Wilfrid Laurier University

Scholars Commons @ Laurier

Hungry Cities Partnership

Reports and Papers

2017

No. 03: The Urban Food System of Cape Town, South Africa

Gareth Haysom

African Centre for Cities

Jonathan Crush

Balsillie School of International Affairs/WLU, jcrush@wlu.ca

Mary Caesar Queen's University - Kingston, Ontario

Follow this and additional works at: https://scholars.wlu.ca/hcp

Part of the Food Studies Commons, Human Geography Commons, Politics and Social Change Commons, and the Urban Studies and Planning Commons

Recommended Citation

Haysom, G., Crush, J. & Caesar, M. (2017). The Urban Food System of Cape Town, South Africa (rep., pp. i-65). Waterloo, ON: Hungry Cities Partnership. Hungry Cities Report, No. 3.

This Hungry Cities Report is brought to you for free and open access by the Reports and Papers at Scholars Commons @ Laurier. It has been accepted for inclusion in Hungry Cities Partnership by an authorized administrator of Scholars Commons @ Laurier. For more information, please contact scholarscommons@wlu.ca.

HUNGRY CITIES PARTNERSHIP



THE URBAN FOOD SYSTEM OF CAPE TOWN, SOUTH AFRICA

THE URBAN FOOD SYSTEM OF CAPE TOWN, SOUTH AFRICA

GARETH HAYSOM, JONATHAN CRUSH AND MARY CAESAR

Series Editor: Prof. Jonathan Crush

ACKNOWLEDGEMENTS

The research and publication of this report was funded by the Social Sciences and Humanities Research Council (SSHRC) and the International Development Research Centre (IDRC) under the International Partnerships for Sustainable Societies (IPaSS) Program. The authors wish to thank Bronwen Dachs and Maria Salamone for their assistance in preparing this report.



© HUNGRY CITIES PARTNERSHIP 2017

Published by the Hungry Cities Partnership African Centre for Cities, University of Cape Town, South Africa, and Wilfrid Laurier University/Balsillie School of International Affairs, Waterloo, Canada hungrycities.net

First published 2017

ISBN 978-1-920597-22-1

Production by Bronwen Dachs Muller, Cape Town

All rights reserved. No part of this publication may be reproduced or transmitted, in any form or by any means, without prior permission from the publishers.

Authors

Gareth Haysom is Southern Cities Project Co-ordinator for the Hungry Cities Partnership at the African Centre for Cities, University of Cape Town, South Africa.

Jonathan Crush is Hungry Cities Partnership Director and the CIGI Chair in Global Migration and Development at the Balsillie School of International Affairs, Waterloo, Canada.

Mary Caesar is a Postdoctoral Fellow at the Balsillie School of International Affairs.

Previous Publications in the Hungry Cities Report Series

No 1 The Urban Food System of Nanjing, China

No 2 The Urban Food System of Maputo, Mozambique

(Contents	Page
1.	Background	1
2.	Demography of Cape Town	3
	2.1 Population Composition	3
	2.2 Population Distribution and Density	6
3.	Formal Economy of Cape Town	11
	3.1 Major Economic Activities	11
	3.2 Employment and Unemployment	12
4.	The Informal Economy	14
	4.1 Size and Significance	14
	4.2 Policies Towards Informality	21
5.	Poverty and Income	23
	5.1 Household and Personal Income	23
	5.2 Housing Type	24
6.	The Urban Food System	25
	6.1 Sources of Food and Food Flows	28
	6.1.1 National Food Sources	28
	6.1.2 International Food Sources	33
	6.1.3 Commercial Agriculture within Cape Town	34
	6.1.4 Philippi Horticultural Area	37
	6.2 Urban Agriculture	38
	6.3 Food Processing	41
	6.4 Food Retailing	43
	6.4.1 Cape Town Fresh Produce Market (CTFPM)	43
	6.4.2 Supermarket Dominance of Formal Food Retail	45
	6.4.3 Informal Food Economy	49
7.	Urban Food Security	53
	7.1 Levels of Household Food Insecurity	53

7.2 D	eterminants of Food Insecurity	56
7.	2.1 Household Income	56
7.	2.2 Social Protection	58
7.	2.3 Sources of Food	58
8. Conc	lusion	59
Referenc	es	59
List o	OF TABLES	
Table 1:	Population Increase of the City of Cape Town, 1901-2014	2
Table 2:	Racial and Gender Profile of Cape Town, 2011	3
Table 3:	Population Projections for Cape Town to 2031	4
Table 4:	Number of Households in Cape Town, 1996-2011	4
Table 5:	Racial Composition of Cape Town Suburbs	8
Table 6:	Characteristics of Participants in the Informal Sector	15
Table 7:	Country of Origin of Informal Migrant Entrepreneurs	19
Table 8:	Immigration Status of Informal Migrant Entrepreneurs	19
Table 9:	Business Locations of Informal Migrant Enterprises	20
Table 10:	Households by Type of Dwelling, 2011	25
Table 11:	Housing Type by Race, 2001 and 2011	25
Table 12:	Sectoral Share of Agricultural Output,1981-2013	29
Table 13:	Major Imports and Exports from Cape Town, 2014	34
Table 14:	Value of Agricultural Production in Magisterial Districts, 2007 (rand per ha)	36
Table 15:	Livestock Holdings in Magisterial Districts, 2007	36
Table 16:	Types of Food Vendor at Mitchell's Plain Interchange	51

List of Figures

Figure 1:	Population Increase by Race in Cape Town, 1910-2011	
Figure 2:	Decline in Average Household Size, 1996-2011	5
Figure 3:	Population Pyramid of Cape Town, 2011	5
Figure 4:	Cape Town Central Business District with Suburbs of Green Point and Sea Point	6
Figure 5:	Mix of Formal and Informal Housing, Khayelitsha, Cape Town	7
Figure 6:	Imizamo Yethu in Hout Bay	7
Figure 7:	Dominant Population Group in Suburbs of Cape Town	8
Figure 8:	Population Density in Cape Town, 2011	10
Figure 9:	Comparison of National and Cape Town GDP Indices	11
Figure 10	: Sectoral Contributions to Economic Growth, 2005-2014	12
Figure 11	: Employment in Cape Town, 2008 to 2015	13
Figure 12	: Employment by Sector in Cape Town, 2013-15	13
Figure 13	: South African and Cape Town Unemployment Rates, 2008-2015	14
Figure 14	: Characteristics of Informal Sector by Location	16
Figure 15	: Informal Micro-Enterprises in Delft, Cape Town, 2010 and 2015	17
Figure 16	: Year of Arrival in South Africa and Year of Business Start-Up	20
Figure 17	: Average Household Income in Cape Town, 2001	23
Figure 18	: Distribution of Household Income, 2011	24
Figure 19	: Decline in Number of Commercial Farms	26
Figure 20	: Components of the Urban Food System	28
Figure 21	: Wheat Production by Province, 1994-2015	30
Figure 22	: Selected South African Vegetable Production, 1990-2015	30
Figure 23	: Key Fruit Crop Production, 1990-2015	31
Figure 24	: Consumption of White and Red Meat, 1990-2014/5	31
Figure 25	: Consumption Expenditure on Key Foods	32
Figure 26	: Major South African Food Imports, 2008-2012	34
Figure 27	: Productive and Designated Agricultural Areas	35

Figure 28: Philippi Horticultural Area, Cape Town	37
Figure 29: Location of Urban Agriculture Projects	40
Figure 30: Nyanga People's Garden Centre, Cape Town	40
Figure 31: Oranjezicht City Farm	41
Figure 32: Sasko (Pioneer Foods) Bread Delivery	42
Figure 33: Location of Food Processing Businesses	43
Figure 34: Flows of Food from the CTFPM	44
Figure 35: Cape Town Fresh Produce Market	45
Figure 36: The People's Market at the CTFPM	45
Figure 37: Supermarket Food Sales Turnover	46
Figure 38: Shoprite Distribution Centre, Brackenfell	47
Figure 39: Growth of Supermarkets in Cape Town 1994-2013	47
Figure 40: Number of Supermarkets by Income Quintile	48
Figure 41: Spatial distribution of USaves in Cape Town	48
Figure 42: Location of Food Vendors in Ward 34	50
Figure 43: Reasons for Choosing Trading Location	50
Figure 44: Peak Business Hours for Informal Vendors	50
Figure 45: Spaza in Low-Income Area of Cape Town	51
Figure 46: Spaza Owned by Migrants	51
Figure 47: Sources of Produce Sold by Informal Food Vendors	52
Figure 48: Frequency of Food Purchased by Informal Vendors	52
Figure 49: Experience and Risk of Hunger in South Africa, 2013	53
Figure 50: Levels of Food Insecurity in Low-Income Areas	54
Figure 51: Levels of Food Insecurity among Migrant Households	55
Figure 52: Foods Eaten by Low-Income Households	55
Figure 53: Months of Inadequate Food Provisioning	56
Figure 54: Household Income and Food Insecurity	57
Figure 55: Income and Food Insecurity among Migrant Households	57
Figure 56: Food Sources of Low-Income Households	59

1. Background

Cape Town is South Africa's second largest city and plays a critical role in the national economy. It is also the seat of Parliament and the capital city of the Western Cape, one of South Africa's nine provinces. The origins of the city date back to the first use of the Cape as a provisioning station for ships of the Dutch East India Company en route to South East Asia in the 17th century (Worden et al 1998). In the years that followed, white settlers from the Netherlands and France, having decimated the local population, developed an agricultural slave-based economy that began to expand inland from the urban settlement in Cape Town. Slaves were imported from various colonies in Asia, many of whom are the forebears of today's large mixed-race (or Coloured) population of Cape Town. The British occupied the Cape in 1814 and hastened the development of the modern city and agricultural hinterland of Cape Town by transforming its local governance structures and economy.

Under British colonial occupation, by 1870 the number of urban centres in the Cape Colony had increased from 14 to 103 (Mäki 2008). This expansion is largely attributable to the growth of service and administrative centres. Further, the Cape Municipal Ordinance of 1836 established municipal councils introducing local government structures of Boards of Commissioners as the formal authority. Local government existed in the Cape from as early as 1786 with specific duties to fix the price of bread and meat as well as controlling public works (Mäki 2008). In terms of the local economy, the British abolished slavery and instituted a low-wage-based economy. South Africa's minerals-based industrial revolution in the late 19th century led to new roles and immigrant populations in the city. Cape Town became one of South Africa's major ports for mineral and agricultural exports and imports of commodities including food. The total population for the City was only 8,400 in 1865 but increased rapidly to 181,240 in 1920. For much of the 20th century, population growth was steady, at between 2-4% per annum (Table 1).

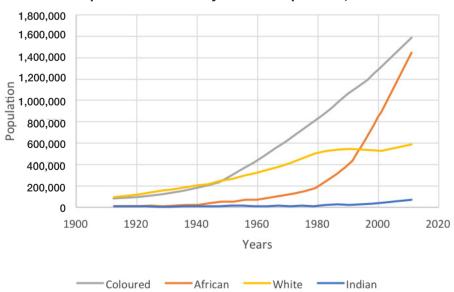
The history of urbanization in Cape Town is highly racialized (Bickford-Smith 1995, 2003, Western 1997). Until 1945, the white population of the city was the largest component (Figure 1). This changed when the apartheid government came to power in 1948. The urbanization of the Coloured population, which grew from 200,000 in 1945 to 1.2 million in 2000 in Cape Town, was partly a result of increased movement from small towns and farming areas to the city. The apartheid government imposed strict controls on the movement of black Africans and sent large numbers of migrants to South Africa's cities back to the rural areas. This repressive and unworkable "influx control" system had broken down by 1986 when the controls and associated pass laws were abolished (Saff 1998). The black African population of Cape Town began to grow rapidly from

the mid-1980s onwards. Between 1980 and 2000, the black African population of the city grew from less than 200,000 to 900,000, and to 1.4 million in 2011. In the post-apartheid period, the white population stabilized as new national immigration policies stopped large-scale migration from Europe and Cape Town began to experience a major "brain drain" with skilled and professional whites leaving the country (Höppli 2014).

TABLE 1: Population Increase of the City of Cape Town, 1901-2014

Year	Population	±% p.a.					
1901	171,000	+9.82					
1950	618,000	+2.66					
1955	705,000	+2.67					
1960	803,000	+2.64					
1965	945,000	+3.31					
1970	1,114,000	+3.35					
1975	1,339,000	+3.75					
1980	1,609,000	+3.74					
1985	1,933,000	+3.74					
1990	2,296,000	+3.50					
1996	2,565,018	+1.86					
2001	2,892,243	+2.43					
2007	3,497,097	+3.22					
2011	3,740,000	+1.69					
2014	3,750,000	+0.09					
Sources: Worden et al (1998), Statistics South Africa							

FIGURE 1: Population Increase by Race in Cape Town, 1910-2011



The other distinctive aspect of Cape Town's history is the racialization of urban space through racial segregation policies (Western 1997). In the period before 1948, segregationist policies led to a distinctive spatial organization in which wealthy whites, who controlled the city's economy and politics, lived in salubrious surroundings close to Table Mountain. The working-class Coloured population lived in low-income areas, known as the Cape Flats, which were further from the CBD, but there were also middle-class suburbs in which both whites and people of mixed-race lived. This racial mixing was outlawed by the apartheid government which expropriated and demolished many Coloured-owned houses and forcibly relocated their inhabitants to the Cape Flats (Western 1997). Some predominantly mixed-race housing areas were completely destroyed, including District Six, close to the city centre. The city's growing black African population was channeled to low-cost housing areas on the periphery of the city. However, housing construction did not keep pace with urbanization and the city landscape became increasingly congested with rapidly-growing informal settlements.

2. Demography of Cape Town

2.1 Population Composition

The 2011 South African Census recorded a population of 3,740,026 in the City of Cape Town, with 42% Coloured or mixed-race, 39% black African, and 16% white (Table 2). The number of women slightly exceeded the number of men, significantly so in the case of the Coloured and white populations. Dorrington (2000) projected that the city's rapid post-apartheid population growth would continue, reaching 4.3 million in 2016, and 5 million in 2031 (Table 3). According to this analysis, the black African population will be the largest component of the city's population by 2031.

