. 4

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AND HOUSEHOLD FOOD
SECURITY IN SOUTHERN
AFRICAN CITIES

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INTRODUCTION

The contribution of urban food cultivation to the food security of poor households in African cities has been recognized for many years.¹ Urban agriculture involves the production of plant and tree crops and animal husbandry on-plot and in open public spaces or private rented land within the city and in the peri-urban zone. In African cities, the most commonly cultivated crops are leafy vegetables and maize (which is the staple crop in southern parts of the continent). Studies in the 1980s and early 1990s documented increasing rates of participation in urban agriculture in a number of Southern African cities.² The case study evidence seemed to suggest that it had become a major livelihood strategy for poor households and the newly urbanized across Africa.³ In Zambia and Zimbabwe, for example, increased household food production has consistently been seen as a major response by poor urban households to growing economic hardship and resultant food insecurity.⁴ In urban South Africa, household food production supposedly escalated following the end of apartheid due to continued city growth, increasing levels of food inflation, and fluctuations within the formal economy.⁵ The peri-urban areas of post-colonial Maputo became a major site of vegetable and livestock production for this rapidly expanding city.⁶ And in Botswana, despite environmental constraints, researchers also found evidence of expanding urban food production.⁷

In Southern Africa, the evidence from the empirical studies of the 1980s and 1990s led to markedly different policy conclusions.⁸ The weight of opinion was that given the right policy environment, urban cultivation could be the panacea for food insecurity during rapid urbanization.⁹ As the IDRC (a major sponsor of urban agricultural research and policy-making) noted:

The cities of the South are growing fast as people move from the countryside to seek a better future. So fast that the municipalities cannot keep up with the influx. There are too few jobs and limited facilities. Many of these new arrivals face poverty and malnutrition, often spending three-quarters of what little income is available to provide just one meal a day. In an effort to improve their situation, many of the urban poor use any available space to grow more food. From rooftops to window boxes, on roadsides, riverbanks, and vacant lots, people will find places to grow a little food to feed their families. Some even manage to grow enough to sell the surplus, providing much needed income. For others, especially on the outskirts of the city, farming becomes their main

occupation and may provide support for an entire family or group of families.¹⁰

Advocacy-driven enthusiasm prompted such optimistic book and programme titles as “cities feeding people,” “hunger-proof cities,” “self-reliant cities,” “urban harvest,” “cities farming for the future” and “agropolis.”¹¹

Various positive conclusions were drawn about the actual and potential impact of expanded urban cultivation on the food security of poor households. Households producing some of their own food appeared to be more food secure and have better nutritional status than non-farming households of similar socio-economic status.¹² In addition, production for consumption and sale could generate revenue and reduce monthly household expenditures on food, leaving more cash available for other basic household needs (such as health, housing, education and clothing).

Amidst all the enthusiasm, there were some dissenting voices. Ellis and Sundberg, for example, noted that “the term urban agriculture both claims too much and offers too little in the policy context of urban poverty and family food security. It claims too much by equating all food production in towns with improved food security for poor people, and it offers too little by failing to consider the role of rural-urban interactions in explaining the survival capabilities of the urban poor.”¹³ Tevera argued that there is actually little evidence to suggest that the truly poor derived much benefit from urban agriculture.¹⁴ This is because very poor urban residents and new arrivals to the city have limited access to land and tend to shift residence too often for them to engage in food production. The land market for urban cultivation is mainly informal and many people cultivate land they do not own or have legal access to. In Southern Africa, squatting, borrowing and user rights are the most common means of accessing cultivable land. Webb also questions the evidence for the positive nutritional impacts of urban agriculture on the diets of the poor.¹⁵ The dissenters argue that the benefits of urban agriculture for the poor have been “grossly exaggerated” and that the real poor derive little benefit.¹⁶

More recently, scepticism (if not outright pessimism) has increasingly characterised discussion about the extent, impacts and potential of food production by the poor in Southern Africa’s urban areas. A more cautious and critical approach has emerged that seeks to understand the possibilities and the limits of what urban food production can actually deliver to poor households. In part this reassessment has been prompted by the relatively limited policy impact of a decade or more of research. In its new



“From Seed to Table (FSST) Project,” for example, RUAF highlights “the constraints that limit the development of safe and sustainable urban agriculture.”¹⁷ These include limited (or inappropriate “rural” oriented) support services (extension services, access to credit, infrastructure development); a lack of recognition by city authorities, urban planners and government institutions of the role and functions of urban and peri-urban agriculture in a developing modern city; limited access to productive resources; use of basic implements such as the hoe; and insecure land tenure. Other inhibiting factors include a low degree of formal organisation of urban producers which “limits their capacities to improve their farming systems and marketing opportunities”; low agricultural productivity and profitability; and official opposition or indifference. One result of these “mounting problems affecting urban agriculture” is low intensity use and even the growing abandonment of urban and peri-urban agricultural lands.¹⁸ Even when land use is an accepted urban land use, as in Tanzania, existing by-laws militate against the activity.¹⁹

After several years of declining research interest, there seems to be a renewed focus on urban food production amongst researchers and policy-makers. This is a positive development, as the urban food security context of today is not the same as it was in the 1980s and 1990s. Towns and cities have grown considerably since then and continue to increase rapidly in size through migration and natural increase. Competition for resources, including land, has intensified. In many cities, water delivery has been privatized, making one of the key inputs for urban agriculture considerably more expensive. This paper asks what role urban production currently plays in the food security of the residents of Southern Africa’s rapidly-urbanizing towns and cities and how this role can be further enhanced.

