

Informal micro-enterprises in a township context: A spatial analysis of business dynamics in five Cape Town localities

Andrew Charman and Leif Petersen

Abstract

This paper presents the findings of a small area census of micro-enterprises undertaken in five Cape Town townships in 2010-2012. The research identified 4273 micro-enterprise activities in Browns Farm, Delft South, Imizamo Yethu, Sweet Home Farm and Vrygrond. The research method also included enterprise surveys in key sectors (liquor, spaza, educare, traditional healers, hair salons), ethnographic observation and visual recording, interviews and participatory engagements with specific groups. The research has supported several papers and published articles that have examined the micro-enterprise dynamics and business practices in particular sectors. This paper outlines an overall perspective and synthesis of the diversity, intensity and relative frequency of informal businesses across the five sites and individually.

The paper address four questions: One, in what ways can a small area research approach add value to current understanding of the South African informal economy? Two, what is the scope and scale of micro-enterprise activities in the township context in different sites? Three, what is the spatial distribution of micro-enterprises in particular sites and business contexts (for example, the high street versus residential sites)? Four, what is the influence of variables such as settlement history, housing type and population structure on these outcomes?

Liquor retail, grocery retail (spaza shops) and house shops accounted for 46% of the identified micro-enterprises. Food and liquor retail predominance is evident across all sites, though liquor retail is more pronounced in informal settlements. There is notable variance between the five sites in the range of business types and proportionality. The spatial distribution of businesses highlights the distinct dynamics of the high street as a business location which, in contrast to residentially-based enterprises, is a more important location for certain services such as hair salons and fast food take away. We conclude that the research method and outcome are of relevance to development policies which seek to build on the organic foundations of township micro-entrepreneurship.

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1. Introduction

In South African economic development scholarship there has been an enduring interest in the informal economy since the late 1970s (Preston-Whyte and Rogerson, 1991). The roots of this fascination lie in the social sciences and ethnographic studies on the survival strategies of the poor among urban dwellers and rural subsistence populations. Writing about the urban poor in Accra in the 1960s, Keith Hart (1973) (whose analysis inspired much of the early scholarship) drew attention to the importance of non-formal employment in the livelihoods of those social strata that he termed as the ‘sub-proletariat’. In a seminal article, Hart outlined how, through ‘informal economy activities’, these persons acquired a means for generating income and facilitating a redistribution of wealth from formal wage earners (and the salaried classes) to the informal self-employed. His analysis brilliantly identifies the scope and scale of informal activities in this rapidly urbanising African city, including the activities of confidence tricksters and prostitutes as well as individuals that profit from providing culturally informed services such as musicians and praise singers. He argued that the informal sector allows the formally employed to enhance their income and the self-employed to pursue a path of entrepreneurship to derive an income.

1.1 Established knowledge

In order to better comprehend the South African ‘informal economy’, scholars have turned their attention towards three main topics of investigation. First, research has sought to document the dynamics of ‘survivalist’ actors at the margins, especially street traders and transnational migrants to highlight their resilience as well as the legal obstacles to conducting business (Skinner, 2008, Rogerson, 1998; Petersen, Charman, Moll, Collins, Hocking, 2014). Second, research has sought to understand the entrepreneurial orientation of informal businesses such as the ubiquitous grocery retailing spaza shops, seeking to examine the internal drivers and inhibitors of business growth at the level of the entrepreneur including cost factors and skills (Ligthelm, 2004 and 2008). Third, research has focused on the residual labour market comprising the unemployed or persons discouraged from seeking employment as a result of their structural exclusion from the formal

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labour market in order to better comprehend labour market rigidities (Kingdon and Knight, 2001,2007; Bhorat and Leibbrandt, 2004; Heintz and Posel, 2008). This body of research has sought to shed light on the apparent paradox whereby unemployed South Africans 'chose' to remain unemployed rather than seek employment in the informal economy or start up their own informal business as is commonly observable in Asian and Latin American cases.

One concern that weaves it way through all three fields of research, which Rogerson (2007) called the 'top of the research agenda', are doubts about the size and economic contribution of the informal economy. By Asian, South American and indeed most African country standards, South Africa's informal economy is regarded as small, in relative and absolute terms (Devey, Skinner and Valodia, 2006), whilst Yu refers to South Africa as an 'international outlier' as having the characteristics of high unemployment and low informal employment (2012:3). For economists, the smallness is underpinned by fairly robust quantitative data from Statistics South Africa (StatsSA) through the mechanism of the quarterly labour force survey (QLFS) as well as other instruments such as the Census 2011 (StatsSA, 2012) and the Survey of Employers & Self-Employed (SESE) (StatsSA, 2009). Together these surveys indicate that the informal economy is relatively small in size and value in comparison to formal employment and business output respectively, has not fundamentally changed over the past twenty years and remains comparatively insignificant (against other middle income countries). For example, the QLFS 2 (StatisticsSA, 2013b) identified 2,2 million persons employed in the informal economy, exceeded by the 2,3 million discouraged work-seekers and 4,6 million unemployed. In contrast, the total population employed in the formal sector, outside agriculture, was 9,6 million. The trend data entices StatsSA to pronounce on the weakness of the informal sector in the argument that the 'informal sector is still shedding jobs even in the expansion periods' (2013:10).

National surveys are able to provide a rough idea of the sectoral composition of the informal economy. Using the QLFS data, researchers such as Valodia, I., Lebani, L., Skinner, C. and R. Devey (2007) and Wills (2009) for example, show that approximately half of the number of informal activities (and employment) entail trade, with construction and manufacturing together accounting for about one third of informal employment. Valodia et. al. (2007) report that 85% of the respondents in their survey sold perishable products, notably fruit, a finding that aligns with research on street traders in urban centres (Skinner, 2008). Analysing labour force survey (LFS) data, Wills (2009:24) identifies the main occupations for informal self-employed persons (men and women) as i) street vending (38.4% of total non-agricultural informal employment), ii) craft and related trade workers (including construction workers, tailors, mechanics) (29.9%), service workers (including shebeen owners, hair salons, and spaza shop-keepers) (16.5%), and technical occupations (including traditional medicine practitioners) (5.7%).

Whilst useful in providing a basic characterisation of the sectors within which informal businesses operate, national data sets do not offer insight into the diverse kinds of activities which Hart describes in the spatial context of local informal economies. We do not know, for example, whether the pattern is broadly reflective of the township context and whether there are consistent tendencies in different township localities. As such, there might be anomalies in the macro-level characterisation of the informal economy that, for example, misrepresent challenges for the unemployed to either obtain work in or start up informal businesses. In particular, the pronounced spatial disconnection between the place where people live (sleep) and work (conduct business)

remains a legacy of apartheid spatial planning (in the Cape Context, see Turok, 2001) and might significantly influence the kinds of business we find in townships and the kinds observable in central business districts. The influence of spatial context has been undervalued in research, apart from localised studies of particular sectors, and there are no studies that specifically analyse the mixture of informal economy businesses in the context of settlement. Whilst much informal economy research has examined inner-city street traders (see Skinner, 2008), the residential context is equally important – with the Finscope Small Business Survey (2010:14-15) finding that in the township context home-based businesses were predominant.

This research paper seeks to address the gap in knowledge on the informal economy between the macro-data understandings, derived from the QLFS and SESE, and micro-levels studies through focusing on a substantial geographic area at the level of settlements. Our aim is to quantify and qualify the diversity, the frequency and the vibrancy of the informal economy that ethnographic researchers following Hart have identified. The geographic focus is on five townships sites within the Cape Town metro region. Through undertaking in-depth field research in these sites, using an original approach which we describe as a 'small area census', we seek to outline the spatial architecture of the township informal economy in order to detail the diversity of businesses, the relative scale of activities and the positioning of micro-enterprise activities. Our overarching objective is to examine the spatial dynamics of the township informal economy in these areas to contextualise the size and significance of micro-enterprises at the local level.