TABLE 2: Racial and Gender Profile of Cape Town, 201
--

	Male		Female		Total	
	No.	%	No.	%	No.	%
Black African	722,755	19.3	722,184	19.3	1,444,939	38.6
Coloured	759,559	20.3	825,727	22.1	1,585,286	42.4
Asian	26,155	0.7	25,631	0.7	51,786	1.4
White	280,133	7.5	305,698	8.2	585,831	15.7
Other	42,097	1.1	30,087	0.8	72,184	1.9
Total	1,830,699	48.9	1,909,327	51.1	3,740,026	100.0
Total Source: Statisti			1,909,327	51.1	3,740,026	10

	2016		2021		2026		2031	
	No.	%	No.	%	No.	%	No.	%
Asian	75,546	1.9	82,334	1.9	88,383	2.1	93,541	2.2
Black African	1,496,267	37.4	1,581,397	38.4	1,653,399	39.3	1,703,802	40.0
Coloured	1,697,148	42.5	1,711,661	41.6	1,712,078	40.7	1,698,536	39.9
White	728,756	18.2	744,113	18.1	754,584	17.9	759,977	17.9
Source: Dorrington (2000)								

TABLE 3: Population Projections for Cape Town to 2031

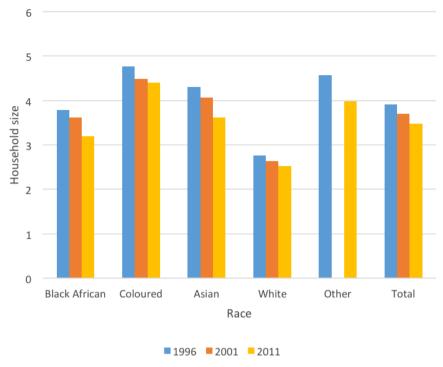
The number of households in Cape Town grew from 653,000 in 1996 to 1,069,000 in 2011, an increase of over 60% (CoCT 2017: 17). The greatest increase was in the number and proportion of black African households, again a function of large-scale migration to the city (Table 4). While the number of Coloured and white households also increased, their proportional share fell by 6-7% each. While the number of households has increased, average household size has been declining across all racial groups (Figure 2). White households are on average the smallest and Coloured households the largest, despite an overall decline in the average size of both since 1996. In total, 38% of households in Cape Town are female-headed.

TABLE 4: Number of Households in Cape Town, 1996-2011

	1996		2001		2011		
	No.	%	No.	%	No.	%	
Black African	168,000	25.7	251,125	32.3	444,781	41.6	
Coloured	259,982	39.8	310,465	39.9	358,629	33.6	
White	195,011	29.9	205,734	26.5	232,826	21.8	
Other	30,092	4.6	10,065	1.3	32,336	3.0	
Total	653,085	100.0	777,389	100.0	1,068,572	100.0	
Source: CoCT (2016: 17)							

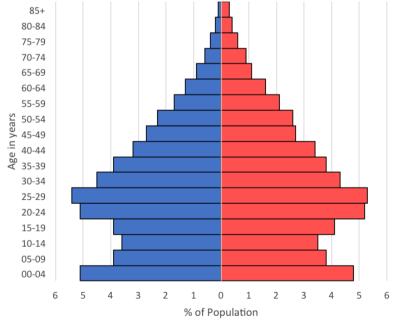
Rapid in-migration of adults from other parts of the country has produced a distinctive age structure in which working-age men and women between 20 and 40 years of age predominate (Figure 3). The population pyramid of the city shows a distinctive pattern in which the largest proportion of the population is not young children (as is the case nationally) but adults in the 25–29 age band. Also of note is the relatively low proportion of people in their teens. This may reflect the preference of adults to school their children in other locations.

FIGURE 2: Decline in Average Household Size, 1996-2011



Source: CoCT (2016: 18)

FIGURE 3: Population Pyramid of Cape Town, 2011



■Male ■Female

Source: http://www.statssa.gov.za/?page_id=1021&id=city-of-cape-town-municipality

As well as being a major destination for internal migrants (primarily from the Eastern Cape), post-apartheid Cape Town has become a destination for international migrants and refugees from neighbouring SADC (Southern African Development Community) countries (74,685 in 2011), other African countries (25,392 in 2011) and elsewhere in the world (23,854 in 2011). The actual numbers may be higher since as many as 205,546 people did not specify their region of birth in the 2011 Census.

2.2 Population Distribution and Density

Cape Town is a city of major contrasts and extremes. The wealthiest suburbs are around Table Mountain and are inhabited primarily by whites, a legacy of the city's apartheid past. This is the popular touristic image of Cape Town (Figure 4). However, the majority of the city's people live in formal and informal housing further away from the mountain in an area known as the Cape Flats. One of the largest of these areas is Khayelitsha, which was established in the 1980s as a planned residential area for black Africans, 30km from the city centre. Khayelitsha now houses over 1 million people, many in dire poverty, in a mix of basic formal housing and informal structures (Figure 5). In some areas of the city, large informal settlements have grown in what were whites-only areas under apartheid. This has produced stark juxtapositions of wealth and poverty, such as the case of Imizamo Yethu in Hout Bay (Figure 6).

FIGURE 4: Cape Town Central Business District with Suburbs of Green Point and Sea Point



The spatial distribution of the city's population is still predominantly determined by race. More than 20 years after South Africa's first democratic election, and the abolition of state-mandated racial segregation, racially-determined suburbs remain the dominant feature of urban settlement in Cape Town. As Figure 7 and Table 5 clearly show, most areas are either predominantly white, Coloured or black African.

The parts of the city where over 90% of the residents are black African include areas designated for Africans by the apartheid system (such as Langa, Gugulethu and Khayelitsha) and informal settlements (including Crossroads, Imizamo Yethu and Philippi). In addition to Imizamo Yethu in Hout Bay, the wealthy area of Noordhoek has a large informal settlement (Masiphumelele). Both Imizamo Yethu and Masiphumelele are post-apartheid informal settlements mainly occupied by recent migrants to the city. Suburbs with a predominantly Coloured population are generally low-income and working class areas on the Cape Flats including Mitchell's Plain (91%), Athlone (87%), Grassy Park (87%) and Manenberg (85%). The only suburb with a roughly equal number of black African and Coloured residents is the low-income area of Delft. The residents of the wealthiest suburbs, most of which are close to Table Mountain, are predominantly white.

FIGURE 5: Mix of Formal and Informal Housing, Khayelitsha



Source: Johnny Miller

FIGURE 6: Imizamo Yethu in Hout Bay



Source: Johnny Miller

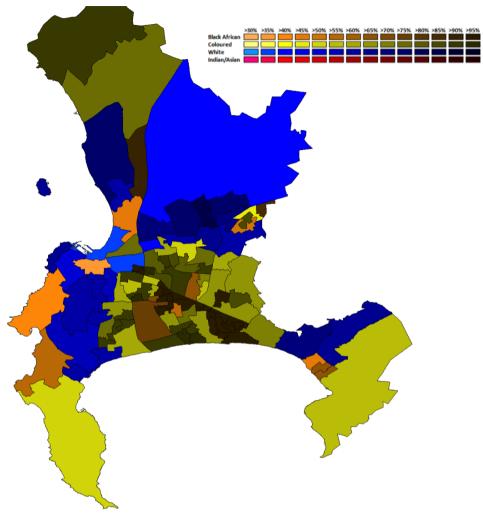


FIGURE 7: Dominant Population Group in Suburbs of Cape Town

Source: https://welections.wordpress.com/guide-to-the-2014-south-african-election/race-ethnicity-and-language-in-south-africa/

TABLE 5: Racial Composition of Cape Town Suburbs

TABLE 3. Nacial Composition of Cape Town Suburbs									
Suburb	Black African	Coloured	White	Other					
Majority Black African Population									
Langa	99.1	0.4	0.1	0.5					
Nyanga	98.8	0.3	0.2	0.8					
Khayelitsha	98.6	0.6	0.1	0.7					
Gugulethu	98.6	0.9	0.0	0.5					
Crossroads	96.7	2.9	0.1	0.3					
Mfuleni	95.9	3.0	0.2	0.9					
Philippi	94.1	4.7	0.1	1.1					
Nomzamo	93.3	4.0	0.3	2.4					
Imizamo Yethu	91.6	3.7	0.1	4.6					

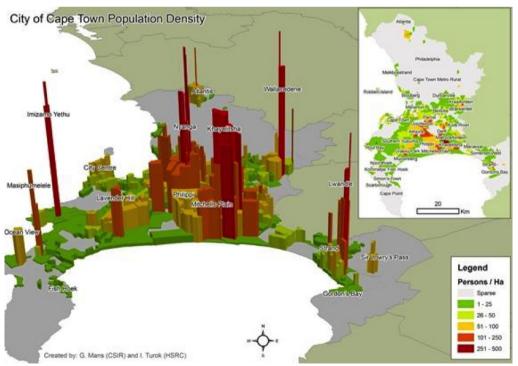
Durbanville	85.4	14.6	0.0	0.0
Noordhoek	67.3	2.3	24.6	5.8
Klipheuwel	54.1	38.6	6.8	0.5
Fistantekraal	51.5	46.9	0.5	1.1
Castle Rock	49.5	46.3	2.8	1.4
Kraaifontein	43.3	40.2	14.4	2.1
D.II.	1	rity Coloured Popul		0.0
Pella	1.7	97.3	0.1	0.9
Mamre	3.0	94.6	0.3	2.1
Elsies Rivier	6.8	91.4	0.3	1.5
Matroosfontein	7.0	90.9	0.1	2.0
Mitchell's Plain	7.3	90.8	0.2	1.7
Belhar	4.9	90.2	0.3	4.7
Macassar	8.9	88.3	1.2	1.6
Grassy Park	6.2	87.4	0.6	5.8
Athlone	5.9	87.0	0.3	6.8
Atlantis	12.9	85.0	0.1	2.0
Manenberg	10.4	84.5	0.1	5.0
Eerste Rivier	16.0	81.7	0.2	2.0
Blue Downs	22.9	74.9	0.3	1.8
Kommetjie	6.1	74.5	17.8	1.6
Epping Industria	30.0	66.0	0.0	4.0
Blackheath	33.4	63.2	0.9	2.4
Parow	9.6	58.4	25.5	6.5
Kuilsriver	11.4	53.1	32.6	2.8
Delft	46.2	51.5	0.1	2.1
Cape Metro	24.2	46.8	26.9	2.2
Cape Farms	14.3	44.1	36.5	5.2
Goodwood	17.9	37.9	37.9	6.2
Philadelphia	7.2	59.1	33.7	0.0
Strand	11.6	51.1	34.2	3.1
	Ma	jority White Populat	ion	
Fish Hoek	9.7	5.1	82.2	3.1
Durbanville	5.5	10.1	82.2	2.2
Melkbosstrand	7.8	10.0	80.5	1.6
Camps Bay	12.2	4.4	80.2	3.1
Brackenfell	9.8	9.0	79.0	2.2
Newlands	8.9	5.9	77.0	8.2
Constantia	11.5	9.2	75.3	4.0
Scarborough	16.2	9.8	69.6	4.5
Gordons Bay	10.9	19.8	65.6	3.7
Claremont	16.8	11.1	64.1	8.0
Green Point	21.5	9.7	62.4	6.5
Somerset West	13.0	24.5	60.1	2.5
			00	5

Hout Bay	6.8	32.3	57.4	3.6
Simon's Town	31.4	8.9	56.0	3.6
Bellville	15.7	29.4	50.3	4.6
Muizenberg	23.2	18.4	49.9	8.5
Milnerton	29.9	17.3	47.7	5.0
Blouberg	44.4	6.5	44.7	4.5

Source: Compiled from 2011 Census data at http://www.statssa.gov.za/?page_id=1021&id=city-of-cape-town-municipality

The legacy of urban racial segregation can also be seen in the highly variable population density across the city. In general, high and low-density areas are in different parts of the city. Densities are very low in the middle and upper (predominantly white) suburbs close to the mountain and around the Cape peninsula (Figure 8). By contrast, densities are extremely high in the city's informal settlements. In between are the Cape Flats suburbs with relatively high-density formal housing. In the last three decades, the city has undergone a process of inverse densification with the periphery densifying much faster than the urban core (Turok 2011).

FIGURE 8: Population Density in Cape Town, 2011

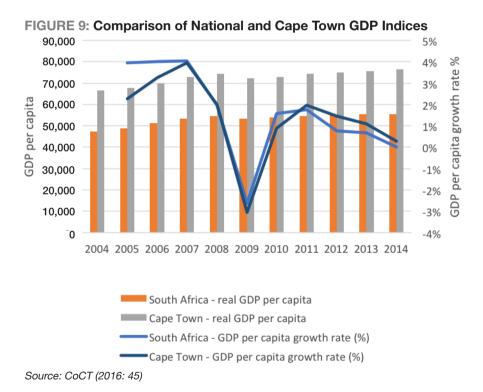


Source: SACN (2011)

3. FORMAL ECONOMY OF CAPE TOWN

3.1 Major Economic Activities

Cape Town is an important contributor to the national and provincial (Western Cape) economies, making up around 10% of national GDP in 2014 (CoCT 2016: 45). Its real GDP per capita and GDP per capita growth rate closely mirror that of the national economy, although GDP per capita is consistently higher in Cape Town (Figure 9). Cape Town's economy is primarily service-driven, with the tertiary sector contributing almost 80% of the city's economic output (CoCT 2016: 46). Between 2005 and 2014, the finance and insurance industry contributed over 30% of economic growth. Retail and wholesale trade, construction and business services also made significant contributions (Figure 10).



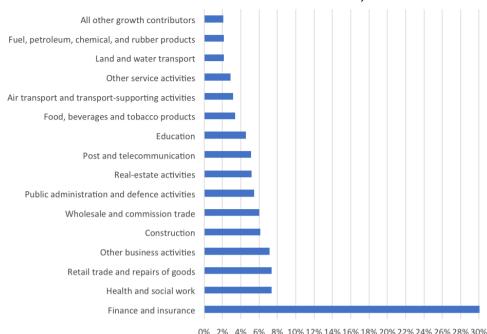


FIGURE 10: Sectoral Contributions to Economic Growth, 2005-2014

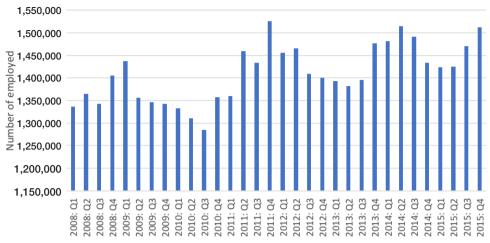
Source: CoCT (2016: 46)

3.2 Employment and Unemployment

The growth of the city's economy is reflected in the rising number of jobs, which increased from 1.34 million in 2008 to over 1.5 million in 2014 (with a marked dip between 2008 and 2010 during the global financial crisis) (Figure 11). The importance of the tertiary sector (which includes services, finance, private households, transport and trade) as a source of employment is evident from Figure 12, which shows that over 1 million jobs are in tertiary industry. Secondary industry provides around 200,000 jobs with clothing and textiles and agro-processing as major employers. Primary industry (agriculture and mining) is much less significant, employing less than 10,000 people.