As a prelude to promoting an invigorated policy debate on the relationship between urban food security and urban food production, this paper reports the results of the regional baseline survey on urban food security in Southern Africa conducted by AFSUN in 2008. The survey provides an overview of the current state of urban food production in the poorer areas of Southern Africa and insights into the role of urban food production as a food source for the urban poor. The survey shows that across the region rates of participation in urban food production in poor urban communities are currently quite low, with some variation between cities. Even more significant is the fact that very few households derive income from the sale of home-produced food. This has considerable implications for the idea that food insecure households are most likely to grow their own food.²⁰

2 FORMS OF URBAN FOOD PRODUCTION

Urban agriculture is often advocated as a means to address growing vulnerability and poverty, persistent food insecurity, declining livelihood opportunities and gender inequality in the urban economy :

The local production of food, and associated local marketing of fresh and processed products, increase the food security of the poor by making food locally available, and at lower prices, and by improving the nutritional balance of the family diet. Creation of better conditions for periurban and urban families to produce and market vegetables, fruits, livestock products and fish, can positively affect the nutrition and health of vulnerable urban groups, especially in situations where women gain control over the destination of the produce and revenues from sales.²¹

However, household urban food production is not simply, or even predominantly, a response to dire poverty and food insecurity.

Urban cultivators generally belong to one of three main groups.²² Usually one group is dominant but in some cities or parts of a city all three groups can be found.²³ The first group does comprise members of the lowest socio-economic urban stratum who grow a certain proportion of their own food requirements due to absolute need. Studies in Atteridgeville near Pretoria, for example, have found that 88% of households were recent migrants from the countryside and that 54% were actively involved in some form of food production. However, the average monthly income obtained from household production was only about R6 which represented less than 1% of total monthly household income.²⁴ Another recent study in the poor informal settlement of Orange Farm, south of Johannesburg, found that 89% of households engaged in urban farming had no household members in formal employment. Around a third of farming households relied on home-produced food for over 40% of their food.²⁵ For a variety of reasons, however, urban food production is not particularly common in this poor area with only 16% of poor households obtaining some of their food in this manner.²⁶

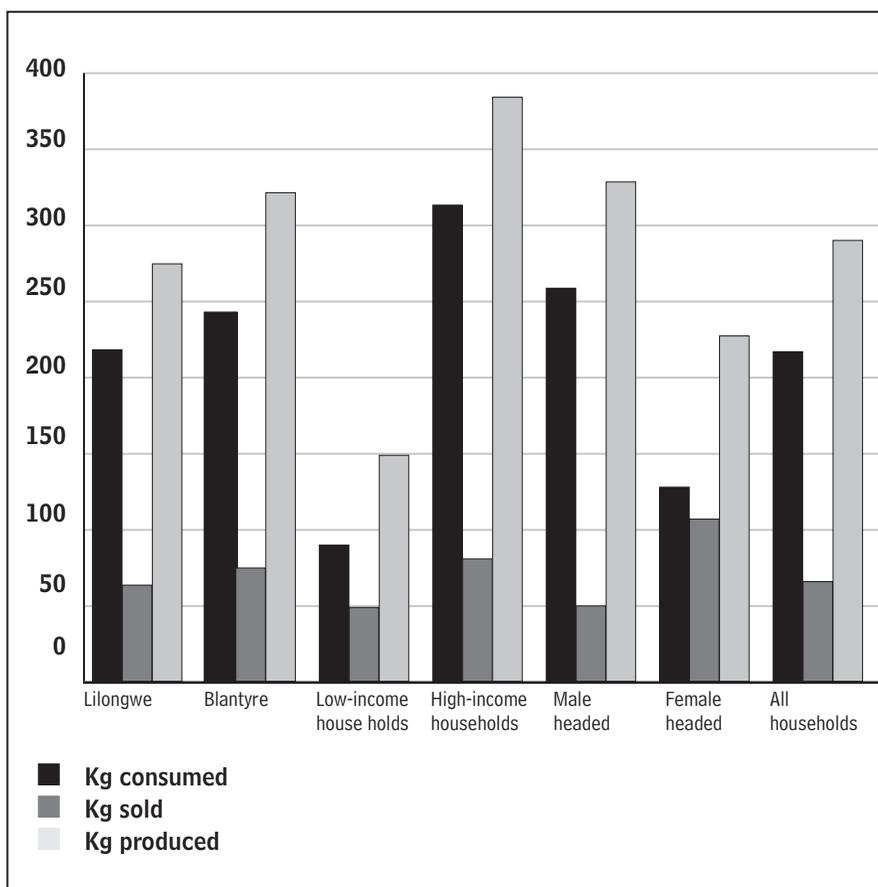
The second group comprises urban households who “choose to cultivate in order to attempt to preserve their standards of living during inflationary times of crises and also to reduce their vulnerability to the possible breakdown of formal food channels.”²⁷ A recent study of households in Lilonge and Blantyre in Malawi found that urban food production is



dominated by high-income people who are able to access more land and agro-inputs.²⁸ The study showed that urban production is a source of both food and income, though the relative importance of each varied by type of household, with higher-income households selling a larger absolute (but lower proportional) volume of produce and female-headed households selling more than male-headed households (Figure 1). In Harare, Smith and Tevera observed that economic hardships after the implementation of the economic structural adjustment programme compelled many middle-income households to engage in food production on their plots and on open land.²⁹