1.2 Research questions

The paper addresses four questions with regard to the selected sites: **One**, in what ways can a small area research approach, replicated in five sites, add value to current understanding of the South African informal economy and micro-enterprise activities? **Two**, what is the scope and scale of micro-enterprise activities in the township context, comparing sites of different demographic, settlement and socio-economic characteristics? **Three**, what is the spatial distribution of micro-enterprises in particular sites and business contexts (e.g. the high street) and in cross-comparison, and how does this distribution inform us about the township as a business environment? **Four**, is there evidence of the influence of variables such as settlement history, housing type, population structure on i) the (relative) frequency of micro-enterprises and ii) the spatial distribution of enterprises / sectors in different sites?

1.3 Structure of the paper

The paper is structured into four segments.

First, we discuss the research methods that were used to gather the data. The methods comprise three aspects: (a) a census of all micro-enterprises within the site boundary; (b) a focused business survey of micro-enterprises in selected key sectors; and (c) qualitative explorations through interviews and subject participation.

Second, we describe the analytical methods employed to analyse the research data. Because this paper focuses on the census results, we concentrate on the process of sorting and categorisation of the identified micro-enterprise into types and the building of the data-set.

Third, we profile the socio-economic characteristics of the five case sites and examine their demographic characteristics, comparing these across sites. Furthermore, we characterise each site, describing the settlement characteristics, infrastructure dynamics and population structure. The analysis here is partially informed by distributional maps that indicate the frequency and position of the identified micro-enterprises according to business type.

The fourth section of the paper presents the results of our analysis of the absolute and relative frequency of micro-enterprises. We detail the major commonalities as well as the differences between the five sites. In our analysis of spatial dynamics, we compare the absolute and relative intensity of business types operating on the 'high street' against the results of the broader settlement. As part of this analysis, we consider the spatial dimensions of the specific sites and particular sectors, especially liquor retailers and grocery retailers.

Finally, the paper concludes with a consideration of the significance of the research outcomes in terms of the four research questions.

2. Methods and data

The research method entailed a small area census to identify and record informal economic activities and micro-enterprises using a mixture of quantitative and qualitative tools. The research was undertaken in five sites: Browns Farm, Delft South, Imizamo Yethu, Sweet Home Farm and Vrygrond. The selection of the sites is explained in section 4 below. The data has been arranged to refer to the sites in this order. The location of the research sites is shown in **Plate 1** which shows, moreover, the actual area surveyed in relation to the entire City of Cape Town metro area.

A micro enterprise is defined by the South African National Small Business Act (No. 2 of 1996) and subsequent Amendment (No. 26 of 2003) as, inter alia, those enterprises employing less than 5 persons, having a turnover of <R200 000 and assets worth <R100 000. The South African revenue service defines an informal micro-enterprise as both the employers and own-account workers 'who are not registered for income tax or value-added tax' as well as employees who work in 'establishment that employ less than five employees, [and] who do not deduct income tax from their salaries / wages' (StatisticsSA, 2013b:21).

Since our objective was to gather data on all micro-enterprises *and* all informal economic activities within the research site, we did not adhere to the Small Business Act definition, but only excluded businesses that operated in commercial business parks. These were few in number. Some of the businesses included in the survey were operating formally in certain respects, such as the tavern owners, taxi operators and educares who hold specific trading and business licences. The survey made no exclusion on the basis of employment or enterprise turnover. The census also included livelihood activities which we understood as work activities that are undertaken for economic survival but that do not equate to an enterprise form, even though the work results in income, however small, and/or in in-kind payments and reciprocal value. Persons engaged in livelihood activities typically don't operate from permanent business stands. Their activities are not branded or signed. Most regard their situation as a temporary measure to derive income to meet immediate needs. As Neves and Du Toit point out, these individual are 'motivated not by business plans but various social and redistributive logics' (2012:132). Among the livelihood activities identified in the course of the research were individuals collecting scrap, selling meat and fresh products, child

mindings, selling sweets and cigarettes from street trading stands, and providing social and religious services.

The methodology of the research process is described at length in Charman, Petersen, Piper, Liedeman and Legg (2014). The research approach used a combination of quantitative and qualitative methods. The method seeks to identify and record all enterprise/business activity through a street based census with a geographic area of sufficient size to include a population of 6,000-10,000 households. The size threshold was established in the first site we surveyed, Delft South, and was achieved in all but one site, namely Sweet Home Farm.

The research was undertaken over the period November 2010 to May 2012. The research period straddles the National population census of 2011 thus permitting close comparison of data. In each site, an experienced research team traversed the area on bicycle and recorded all identified businesses on a GPS device. Enterprise activities were geocoded with a specific reference number. The approach was to ensure that all recognisable informal economic activities, regardless of size or nature of business, were recorded. Some businesses were visually obvious and easy to locate, whilst others were unmarked and thus identified through referrals from businesses and local residents with whom the researchers spoke at length during the process. Livelihood activities that were not based at fixed premises (such as roving street hawkers) were recorded at the point of encounter. The investigation was concluded once the entire suburb had been traversed and outstanding referrals addressed.

As a result of the logistical difficulties of conducting such a research process in marginalised communities, where many people are non-cooperative towards research enquiry, the researchers accepted that some economic activities would be under-represented. Possible examples include business and financial services, care of the elderly and illicit activities. Also likely to be under-reported were activities that formed part of the township night time economy (which we did not study) as well as local transport service businesses, as these were difficult to record when the businesses were on the move.

The research method included a business survey. Since it would be very time-consuming to interview all businesses, the approach was to focus on 'key sectors'. The sectors were to include the most commonly occurring micro-enterprises, as confirmed in literature, as well as businesses that provided social services. In the first four sites, the key sectors were: liquor traders / liquor selling venues, grocery retailers or spaza shops, educares, and traditional healers. In the fifth site the list was expanded to include hair salons / barber shops and micro-manufacturing businesses. (In this latter site, namely Imizamo Yethu, the survey also included a rapid survey of the products and prices of persons selling goods on the street or pavement.)

A questionnaire tool was design to obtain a minimum level of useful data, focusing on the enterprise owner, indicators of enterprise longevity, size and scale, and details on business challenges and crime impact. The questions were tailored to explore sector specific issues such as the core price of 8 commodities in spaza shops. Wherever the team encountered key sectors business, the researchers aimed to interview the business owner. In most instances, the survey was conducted in their home/business by the research team, predominately in their language of choice (generally English, Afrikaans or isiXhosa). All participants were informed of the objectives of the research and their consent secured. The questionnaire was designed to take no longer than 20 minutes to complete. As

the questionnaire included an open-ended component, the researchers took notes on the history of the enterprise and explored issues affecting business growth through conversation and reflection on the business start-up phase or specific events such as robbery or police raids.

In total, business survey interviews were conducted with 1508 micro-enterprise owners. Although the preferred approach in this component was to interview all identified businesses in each key sector, this proved impossible as a result of non-participation or non-availability and the inappropriateness of the survey instrument in the case of some home-based livelihood activities. For example, the research identified many people selling liquor in small quantities on an ad hoc basis, though their activities did not equate to running a shebeen (an unlicensed liquor trader characteristically operating an on-consumption venue) and they saw themselves as simply creating an income stream to enhance their livelihoods. The research thus counted these businesses in the census but omitted them from the business survey component.