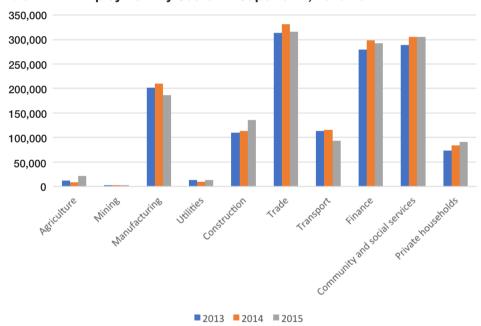
As the sectoral breakdown suggests, Cape Town's labour market favours those with skills. Many new migrants to the city are semi-skilled or unskilled and are therefore mostly absorbed into the informal sector. However, the city still has a very high unemployment rate. Between 2008 and 2015, unemployment increased from 19.2% to 22.1%, although there was a sharp decline during the course of 2015 (CoCT 2016: 48). While Cape Town's unemployment rate is well below the national average (Figure 13), unemployment for youth in the city is as high as 47%.

FIGURE 11: Employment in Cape Town, 2008 to 2015



Source: CoCT (2016: 49)

FIGURE 12: Employment by Sector in Cape Town, 2013-15



Source: CoCT (2016: 52)

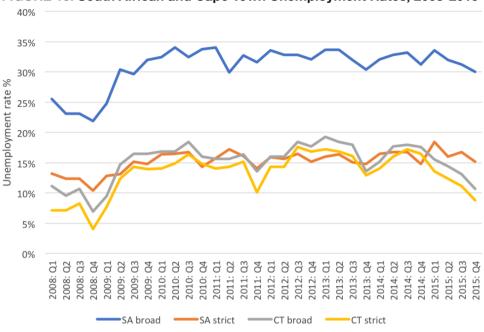


FIGURE 13: South African and Cape Town Unemployment Rates, 2008-2015

Source: CoCT (2016: 49)

4. The Informal Economy

4.1 Size and Significance

Various commentators have said that the informal economy in South Africa is small in comparison with that of other African countries and given the country's high rates of formal sector unemployment. According to the City of Cape Town (CoCT 2015: 45), "the informal sector incorporates a broad spectrum of economic activities and business typologies in a diverse range of geographic locations across the city, with varying intensities of relations with formal business." An estimated 122,000 people (or 9% of the total workforce) were informally employed at the time of Census 2011, an increase from 47,000 in 2001 (CoCT 2016: 53). Current estimates suggest that the sector has grown rapidly in the last five years and may now provide employment or self-employment for between 160,000 and 186,000 people. The Cape Town Partnership claims that the local informal economy constitutes 12% of the city's total economy and that it employs 18% of economically active residents. According to the City (CoCT 2016: 53):

The informal sector's socio-economic impact in Cape Town is even larger than its contribution to employment would imply, as the income received from informal work accrues disproportionately to those who live close to the poverty line... The

relatively low wages of informal-sector workers, who tend to live in poor households with larger- than-average household size, result in a substantial decrease in the city's poverty rate.

The City calculates that there is a 4.5% decline in the poverty rate once informal sector income is factored in or the equivalent of pulling 186,000 people out of poverty. While individual incomes can be low, the informal economy supports large numbers of dependants in poor households.

A City of Cape Town 2015 study of the informal sector found that 60% of the participants were male and 40% were female (Table 6). Nearly half were black African, with 36% Coloured and only 15% white. As many as 41% were youth (under the age of 35, according to the ILO definition). Participation by people over the age of 50 was much lower (at 18%). The participants were relatively well educated with 38% having completed high school and 10% with some tertiary education. Contrary to expectations, only 12% of informal-sector workers were employed or self-employed in informal settlements. By far the greatest number were in formal areas of the city. The informal sector is also "incredibly fluid" with individuals moving backwards and forwards between it and formal employment. Many participants use their savings from a formal job as start-up capital for an informal business.

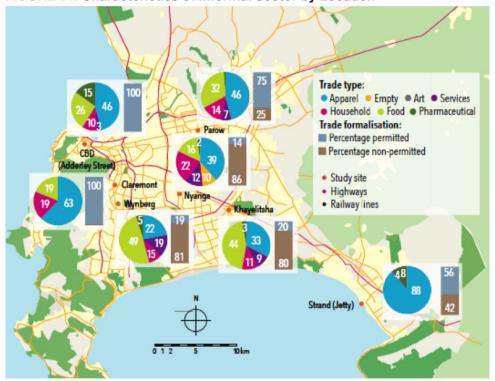
Figure 14 maps the major areas of the city in which informal businesses operate and shows that there is considerable variation in the degree to which they are operating with City business permits. In the CBD for example, all operators have permits, while the proportion in Strand with permits is only 56%. The map also suggests that the mix of informal sector activities varies considerably by location, although trade in food and apparel is found to a greater or lesser degree in every location.

TABLE 6: Characteristics of Participants in the Informal Sector

	% of Informal Sector Workers				
Gender					
Male	59.8				
Female	40.2				
Race					
Black African	48.5				
Coloured	36.0				
White	14.9				
Other	0.5				
Age					
15-29	26.5				
30-34	14.5				

35-49	41.1			
50-64	17.9			
Education				
None	3.0			
Primary (some/completed)	13.6			
Secondary (some/completed)	80.4			
Tertiary	10.4			
Location				
Urban formal	88.2			
Urban informal	11.8			
Source: CoCT (2015: 48)				

FIGURE 14: Characteristics of Informal Sector by Location



Source: CoCT (2015: 49)

CoCT (2015) divides informal traders into two main types: (a) general traders who rely on high-volume, low-margin sales and (b) specialized traders who sell higher-margin goods to smaller numbers of customers. The former are "more responsive to pedestrian flows, as customer convenience is their main competitive advantage" (CoCT 2015: 49). They are primarily retailers who sell "cheap and popular items" such as fruit, vegetables and snacks. While retailing/trading is the major informal sector activity, the informal economy is much more diverse than simply the buying and reselling of goods:

Structurally, the components of this informal economy include a notable informal retail economy which is manifest as street trading in the inner city and spaza retailing in township areas. The Cape Town market street trading economy includes a distinctive element of traders who are engaged with the city's burgeoning formal tourism economy through the vending of arts and crafts. Beyond retail, however, there is evidence of an informal economy of services (which includes among others, hairdressing and shebeens); of manufacturing (especially informal clothing), construction, recycling and repairs (garage mechanics in townships, cell phone repairs); and, a highly distinctive economy in which an estimated 15,000 practitioners collectively are involved gathering wild-harvest resources to support the traditional medicine economy (Rogerson 2015).

Additional detail on informal activity in particular localities comes from other recent surveys. First, a recent study of the informal sector in the low-income suburb of Delft in Cape Town shows the relative importance of different types of informal sector activity (Charman et al 2016). The number of micro-enterprises more than doubled from 879 in 2010 to 1,798 in 2015 (Figure 15). While almost all types of activity saw some growth, the increase was particularly marked for take-away (cooked) food, street trading, meat, poultry and fish selling, and wood and coal sales. There was an overall decline in the number of spaza shops, which may be related to recent attacks and looting of these types of outlet (Charman and Piper 2012).

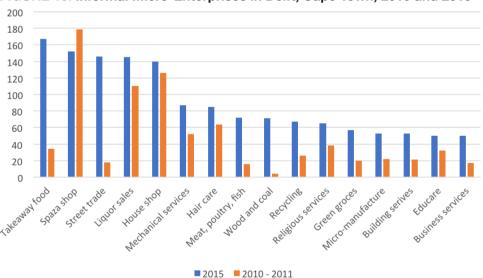


FIGURE 15: Informal Micro-Enterprises in Delft, Cape Town, 2010 and 2015

Source: Charman et al (2016: 4)

A study of small businesses in Khayelitsha found that there were 85,000 SMMEs of which 32,000 were informal micro-enterprises and 45,000 were classified as "survivalists" (USB 2014: 2). The study classified enterprises into (a) medium-sized enterprises (20–50 staff) such as taxi operators or large childcare centres; (b) small enterprises (6–20 staff) such as corner shops, repair workshops and restaurants; (c) micro-enterprises (5 or fewer staff) such as spaza, shebeens, hairdressers and taxis; and (d) survivalist operations such as street vending, cleaning and waste removal.

There have been various studies of the involvement of migrants and refugees in the informal economy of Cape Town (Gastrow and Amit 2013, Kalitanyi and Visser 2010, Khosa and Kalitanyi 2014, Slabbert and Tengeh 2013, Tawodzera et al 2015, Tengeh 2013a, 2013b, Tengeh et al 2011). African migrant entrepreneurs in Cape Town are engaged in a wide range of entrepreneurial activities. Tengeh et al (2011: 16) found that the array of informal sector activities included cell phone repairs, shoe repairs, crafts, restaurants, panelbeaters, ethnic clothing, manufacturing and even operating night clubs. Most – almost two-thirds – were involved in various forms of trading. Certain activities were dominated by particular groups of foreign nationals including Somalis in clothing, Senegalese in footwear, Congolese in hairdressing, and Malawians and Ugandans in arts and crafts (Kalitanyi and Visser 2010). A 2015 SAMP study of 518 migrant-owned businesses in Cape Town confirmed that the migrants came from a wide variety of countries (Table 7) (Tawodzera et al 2015). There is a common public perception, reinforced by official statements, that most migrants are in South Africa illegally. However, the SAMP study found that over 60% were either recognized refugees or asylum-seekers and only 7% had no official documentation (Table 8).

The survey concentrated on micro-enterprises in three major sectors: (a) retail, trade and wholesale; (b) manufacturing; and (c) services. Sixty-two percent of the migrant entrepreneurs were engaged in retail, trade and wholesale activities, 28% in services and 10% in manufacturing. The entrepreneurs conducted their business activities from a variety of temporary and permanent locations (Table 9). Some operate in more than one location. The most significant location was a temporary stall on the street (38% of the total sample). Next was a permanent stall on the street (at 21%). Other fixed premises included workshops or shops (16%), their own home (11%), a permanent stall in a market (11%) and a shop in a house, yard or garage (3%). Other temporary sites of significance included taxi ranks (11%) and in the customer's home (3%). A total of 9% were mobile, predominantly selling goods door-to-door.

TABLE 7: Country of Origin of Informal Migrant Entrepreneurs

	No.	%
SADC		
Zimbabwe	118	22.8
Malawi	39	7.5
Tanzania	9	1.7
Lesotho	5	1.0
Zambia	5	1.0
Angola	4	0.8
Mozambique	4	0.8
Other African		
Somalia	70	13.5
Democratic Republic of the Congo	58	11.2
Nigeria	48	9.3
Ethiopia	37	7.2
Cameroon	22	4.3
Ghana	17	3.3
Congo (Brazzaville)	14	2.7
Uganda	12	2.3
Kenya	11	2.1
Rwanda	5	1.0
Other		
Pakistan	8	1.5
Bangladesh	4	0.8
Other country	27	5.2
Total	517	100.0

TABLE 8: Immigration Status of Informal Migrant Entrepreneurs

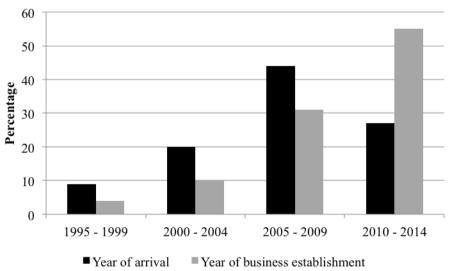
<u> </u>						
	No.	%				
Refugee permit holder	162	31.5				
Asylum-seeker permit holder	158	30.7				
Permanent resident of South Africa	61	11.9				
Work permit holder	40	7.8				
No official documentation	38	7.4				
Visitor's permit holder	30	5.8				
Other immigration status	12	2.3				
Unknown	12	2.4				
Citizen of South Africa	1	0.2				
Total	514	100.0				

TABLE 9:	Business	Locations of	Informal	Migrant Enterprises
IADLL 3.	Dusiliess	Locations of	IIIIOIIIIai	wings and Linter prises

	No.	% of total			
Permanent					
Permanent stall on the street	109	21.0			
Workshop or shop	85	16.4			
Permanent stall in a market	55	10.6			
In own home	55	10.6			
Shop in house/yard/garage	18	3.5			
Taxi/public transport station in permanent structure	10	1.9			
Restaurant or hotel	2	0.4			
Temporary					
Temporary stall on the street	198	38.2			
Taxi rank	57	11.0			
Mobile (e.g. door-to-door)	46	8.9			
In customer's home (e.g. hairstyling)	17	3.3			
From vehicle (car, truck, motor bike, bike)	6	1.2			
Other					
Other location	34	6.6			
Note: multiple response question					

Only a few of the businesses (less than 5%) were established before 2000. The majority (over 50%) started between 2010 and 2014 (Figure 16). Comparing the year in which the migrants came to South Africa with the year they established their business, shows that there is a clear time lag between the two as they raise sufficient capital from other activities (formal employment as well as working for an informal business owner) to set up their own business.

FIGURE 16: Year of Arrival in South Africa and Year of Business Start-Up



4.2 Policies Towards Informality

Cape Town's 2013 Informal Trading Policy emphasizes the importance of the informal economy to the city:

The City acknowledges the legitimacy and role of the informal economy in terms of its employment and economic growth prospects. Urbanising cities and towns globally are experiencing growth in the number of entrants to the informal sector. The informal economy also has low barriers to entry and serves as a social safety net: it also often sustains the livelihoods of foreign nationals who seek refuge from war torn countries. The informal economy is thus important socially and economically. The response to the sector will determine how well it thrives (CoCT 2013: 10).

Officials from the Department of Economic Development have noted that new policy adopts "a more developmental approach" (Rogerson 2015).

Skinner (2013) draws attention to the more restrictive dimensions of the official response and regulation of the street trading economy of Cape Town. First, the City of Cape Town has committed much less funding for infrastructure in support of informal retailing. Second, Cape Town has declared a significantly larger area of defended space, in the form of restricted or prohibited trade areas, than any other leading city in South Africa. Third, compared to other South African cities, Cape Town has fewer public space traders generally and a reduced number of inner-city traders. Waiting lists for permits can be up to two-and-a-half years in certain parts of the city (Chapman, 2014). Donaldson et al (2014: 292) argue that the policy "limits who can trade; traders that do not get a permit find this unfair. Traders that have one find that the process to add or change the type of goods they sell is too onerous." Crush et al (2015: 44) conclude that while the policy environment varies across different parts of the city, as well as between different elements of informal economic activities, for Cape Town as a whole "the modernizing vision of the 'world-class city' with its associated antipathy towards informality and the pathologizing of informal space and activity seems to predominate." There is evidence of a subtle but systematic exclusion of street traders through "ongoing harassment of traders throughout the city" and the allocation of only 410 street trading bays across the entire inner city (Crush et al, 2015: 44).