FIGURE 1

Urban Agricultural Production in Lilongwe and Blantyre



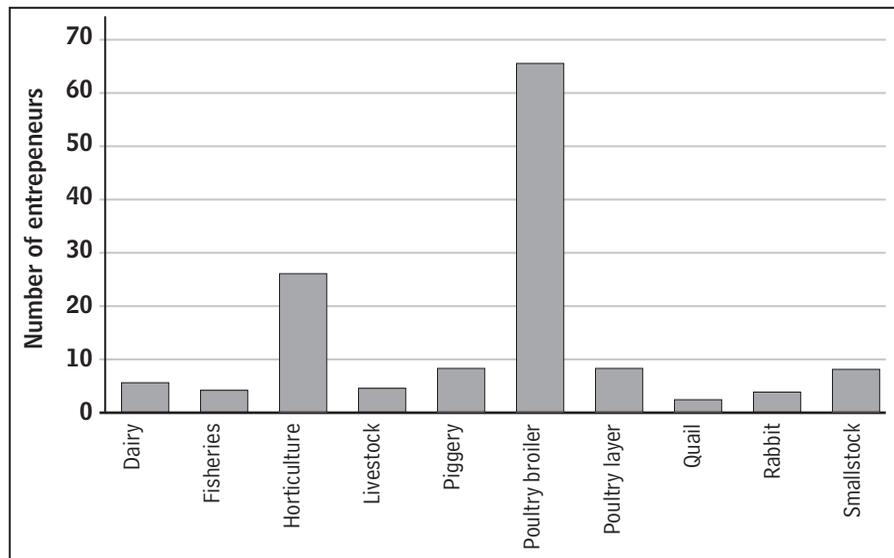
Source: Mkwambisi, “Urban Agriculture and Food Security in Lilongwe and Blantyre”

Another study of the production and marketing of indigenous vegetables in Durban, South Africa, found that “the bulk of the produce was consumed at home, with the result that most of the farmers were not selling AIV’s (African Indigenous Vegetables) or only in small quantities and at irregular intervals.”³⁰

Over time, a third group of urban cultivators has emerged: small-scale entrepreneurs who engage in urban food production explicitly for sale rather than home consumption.³¹ The entrepreneurial form of urban production has been observed in a number of Southern African cities. In Botswana, studies in the 1990s initially showed only limited agricultural production in and around the main urban areas of the country.³² This was attributed to harsh climatic conditions, scarcity and expense of water, land access and availability, rural cultivation preferences, relative lack of poverty, cultural/attitudinal factors, government safety nets and policy, planning regulations, recent urbanization, and greater returns to land and labour in other urban activities. However, a more recent study in Gaborone showed that middle-income producers were generating substantial amounts of foodstuffs for the urban market.³³ The study of 114 entrepreneurs found a concentration of activity in poultry farming and, to a lesser extent, horticulture (Figure 2). However, these were not the urban poor but “generally well-educated, middle-income, urban residents who are employed.”³⁴ Middle and higher-income household involvement in commercial agriculture has been documented in urban peripheries in Mozambique, Zambia, Zimbabwe and South Africa.³⁵

FIGURE 2

Activities of Agricultural Entrepreneurs in Gaborone





In overcrowded Southern African cities, low-income households who live on properties of less than 350 square metres do not have enough land on their own plots. This has given rise to extensive ‘open space’ or ‘off-plot’ food production:

Urban agriculture is – to a large extent – being done on land that is not owned by the user: roadsides, riverbanks, along railroads, idle public lands, parks, etc. The use of such areas is, in principle, transitional and user rights are minimal. However, various systems of informal rent, lease and inheritance exist. The quality of the lands to which urban farmers do have access is often very marginal to start with. In combination with the poverty of the majority of the urban farmers and the insecure land-tenure situation, this leads to low investments in the land, low productivity and further deterioration of the soil. Fear of eviction leads people to plant quick-yielding seasonal crops and to avoid investments in soil quality, tree and shrub components, erosion prevention, water-harvesting measures, etc. Next to land, the access to water (especially water of good quality) and nutrients (especially manure and compost of good quality) is crucial to urban farmers, and both are difficult to obtain (although more widely available than in many rural areas). Use of water sources is often informal (e.g. tapping off wastewater disposal pipes and canals).³⁶

In Gaborone, some 60% of urban food production enterprises operate on allocated plots on tribal land in Greater Gaborone.³⁷ The land is allocated free of charge and based on usufruct rights to communal land. In Lusaka, one study showed that extensive cultivation of maize, sugar cane and sweet potato was taking place on peri-urban land owned by the Council, in a dambo (wetland) area on rented privately-owned land and on the northern peri-urban fringe, a mix of Council and rented land.³⁸ Many of these “open space and contested” sites were under threat from urban developments, particularly housing projects.”³⁹

The extent of each of these forms of urban food production is unknown in most cities, let alone across the SADC region as a whole. AFSUN’s baseline survey in 2008-9 attempted to provide a broad regional picture of the state of household food insecurity in the poorer areas of Southern African cities including the prevalence of different types of urban cultivation, the contribution of urban agriculture to food security and the role of urban food production in urban food supply systems more broadly. Because the survey focused on one or more poor areas in each city, the results cannot be interpreted as representative of cities as a whole. For example, the survey does not capture urban food producers in middle-class suburbs of the city. The results of the survey are discussed in the following section.

3. THE STATE OF URBAN AGRICULTURE IN SADC

The AFSUN survey was conducted simultaneously in 11 SADC cities in 2008-9. During the course of the survey, households were asked three separate questions relating to different aspects of urban food production:

- Where does the household normally obtain its food and how often does it normally obtain food from these sources? Urban food production was one of a number of options available to households.
- To what extent does the household use strategies other than formal employment to make a living? Households were offered four options (“not at all,” “slightly,” “partly dependent” and “wholly dependent”) and asked about four types of household food production (field crops, garden crops, tree crops and livestock).
- How much income did the household derive from urban farm products in the previous month?