The total number counted and percentage of micro-enterprises surveyed (in the key sectors) are shown in **Table 1**. In the spaza shop sector, the researchers succeeded in interviewing more than 90% of identified businesses, whilst in the case of liquor traders, the researchers succeeded in interviewing 74% of identified entrepreneurial actors in the sector. Similarly, a high percentage of educare, traditional healers and hair salons were surveyed.

Table 1: Micro-enterprises interviewed in business survey of key sectors (number and % of total identified)

Site	Health Services		Street Trade		Spaza Shops		Hair Care		Educare		Liquor Retail	
	n	%	n	%	n	%	n	%	n	%	n	%
Browns Farm	11	22	0	0	168	91	0	0	39	93	244	82.7
Delft South	0	0	0	0	180	99	0	0	30	94	77	64.2
Imizamo Yethu	18	78	95	100	60	78	35	80	19	190	132	72.1
Sweet Home Farm	11	92	0	0	43	77	0	0	4	67	78	70.3
Vrygrond	30		0	0	124	89	0	0	21	84	89	67.4
Total interviewed	70		95		575		35		113		620	

Note: Street Traders and Hair Care business were only surveyed in Imizamo Yethu

Additional qualitative aspects of the research comprised participant observation, photographic and audio recording, unstructured interviews, and participatory action learning interventions where the researchers engaged with specific groups. The latter included a workshop with spaza shop owners in Delft South, a digital story-telling workshop with shebeen owners in Sweet Home Farm, and focus group discussions with scrap collectors in Vrygrond and rasta herbalists in Sweet Home Farm. The researchers conducted dozens of interviews during the data collection process with self-appointed 'big men', business and community leaders, civil society organisation workers, and ordinary individuals. The data from these interviews was recorded in field notebooks, though a minority of the interviews were audio recorded.

3. Data analysis

Since the research sites were geographically aligned to the sub-place boundaries used for the purpose of Census 2011, we were able to draw on the Census results to compile an accurate socio-demographic profile for each site. This was possible in 4 of the 5 sites. In one site, Browns Farm, our research was only able to cover 58.48% of the total sub-place area as the total area was particularly large (3.39km²). We estimated the population of the Browns Farm site in proportion to the area surveyed. The result may still under-represent the actual population because the area surveyed contained a higher proportion of informal households (80%) than the Browns Farm sub-place area from which the population data derives. The population figure for the Browns Farm site equates to 58% of the total sub-place population.

In the case of four out of five sites (Imizamo Yethu excluded), the researchers undertook a house / dwelling count using high resolution aerial photographs taken in 2010. The results of our physical enumeration of dwellings would closely match the StatisticsSA population census data (Census 2011) for household numbers. For example, in Delft South we counted 11868 distinct dwellings, whereas the StatisticsSA population census (Census 2011) recorded 11322 households. Due to the similarities in the data, we applied our dwelling count to calculate the proportion of the population residing in formal and informal households in Browns Farm.

The business census data was analysed at the completion of each site phase. It was examined to remove errors and duplications and the identified micro-enterprises were categorised into one of 35 business types. The raw data included X:Y (longitude: latitude) co-ordinates, a linked photograph, field research notes on the business activity and some demographic data (for example, nationality, where it was possible to obtain information). The data was linked to the survey data through a waypoint number generated at the point that the business was captured in the business census process on the GPS device. Photographs were taken of most business activities except in cases where the owners objected or refused to participate in the research.

In terms of the enterprise classification process, we recorded separate activities in instances where one micro-enterprise was undertaking two or more distinct business activities, such as a traditional healer who also operated a liquor retailing venue. The system of classification we developed sought to capture the nature of the activity as accurately as possible in terms of what the business actually did or the goods they traded. In this respect, the system of classification substantially differs from the StatisticsSA QLFS classification (derived from the International Standard Industrial Classification). Our objection to following this classification is that it does not sufficiently disaggregate the diverse range of activities within retail trading. For example, classification 6211 refers to 'retail trade in non-specialised stores with food, beverages and tobacco predominating' and 62190 refers to 'other retail trade in non-specialised stores'. These categories are simply too broad to capture the diversity that our research identified. In our system of classification, businesses trading from the position of the street, regardless of the infrastructure used to operate their business, were classified according to the service provided or good sold. The categories we used are applied irrespective of enterprise size, structure or position. Hence, street traders selling fruit and vegetables (as their core activity) were classed as green grocers, placing them in the same category as businesses operating from shacks, containers and private homes. The term 'street trader', however, was reserved for businesses selling miscellaneous products in the street context such as sweets, chips and cigarettes, homeware (plastic

buckets) or second hand clothing. People selling fruit and vegetables were classified under the green grocery category. **Table 2** contains the classification list and examples of businesses that fell within the particular category.

Table 2: Micro-enterprise classification system

Category	Example 1	Example 2	Example 3
Agriculture	Livestock	Food gardens	
Appliance repair	Cell phone repairs	TV repairs	
Art and craft	Beadwork	Carvings	
Building services	Artisans	Hardware sales	Bricks
Business services	Internet café	Photographer	Driving school
Car wash			
Community service	NGO	Soup kitchens	
Drug dealer			
Educare			
Entertainment service	DJs	Game shop	
Green grocer	Fruit & vegetable stand		
Hair care	Hair dresser	Barber shop	
Health services	Doctor	Traditional healer	
Home maintenance services	Garden services		
House shop	Frozen meat	Sweet, chips, cigarettes	
Liquor sales	Tavern	Shebeen	Home off-sales
Meat, poultry & fish retail	Butcher	Hawker	
Mechanical services	Car mechanic	panel beater	
Micro-manufacture	Burglar bars	Wendy houses	Bedding and cushions
Personal services	Child minding	Clothes washing	Home care
Phones	Public phones	Container phone shops	
Recycling	Glass	Scrap metal	
Religious services	Church	Mosque	
Restaurants			
Shoe repair	Shoe repair	Shoe making	
Grocery retail (Spaza)	Spaza		
Specialist store	General dealers	Furniture store	Car spares
Street trade	Clothes	Airtime	Music
Tailor	Clothes repair	Clothes making	
Takeaways	Street braais	Home businesses	
Transport services	School transport	Freight services	
Tuck shop	Small spaza		
Wholesaler	Grocery wholesaler		
Wood and coal	Braai wood		
Miscellaneous	Hotel	Container storage	

The researchers classified places of worship as micro-enterprises because most of those identified operate independently of religious institutions (thus are not grant funded) *and* raise income to provide a livelihood for the religious leader and his/her extended family. Several of the identified religious micro-enterprises had strong enterprise features, including a business brand, dedicated business structure and employees.

Although the research identified many entrepreneurial activities related to the provision of accommodation, these activities were excluded from the categorised dataset. Accommodation rental (mainly to immigrant Africans) is potentially the most common business activity in both Vrygrond and Imizamo Yethu. The entrepreneurial component within this category comprises property maintenance, rent collection and the provision of security services.

The categorised census data was compiled into a dataset. This enabled us to identify sector frequencies and compare / contrast site outcomes. Importing the data into MapInfo enabled us to analyse the spatial distribution of the categorised data in each site. The mapped data permitted us to produce a series of map outcomes wherein we could examine, through observation, particular sector dynamics. Through visual comparison of the data we could identify basic patterns in the spatial location of certain business sectors and the clear disjuncture between residential localities and high street activities. The visualisation of the data on maps overlaying the site aerial photograph and streets enabled the researchers to examine enterprise distribution against settlement architecture, street grids, and proximity to formal business centres and transport nodes.

In order to advance this analysis quantitatively, we isolated all the micro-enterprise activities situated on major streets and important secondary street routes operated by formal taxis (known as mini-buses). These streets were constituted as the 'high street'. The data was exported from MapInfo and then analysed statistically to gauge the comparative distribution of economic activity on the high street as a proportion of all activities.