A completely different set of regulatory challenges confront migrant entrepreneurs undertaking operations in Cape Town township areas as opposed to the inner city. Gastrow and Amit (2013) record that low regulatory barriers to entry facilitated the growth of Somali trading in Cape Town townships. Indeed, low regulatory requirements as well as lack of enforcement of applicable legislation "have benefited spaza traders who might otherwise struggle to meet the complex, legal, technical and bureaucratic requirements in more regulated areas" (Gastrow and Amit, 2013: 18). In low-income areas, spazas and "house shops" are not regulated under the informal trading policy but instead by the zoning schemes that

apply to residential areas (Rogerson 2015). The city's zoning scheme differentiates between two types of single residential zoning. In higher-income residential areas – SR1 – the zoning regime does not allow for spazas or house shops. But in lower-income areas, such as townships, SR2 zoning makes provision for spazas (Rogerson 2015). The intention is that owners use house shops for supplementary income only and do not lease out their shops for rent. Shops that expand and exceed these conditions are expected to formalize and relocate to areas that are zoned for business purposes (Rogerson 2015).

Although spaza traders are legally required to possess business licences, Cape Town authorities have been generally reluctant to enforce licensing in townships mainly because of lack of capacity. Many, if not most, township spazas, whether run by locals or migrants, therefore operate in contravention of this requirement for a business licence, which applies to sellers of perishable items such as milk, bread or meat (Gastrow and Amit, 2013). The absence of clarity in regulations about spaza operations and zoning was articulated as follows by the Chairperson of the Somali Association of South Africa:

What spaza shops normally face is that there are areas which are zoned and areas which are not zoned. In all those areas which are zoned, there's always challenges that the spaza owners face because they don't understand how the regulation works: what they're supposed to do and not supposed to do when they open a shop for the first time. What happens is that somebody opens a shop somewhere and receives a warning letter from the municipality saying 'no, you have to close down'. And he doesn't understand why. And the person who gives the letter doesn't explain a lot of things. The municipalities don't usually run workshops or things like that for spaza shops to teach them about what regulations or by laws mean. You think it is a free zone where you can just trade and do what you want. People are fined and told 'you are doing illegal business. You don't have a license.' So, there's a lot of confusion when it comes to the by laws or regulations that apply to places that are not zoned specifically. And the municipality or the local government is not actually very clear with their law (Quoted in Rogerson 2015).

In spite of the existence of regulations and the important role of the informal economy in Cape Town, informal enterprises continue to face a number of difficulties (Rogerson 2015). Traders are unsure of their rights and their economic role, especially when their goods are confiscated by the police with devastating impacts on their livelihoods.

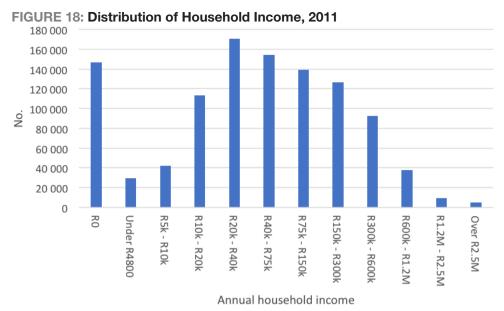
5. Poverty and Income

5.1 Household and Personal Income

Average annual household income in Cape Town in 2011 was ZAR57,300 per year. However, there were wide variations in levels of income across the city with high-income areas located around the mountain and Cape Peninsula and lowerincome areas located on the periphery of the city (Figure 17). In 2011, 147,000 households (14%) had an income of zero and 332,000 (31%) had an income of less than ZAR20,000 per year. At the other end of the spectrum, 141,000 households had an income of more than ZAR300,000 per year.

Percentage in Informal Standalone Housing 0 - 7% 7 - 21% 21 - 43% 43 - 66.5% 66.5 - 100% Average Household Income R0-R39,537.17 R39,537.17-R77,992.85 R77,992.85-R124,689.06 R124,689.058-R200,492.71 R200,492.71-R1,091,651.80 15 Km by Stephen Peyton
Census 2001 Household Income Data
Spar, PnP, Shoprite, Woolworths Store Locators
Projection: Transverse Mercator WGS 1084 UTM Zone 34S Source: Peyton, 2012

FIGURE 17: Average Household Income in Cape Town, 2001



Source: https://wazimap.co.za

Statistics South Africa reports that between 2001 and 2011 there was a decrease in the number of low-income households in Cape Town: 56% of households had a monthly income of ZAR3,200 or less in 2001 but, by 2011 that figure had dropped to 47%. During the same period, only one percent of households moved into the category of households with no income: from 13% to 14%. There was also very little movement at the other end of the income spectrum as the percentage of households with a monthly income of ZAR25,600 or more increased from 10% to 14%. Black African and Coloured households experienced this increase in income. In 2001, 87% of Black Africans and 54% of Coloured households had an income of ZAR3,200 or less and by 2011 that figure had dropped to 69% for Black African and 41% for Coloured households.

Cape Town is becoming a more unequal society as the gap between the rich and the poor increases. The Gini coefficient for Cape Town improved from 0.60 in 2001 to 0.57 in 2010. However, in 2011/2012 it increased to 0.67.

5.2 Housing Type

Census 2011 found that 56% of dwellings in Cape Town were formal houses and 21% were informal shacks (Table 10). Most shacks are located in informal settlements scattered around the city (Figure 17). Forty-two percent of the Black African population of the city lived in informal housing in 2011 and around 10,000 new shacks are constructed annually. Up-to-date information on the location of settlements in relation to household income is not yet available. However, plotting their location on a base map of income levels across the city in 2001 suggests that there is a strong correlation between the two (Figure 17).

	No.	%			
House	601,956	56.3			
Shack	218,781	20.5			
Apartment/flat	106,161	9.9			
Semi-detached house	74,484	7.0			
Others	67,194	6.3			

TABLE 10: Households by Type of Dwelling, 2011

Housing type is clearly differentiated by race with 43% of black African households in informal dwellings in 2011, compared with only 7% of Coloured households and 0.3% of white households (Table 11). The proportion of black African households in informal dwellings did, however, decline between 2001 and 2011.

TABLE 11: Housing Type by Race, 2001 and 2011

	Black		Coloured		Indian		White	
	2001	2011	2001	2011	2001	2011	2001	2011
Informal/backyard dwellings	8.6	12.3	3.7	5.0	0.5	1.1	0.2	0.1
Informal dwelling not in backyard	43.0	30.3	1.8	2.1	0.4	1.0	0.2	0.2
Formal dwellings	45.2	56.4	92.1	91.3	97.4	97.1	98.5	99.0

6. The Urban Food System

The Cape Town food system is embedded within the wider food system of South Africa. The country's food system is a product of its apartheid past, which was designed specifically to benefit a particular racial group. White South Africans were recipients of direct development support that has resulted in market dominance by a small core group. Instead of a post-apartheid transformation of the food system, its inequalities were compounded by legal and governance processes that followed the country's first democratic election in 1994.

Three notable developments impacted directly on the nature and shape of the food system that emerged after apartheid's collapse. First was the signing of the Uruguay Round of Global Agreement of Trade and Tariffs (GATT), which led to the formation of the World Trade Organization (WTO) in 1994. This process obligated countries to trade agreements with implications for the multiple food systems of production and distribution. Second was the dismantling of the legal and regulatory systems governing agricultural and food products in South Africa, and their replacement with a combination of free market systems and forms of industry self-regulation (as opposed to policy and regulatory systems).

These processes culminated in legislation enabling the dismantling of state-led systems: the Marketing of Agricultural Products Act (MAPA) of 1996. This was supported by the third process, enacted before the previous ones but of critical importance. This was the amendments to the Co-operatives Act (in 1993). These amendments allowed the removal of co-operative infrastructure from farmer control, and the subsequent privatization of these assets. Combined, these three processes opened the door to the expansion of corporate power in the South African food system (Greenberg 2016). These shifts are important as they lay the foundation for the type and structure of the South African (and Cape Town) food system and its functioning.

These changes, followed by the 2001 Strategic Plan for Agriculture, paved the way for liberalized and competitive agricultural markets aimed primarily at greater foreign trade in agricultural products (DoA 2001). After deregulation, field crop prices adjusted downwards to world market levels. Commercial farmers shifted production approaches to greater mechanization and relocated onfarm field crop production to better quality soils, abandoning more marginal areas. The result has been a simultaneous consolidation and expansion of large commercial (industrial) farms, a decrease in the number of smaller family-owned farms and an overall increase in average farm size (Vink and Van Rooyen 2009). There has been a marked decline in the number of farming units in every province (Figure 10). Vink and Van Rooyen (2009) reported that between 1990 and 2008, there was a 76% decline in the number of farmers farming on land over 20ha. While this figure has been contested, and absolute numbers may differ slightly, the dual trend of farmer decline and farm consolidation is a reality in the South African agrifood sector.

North West Gauteng Limpopo **Mpumalanga** 2007 KwaZulu-Natal 2002 Eastern Cape **1996** Free State **1993** Northern Cape Western Cape 2.000 8,000 10.000 12.000 Ō 4.000 6.000 Number of farming units >20ha

FIGURE 19: Decline in Number of Commercial Farms

Source: DAFF (2013)

The Cape Town food system includes activities, actors and institutions connected to, and interacting, in the production, processing and packaging, distribution and retail, and consumption of food as well as waste disposal. The preferred outcome of these interactions is food security for *all* of the city's residents. Cape Town's food system is complex, reflecting the above regulatory changes running concurrently with an informal food system that originally emerged to counter the inequalities enforced by apartheid.

The informal system is active and vibrant and engages in similar activities as the formal sector. The only difference is effectively one of visibility, in terms of policy and law. The informal sector remains largely illegal, despite the fact that it and the formal sector are directly connected and often reliant on one another. This mutuality is perhaps most evident in the fact that recently Massmart (the South African Walmart subsidiary) stated that as much as 50% of its business comes from the informal sector. The connections exist not only in retail but also in production, processing, packaging, and waste management, and even in the prepared food sector.

All of the components of a typical city food system are represented to a greater or lesser degree within the city limits and Figure 20 assists in demonstrating its inter-connected components. However, the complex nature of the food system means that in the absence of a long-term recording of food system activities, much of it remains unseen, masked by corporate confidentiality concerns, unclear reporting measures (such as on food flows), and a general absence of an obligation to report information and data.

The absence of a food governance mandate in Cape Town (and in all other South African cities) means that no institution is tasked with the monitoring of the food system. The food system is largely in the hands of the private sector, which means that data is not uniformly recorded or readily available. The control of substantial components of the food system by large private sector players is thus a fundamental challenge to evidence-based food system governance (Haysom 2015).

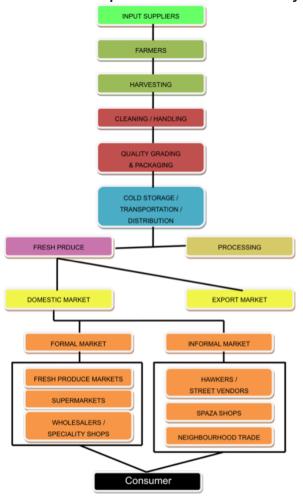


FIGURE 20: Components of the Urban Food System

Source: Troosters (2015: 29)

6.1 Sources of Food and Food Flows

6.1.1 National Food Sources

South African commercial agriculture, while highly mechanized, is a high-risk activity. Only 35% of South Africa's land surface receives sufficient rainfall for dryland crop production and only 13% of the land is suitably arable, with only 3% considered high potential agricultural land (Haysom and Metelerkamp 2012). As climate volatility increases, the viability of the local food system is coming under severe pressure. When the resource challenges are combined with the volatility that comes with open and liberalized markets, the food system pressures are further amplified. This was highlighted in the 2016 Bureau for Food and Agricultural Policy (BFAP) report:

Despite some volatility owing to its dependence on global markets and on an inclement climate, gross value added by the sector expanded by more than 15% in real terms since 2005. However, this expansion peaked at over 30% in 2014, before declining rapidly in the past two seasons as a result of extreme drought in the summer rainfall regions (BFAP 2016: 1).

Agricultural outputs fall into three broad categories: field crops, horticulture and animal production. Largely driven by the changes in the nature of the agricultural economy, there has been a shift in the relative importance of each with declines in field crops, increases in horticulture, and livestock remaining relatively constant before a fairly dramatic increase in recent years (Table 12).

TABLE 12: Sectoral Share of Agric	cultural Output,1981-2013
-----------------------------------	---------------------------

Years	Field Crops (%)	Horticulture (%)	Animal Production (%)
1979-1983	44.8	16.2	39.0
1984-1988	39.5	18.0	42.5
1989-1993	34.5	21.3	44.2
1994-1998	33.5	23.6	43.2
1999-2003	34.0	25.7	40.3
2004-2008	26.8	26.5	46.7
2009-2013	26.8	25.6	47.6
Source: DAFF (2016)			

The relative importance of animal production is a result of poor soils and the climate and rainfall needed for field crops and horticulture. From a field crop perspective, very little maize – a key staple for most people within the city of Cape Town and the province – is produced in the Western Cape. However, the province is a key wheat-growing region in South Africa, accounting for around a third of all wheat produced (Figure 21).

Trends in vegetable production, classified under horticulture, are reflected in Figure 22. This figure raises critical questions about the changes taking place in the South African food system. The product showing the greatest growth is the potato crop. When considered against a backdrop of the tepid performance of other horticultural crops, this expansion in production output provides further insights into changes in both agricultural production, resource use (for example water), and diets.

Fruit production in South Africa has benefited from the opening up of markets. Access to new markets, and changes in how farmers and producer organizations could engage the market, resulted in the expansion of fruit production. As the Western Cape is ideally suited to the production of wine and some pome fruits, the expansion resulted in marked changes in the production landscape. Despite

this, open markets mean that the fruit available to the Cape Town consumer is often imported. Figure 23 shows South African production changes in some key fruits (though not all are grown in the Western Cape).