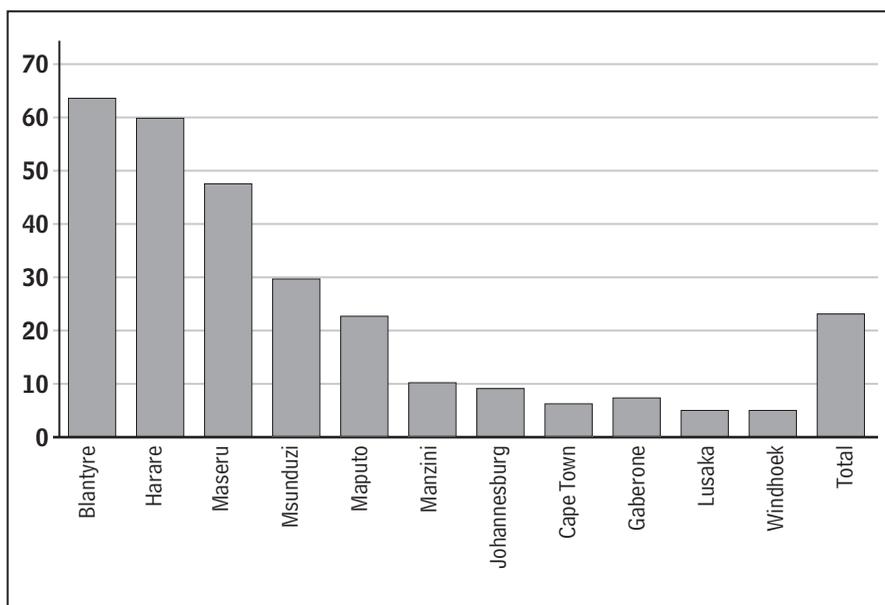
Participation in Urban Food Production

Across the region, around a fifth (22%) of surveyed households said they normally grow some of their own food (Figure 3). This was far below the proportion who normally obtain some of their food from supermarkets (79%), the informal sector (70%) and small retail and fast-food outlets (68%).⁴⁰ Only one city (Maputo) was anywhere close to the regional average (at 23%). Four cities were well above the average: Blantyre (64%), Harare (60%), Maseru (47%) and Msunduzi (30%). A combination of factors, including levels of food insecurity in these cities and a change in official attitudes from intolerance to indifference (and at times support), may explain the high levels of urban household food production recorded. In many Southern African cities there has been a growing tendency since the mid-1990s to legitimise urban cultivation. In Zimbabwe, for example, the suspension of certain by-laws resulted in the cessation of harassment of urban cultivators and the slashing of their crops. However, poorer areas in other cities were well below the regional average: Manzini (10%), Johannesburg (9%), Gaborone and Cape Town (5%) and Windhoek and Lusaka (3%). In other words, poverty per se does not adequately explain the resort to household production as a source of food.

The extremely low rates of participation by poor households in Cape Town and Johannesburg may not be typical of the country as a whole. The 2002 and 2007 South African General Household Surveys show, for

**FIGURE 3**

Proportion of Urban Households Growing Food (%)



example, that the poorer South African provinces, especially the Eastern Cape, have higher rates of participation in urban farming (Table 1).⁴¹ Rates of participation may also be higher in the country's smaller, poorer urban centres particularly in areas such as the Eastern Cape.⁴² This would suggest that urban farming is something of a last resort, when sources of income to purchase food are absent or fail altogether.

Province	2002		2007	
	No.	%	No.	%
Eastern Cape	48,036	77	52,344	64
Free State	8,621	14	8,512	10
Gauteng	3,180	5	12,441	15
Northern Cape	1,559	2	1,779	2
Western Cape	723	1	1,767	2
North West	602	1	5,190	6

Note: Data for Kwazulu, Mpumalanga and Limpopo not included.

Source: Burger et al, "Addressing the Role of Urban Agriculture" p. 22.

The other city finding requiring comment is the fact that only 4% of households in Lusaka were growing food as an additional livelihood strategy and only 3% derived any income from the sale of produce. In the 1980s, Lusaka was referred to as the “urban agriculture capital” of Africa so extensive was the use of urban land to grow food.⁴³ In the 1990s, economic hardships led to further expansion in household food production. A newer trend, in addition to the traditional use of large open spaces and backyards, is the expansion of food production to a wider variety of urban locations including “between railway lines, around industrial areas, along roadsides, in the middle of roundabouts, under power lines, around airports, along rivers, or river valleys, on land occupied by educational and administrative institutions, around dams and sewerage installations, and on land which has been officially designated for residential development.”⁴⁴

Other recent studies appear to confirm the continuing importance of urban food production in Lusaka despite growing pressures on open space in the city. One study in 2004–6 interviewed 140 urban producers in three areas of the city: (a) Chilenje (a planned medium and low cost housing area); (b) Garden Compound (a centrally located informal settlement of 60,000 people) and (c) Seven Miles (a peri-urban site which is “a major source for the city’s fresh fruit and vegetables”) and concluded that “large numbers of Lusaka’s urban dwellers are engaged in farming activities both within and on the periphery of the urban area.”⁴⁵

Another study in 2004–5 interviewed 100 urban farmers in (a) the Baobab Area (a peri-urban area owned by the Council and an extensive cultivation zone), (b) the dambo (wetland) area around the University (privately-owned open space), (c) privately-owned open space near the airport and (d) the Barlaston–Chunga area on the northern fringe (owned by the Council). This study concluded that “urban agriculture is one of the common sources of food and income among the poor.”⁴⁶ Both studies focused on identifying and interviewing producers. Unfortunately, neither provides information on the proportion of urban households involved in food production.