To compare outcomes across the five sites, we selected two measures of analysis: i) the proportion of businesses per 1000 persons and ii) the proportion of businesses per 100 households. The validity of the results is contingent on the accuracy of the population data. Whilst we accept the veracity of this data, the reported figures for the informal settlements of Imizamo Yethu (part of the settlement), Sweet Home Farm, and Overcome Heights (Vrygrond) are lower than estimates provided by the community leaders with whom we engaged. Given the difficulties of conducting the Population Census (2011) in these localities it is likely that under-reporting occurred, though the probably scale of under-reported persons may not invalidate our results. Nevertheless, our findings may report an inflated rate of micro-enterprise activity in informal settlements and the immediate geographic area that surrounds these settlements within the sub-place boundary (i.e. the base unit in terms of geographic area of the StatisticSA Census 2011 on which population data is derived).

The enterprise/business survey data was also compiled into a dataset. The quantitative aspects were recoded to enable statistical analysis. The data was examined for typographical errors and inconsistencies. The qualitative data comprised researcher notes, statements and verbatim quotations. The names of the interviewees, their businesses and the street localities at which their businesses operate were anonymised and assigned a number in keeping with ethical conventions. Each of the interviewees is linked to a designated site and data-base number (for example V21; V=Vrygrond, B=Brown's Farm, D=Delft, S=Sweet Home Farm) with their gender and time in business in parenthesis for additional information [for example M,7]. Wherever the questionnaire tool required an explanation or prompted an elaboration, the quantitative responses were cross checked against the qualitative record. The data was scanned for information that could be translated into quantitative variables with respect to questions relating to micro-enterprise challenges and employment. In terms of a partial funding and facilitation agreement with REDI3x3, the quantitative

dataset has been transferred to DataFirst with the intention of enabling public access to the data (<http://www.datafirst.uct.ac.za/home/>).

The qualitative data added a rich layer of information on the businesses, their spatial position and relationship to other enterprise activities. The photographs, for example, provide insights on the infrastructure of each micro-enterprise, the use of branding and signage, the location of the business and proximity to other activities. Advertisements and pamphlets provided information about particular services, which provided useful insights into the business dynamics of sectors such as medical services. Informal interviews helped us to understand the broader business environment, including the influence of crime and police harassment or the nature of competitiveness between micro-enterprises. As a result of the sustained immersion of the research team in surveying each site (up to 15 weeks per site), the researchers were able to observe patterns in business behaviour, the movement of commuters, the role of business services such distribution and signs of hidden business activities (drug dealing, traditional healing and informal liquor sales).

4. The research sites

The five sites that were selected are:

1. Browns Farm: a settlement of informal and formal housing, established more than 20 years ago on the Cape Flats in the eastern part of Philippi, bordering Nyanga, between the N2 and the R300 routes.
2. Delft South: a mainly residential township on the Cape Flats with formal housing, with most houses built in the period 1996-2000, east of Cape Town International Airport on the northern side of the N2 highway.
3. Imizamo Yethu: a settlement of both informal and formal housing, situated on the mountain slope in the suburb of Hout Bay. It emerged in the early 1980s and has become more established since the 1990s.
4. Sweet Home Farm: an informal residential settlement, situated on the Cape Flats in Philippi, adjacent to Browns Farm; extension occupation of the land started in the early 1990s though the first residents have occupied the site since the 1970s.
5. Vrygrond: near Muizenberg and next to the M5 highway, it comprises three adjacent but very different areas: a 1980s formal housing component (Seawinds), a 2000s private-sector-led social housing development project (Capricorn), and an informal settlement that started in 2005 (Overcome Heights).

The location of the sites is shown in **Plate 1** below. The sites were selected to reflect differing settlement characteristics and infrastructural influences. Although the five sites are reflective of the typical conditions of poverty, unemployment and marginalisation within the township settlements of the metro region, we specifically sought to select sites with differing population (heterogeneous vs homogenous) and spatial (formal vs informal housing) characteristics so as to be able to compare the results across these variables. The sites were not randomly selected; this has implications for potential statistical generalisation.

Plate 1. Location of the sites



4.1 Demographic profile

The main demographic characteristics of the sites are shown in **Table 3**.

Table 3: Demographic characteristics

Site	Black population	Coloured population	Total population	Households	Household size	% Pop. Female	% Pop. Formal Housed	% Pop. Informal Housed
Browns Farm	40 893	578	41 895	14 355	2.9	50	20	80
Delft South	22 311	20 046	43 185	11 322	3.8	51	100	0
Imizamo Yethu	14 235	576	15 537	6 015	2.6	45	39	60
Sweet Home Farm	7 491	231	7 836	3 210	2,4	46	0	100
Vrygrond	11 910	11 916	25 197	6 627	3.8	47	79	21
Total	96 840	33 347	133 650	41 529	3.2			

Source: 2011 census (StatisticsSA, 2013). Notes:

Browns Farm: Total population data is estimated, comparing the actual survey area against the sub-place area. Housing data is derived from a dwelling count. Race data estimated from the demographic profile of the sub-place area. Gender data from sub-place area.

The combined population of the five sites is 133 650, comprising 41 529 households. The overall residential population is predominantly black (96 840), though both Delft South and Vrygrond have coloured populations roughly equal to the black population. There are more men than women in three sites, Imizamo Yethu, Sweet Home Farm and Vrygrond, mainly due to migrant dynamics. Imizamo Yethu and Vrygrond have sizable African immigrant sub-populations.

The percentage of the population residing in formal housing provides an insight into the varying living conditions across the selected sites, with only Delft South having its entire population living in

formal housing. In contrast, the entire population in Sweet Home Farm resides informally, as do 60% of the households in Imizamo Yethu and 80% in Browns Farm. The table includes data on household size. This data should be viewed cautiously because it does not account for contrasting household dynamics between formal and informal settlements. We do not know, for example, whether the larger household sizes in the predominately formal settlements of Delft and Vrygrond reflects the larger dwellings found in these sites and hence their capacity to accommodate greater numbers of persons.

The employment figures for the five sites are shown in **Table 4**. All data is derived from the population census 2011. The table presents data on the numbers of persons employed, the number unemployed, the total labour force, number of discouraged workseekers, number of persons not economically active, the number of non-applicable persons and the dependency ratio.

Table 4: Employment status (working age persons above 15)

Site	Employed	Unemployed (Narrow)	Labour Force	Discouraged workseeker	Other not economically active
Browns Farm	12 659	7 611	21 532	1 262	8 116
Delft South	10 557	8 082	19 440	801	9 723
Imizamo Yethu	6 234	3 045	9 564	285	2 124
Sweet Home Farm	2 343	1 701	4 314	270	1 389
Vrygrond	8 508	4 035	13 095	552	4 467
Total	40 301	24 474	67 945	3 170	25 819
Site	% Unemployed (Narrow Definition)	% Unemployed (Broad Definition)	Unemployed (Broad)	Employment not applicable	Dependency Ratio
Browns Farm	35	41	8 873	20 901	48
Delft South	42	46	8 883	14 022	43
Imizamo Yethu	32	35	3 330	3 849	60
Sweet Home Farm	39	46	1 971	2 133	52
Vrygrond	31	35	4 587	7 638	50
Total			27 644	48 543	

Source: 2011 census (StatisticsSA, 2013).Notes:

Not applicable: Persons younger than fifteen years, institutional population and transients.

With respect to unpaid work, the census enumerators were advised not to count normal housework undertaken by housewives and children in household. See StatsSA, 2012, page 72.

Not economically active = People who are not available for work such as full-time scholars and students, full-time homemakers, those who are retired and those who are unable or unwilling to work.