1,000 900 800 700 Production (1000t) **1**994 600 1999 500 2004 400 2009 300 2014 200 **2015** 100 Eastern Cape Western Cape fiee state

FIGURE 21: Wheat Production by Province, 1994-2015

Source: DAFF (2016: 12)

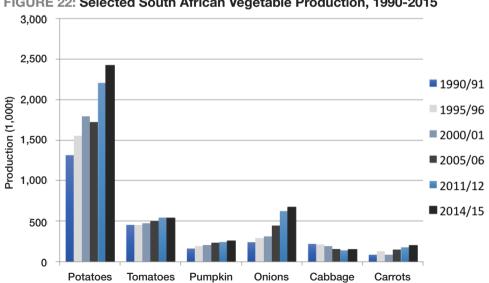
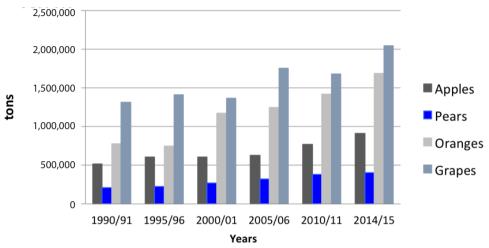


FIGURE 22: Selected South African Vegetable Production, 1990-2015

Source: DAFF (2016: 54)

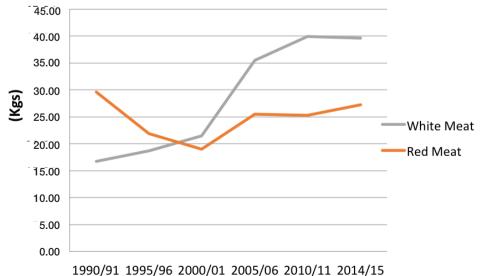
FIGURE 23: Key Fruit Crop Production, 1990-2015 Selected fruit production



Source: DAFF (2016: 35,36,37,50)

Changes in the eating habits of South African consumers are perhaps best reflected in the meat industry. There is a general trend of reduced consumption of beef and pork (and other red meat) and an increase in the consumption of poultry (Figure 24). The size of the cattle herd has remained constant since the 1980s with a reported herd size of 12.9 million head in 1980 and 13.7 million in 2014/5 (DAFF 2016: 56). Poultry has eclipsed all other meat consumed and is arguably the key source of protein for most South Africans.

FIGURE 24: Consumption of White and Red Meat, 1990-2014/5 Per Capita Consumption

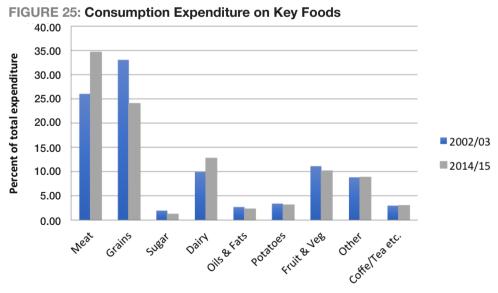


Source: DAFF (2016: 66)

South Africa's apartheid legacy is a food system with high levels of concentration in all aspects of the food value chain. For example, there are 5-6,000 wheat farmers but the four main millers control 87% of the market and are integrated with plant bakers (Cutts and Kirsten 2006). There are only 13 milk buyers of which the largest four process 65% of commercial milk. The broiler meat industry is controlled by two major players who control 50% of the industry (Louw et al 2007:4). Maize and soy are the main inputs for chicken feed – and four companies control 75% of maize milling (Makgetla 2017) . The nature of the South African agro-food system is described by Greenberg (2016: 36) as follows:

The South African agro-food system has the characteristics of a corporate-led food regime, accompanied by economic concentration and centralisation of power, especially since deregulation in the early 1990s. Although there is an ongoing role for the state, the combination of greater corporate self-regulation and the multinationalisation of agro-food capital ensure a shift in the relationship towards greater corporate power. Characteristics of the contemporary regime include economies of scale, mergers and acquisitions and concentration and centralisation of ownership and power.

Despite the high degree of corporate concentration, there is intense competition by companies and a related unwillingness to supply detailed information on food flows to researchers. Any attempt to ascertain what proportion of the cereals, fruit, vegetables and livestock produced nationally makes its way to Cape Town and is actually consumed there is thwarted. Cape Town consumption of food therefore needs to be considered within the context of wider South African consumption patterns (Figure 25). What is evident is a real decline in grain consumption and an increase in meat consumption.



Source: DAFF (2016: 96)

6.1.2 International Food Sources

South Africa's major imports from global markets are cereals, with rice being the most important, sourced primarily from Thailand and India. Although wheat is the second most important cereal crop in South Africa (after maize), imports reached an all-time high in 2015. The major suppliers, in order of importance, are Russia, Germany, Canada and the Ukraine. The other major imports are meat and poultry, palm oil and its derivatives, and soya and its derivatives. In 2012, South Africa imported ZAR831 billion worth of agricultural products. Figure 26 shows the top 10 South African agricultural food and beverage imports for the period 2008 to 2012 (Battersby et al 2014). In times of climatic stress, these figures can shift dramatically. During the recent (2015/2016) drought, for example, the Bureau for Agricultural Policy (BFAP) noted:

In the case of maize, the domestic crop is expected to decline by almost 30% from an already below average 2015 harvest and consequently imports are expected to exceed 3 million tons in the 2016/17 marketing year. Under the assumption of stable weather conditions, South Africa is projected to return to a net exporting position from 2017 onwards (BFAP 2016: 1).

While production issues have been seen by many as a driver of higher food prices, the general economic challenges, linked to a reliance on imports and a volatile currency, have also played a role:

The impact of the 2015/16 drought, the worst in South Africa since 1904, has been far ranging, for producers and consumers alike. It has however not been the sole cause of higher food prices, as the sharp depreciation of the exchange rate over the past year has caused import parity prices to soar. Consequently, by January 2016, the cost of a staple basket has increased by approximately 19% year on year (BFAP 2016: 39).

Cape Town has some of the most advanced import and export-oriented infrastructure in the country in terms of ports, air links and road and rail transport. Data is available to show the major imports and exports from Cape Town (Table 13). Among the major exports are fruit and fish. While South Africa's major food imports, such as cereals, enter the country through other ports, the Western Cape did import ZAR1.43 billion worth of wheat in 2014 (CoCT 2015: 41). Unfortunately, it is not possible to connect the city's imports and exports to the Cape Town food system itself.

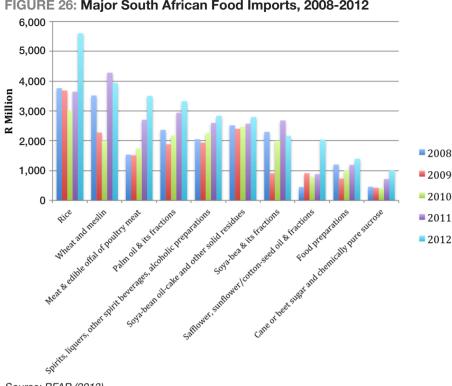


FIGURE 26: Major South African Food Imports, 2008-2012

Source: BFAP (2013)

TABLE 13: Major Imports and Exports from Cape Town, 2014

Exports	ZAR (billion)	Imports	ZAR (billion)				
Petroleum oils	8.70	Petroleum oils	63.07				
Citrus fruit	4.71	Other petroleum oils	37.29				
Apples, pears, quinces	2.77	Alcohol	2.24				
Grapes	2.59	Electrical	1.98				
Centrifuges	1.98	Semiconductors	1.74				
Diamonds	1.45	Footwear	1.50				
Engine parts	1.36	Medicine	1.47				
Fish fillets	1.27	Tobacco	1.10				
Yachts, boats, canoes	1.01	Fish caviar	1.09				
Frozen fish	1.01	Men's clothing	1.05				
Source: CoCT (2015: 43)							

6.1.3 Commercial Agriculture within Cape Town

In the Western Cape province, about 11.5 million hectares of land are under cultivation and five key agricultural products are produced: field crops, horticulture, animals, animal products and aquaculture. The most productive farming areas are concentrated in the south-western part of the province, close to Cape Town. Also, largely as a result of the consolidation of the municipal areas and the formation of a single metropolitan region, there is a significant amount of agricultural activity within the Cape Metropolitan Area (CMA). The main agricultural areas within the CMA are detailed in Figure 27. A number of areas have been zoned for food production and provided designated protection status. However, the level of protection for most food production areas remains weak and several are under constant threat as urban developers target open land for possible development projects. Areas for vineyard production seem to have far greater protection status as they are considered agriculturally productive as well as affirming of the city's cultural heritage.

CITY OF CAPE TOWN REVIEW OF AGRI-LAND STUDY REVIEW AREAS

FIGURE 27: Productive and Designated Agricultural Areas

Source: CoCT (2008, 2013)

Most of the agricultural production in the CMA is horticultural in nature. The most important crops include potatoes, cabbages and onions as well as fruit (Table 14). The data in Tables 14 and 15 are collected according to magisterial district and not suburb or region, and magisterial district boundaries span or

dissect some of the key production areas detailed in Figure 27. For example, the Philippi Horticultural Area falls within both the Mitchell's Plain and Wynberg districts. The Constantia vineyards fall within the Wynberg magisterial district. This mixing of how data is collected further aggravates efforts to ascertain the viability of specific areas, negating effective planning and governance processes (Battersby-Lennard and Haysom 2013). Key vegetable products cover less than 15% of the productive agricultural land (calculated in hectares planted), but these areas are vital in producing vegetables that flow into the city's various food channels enabling a more diverse and affordable diet for its residents. The remainder of the productive land is used for the production of grapes and apples, reflecting the city's embeddedness in South Africa's export-based agricultural economy.

TABLE 14: Value of Agricultural Production in Magisterial Districts, 2007 (rand per ha)

	Wheat	Pota- toes	Onions	Pump- kins	Carrots	Cab- bages	Apples	Pears	Grapes
Bellville	5,114						121,858	93,136	38,286
Goodwood							87,400		30,319
Kuilsrivier		34,222		22,488	66,357	70,112			24,492
Mitchell's Plain		36,000			77,666	40,708			29,384
Simon's Town					2,777		72,600		15,000
Somerset West	3,368	46,666					55,378	33,391	29,463
Strand							99,533	41,556	64,407
Wynberg		73,774	57,417	25,000	46,000	47,603	76,462	59,101	25,569
Source: Data from 2007 Agricultural Census									

Chickens are the most common form of livestock in the city (Table 15). In 2007, there were over 7 million chickens in the Goodwood district alone, with net sales of over ZAR1.3 billion. However, discerning whether these sales were derived from chickens reared in the area or imported chickens (with sales of processed chickens included in the data) is a significant challenge.

TABLE 15: Livestock Holdings in Magisterial Districts, 2007

7.1222 Tot 2.1700.100 K 1.101.21.190 H. Magiotoria. 2.101.101.0, 2007.								
	Cattle	Sheep	Pigs	Ostriches	Chickens			
Bellville	2,756	7,427	3,147	155	1,232,738			
Goodwood	246	2,499			7,040,122			
Kuilsrivier	730	311			12,764			
Mitchell's Plain			4,000		7,642			
Simon's Town					71,267			
Somerset West	1,397	3,490						
Strand		2,046		300	170,472			
Wynberg	1,445	410	3,866		930,072			
Source: Data from 2007 Agricultural Census								

6.1.4 Philippi Horticultural Area

While the City of Cape Town has 13 designated and rural-zoned agricultural areas, one that has been researched in detail is the Philippi Horticultural Area (PHA), which has been producing food for more than 150 years (Figure 28). A 2012 report on the PHA estimated that just under 100,000 tonnes of fresh produce is grown in the PHA annually. This included over 2,000 tonnes of produce given free to farm workers (Battersby-Lennard and Haysom 2012). The report detailed how large volumes of "heavy-low-cost" produce (specifically cabbage, broccoli, pumpkins and butternut) are the key products grown for the Cape Town food system.



FIGURE 28: Philippi Horticultural Area, Cape Town

Source: http://www.realestatemagazine.co.za/blog/2014/07/17/development-tale-two-cities/

The produce from the PHA goes to markets and retail outlets in the Cape Town food system through a variety of channels. Farmers responding to one survey estimated that around 80% of their produce goes direct to retail outlets, about 12% to the Cape Town Fresh Produce Market (CTFPM) and about 2% straight to informal traders. From a food system perspective, the location of the PHA and the reduced cost of PHA-derived produce (largely due to lower transportation costs) serve to depress food prices and deliver cheaper food to Cape Town consumers. This was confirmed in a recent City of Cape Town food system report (Battersby et al 2014). The area also provides over 3,000 jobs, particularly for women from poor communities adjacent to the PHA (Battersby-Lennard and Haysom 2012).

The absence of a city food governance strategy and the lack of recognition of the importance of city-specific food assets have come to the fore in the contestations over the viability and usefulness of the PHA. Since 2008, developers have been targeting the area for housing. Findings from a 2008 enquiry into the area suggested that while Cape Town has a desperate housing shortage, the geography and geology of the PHA (a high water table, on a critical aquifer, and very sandy soil), would mean that the engineering costs for a home would far exceed the housing subsidy for low-cost housing (CoCT, 2008). Despite this, the development application was approved. As a result, the portion of land to which the application applied was removed from the wider PHA area. More importantly, the urban edge was formally moved to locate the proposed development area in urban Cape Town. Subsequently, and after much debate in the media over the merits and flaws of such development, a further application was submitted to the City of Cape Town. The second application is still pending with many court cases and various city, regional and national approval bodies disagreeing on the proposed development (http://bit.ly/2sKaQwN).

Cuff (2016) carried out an analysis of three City of Cape Town policies that have a direct bearing on the PHA: the Urban Agriculture Policy of 2007 (UAP), the Agricultural Land Review of 2008 (ALR) (CoCT 2008) and the Cape Town Spatial Development Framework of 2012 (CTSDF). Following a detailed analysis and key informant interviews, Cuff (2016: 42-43) concluded:

The dynamics of decision-making are impacted by the relations between stakeholders, the knowledge they possess and the influences determining the shape and use of knowledge. These factors were all found to have the potential to facilitate disjunctures between policy and practice. Decision-making within the PHA, a contested space, is impacted by multidimensional institutional factors that shape knowledge and how it is used and influenced. Knowledge is created through informal alliances between politicians, the ultimate decision-makers, and private policy stakeholders, developers and private interests [and] these factors are assumed by the research to influence the types of knowledge used by politicians land use decisions in the PHA.

6.2 Urban Agriculture

A 2008 AFSUN survey in three low-income areas in Cape Town found that less than 5% of households grow any of their own food (Battersby 2011). Letts (2013) argues that while food gardeners in the poorer communities of Cape Town are slightly more food secure, the reason is that they have alternative income streams. An estimated 50% of all income contributions in four sites reviewed was derived from some form of grant or social protection (Letts 2013: 40).

In 2007, after nearly five years of planning and policy planning, the City adopted an Urban Agriculture Policy and established an Urban Agriculture Unit (Visser

2012). The Strategic Development Plan for the Promotion and Development of Urban Agriculture in the City of Cape Town has several focus areas including awareness and advocacy for urban agriculture; research, knowledge and technology transfer; production and marketing of horticulture and urban livestock; and youth engagement (CoCT 2013b). In addition, the City has a Food Gardens Policy in Support of Poverty Alleviation and Reduction, which seeks to address food insecurity through the establishment of sustainable food gardens. The Food Gardens Policy has effectively eclipsed the Urban Agriculture Policy. The implications of this are that the Food Gardens Policy focuses largely on poverty alleviation programmes and the wider food system work that was being done by the Urban Agriculture Unit has fallen away.