The AFSUN survey was conducted in only one area, Chipata Compound, one of the poorest areas of the city. Chipata Compound is an overcrowded informal settlement which is home to over 50,000 people. It has been described as an area in which “large families share small, deteriorated houses, roads are muddy and full of potholes, garbage piles up, and people do their best to make their living selling tomatoes, onions and other small merchandise along streets or from their front yards.”⁴⁷



The AFSUN survey suggests that in this area of Lusaka, with a very high concentration of poor households, food production is extremely limited, and that most households do not have access to the land to grow anything. Informal trading and selling appears to be the major means of making a livelihood and trying to mitigate food insecurity. Twenty nine percent of total household income in the sample of 500 households comes from wage work, 23% from the informal sector and 17% from casual work. In other words, while urban food production appears ubiquitous in Lusaka, it does not seem to be an option in some of the poorest areas of the city.

Reliance on Urban Food Production

The fact that households rely on a particular source for some of their food says nothing about how often they obtain food from this source. For example, while 79% of households said they normally obtain some of their food from supermarkets, only 5% do so on a daily basis.⁴⁸ By contrast, 70% of households normally source food from the informal sector, but 31% do so on a daily basis.

	At Least Once a Week	At Least Once A Month	At Least Once Every Six Months	Less than Once a Year	Never
Windhoek	0	0	1	2	97
Gaborone	1	1	1	2	95
Maseru	21	9	13	4	53*
Manzini	1	1	3	4	91
Maputo	12	6	3	2	78
Blantyre	1	0	8	54	37
Lusaka	2	0	0	1	97
Harare	41	7	9	3	40
Cape Town	1	1	1	1	96
Msunduzi	15	10	3	2	70
Johannesburg	2	1	4	1	92
Total	8	3	5	6	78
N	532	211	278	341	4,860

With regard to urban cultivation, while 22% of households obtain food from their own gardens or fields, only 8% get food from this source at least once a week and another 3% at least once a month (Table 2). Even these results are positively skewed by four cities. In Harare, for example, 41% of poor households normally rely on home-grown food at least once

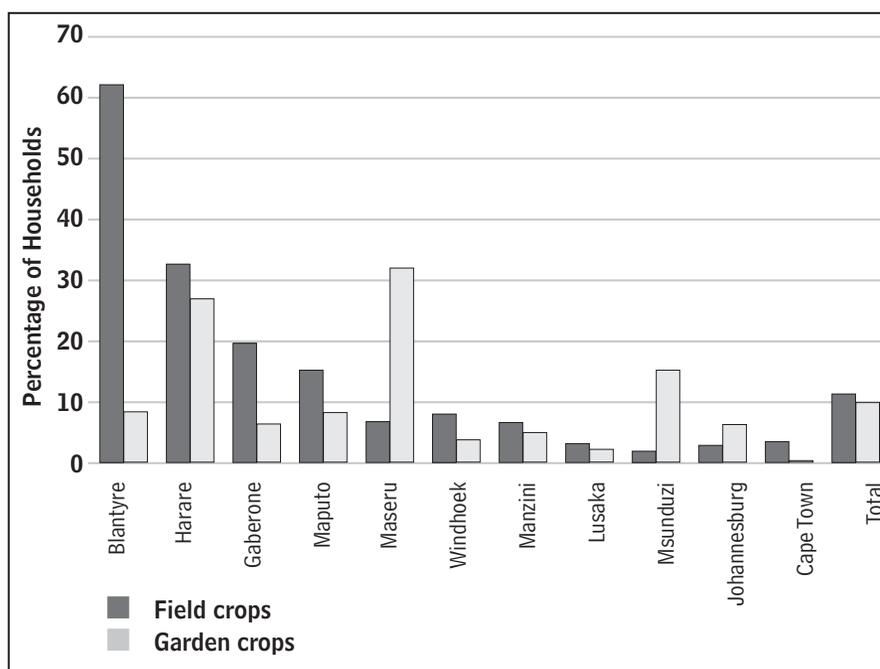
a week, as do 21% in Maseru, 15% in Msunduzi and 12% in Maputo. Households in most of the other cities do not consume home-grown food with any kind of regularity. Even in Blantyre, which has the highest overall participation rate, 54% of households said they source food from their own gardens less than once a year. The general pattern seems to be that it is only in cities with absolute food shortages, such as Harare, and the poorer areas of the poorest cities that food production for home consumption is a normal source of food.

Urban Food Production as an Additional Means of Making a Living

This question asked households the extent to which they engaged in four different types of urban food production as an additional means to make a living. Dependence on urban food production as a supplemental food source is generally quite low across the major cities of the region. However, the extent of such dependence varies with the type of activity involved and from city to city (Figure 4). For example, 11% of households across the region said they were partially or totally dependent on field crops as an additional livelihood strategy and 10% said the same thing about garden crops. However, only 4% were partially or totally dependent on livestock and 2% on tree products.

FIGURE 4

Field and Garden Cropping as Livelihood Strategies





In terms of inter-city differences, 61% of households in Blantyre said they were partly or totally dependent on field crops as an additional livelihood strategy, followed by Harare (33%), Gaborone (22%) and Maputo (14%) (Figure 3). In all of these cities, households own or are able to access fields in the peri-urban areas or close to the city. Dependence on household garden crops, on the other hand, was much lower in Blantyre (9%) and Maputo (3%) and highest in Maseru (31%), followed by Harare (27%) and Msunduzi (16%).

In every city, tree crops were important to less than 10% of households (with Harare and Maseru the highest at 7% and 6% respectively). Gaborone was next at 5% and Maputo at 3%. Overall, therefore, there are only four cities where there is some dependence on urban field cultivation. And there are only two cities where garden crops are important (Maseru and Harare). Tree crops are relatively unimportant everywhere and livestock is really only significant in one city (Gaborone) where 14% of households depend on livestock, mainly poultry.