Dependency ratio = economically active (employed and unemployed) compared to inactive.

In terms of the narrow definition of unemployment used by StatisticsSA – persons able to work and actively seeking employment – unemployment varies from 31% of the labour force (Vrygrond) to 42% (Delft). It is significant that the two sites that accommodate African immigrants in significant numbers (predominantly through rental accommodation – source: field research notes and observations) are closest located to middle class neighbourhoods (Vrygrond and Imizamo Yethu) and have significantly lower unemployment levels that sites located away from formal and domestic labour job markets. The implication is twofold: first, it suggests that there are comparatively more employment opportunities close to these sites (hence the in-migration) and second, that there is less

competition for employment within the local labour market (hence African immigrants are more easily able to obtain work). High levels of unemployment nevertheless prevail in all sites, with the unemployment levels roughly 7-18% higher than the national figure. The figures on unemployment (narrow definition) were obtained from the Census 2011. In Table 4 we have calculated the rate of unemployment using a broader definition which includes discouraged work seekers. The true level of unemployment, nevertheless, does not reflect persons performing unpaid domestic work and pensioners (many of whom need to work to supplement pensions) (See note 2). The unemployed figures exclude persons who are not economically active because they cannot work (such as full time students) or do not have the physical capacity to work (such as pensioners). The data highlights the income burden on the economically active (dependency ratio) relative to the inactive. Out of every 100 persons 43 are either working or seeking employment in Delft South.

Table 5 presents the distribution of households in annual household income brackets, from data for each site obtained from the 2011 National Census (from <http://www.census2011.co.za/>).

Table 5: Household annual income data: number of households

Income bracket	No income	R 1 - R 4800	R 4801 - R 9600	R 9601 - R 19600	R 19601 - R 38200	R 38201 - R 76400	R 76401 - R 153800	R 153801 R 307600	R 307601 -	Total
Site										
Browns Farm	4 650	1 626	2 049	4 089	6 660	3 591	1 239	402	201	24 507
% Browns Farm	19	7	8	17	27	15	5	2	1	
Delft South	1908	573	915	1704	2877	2025	930	285	105	11 322
Eindhoven	306	69	120	201	276	267	135	33	27	1 434
Delft South	1 602	504	795	1 503	2 601	1 758	795	252	78	9 888
% Delft South	17	5	8	15	25	18	8	3	1	
Imizamo Yethu	1 464	195	321	1 014	1 743	924	276	39	36	6 012
% Imizamo Yethu	24	3	5	17	29	15	5	1	1	
Sweet Home Farm	831	294	312	621	810	279	54	9	6	3 216
% Sweet Home Farm	26	9	10	19	25	9	2	0	0	
Vrygrond	1443	276	351	1005	1569	1188	561	171	72	6 636
Capricorn	921	207	249	630	993	654	222	45	30	3 951
Overcome Hts	321	60	90	216	324	189	60	12	21	1 293
Seawinds	201	9	12	159	252	345	279	114	21	1 392
% Vrygrond	22	4	5	15	24	18	8	3	1	

Source: 2011 census (StatisticsSA, 2013).

The household income data shows considerable uniformity across the five sites, though the data for Browns Farm represents the Census 2011 sub-area and not the survey area and must thus be regarded as unrepresentative. In all sites, nevertheless, between 17% and 26% of households report no income with the informal settlement of Sweet Home Farm worst off in this respect. Amongst households with regular income, 59% in Browns Farm, 54% in Delft South, 54% in Imizamo Yethu, 63% in Sweet Home Farm and 48% in Vrygrond report earning between R1–R38 200 per annum with roughly 25% of all households having an annual income of between R19 601–R38 200 (or between R1 633–R3 183 per month). In both Delft South and Vrygrond, 30% of households have an annual income greater than R38 201 a result which reflects higher incomes in the more established neighbourhoods of Eindhoven and Seawinds respectively. The corresponding figure (for annual income above R38 201) in Browns Farm is 22% and Imizamo Yethu 21%, whilst only 11% of

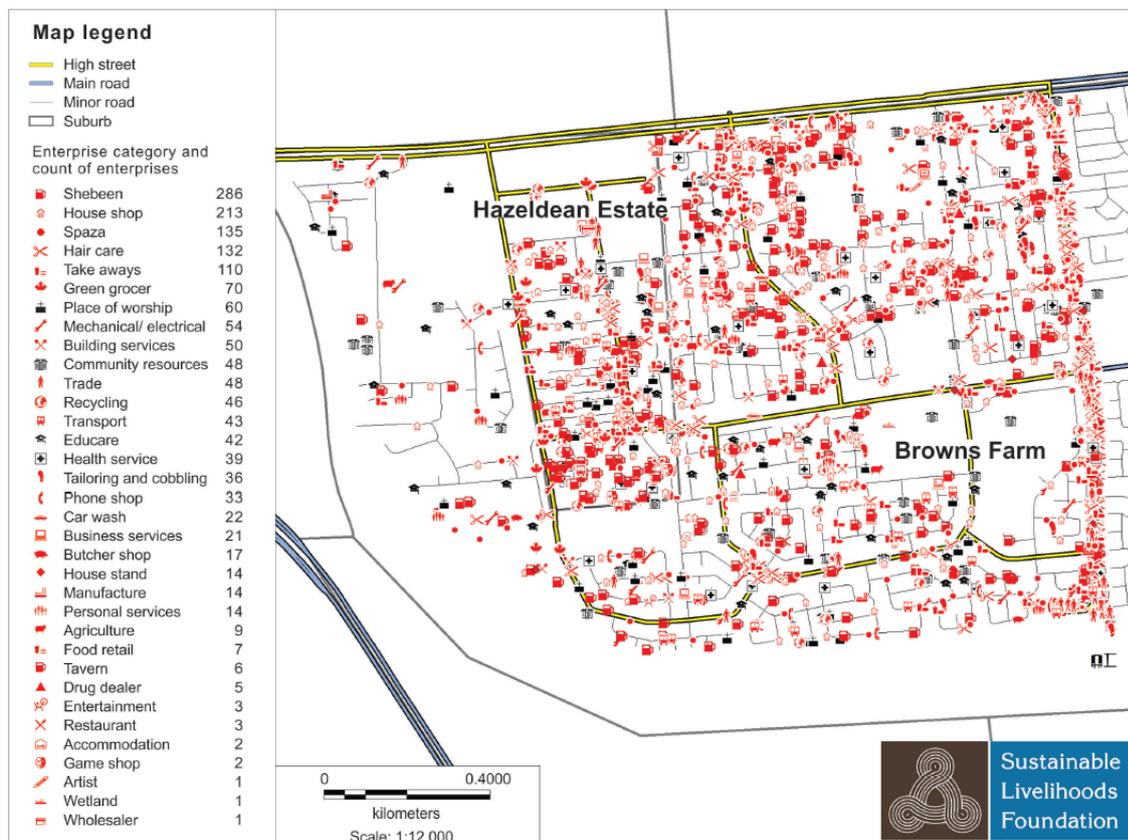
households in Sweet Home Farm fall into this segment. We note that in areas of high unemployment such as Delft South and Browns Farm, some of the employed persons earn incomes which place them into a middle class consumer category, though the number is small. Merely 3% of households in all our sites combined (n= 1326) have an annual income exceeding R153801 (R12816 per month).