According to a 2014 City of Cape Town report, the City supports 201 community gardens with 1,849 beneficiaries. The vast majority are vegetable gardens, with just five receiving support for livestock activities. These projects are widely dispersed across the city, with at least one project in 68 of the city's wards. They are overwhelmingly concentrated in areas of low income and high unemployment. Another 38 projects are supported by the Social Development and Early Childhood Development Directorate. These projects have received compost or manure, sawdust, seed packs, hosepipes, rakes, spades, forks and wheelbarrows (Battersby et al 2014). Figure 29 shows the distribution of the supported urban agriculture projects and that they are clustered in lower-income (lighter shaded) areas.

According to programme officers at the Western Province Department of Agriculture, the Province supports over 100 community gardens in low-income areas with 756 beneficiaries. An estimated 93% of the projects produce vegetables, with a small number engaged in raising pigs and chickens and producing mushrooms and honey (Battersby et al 2014). An assessment of six provincial community urban agriculture projects in 2014 found that they were typically located on marginal lands on or next to government properties such as schools, clinics, courts or markets (Kroll 2014). Participants reported harsh environments with strong winds causing sand blasting to crops, as well as pests, flooding and theft, all resulting in crop losses. Intensive agricultural inputs are required to compensate for the marginal nature of the land and poor soils. Water access is a recurrent problem. The sites are small and typically surrounded by security fences to prevent theft or vandalism. Participants were mainly older people with the average age being 50. Most were migrants and had grown up helping parents and grandparents with farming in the rural areas of the Eastern Cape province and thus had some experience of agriculture. The projects generate very small incomes for a small number of people.

FIGURE 29: Location of Urban Agriculture Projects

Source: Battersby et al, 2014





Source: http://www.designother90.org/solution/abalimi-bezekhaya/

A number of NGOs promote and support urban agriculture, including Abalimi Bezekhaya (http://abalimi.org.za), SEED (http://seed.org.za) and Soil for Life (http://soilforlife.co.za) (Letts 2013). Abalimi Bezekhaya supports over 200 gardens in low-income areas. Since 2008, it has run a Harvest of Hope Programme, which seeks to provide a market for their farmers through an organic vegetable box sales scheme. SEED supports 100 home gardeners in Mitchell's Plain and facilitates the Mitchell's Plain Food Freedom Initiative aimed at educating and supporting home gardeners based on permaculture principles (Brown 2013). The NGO has grown food in 40 schools and has trained more than 80 young people through an accredited permaculture course. Since starting its home garden project five years ago, Soil for Life has trained 1,600 people in building soil fertility, conserving water, utilizing available resources and ensuring no harm to human or environmental health.

There are a few urban agriculture projects in wealthier parts of the city, such as the Oranjezicht City Farm (http://ozcf.co.za/about), which describes itself as a Cape Town farm project (Figure 31). Such projects generate much publicity but how the benefits translate across income groups is unknown (Battersby 2011).



FIGURE 31: Oranjezicht City Farm

Source: http://www.cnn.com/2014/11/07/travel/south-africas-urban-farming-revolution/

6.3 Food Processing

Battersby et al (2014) report that there is a large food processing industry in Cape Town with over 500 processors recorded in the City's registration for health clearance. The food processing sector provides a wide variety of foods to retailers and wholesalers within the city and beyond. Most of the major South African food processing companies have factories in Cape Town. The food processors

produce a wide variety of products including dried meat (biltong), confectionary, cookies, chips (crisps), spices and condiments, beverages, bread and cakes, and fish and seafood. Many small businesses also provide processed foods for the Cape Town market and beyond, although economies of scale and corporate business strategies make it difficult for smaller companies to compete in some areas of the market. For example, few independent bakeries produce bread as a result of the dominance of Pioneer (Sasko, Duens), Tiger (Albany) and Premier (Blue Ribbon) in the bread market (Figure 32).



FIGURE 32: Sasko (Pioneer Foods) Bread Delivery

The food processors are clustered in key nodes in industrial areas in the city including Montague Gardens, Killarney, Epping Industrial, Cape Town Harbour and, to a lesser extent, Westlake, Brackenfell, Athlone and along Voortrekker Road. The spatial distribution of these producers highlights the clustering along main distribution routes and in designated industrial areas, which are typical areas for food system activities, such as the main municipal market (Figure 33).

In an unpublished report commissioned by a restaurant chain, the Cape Town processors reported a global procurement system using multiple transport options including road, air and sea, with products at different stages in the processing cycle moving around the globe. A product's inputs could be sourced from India, China, South Africa and other Southern African countries and its dry ingredients processed in Cape Town. It could then be shipped to Johannesburg for the adding of wet ingredients (also sourced from different regions) and then, in final form, shipped locally and internationally for sale and use in the chain's many stores. Such practices were argued to make economic sense. Cape Town's processes are active in these networks, supplying both local and international consumers (Haysom unpublished).

FIGURE 33: Location of Food Processing Businesses

Source: Battersby et al (2014)

6.4 Food Retailing

6.4.1 Cape Town Fresh Produce Market (CTFPM)

The term Fresh Produce Market (FPM) is used in South Africa to describe a specific market structure. FPMs are not "town square" markets where small traders sell produce. Instead, they are formal trading hubs where large-volume trading is carried out between commercial growers or grower co-operatives and market agents who purchase produce and sell it to wholesalers and retailers. These markets began as meeting places for trade between producers and consumers, under the control of a government body or official (Madevu 2006), but now include National Fresh Produce Markets (NFPMs) as well as privately owned markets not controlled by (municipal) bylaws (Reardon et al 2003). Large-scale commercial farmers dominate the majority of the supply to the NFPMs with between

80% and 90% of sales. The markets are controlled by the local authorities, with powers to run the markets delegated by the provincial or central government.

The City of Cape Town outsourced the operations of the Cape Town Fresh Produce Market (CTFPM) to a private company in 2004 (MBB 2006). The CTFPM retains the operating status designated to all municipal markets despite its privatized status. This means that it operates as a commission market (set at a maximum of 5% to the market and a maximum of 7% to the sales agent). CTFPM is one of the two main sources of fruit and vegetables in the Cape Town food system with the other being the supermarkets' supply chains. Figure 34 shows the flows of food from the CTFPM into Cape Town's food system. Wholesalers and processors are the main groups buying from the market (Louw et al 2006). Some retailers also purchase through the CTFPM, either directly or through buying agents. On the trading floor of the CTFPM, all transactions are managed through a buyer's card rather than cash.

'Food on the Table' Waste Social responsibility program 216t/mnth PHA (5961t biannually) Cape Town Fresh Product Market **Donations** CTFPM PHA Traders Farm stalls **CTFPM CTFPM** Agencies **Traders** Grocers South Caterers African Restaurants Theft Traders Wholesalers Packaging Retailers Grocers (M&R, plants Caterers Freshmark) Restaurants

FIGURE 34: Flows of Food from the CTFPM

Source: Jackson (2010)

Within the city administration, there is a belief that the CTFPM is no longer useful to the City, or less useful than it was. However, while the overall trade contribution of the CTFPM is declining as a result of the increasing share of the market held by supermarkets, its contribution to the Cape Town food system remains critical. In 2013, for example, the CTFPM supplied about 40% of Cape Town's fresh produce (CTFPM 2013). Sales at the CTFPM are dominated by

four key products: potatoes, onions, tomatoes and bananas (which account for 64% of all trade).

The CTFPM is also a key site for informal traders to purchase produce (Figure 35). There are two areas most frequented by informal traders. One is a designated area – the People's Market – within the boundaries of the CTFPM where transactions are cash-based and accessible for bulk purchases (Figure 36). The People's Market also sells directly to the public. Often transporters will go to the market and collect fresh produce for traders operating across the city. The second area frequented by informal traders is on the road outside the CTFPM where informal wholesalers operate.

FIGURE 35: Cape Town Fresh Produce Market



Source: M. Salamone

FIGURE 36: The People's Market at the CTFPM



Source: M. Salamone

6.4.2 Supermarket Dominance of Formal Food Retail

The food system in South Africa has undergone rapid transformation in the last two decades with the expansion and growing control of supermarket chains (Crush and Frayne 2010). Four major companies increasingly dominate the food system, from production to point of sale, accounting for 97% of sales within the national formal food retail sector: Shoprite Checkers (around 38% of the

formal food retail market), Pick n Pay (31%), Spar (20%) and Woolworths (8%) (GAIN 2012). In a public written submission to the South African Competition Commission investigating market dominance in the food retail sector, Pick n Pay used published annual reports to detail the market share of these four leading supermarkets in terms of turnover (Figure 37) (Nortons Inc 2016). Total turnover amounted to an estimated ZAR220 billion (USD16.2 billion) in 2014.

FIGURE 37: Supermarket Food Sales Turnover

Comp			able sales perio `14 -Dec`14)			
Pick n Pay	FY13 (Mar12-Feb13)	FY14 (Mar13-Feb14)	FY15 (Mar14-Feb15)			
Pick n Pay Group	R59.3bn	R63.1bn	R66.9bn			
Pick n Pay Excl. Africa	R56.7bn	R60.4bn	R63.9bn		(10/12)*FY'14 +(2/12)* FY15	R61bn
Shoprite	FY13 (Jul12-Jun13)	FY14 (Jul13-Jun14)	FY15 (Jul14-Jun15)			
Shoprite Group	R92.5bn	R101.2bn	R113.7bn			
Shoprite Excl. Africa	R70.7bn	R76.9bn	R83.3bn	\rightarrow	H2 FY'14 +H1 FY15	R83bn
Spar	FY13 (Oct12-Sep13)	FY14 (0ct13-Sep14)	FY15 (Oct14-Sep15)			
Spar Wholesale excl. Ireland	R47.4bn	R51.7bn	R56.4bn			
Spar Till sales excl. Ireland & <u>BuildIt</u>	R50.2bn	R53.9bn	R57.5	\rightarrow	(9/12)*FY'14 +(3/12)* FY15	R55bn
Woolworths	FY13 (Jul12-Jun13)	FY14 (Jul13-Jun14)	FY15 (Jul14-Jun15)			
Woolworths Food	R17.4bn	R19.7bn	R22.4bn	\rightarrow	H2 FY'14 +H1 FY15	R21bn
			Top 4 ret	ailer sale	s	R 220bn

Source: Nortons Inc (2016: 20)

Most supermarket chains make use of central purchasing processes through large-scale distribution centres (Figure 38). The business model of the central purchasing approach is to ensure bulk contracts through offtake agreements, exclusive trade agreements, centralized buying and detailed contractual stipulations on issues such as guaranteed supply, farm pre-washing and packaging, and cold chain conditions. This externalization of food procurement activities often excludes smaller farmers. As the supermarkets dominate the food system further, these small producers are unable to find market entry (Vink and van Rooyen, 2009).

Figure 39 shows the spatial expansion of supermarkets in Cape Town between 1994 and 2013. Prior to 2003, supermarkets were clustered in high-income areas of the city. The last decade has seen a process of increasing diffusion into middle and lower-income areas. Nevertheless, the spatial distribution of supermarkets in Cape Town remains uneven and unequal. Residents of the highest-income areas have almost eight times as many supermarkets per household as those in the lowest-income areas (Battersby and Peyton 2014: 158) (Figure 40). The city's supermarkets cluster along major roads, and especially arterial routes for taxis and buses. Of the 269 stores mapped in 2013, nearly three-quarters were located within 200 metres of a main road (Battersby and Peyton 2014). This strategy

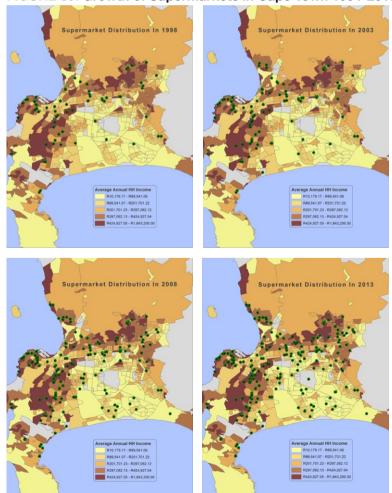
expands the spatial reach of individual stores, enabling them to draw customers from other parts of the city. Supermarkets clustered around busy transport hubs also cater to lower-income commuters.

FIGURE 38: Shoprite Distribution Centre, Brackenfell



Source: http://www.kls.co.za/industrial.html

FIGURE 39: Growth of Supermarkets in Cape Town 1994-2013



Source: Battersby et al (2014)

0.6 0.5 0.6 0.5 0.4 0.3 0.3 0.2 0.1 0 Category 1 Category 2 Category 3 Category 4 Category 5

FIGURE 40: Number of Supermarkets by Income Quintile

Source: Battersby and Peyton (2014: 158)

Recent supermarket expansion has focused on the low-income mass market, with the best example being Shoprite's Usave chain stores (Figure 41).

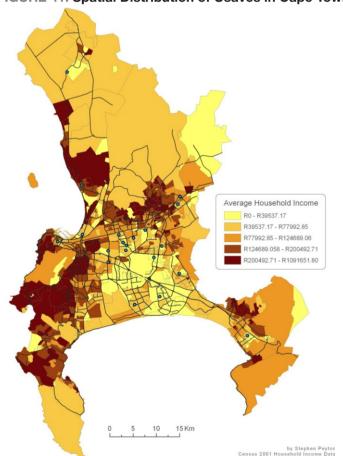


FIGURE 41: Spatial Distribution of Usaves in Cape Town

Source: Battersby and Peyton (2014)

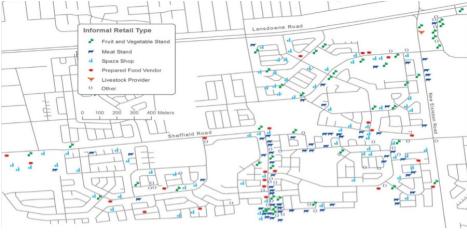
Supermarkets mostly enter low-income areas as anchor tenants in new mini-mall shopping developments. These mini-malls often have supermarket-owned fast-food subsidiaries as well as other fast-food outlets. The development of minimalls with a supermarket as an anchor client is part of a township development process where the City funds infrastructure such as roads, sewerage systems and other related services. Although Usaves are located in lower-income areas, they are still not in the poorest parts of the city. There are almost 2.5 times as many Usave stores per household in areas in the second-lowest-income quintile compared to lowest-income quintile areas (Battersby and Peyton 2014). Usaves stock a more limited range of products and less fresh produce than the supermarkets in wealthier areas. The primary outcome is that residents of low-income areas with supermarkets are gaining more access to calorie-dense, nutritionally-poor foods than to fresh produce (Temple and Steyn 2009).