TABLE 3: Household Food Production as an Additional Livelihood Strategy (Total/Partial Dependence)

City	Field Crops (% of HH)	Garden Crops (% of HH)	Tree Crops (% of HH)	Livestock (% of HH)
Blantyre	61	9	2	4
Harare	33	26	7	5
Gaborone	20	7	5	14
Maputo	14	9	3	4
Maseru	8	31	6	9
Windhoek	7	2	1	7
Manzini	5	4	1	3
Lusaka	2	1	0	1
Msunduzi	1	16	0	2
Johannesburg	1	3	2	1
Cape Town	0	1	0	0
Total	11	10	2	4

Field cropping is slightly more prevalent amongst extended (14%) and nuclear (12%) households than male (7%) and female-headed (5%) households (Table 4). Female-headed households (9%) are marginally more likely to engage in garden cropping than male-headed households (8%) but both are lower than the frequency for nuclear households (11%). There is no significant difference between households when it

comes to tree cultivation and livestock rearing, with rates of participation lower than 5% irrespective of household type. However, this does not mean that urban food production is not structured along gender lines. Evidence from case studies suggests that it is women and children, even in nuclear and extended households, who undertake the bulk of urban food production.⁴⁹ The lower-than-expected rates of participation by female-headed households probably have to do with inequalities in access to land and labour. For example, male-headed households often include a second adult (the spouse or partner) while female-headed households do not. In male-headed households, there are likely to be more people to distribute tasks amongst. In the female-headed household, women have to trade off time spent in wage employment (if available), trading and urban cultivation.

Type of Household	Field Crops		Garden Crops		Tree Crops		Livestock		N
	No	%	No	%	No	%	No	%	
Female-Headed	115	5	203	9	44	2	64	3	2,194
Male-Headed	55	7	59	8	17	2	31	4	774
Nuclear	247	12	218	11	41	2	70	3	2,065
Extended	205	14	132	9	40	4	68	5	1,419

Clearly, land access is a key modality in urban food production. If we assume that households that own their own properties are more likely to have the land for cultivation than those who do not, then we might expect these households to have higher rates of participation. And indeed, over two-thirds of households who are dependent on food production own their own houses (Table 5). No other housing type is remotely as important although renting a property does not always preclude having a garden. The very low rates of participation in urban food production by households in informal settlements is especially noteworthy (only 5% of households who are dependent on field or garden crops live in informal housing).



	Field Crops		Garden Crops		Tree Crops		Livestock	
	No.	%	No.	%	No.	%	No.	%
House	449	68	426	70	105	71	166	66
Town House	66	10	17	3	8	5	13	5
Flat	12	2	18	3	11	7	10	4
Traditional Homestead	44	7	46	7	6	4	11	4
Backyard Room	15	2	12	2	6	4	13	5
Room in House	33	5	28	5	8	5	13	5
Room in Flat	16	2	30	5	1	1	15	5
Informal Dwelling/Shack	25	4	26	5	1	1	8	3
Other	2	0	3	0	0	0	2	0
	662	100	606	100	147	100	251	100

Although households that have their own property are more likely to be dependent on food production than those that do not, the vast majority of owner-occupied units do not engage in urban food production. Only 15% of these households depend on field crops, 14% on garden crops, 5% on livestock and 2% on tree crops (Table 6). In fact, people living in rented accommodation (such as town houses), backyard rooms and rooms in houses have similar rates of participation in field and garden cropping. What is striking, again, are the very low rates of participation by households in informal settlements: only 3% depend on field crops and garden crops and 1% on livestock.

	Field Crops		Garden Crops		Tree Crops		Livestock		N
	No.	%	No.	%	No.	%	No.	%	
House	449	15	426	14	105	2	166	5	3,079
Town House	66	22	17	6	8	3	13	4	305
Flat	12	2	18	3	11	2	10	2	527
Traditional Homestead	44	11	46	11	6	1	11	3	413
Backyard Room	15	11	12	9	6	4	13	4	137
Room in House	33	12	28	11	8	3	13	2	266
Room in Flat	16	4	30	7	1	0	15	4	400
Informal Dwelling/Shack	25	3	26	3	1	0	8	1	852
Other	2	0	3	0	0	0	2	0	85
	662	11	606	10	147	2	251	4	6,064

Urban Production as a Source of Income

In the region as a whole, 22% of households engage in some form of food production. However, only 140 out of over 6,000 households (a mere 3%) derived any income from the sale of home-grown food in the month prior to the survey (Table 7). Over the course of a year, this figure would probably be higher but still suggests that selling home-grown food is not a common income-generating strategy in the poor communities of SADC cities. Nearly 80% of the households who received income in the month prior to the survey were in only three of the eleven cities: Blantyre (51%), Maputo (14%) and Maseru (12%). In five of the cities (including the three in South Africa) less than 5% of households derived income from the sale of produce.

City	No	%
Blantyre	72	51
Maputo	21	14
Maseru	17	12
Manzini	8	6
Harare	8	6
Cape Town	5	4
Lusaka	4	3
Msunduzi	3	2
Gaborone	1	1
Windhoek	1	1
Johannesburg	0	0
Total	140	100