4.2 Spatial settlement characteristics

4.2.1 Browns Farm

Browns Farm is a settlement of informal and formal housing. The population density is 16,772 per km², though this number substantially increases to 39,118 per km² in the informal settlement areas including the sub-area of Hazeldean. The main population group are black Africans (97.61%), which is predominantly ethnically homogenous with 86% speaking isiXhosa as their first language (Census 2011). About 20% of individuals live in formal houses, the majority of which, including private (i.e. non-state) funded homes, have been built within the past 20 years, i.e. post-apartheid,. Approximately 80% of the total population reside in informal housing or slum conditions. A proportion of the formal houses were privately financed; these are units within an area characteristically middle class in appearance (in terms of visual evidence of car ownership, gating within properties, architectural styles). Social infrastructure in Browns Farm includes parks, libraries, clinics and sporting facilities. The site includes a rail terminus and taxi ranks.

Plate 2. Distribution of micro-enterprises by enterprise category Browns Farm and Hazeldean Estate, Philippi, November 2011

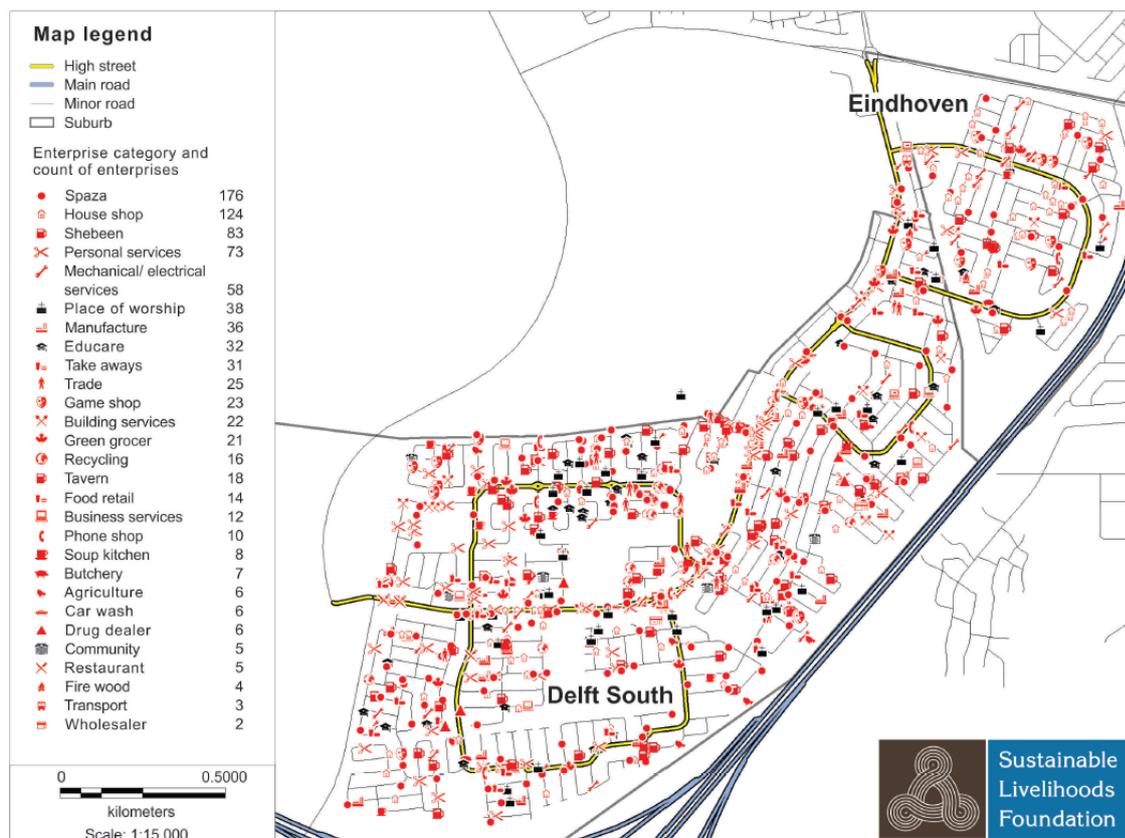


Browns Farm has a particular notable high street dynamic, as is evident from the business distribution map (Plate 2), with many businesses concentrated on the street leading to the station (on the right-hand north-south boundary of the area). It is the only site in which a train station is situated. Our field observations indicated that the density of micro-enterprise activity was related to the pedestrian movement and proximity of the train station. Within the high street transect, the researchers identified a diversity of street based businesses that sell homeware (plastic goods) and hardware, including prefabricated Wendy houses, hair salons, food take-aways and fruit and vegetable stands.

4.2.2. Delft South

Delft South is a principally residential township with formal housing (Plate 3), with most houses built in the period 1996-2000. Population density is 16,296 per km². The portion of the site known as Eindhoven has a density of only 11,795 persons per km², the least dense area within the study. The population comprises an equal mix of Black and Coloured South Africans, though the sub-place area of Eindhoven is predominantly (91%) a Coloured residential area. In the Delft South sub-area, 50% of the population speak isiXhosa as their first language, whereas 38% speak Afrikaans and 6% speak English.

Plate 3. Distribution of micro-enterprises by enterprise category
Delft South and Eindhoven, May 2011



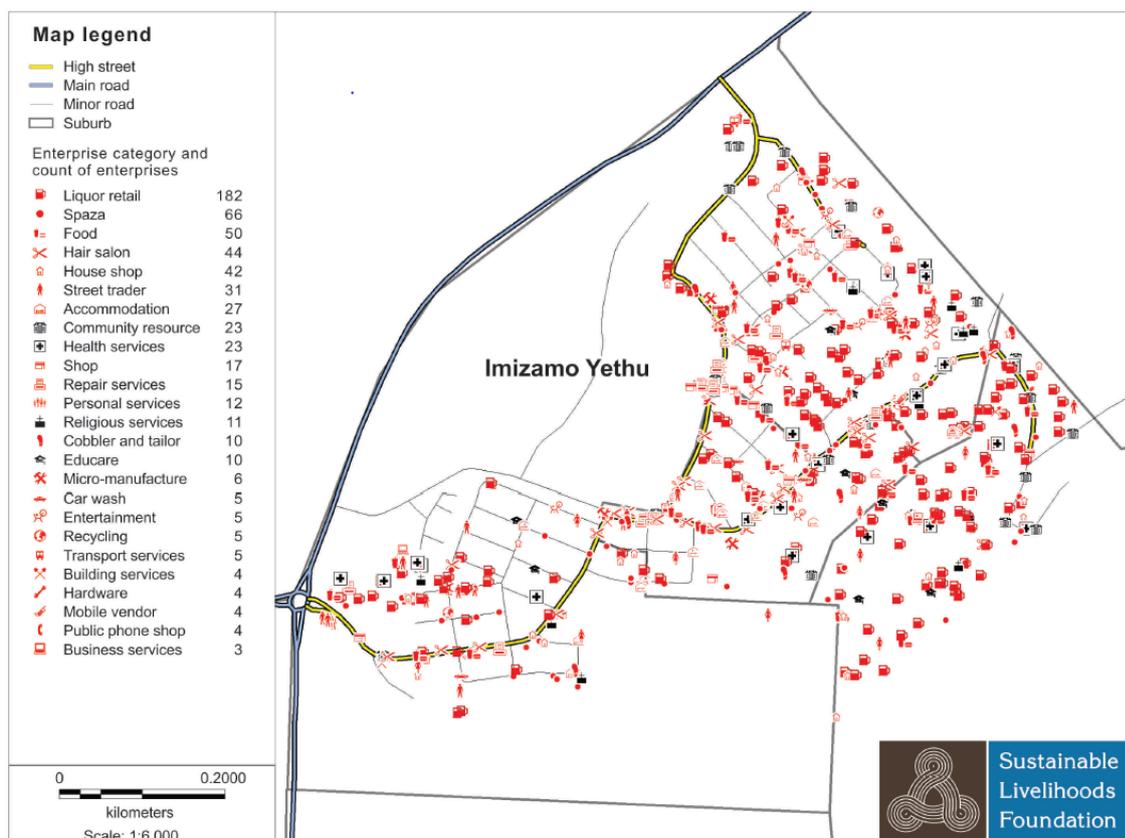
A main road traverses the centre of the Delft site. The high street effect is less significant in terms of absolute numbers, but still evident in terms of business types. This is analysed below. Social infrastructure includes parks, libraries, clinics and sporting facilities. The residents have a high

degree of access to water, sewerage and electricity. The area is situated on the City periphery with residents relying on private transport and minibus taxis to connect with centres of employment. As this site is spatially disconnected from the public transport networks and situated far from the formal business economy, ownership of a running car is central to livelihood improvement. In this site the researchers identified a range of businesses providing car repair services including mechanics, panel beaters, spare part dealers, car washes and transport services.