6.4.3 Informal Food Economy

As noted above, food trade is a major component of Cape Town's informal economy. The informal food economy plays a major role in making food accessible to low-income households and has a very distinctive micro-geography to maximize accessibility. Figure 42, for example, presents the findings of a mapping exercise of informal food vendors conducted by AFSUN in 2013 in a low-income area of the city (Ward 34 in Philippi). Just under 80% of the vendors were general dealers/spazas selling a variety of processed foodstuffs (39%), meat traders (20%) and fruit and vegetable traders (19%) (Battersby 2016). There is dense food retailing around the Philippi train station and leading up to Sheffield Road (see Figure 42). The road is a major thoroughfare for people using trains and local informal taxis to get to and from work. This particular area is dominated by small-scale cooked meat stands and sellers of take-away foods. By far the most important reason given by traders for choosing a particular location was proximity to passing customers (Figure 43). The busiest times of day are commuting peaks (Figure 44) and the busiest days of the week are Friday, Saturday and Sunday. A number of businesses only open on weekends. Spaza shops tend to be scattered throughout the area, serving a very local customer base (Figures 45 and 46).

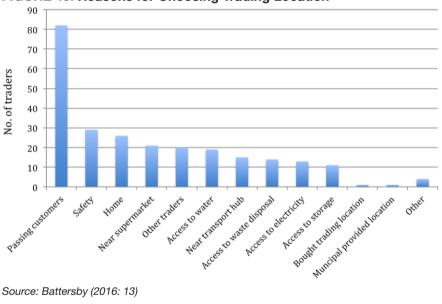
In another mapping study, James (2013) plotted the location of informal food vendors operating in the vicinity of the Mitchell's Plain Public Transport Interchange, which includes a bus terminus, taxi stands and a railway station. The study found that 48% were selling fruit and vegetables, 43% were selling prepackaged food and 9% were selling cooked food (Table 16) (James 2013).

FIGURE 42: Location of Food Vendors in Ward 34



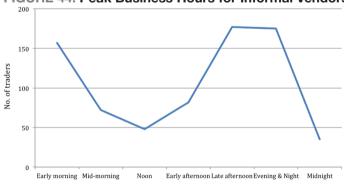
Source: Battersby (2016: 9)

FIGURE 43: Reasons for Choosing Trading Location



Source: Battersby (2016: 13)

FIGURE 44: Peak Business Hours for Informal Vendors



Source: Battersby (2016: 15)

FIGURE 45: Spaza in Low-Income Area in Cape Town



Source: M. Salamone

FIGURE 46: Spaza Owned by Migrants



Source: Thom Pierce

TABLE 16: Types of Food Vendor at Mitchell's Plain Interchange

	Taxi terminus – north	Taxi terminus – west	Taxi terminus - south	Bus terminus	Bridge	Station entrance	Total	% of vendors
Fruit / vegetables	8	5	7	2	4	0	26	48.1
Pre-packaged food	4	2	6	7	1	3	23	42.6
Prepared food	2	0	0	3	0	0	5	9.3
Total	14	7	15	12	5	3	54	100.0
Source: James (2016)								

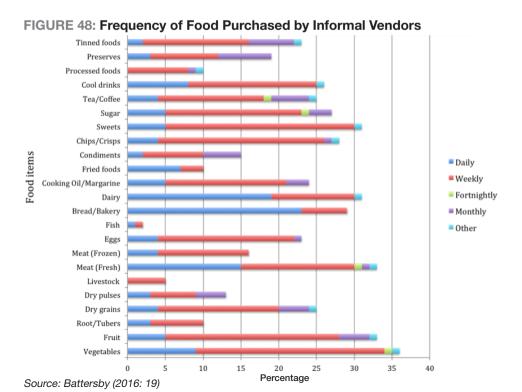
Informal food traders are extremely responsive to the needs of their low-income customers. This is evident in the types of products sold, the practice of bulk breaking to enable affordability and address storage challenges, and the offering of services such as food on credit, especially to regular customers. Customers may be able to get cheaper prices per kilogram at supermarkets, but are often unable to afford the unit sizes on offer (Cooke 2012).

Kroll (forthcoming) challenges the dichotomy between formal and informal retail, suggesting that the trade practices of the informal traders connect directly to the formal sector. Thus, while their structures and business processes may be less formal, informal traders maintain mutually beneficial linkages with formal suppliers. For example, formal wholesalers are the main source of produce for informal vendors, followed by supermarkets and fresh produce markets (Figure 47). Purchasing is frequent because of limited transport, storage and refrigeration, and also to ensure high quality of perishables (Figure 48).

60 50 Percentage 40 30 20 10 Confidently believed 0 der. Social letworks

FIGURE 47: Sources of Produce Sold by Informal Food Vendors

Source: AFSUN



THE URBAN FOOD SYSTEM OF CAPE TOWN, SOUTH AFRICA

7. Urban Food Security

7.1 Levels of Household Food Insecurity

A national South African survey in 2013 found that 26% of the country's population regularly experienced hunger and a further 28% were at risk of hunger (Shisana et al 2013). The study disaggregated the data to reveal the levels of food insecurity in urban and rural formal households and urban and rural informal households (Figure 49). Levels of hunger and hunger risk were extremely high in urban informal areas (at 36% and 32% respectively). Despite its apparent wealth, Cape Town is highly unequal in terms of food security with many areas of South Africa's second largest city experiencing high levels of food insecurity. Cape Town's urban food insecurity challenge is multi-dimensional with determining factors including the size of the city, its urbanization pattern, the legacy of apartheid, and economic marginalization.

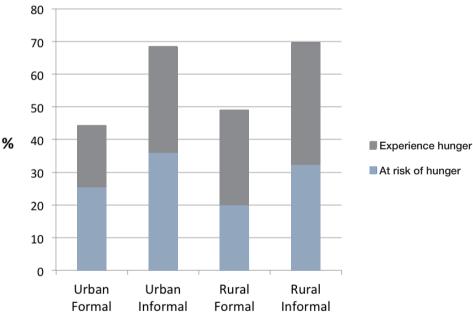


FIGURE 49: Experience and Risk of Hunger in South Africa, 2013

Source: Shisana et al (2013)

A 2008 AFSUN survey focused on three low-income areas of the city: Ocean View, Ward 34 in Philippi, and Ward 95 in Khayelitsha (Battersby 2011). Using Food and Nutrition Technical Assistance (FANTA) Project assessment tools to measure food security, the study examined the following (Coates et al 2007):

• Household Food Insecurity Access Prevalence (HFIAP);

- Household Dietary Diversity Score (HDDS); and
- Months of Adequate Household Food Provisioning (MAHFP).

In the three areas combined, as many as 80% of the households were either moderately or severely food insecure (Figure 50). The highest levels of food insecurity were in the poorest area, Ward 95 in Khayelitsha.

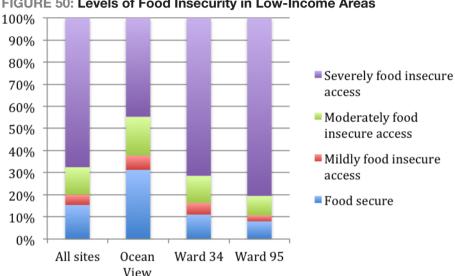


FIGURE 50: Levels of Food Insecurity in Low-Income Areas

Source: Battersby (2011)

In another study, Cooke (2012) explored the lived experiences of food access in Manenberg (Ward 45), classified by the City as a lower-middle-income area. Here, 64% of the households were severely or moderately food insecure. The lower prevalence of food insecurity compared to the three AFSUN study areas supports the argument that food insecurity is directly related to household income. The severity of the food insecurity problem in low-income areas is illustrated by a third study carried out in Du Noon, Nyanga and Masiphumelele (Crush and Tawodzera 2011). This study focused on the food security situation of Zimbabwean migrants in the city and found that 84% of households were moderately or severely food insecure (Figure 51). Low and intermittent household income, tenuous and exploitative documentation processes, and a wider net of dependants (with migrants sending remittances to families in Zimbabwe) all contribute to heightened food insecurity.

Battersby (2011) found that household food insecurity was also characterized by a lack of dietary diversity. Using the household dietary diversity score (HDDS), the study found that most households had consumed food from only six of 12 possible food groups in the previous 24 hours and the six food groups were largely non-nutritive: including foods made with oil, fat or butter (72% of households),

sugar (83%) and tea and coffee (83%) (Figure 52). The HDDS was even worse in migrant households with a mean score of only 5. Healthier foods such as fruit, eggs and fish were almost entirely absent from the diet of most migrant households (Crush and Tawodzera 2011).

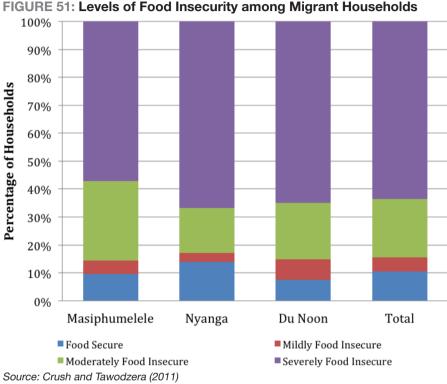


FIGURE 52: Foods Eaten by Low-Income Households 100 Percentage of households 90 80 70 60 50 40 30 Fresh of dried fish of shellfish Foods made from beans, peas, 20 10 Meat of Politry of offal S. thade How John the Indik of other York trade with oil, fat, or . Cereals (toods made from Roots of tubers Other foods Sugar or honey

Source: Battersby (2011)

A third component in the measurement of household food insecurity is shown by the number of months per year in which households are adequately provisioned with food. Using the MAHFP, households were adequately provisioned for only 9.2 months per year (Battersby 2011). Most low-income households experience food shortages in January and around June (Figure 53). The January shortages are related to family-related obligations over the festive season (including travel to rural homes), and school fees and uniforms at the beginning of the new school year. In addition, most businesses close down from mid-December to the second week in January (the traditional "builder's holiday"), reducing income and casual labour opportunities. The peak shortages in June are linked to adverse weather conditions in winter that stop industries from operating at full capacity, as well as increases in other costs such as heating fuel (PACSA 2016).

60 Percentage of households 30 % HH experiencing shortages 20 Mean food shortage across all months 10

FIGURE 53: Months of Inadequate Food Provisioning

Source: Battersby (2011)

7.2 Determinants of Food Insecurity

7.2.1 Household Income

There is a close relationship between employment and household food security. The legacy of apartheid means that the majority of the poor are still economically and spatially marginalized (Battersby et al 2014). In the absence of regular income, households are bound to experience food shortages and consequently become food insecure. Given that most poor urban households are food purchasers not producers, income is essential for household food security. For most of the poor, employment is unpredictable and transitory. In the AFSUN survey, only 52% of the working-age population were employed (Battersby 2011). Limited and fluctuating household income forces people to engage in a difficult balancing act, trying to ensure that essential costs are covered while ensuring a nutritious diet. As Abrahams (2016) argues, "food is one of the few discretionary costs, costs for education, transport, etc. remain fixed – as income declines, food items are the first things discounted."

AFSUN survey results indicate that even in low-income areas of the city, 80% of households in the lowest-income tercile were food insecure compared to only 46% in the upper-income tercile (Battersby 2011) (Figure 54). Migrant households with lower incomes were also more likely to experience greater food insecurity (Crush and Tawodzera 2011) (Figure 55). Only 2% of households with an income below ZAR500 per month were food secure, compared with 23% of those with incomes between ZAR3,001 and ZAR3,500 and 62% of those in the ZAR4,001 to ZAR4,500 income category.

Highest income households (>=ZAR2500)

Middle income households (ZAR1200-2499)

Poorest households (<ZAR1200)

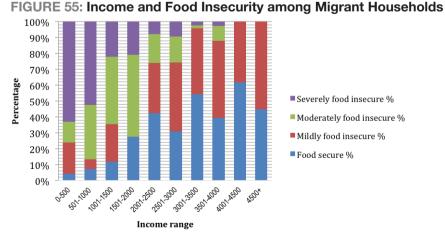
Percentage of households

Food secure Mildly food insecure

Moderately food insecure

FIGURE 54: Household Income and Food Insecurity

Source: Battersby (2011)



Source: Crush and Tawodzera (2011)

7.2.2 Social Protection

South Africa has a well-developed social protection system, including social grants involving cash transfers (old age grant, care dependency grant, disability grant, child support grant), free basic services (water and electricity), free primary health care and some no-fee schools. The proportion of South African households who access grants is large, and increases annually. Households receiving at least one form of social grant rose from 30% (of the population) in 2003 to 44% in 2010 to 46% in 2015. Grants may play an important role in mitigating food insecurity but this still needs to be established (Devereux 2016). The high levels of food insecurity in Cape Town certainly raise questions about their effectiveness. Well-targeted grant systems may improve food security status but households could be using grant funds for other essential household costs, with food spend falling behind. Nagdee (2004) found that poor households seeking debt relief channeled the greatest proportion of the grants towards the purchase of food (44%). Jacobs' (2008) study of the effectiveness of the child support grant in meeting children's needs in Gugulethu found that in most poor households, the grant was incorporated into household income.

School feeding schemes are one area where social protection mechanisms are said to be making a difference for children of school-going age (Swartz 2009). In the Western Cape, over 430,000 students in 1,026 schools receive a meal every day. These schemes alleviate short-term hunger, enhance learning capacity, improve school attendance and address micro-nutrient deficiencies among school children (Battersby et al 2014).

7.2.3 Sources of Food

The AFSUN study found that most low-income households in Cape Town access food through purchase (Figure 56) (Battersby 2011). Supermarkets were the most common source of food (used by 94% of households). Seventy-five percent reported sourcing food from small shops, restaurants and take-aways, and 66% from informal markets or street-food sellers (Battersby 2011). However, the frequency with which these sources were patronized varied with many households only shopping at supermarkets once a month for bulk purchase of staples such as maize flour. Informal sources were patronized several times a week, which confirms that the informal sector makes food accessible to low-income households.

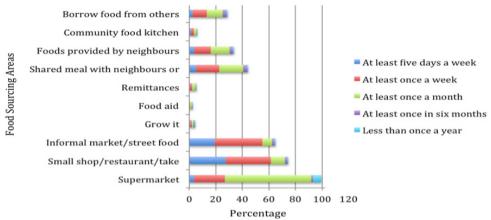


FIGURE 56: Food Sources of Low-Income Households

Source: Battersby 2011

8. Conclusion

Most of the evidence relating to food insecurity and its relationship to the food system in Cape Town is based on case studies in low-income parts of the city. The Hungry Cities Partnership has therefore conducted a recent city-wide survey of household food security and food sourcing patterns. The survey results will be published in a forthcoming HCP Report, which will add considerably to the picture painted in this report and provide a more nuanced, city-wide picture of Cape Town's food system and the governance challenges it poses.

References

- 1. Abrahams, M. (2016). "Comments at PACSA Presentation on Food Price Affordability" PLAAS, University of the Western Cape.
- 3. Battersby, J. (2011). "Urban Food Insecurity in Cape Town, South Africa: An Alternative Approach to Food Access" *Development Southern Africa* 28: 545–561.
- 4. Battersby, J. (2012). "Beyond the Food Desert: Finding Ways to Speak about Urban Food Security in South Africa" *Geografiska Annaler: Series B, Human Geography* 94: 141–159.