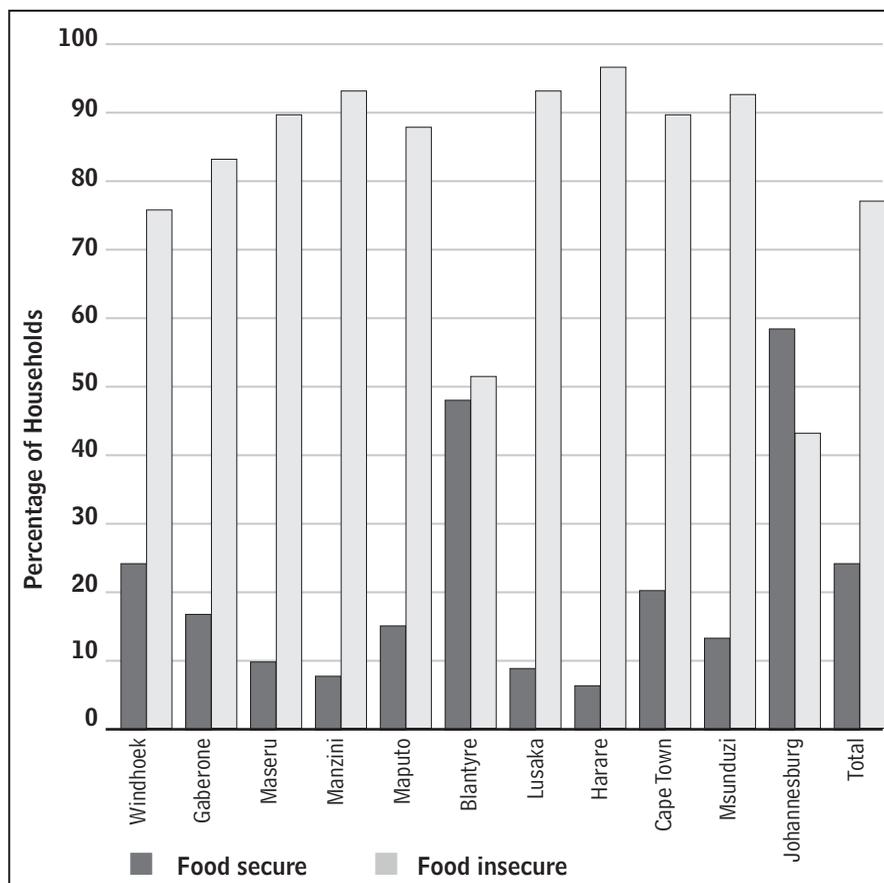
These low figures in the context of more widespread use of urban production as a source of food and as an additional livelihood strategy point to the inadequacy of urban markets as a mechanism of getting household level produce to the commercial consumer. However, where it is more of a survival strategy than a business, efficient markets will still not result in greater commercial participation. When only 3% of households are deriving income from the sale of produce, it suggests that the incorporation of urban food production into informal and formal markets for produce is currently extremely limited.



Urban Food Production and Food Insecurity

The evidence suggests that across the region urban food production is motivated by household survival rather than commercial income-generating opportunities. This is further confirmed by the fact that food insecure households are far more likely than food secure households to engage in food production. In the regional sample as a whole, 77% of households that engage in urban food production as an additional way of making a living turned out to be food insecure. With the exception of Johannesburg and Blantyre, in all of the cities over 70% of households that grow food are food insecure (Figure 5), using the FANTA Household Food Insecurity Access Scale (HFIAS) to distinguish food secure from food insecure households. It may well be that urban food production is responsible for some households becoming food secure. However, when three-quarters of households growing food are still food insecure, it suggests that the impact of urban food production may ameliorate the worst aspects of food insecurity but it does not currently solve the problem.

FIGURE 5
Urban Agriculture and Food Security



4 CONCLUSION

The new international food security agenda focuses almost exclusively on raising food production by small rural farmers (something that has preoccupied rural development ‘experts’ for decades without success). There is a very real danger that this approach will be transferred uncritically to urban areas in the form of technical inputs for poor urban households to grow more food for themselves and for market. There is already an emerging focus on the “technical” aspects of urban farming and how these can be supported and enhanced through strategic interventions such as the promotion and adoption of innovative and appropriate urban farming technologies;⁵⁰ training, technical advice and extension services for urban farmers; reducing the health and environmental risks of urban agriculture;⁵¹ improved access to agricultural inputs and credit;⁵² the strengthening of market chains including the creation of farmers’ markets, linking farmer and consumer organizations, support with the creation of small-scale preservation and storage facilities; and supporting the growth and activities of urban farmer organizations.⁵³ In Southern Africa, these kinds of technical, extension and support activities are much less common (or commented upon) than in other parts of the world.⁵⁴ However, as elsewhere, such technocratic ‘solutions’ are likely to fail if they do not first examine why so few poor households in Southern Africa (with one or two notable exceptions) currently grow any of their own food.

In the past, research on urban cultivation has tended to dissociate these activities from the urban food supply system as a whole. A new approach needs to first situate urban food production within a broader social, economic and political context.⁵⁵ In the global economic context, we need to know what rising global food prices do to the incentive to self-produce and whether supermarket expansion is a threat or an opportunity for urban food producers.⁵⁶ At the national level, the impact of economic (mis)management policies and the privatization of essential services, for example, impact on urban food production by households. Privatization of water delivery, for example, raises the costs of water and simultaneously reduces income available for food purchase. Or again, there is the question of whether national social protection schemes (such as pensions and child grants) are a disincentive to urban food production.⁵⁷

At the household level, urban food production is only one (possible) component of broader household food access and security strategies. As De Zeeuw has noted:

It is not its urban location which distinguishes urban from rural agriculture, but the fact that it is embedded in and interacting with



the urban system. Such linkages include the use of urban residents as labourers, use of typical urban resources (like organic waste as compost and urban water for irrigation), direct links with urban consumers, direct impacts on urban ecology (positive and negative), being part of the urban food system, competing for land with other urban functions, being influenced by urban policies and plans, etc. It is often thought that urban agriculture is a relic of rural habits that has come with the migrants to the cities and that will dwindle over time but that is not correct. It is an urban phenomenon that tends to grow when cities grow (although its locations and characteristics change sharply).⁵⁸

Urban agriculture must also be contextualized within the urban food provisioning system: “the processing and marketing of food produced in and around the city, as well as food from other channels (rural areas, imports) and their linkages and relative contributions to the health and nutrition of the population and to the local economy and environment.” Analytically, it needs to be situated within the context of complex inter-linked urban food supply systems (including urban food provisioning as a whole, which is undergoing rapid transformation throughout the region with the rise and consolidation of modern supply chains and supermarkets). These are the kinds of questions that contemporary researchers need increasingly to grapple with to fully comprehend the complex linkages between urban food production and urban food security. Conceptually, urban agriculture no longer starts and stops at the urban (or peri-urban) boundary.