4.2.3 Imizamo Yethu

Imizamo Yethu (**Plate 4**) is a settlement of (majority) informal and formal housing, situated in a small area on the mountain slopes within an enclave of the middle class city suburb of Hout Bay. The settlement emerged in the early 1990s after the relocation of 450 families from squatter settlements within the Hout Bay area to the site. The first formal houses were built under the state funded Reconstruction and Development Programme. Adding to the housing stock, between 2003-2005 the Niall Mellon Township Trust built 448 houses.² Population density is 27,258 per km² and about 60% of the population reside in informal houses. The population is ethnically diverse, comprising a combination of indigenous and immigrant Africans. Reflecting this diversity, the first languages spoken are isiXhosa (59%), other (17%), English (11%), Afrikaans (5%) and isiZulu (3%).

Plate 4. Distribution of micro-enterprises by enterprise category
Imizamo Yethu, January 2013



² <http://www.impactconsulting.co.za/downloads/Mellon%20Housing%20Initiative%20Rapid%20Assessment.pdf>

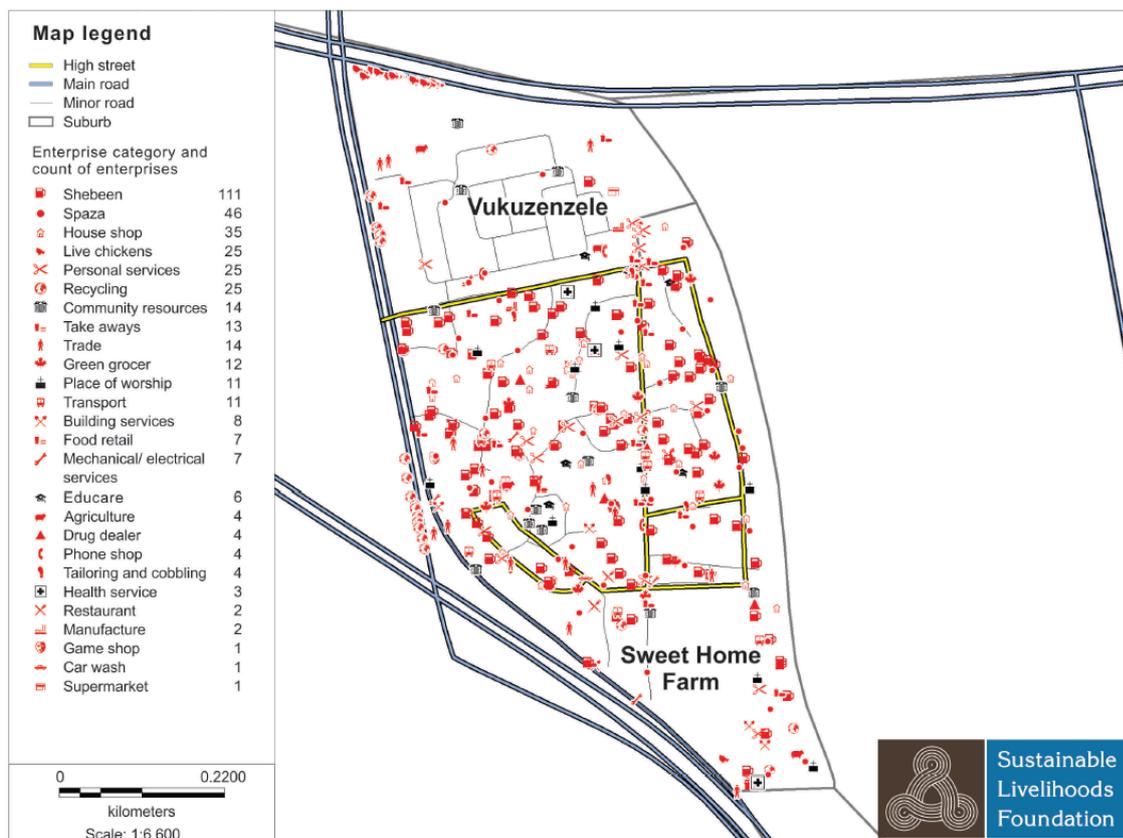
There is a relatively high level of employment within the settlement, as demonstrated in **Table 4**, due to service and domestic worker jobs in the neighbouring suburbs. Informal minibus taxi transport connects residents to public transport networks. The spatial dynamics of the transport economy have been examined and reported elsewhere; see: <http://livelihoods.org.za/informality/informal-life/taxis/>.) The informal taxi routes link the townships to two shopping malls, where supermarkets dominate the retail economy. Taxi transport is both efficient and cost effective. The residents of Imizamo Yethu are, therefore, in a position to shop on a regular basis in the formal economy either in the course of their journey to work/home or on dedicated shopping trips.

In the informal settlement portion of the site, occupying the south-east portion of the map, much of the micro-enterprise activity occurs on the single street that provides access to the informal portion of the settlement (see Plate 6) with notable businesses including hair care, restaurants and fast food outlets. The researchers noted a particularly diverse range of business offering leisure activities (bars, restaurants and nightclubs).

4.2.4 Sweet Home Farm

Sweet Home Farm is an informal residential settlement, situated adjacent to Browns Farm on land under three different types of ownership: private, railway network and municipal. The first residents to settle in this area settled in the late 1970s, though most residents have settled in Sweet Home Farm within the past decade (various interviews with informants).

Plate 5. Distribution of micro-enterprises by enterprise category Sweet Home Farm / Vukuzenzele, October 2011