- 5. Battersby, J. and Peyton, S. (2014). "The Geography of Supermarkets in Cape Town: Supermarket Expansion and Food Access" *Urban Forum* 25: 153–164.
- Battersby, J., Haysom, G., Tawodzera, G., McLachlan, M. and Crush. J. (2014). Food System and Food Security Study. Report for the City of Cape Town, Cape Town.
- 7. Battersby, J., Marshak, M. and Mngqibisa, N. (2016). "Mapping the Informal Food Economy of Cape Town, South Africa" Hungry Cities Partnership Discussion Paper No. 5. Cape Town and Waterloo.
- 8. Bickford-Smith, V. (1995). "South African Urban History, Racial Segregation and the 'Unique' Case of Cape Town?" *Journal of Southern African Studies* 20: 63-78.
- 9. Bickford-Smith, V. (2003). Ethnic Pride and Racial Prejudice in Victorian Cape Town (Cambridge: Cambridge University Press).
- 10. BFAP (Bureau for Food and Agricultural Policy) (2013). "BFAP Baseline: Agricultural Outlook: 2013-2022" University of Pretoria, Pretoria.
- 11. BFAP (2016). "BFAP Baseline: Agricultural Outlook: 2016–2025" University of Pretoria, Pretoria.
- 12. Charman, A. and Petersen, L. (2016). "A Growing Informal Sector: Evidence from an Enterprise Survey in Delft" At: http://www.econ3x3.org/article/growing-informal-sector-evidence-enterprise-survey-delft
- 13. CoCT (City of Cape Town) (2007). "Urban Agriculture Policy for the City of Cape Town" City of Cape Town.
- 14. CoCT (2008). "Agricultural Land Review" Report 1498/2, iKapa Enviroplan. Cape Town.
- 15. CoCT (2009a). "Presentation to Joint PEPCO and Housing Portfolio Committees Meeting: Response to Rapid Planning Review for Philippi Horticultural Area" City of Cape Town.
- 16. CoCT (2009b). "Informal Trading By-Law" Provincial Gazette no. 6677 of 20 November 2009. Cape Town.
- 17. CoCT (2012). Cape Town Spatial Development Framework: Statutory Report City of Cape Town.
- 18. CoCT (2013a). Integrated Development Plan 2012-2017, 2013/14 Review City of Cape Town.
- 19. CoCT (2013b). State of the Cape Town Economy City of Cape Town.

- 20. CoCT (2013). "Informal Trading Policy, 2013 (Policy Number 12664)" City of Cape Town.
- 21. CoCT (2014). State of Cape Town 2014 City of Cape Town.
- 22. CoCT (2015). Economic Performance Indicators for Cape Town (EPIC). Quarter 2 (April-June) 2015. Sector Focus: The Informal Sector City of Cape Town..
- 23. CoCT (2016). State of Cape Town 2016 City of Cape Town.
- 24. Coates, J., Swindale, A. and Bilinsky, P. (2007). "Household Food Insecurity Access Scale (HFIAS) for Measurement of Food Access: Indicator Guide (Version 3)" FANTA Project, Academy for Educational Development, Washington DC.
- 25. Cooke, K. (2012). "Urban Food Access: A Study of the Lived Experience of Food Access Within a Low-Income Community in Cape Town" MA Thesis, University of Cape Town.
- 26. Crush, J. and Frayne, B. (2010). *The Invisible Crisis: Urban Food Security in Southern Africa* AFSUN Urban Food Security Series No. 1, Cape Town.
- 27. Crush, J. and Tawodzera, G. (2011). Right to the Classroom: Educational Barriers for Zimbabweans in South Africa SAMP Migration Policy Series No. 56, Cape Town.
- 28. Crush, J., Chikanda, A. and Skinner, C. (eds.). (2015). *Mean Streets: Migration, Xenophobia and Informality in South Africa* (Ottawa: IDRC).
- 29. Cuff, A. (2016). "An Exploration of the Competing Policy Imperatives in the Philippi Horticultural Area" BSocSci(Hons) Thesis, University of Cape Town.
- 30. Cutts, M. and Kirsten, J. (2006). "Asymmetric Price Transmission and Market Concentration: An investigation into Four South African Agro-Food Industries" *South African Journal of Economics* 74: 323–333.
- 31. DAFF (Department of Agriculture Forestry and Fisheries) (2012). "Department of Agriculture Statistics: Western Cape Report" Pretoria.
- 32. DAFF (2013). "Abstract of Agricultural Statistics" Pretoria.
- 33. DAFF (2016). "Abstract of Agricultural Statistics" Pretoria.
- 34. DoA (Department of Agriculture) (2001). "Strategic Plan for South African Agriculture" Pretoria.
- 35. Donaldson, R., Goutali, M., Sam'an, S., Moe, J., Pauloski, M. and Utomo, M. (2014). "Regulation of Street Trading in Two Nodes of Cape Town"

- In N. Kotze, R. Donaldson and G. Visser (eds.), *Life in a Changing Urban Landscape* (Johannesburg: University of Johannesburg), pp. 287-294.
- 36. Everatt, D. (2011). "Xenophobia, State and Society in South Africa, 2008–2010" *Politikon* 38: 7–36.
- 37. Gastrow, V. and Amit, R. (2013). "Somalinomics: A Case Study on the Economics of Somali Informal Trade in the Western Cape" African Centre for Migration and Society, University of the Witwatersrand, Johannesburg.
- 38. GAIN-USDA (Global Agricultural Information Network). (2012). "Republic of South Africa, Retail Foods, Retail Sector Grows Despite Downturn" Washington, DC.
- 39. Greenberg, S. (2016). "Corporate Power in the Agro-Food System and South Africa's Consumer Food Environment" PLAAS Working Paper No. 32, University of the Western Cape.
- 40. Haysom, G. (2015). "Food and the City: Urban Scale Food System Governance" *Urban Forum*, 26: 263–281.
- 41. Haysom, G. and Metelerkamp, L. (2012). "From Vulnerability to Viability" In M. Swilling, B. Sebitosi and R. Loots (eds.), *Sustainable Stellenbosch: Opening Dialogues* (Stellenbosch: SUN Press), pp. 191–203.
- 42. Hoekman, P. (2015). "Urban-Scale Material Flow Analysis in a South African Context: A Cape Town Feasibility Study" MSc Thesis, University of Cape Town.
- 43. Höppli, T. (2014). "New Evidence on the Brain Drain from South Africa. Policy Research on International Services and Manufacturing" PRISM Working Paper No. 1, University of Cape Town.
- 44. Jackson, A. (2010) "Informal and Formal Linkages: A Case Study of the Production of the Philippi Horticultural Area in Cape Town's Local Urban Food System" MPhil Thesis, University of Cape Town.
- 45. James, J. (2013). "'Rand a Bag!': An Investigation into Informal Trading at Public Transport Interchanges" MPhil Thesis, University of Cape Town.
- 46. Kalitanyi, V. and Visser, K. (2010). "African Immigrants in South Africa: Job Takers or Job Creators?" South African Journal of Economic and Management Sciences 13: 376–390.
- 47. Kessides, C. (2005). "The Urban Transition in Sub-Saharan Africa: Implications for Economic Growth and Poverty Reduction" Africa Region Working Paper No. 97, World Bank, Washington DC.
- 48. Khosa, R. and Kalitanyi, V. (2014). "Challenges in Operating Micro-

- Enterprises by African Foreign Entrepreneurs in Cape Town, South Africa" *Mediterranean Journal of Social Sciences* 5: 205–215.
- 49. Kroll, F. (nd). "Cape Town and Broader Region Agricultural Support Programmes: Focus on Urban Agriculture Projects" Unpublished report.
- 50. Letts, E. (2013). "Urban Agriculture and Various Food Sourcing Strategies: How Can They Mitigate Food Insecurity Amongst the Urban Poor in Cape Town, South Africa?" MA Thesis, Queen's University, Kingston, Canada.
- 51. Louw, A., Chikazunga, D., Jordaan, D. and Bienabe, E. (2007). "Restructuring Food Markets in South Africa: Dynamics within the Context of the Tomato Subsector" Regoverning Markets Agrifood Sector Studies, IIED, London.
- 52. Louw, A., Geyser, M., Wessels, L. and Gouws, J. (2005). "Satellite and N2 Markets" Section 7 Section Committee Investigation on Fresh Produce Marketing in South Africa, National Agricultural Marketing Council, Pretoria.
- 53. Madevu, H. (2006). "Mapping the Competitive Food Chain for Fresh Produce: The Case of Retailers in Tshwane Metro, South Africa" MSc Thesis, University of Pretoria.
- 54. Makgetla, N. (2017). "Chicken Imports Have Benefited the Poor" *Business Day* 17 January.
- 55. Mäki, H. (2008). Water, Sanitation and Health: The Development of the Environmental Services in Four South African Cities, 1840-1920 (Tampere: Juvenes Print).
- 56. MBB (2006). "Philippi Market" Press Release, MBB Consulting Engineers, Cape Town.
- 57. Nagdee, Q. (2004). "The Debt Trap: The Indebtedness of the Poor in South Africa" PhD Thesis, University of the Western Cape, Cape Town.
- 58. Nortons Inc (2016). "Grocery Retail Sector Market Inquiry Index to Non-Confidential Submissions Made by Pick n Pay" Johannesburg.
- 59. Peyton, S. (2012) Expansion of Supermarkets in Cape Town: The Impact of Market-Based Retail Modernization on Food Insecurity, unpublished Honours dissertation, Department of Environmental and Geographical Science, University of Cape Town.
- 60. Reardon, T., Timmer, C., Barrett, C. and Berdegué, J. (2003). "The Rise of Supermarkets in Africa, Asia, and Latin America" *American Journal of Agricultural Economics* 85: 1140–1146.

- 61. Roever, S. (2014). "Informal Economy Monitoring Study Sector Report: Street Vendors" WIEGO Informal Economy Monitoring Study, Washington DC.
- 62. Rogerson, C. (2015). "Unpacking the Informal Economy Policy Environment in South Africa: the National and Local Government Status Quo" Report for the Southern African Migration Programme (SAMP), Cape Town.
- 63. Saff, G. (1998). Changing Cape Town: Urban Dynamics, Policy, and Planning During the Political Transition in South Africa (Lanham: University Press of America).
- 64. Shisana, O., Labadarios, D., Rehle, T., Simbayi, L., Zuma, K., Dhansay, A., et al. (2013). *The South African National Health and Nutrition Examination Survey (SANHANES-1)*. Cape Town: Human Sciences Research Council.
- 65. Skinner, C. (2013). "The Informal Economy: Current Realities" Paper presented at the Informal Trading Summit, Cape Town.
- 66. Skinner, C. and Haysom, G. (2016). "The Informal Sector's Role in Food Security: A Missing Link in Policy Debates?" HCP Discussion Paper No. 6, Cape Town and Waterloo.
- 67. Slabbert, A. and Tengeh, R. (2013). "Informal Employment as an Alternative to Work in the Formal Sector, With Special Reference to Immigrant Owned Businesses" *Conference of the International Journal of Arts and Sciences* 6: 115–125.
- 68. Smith, J. and Abrahams , M. (2016). "Food Price Barometer Annual Report" Pietermaritzburg Agency for Community Social Action, Pietermaritzburg.
- 69. SACN (South African Cities Network) (2011). State of South African Cities South African Cities Network, Braamfontein.
- 70. Swartz, A. (2009). "Evaluating the Effectiveness of the School Feeding Programme as a Service Delivery Mechanism to Improve Academic Performance of Needy Learners in Bonteheuwel" M.Tech Dissertation, Cape Peninsula University of Technology, Cape Town.
- 71. Tawodzera, G., Chikanda, A., Crush, J. and Tengeh, R. (2015). *International Migrants and Refugees in Cape Town's Informal Economy*. SAMP Migration Policy Series No. 70, Cape Town and Waterloo.
- 72. Temple, N. and Steyn, N. (2009). "Food Prices and Energy Density as Barriers to Healthy Food Patterns in Cape Town, South Africa" *Journal of Hunger & Environmental Nutrition* 4: 203–213.

- 73. Temple, N. and Steyn, N. (2011). "The Cost of a Healthy Diet: A South African Perspective" *Nutrition* 27: 505–508.
- 74. Tengeh, R. (2013a) "A Business Survival Framework for African Immigrant-Owned Businesses in the Cape Town Metropolitan Area of South Africa" *Mediterranean Journal of Social Sciences* 4: 247-260.
- 75. Tengeh, R. (2013b) "Advancing the Case for the Support and Promotion of African Immigrant -Owned Businesses in South Africa" *Mediterranean Journal of Social Sciences* 4: 347–359.
- 76. Tengeh, R., Ballard, H. and Slabbert, A. (2011). "Financing the Start-Up and Operation of Immigrant-Owned Businesses" At: http://mpra.ub.uni-muenchen.de/38405/
- 77. Troosters, W. (2015). "Demand Driven Rural Agricultural Development in South Africa: The Case of the Agricultural Sustainable Community Investment Programme" MTech Dissertation, Nelson Mandela Metropolitan University.
- 78. Turok, I. (2011). "Deconstructing Density: Strategic Dilemmas of the Post Apartheid City" *Cities* 28: 470–477.
- 79. Vink, N. and Van Rooyen, J. (2009). "The Economic Performance of Agriculture in South Africa since 1994: Implications for Food Security" Development Bank of Southern Africa, Midrand.
- 80. Visser, S. (2012). "Interview: Head Urban Agriculture Unit" Cape Town. 15 November.
- 81. Western, J. (1997). Outcast Cape Town (Berkeley: University of California Press).
- 82. Worden, N., van Hyningen, E. and Bickford-Smith, V. (1998). *Cape Town: The Making of a City* (Cape Town: David Philip).

Cape Town is South Africa's second largest city and plays a critical role in the national economy. Despite its apparent wealth, Cape Town is very unequal in terms of food security with many areas experiencing high levels of food insecurity. The city's urban food insecurity challenge is multi-dimensional with determining factors including the size of the city, its urbanization pattern, the legacy of apartheid, and economic marginalization. South Africa's apartheid legacy is a food system with high levels of concentration in all aspects of the food value chain. For example, there are 5.6,000 wheat farmers but the four main millers control 87% of the market and are integrated with plant bakers. The food system in South Africa has undergone rapid transformation in the last two decades with the expansion and growing control of supermarket chains. Engaging in similar activities as the formal food sector is an active and vibrant informal system. The only difference is effectively one of visibility, in terms of policy and law. The informal sector remains largely illegal, despite the fact that it and the formal sector in Cape Town are directly connected and often reliant on one another. Food trade is a significant component of Cape Town's informal economy, which plays a major role in making food accessible to low-income households and has a distinctive micro-geography to maximize accessibility.