Analysis of the relationship between urban food production and urban food systems also requires that cross-cutting issues be mainstreamed into the analysis. Gender is a key issue here. Most of the work from a gender perspective focuses on the role of women as urban farmers to make visible their contribution to feeding cities.⁵⁹ There has also been some limited work on child labour in urban food production.⁶⁰ Disaggregation of the gender-neutral concept of the “urban farmer” shows that women play significant roles in urban food production and contribute to both urban household and market economies. Women also benefit from activities that allow them to successfully combine their multiple roles in subsistence, production, and environmental management. On the other hand, various constraints and obstacles (such as land access) hinder women’s participation. Reinstating women as active agents in urban food production is an important step in understanding this activity but is not the same thing as a gender analysis of urban agriculture and urban food security. Gender analysis involves the examination of power relations and gender hierarchies, and men’s and women’s roles, responsibilities and social status

in relation to perceptions of masculinity and femininity. Recognizing the centrality of gender dynamics leads to addressing key local and structural issues and processes that shape gender inequities and hinder food supply at multiple scales.⁶¹

Environment is another important cross-cutting theme. Recent analysis of agriculture in urban areas has suggested that there are both positive and negative environmental impacts on the urban environment. In other words, health benefits are extended by the potential of agriculture to “clean up” urban environments through reuse of wastewater, solid waste and organic materials.⁶² On the other hand, when practiced poorly or under marginal environmental conditions, it can cause or exacerbate health problems given contamination of produce through waste recycling or air pollution, disease transfer from animals to humans, and leaching of agrochemicals into soils and water sources.⁶³

Considerable attention is currently being given to the possibility of incorporating small producers into modern urban food supply chains. However, the opportunities for small rural farmers to competitively access markets dominated by large supermarket retail companies seem extremely limited: “Currently there is little scope for small-scale producers or processors to compete with or be integrated with large-scale food processors in South Africa supplying the modern food system. In fact, small-scale processors supplying traditional markets with products such as bread, traditional beer, rice, meat and dairy products are under pressure and in no position to challenge the large-scale food processors in terms of supplying large supermarkets.”⁶⁴

Such pessimism is even more germane to small urban food producers who, despite the advantage of proximity, are generally unable to satisfy the stringent quantity and quality standards for fresh produce normally demanded by retail chains. This has not dissuaded the FAO, amongst others, from adopting a very bullish position on the “profitability” of urban and peri-urban agriculture: “(It) can thus be a profitable undertaking at the household level, especially when producing products that are high in demand and that have a comparative advantage over rural production such as perishable products (e.g. green leafy vegetables and milk), mushrooms, flowers and ornamental plants. Urban animal husbandry can also be a profitable business.”⁶⁵ However, almost all of the case studies cited are from West Africa, Asia and Latin America. The evidence from the AFSUN survey suggests that this is a more remote possibility for poor urban households in most Southern African cities.

In policy terms, the local and national state is not a neutral, passive



“observer” but an active “player” or even “spoiler” in urban food production. Indeed, there is a growing realization that two decades of academic research and “workshop-talk” about urban agriculture have produced only minor shifts in policy. Some now see the lack of an “enabling policy environment” in cities globally as a major obstacle to maximizing the benefits of urban food production. As Mbiba notes, many urban farmers find themselves caught between “suspicion and repression.”⁶⁶ In other words, despite decades of experience with urban food production, its full potential as a source of food for home consumption and market is hampered by the absence of an enabling and supportive national and local policy environment. This is not uncommon around the region though there are now efforts to secure greater policy buy-in at the municipal level, notably through MDPESA and the Cities Farming for the Future programme.⁶⁷

Such efforts will have practical outcomes only if they provide a better understanding of urban food systems by local and national authorities.⁶⁸ In many cities, agricultural production is still seen as a rural activity that does not belong in town, a potential health threat, a nuisance to people living in cities, detrimental to the local environment, and an activity that has little impact on the economy. In many Southern African cities, this activity is practiced informally without support and in the face of official opposition. Agriculture is rarely recognized as a legitimate land use activity in urban plans or municipal designs. For urban farmers, this means that land is scarce and they often ruffle the feathers of officials and police by establishing their farming activities wherever they can; urban farmers are often harassed by municipal authorities. Comprehensive, systematic research into the linkages between urban agriculture, food security, and health/nutrition could go a long way to easing such institutional and political obstacles so that city farming can meet its full potential in Southern Africa.⁶⁹

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URBAN FOOD PRODUCTION AND HOUSEHOLD FOOD SECURITY IN SOUTHERN AFRICAN CITIES

Optimism about the role of household food production (urban agriculture) in improving the food security of the urban poor has given way to pessimism and even scepticism. This paper critically examines the views of advocates of urban agriculture and suggests that it cannot be isolated from a broader consideration of the changing nature of urban food supply systems in Southern African cities. Urban food production by poor households is currently very limited across the region and even fewer produce for market. While food production is a useful livelihood supplement in some cities and a source of income to some wealthier households, it is not the panacea for food insecurity at the household level. At the same time, it is clear that there are still many obstacles facing households who do produce and sell for market, not least unfavourable regulations and city policies. These need to be addressed to increase the supply and reduce the cost of locally grown food for urban consumers.



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