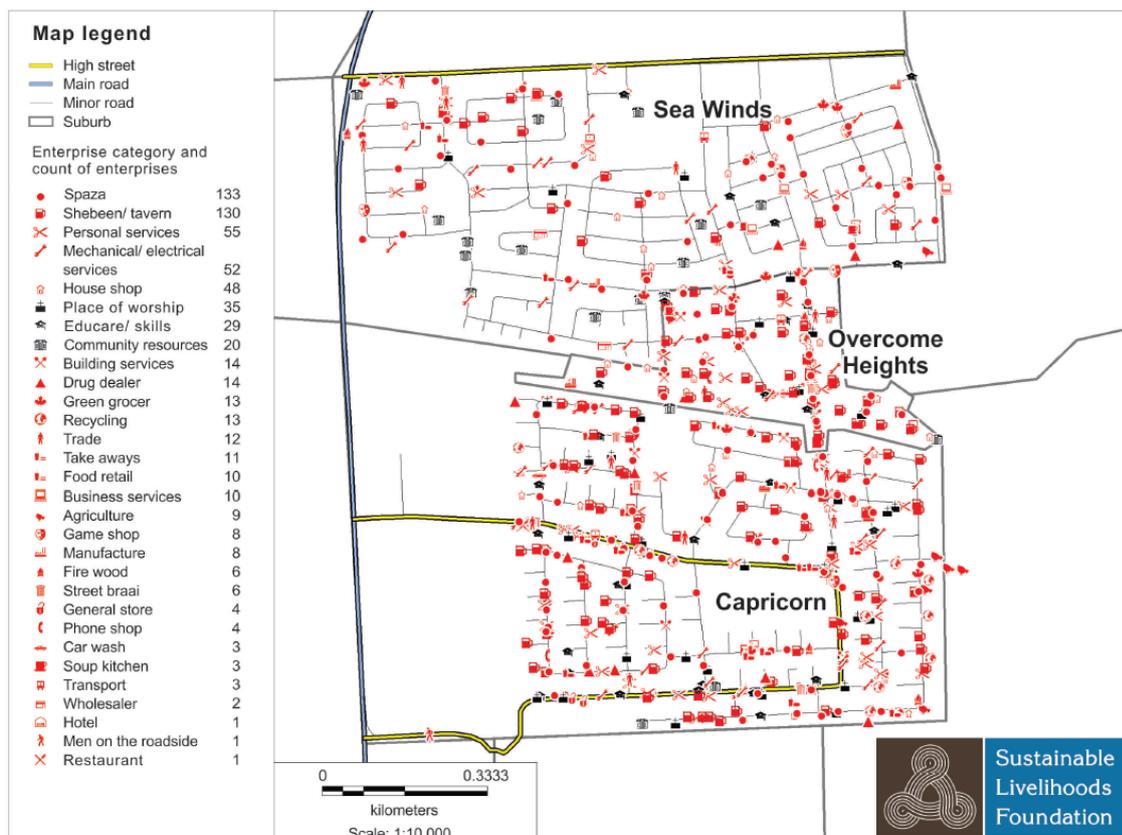
At the time of conducting field research, the area of settlement on private and rail land had no formal water and electricity services. The area is densely settled with 30,138 persons per km². There is little social infrastructure and less than half the population has access to serviced water. People reside in regimentally constructed shacks. Residential poverty is evident across the site. The population is heterogeneous, though the majority are black South African and 96% isiXhosa speaking. A little under 3% of the population are Coloured persons. Most of the Coloured population live along the western boundary of the settlement.

There is substantial volume of informal business activity on the periphery of the site. The main micro-enterprises operating in these localities include the recycling of bricks and the sale of live chickens. The settlement has two significant streets; one follows the northern boundary, providing access to the site, the second, bisects the settlement from north to south. The southern access point is closed to vehicle traffic. The streets are particularly important for business such as spaza shops because the street environment provides relative safety and enable the shop-keepers to access distribution services (interviews with business persons).

4.2.5 Vrygrond

Vrygrondsite comprises three adjacent but very different areas, namely Capricorn, Overcome Heights and Seawinds.

Plate 6. Distribution of micro-enterprises by enterprise category Vrygrond, August 2011



Capricorn was established in 2000 as a private sector led social housing development project (hence the population is formally housed), which included a modest investment in social infrastructure. A significant proportion of the original housing recipients have vacated their properties, either selling them or renting them to immigrants. The site (Capricorn) is situated adjacent to a middle class suburb, providing a source of employment as well as access to formal public transport networks. Population density is 16,120 per km², a density comparable to Delft South. The population is racially and ethnically heterogeneous with migrant African, Black and Coloured South African residents; this is reflected in language with 33% speaking Afrikaans as a first language, 25.7% recorded as 'other' languages, 21% speaking isiXhosa and 14% speaking English.

Overcome Heights, situated adjacent to Capricorn, is an informal settlement occupying a road reserve and predominately occupied by isiXhosa speaking Black South Africans (68%) and Coloured Afrikaans (30%) speakers. The settlement arose in the early 2000s. There is little social infrastructure. Poverty is deep and widespread and residents live in shacks. Population density is 37,671 per km², more than twice the density of neighbouring Capricorn, though similar to Hazeldean in Browns Farm. The settlement has similar locational advantages to formal sector businesses, work opportunities and transport. Despite the disadvantaged settlement conditions, unemployment (narrowly defined) is 32.5%, a figure that is consistent with the site average. In this particular case, settlement dynamics do not appear to disadvantage employment prospects.

Seawinds is a suburb of formal housing established by government in the mid-1980s for Coloured residents. As a reflection of this history, 93% of the residents speak Afrikaans as their first language, whilst 5% speak isiXhosa. Population density is 14,266 per km², substantially lower than Capricorn. Houses are brick structures and residents have access to serviced water and electricity; the site has a modicum of public social infrastructure (parks). The site shares favourable locational advantages. Despite the more favourable housing situation and comparatively longer history of settlement, unemployment is consistent with the area trend (34% narrow definition). The benefits of settlement and utilities in Seawinds have evidently not translated into enhanced employment prospects even though levels of unemployment are lower than Browns Farm and Delft. There are important social and economic challenges that confront the local community, including drug abuse and gang related crime. (The researchers had to engage with gang leaders and drug runners during the data collection process.)

In the broader Vrygrond micro-enterprise context, spaza shops were the most frequently identified micro-enterprise despite the close distance to the Pick 'n Pay shopping centre which is located on the periphery of the site. The mall nevertheless attracts significant trade from the. The mall impact might be greatest on fast-food businesses (n=18 or 0.71 fast-food enterprises per 1000 people, comparatively low in incidence) because residents might instead purchase either fast food from the mall tenants or meat products from the Pick 'n Pay to braai at home (source: field observation).

Another notable feature of the Vrygrond informal economy relates to the business activities of scrap metal collectors and dealers. These micro-enterprises benefit from the availability of scrap materials and metal in particular from the coastal landfill site (see Huegel's (2013) research on the numbers of persons engaged in this enterprise).

There are a number of important mobility roads within the site. No of these roads, however, exhibits the ‘high street’ characteristics evident in Browns Farm. These roads are nevertheless important trading sites. On weekends and late afternoon, for example, the mobility roads provide sites for fast food traders, homeware sales and second-hand goods.

5. Scope and scale of micro-enterprise activities

5.1 Scope and scale of businesses

In all five sites together, the research identified 3985 individual micro-enterprises, engaged in 4273 micro-enterprise activities (including primary, secondary and subsidiary activities within particular micro-enterprises). The research recorded 100 micro-enterprises which had closed in recent times (according to local informants). Although we were unable to assess the full scope of business closures, we noted that 87% of these micro-enterprises had been in three sectors: liquor sales (n=26), phone shop (n=17), and grocery retail (n=43).

The number of micro-enterprise per site and the proportion of micro-enterprises per 1000 person as well as per 100 households are shown in **Table 6**. The greatest number of micro-enterprises was identified in the Browns Farm site (n=1711), though the highest proportion of enterprise activity per capita is found in Sweet Home Farm (51 per 1000 persons and 12.5 per 100 households). This result is partially reflective of the intensity of micro-enterprise activities in the area surrounding Sweet Home Farm settlement.

Table 6: Micro-enterprise activities: number and proportions

SITE	TOTAL (all businesses)	Population (1000s)	Number of households (100s)	Household size	TOTAL (per 1000 persons)	TOTAL (per 100 households)
Browns Farm	1711	41.9	144	2.9	40.8	11.9
Delft South	902	43.2	113	3.8	20.9	8.0
Imizamo Yethu	599	15.5	60.2	2.6	38.5	10.0
Sweet Home Farm	401	7.8	32.1	2.4	51.1	12.5
Vrygrond	660	25.2	66.3	3.8	26.2	10.0
Total	4273	134	415	3.2	32	10.3

Across the five sites there are, on average, 32 micro-enterprises per 1000 persons and just over 10 for each 100 households. While there is noticeable variation across sites in the number of businesses per 1000 persons, the variation per 100 households is lower and remarkably similar across the five sites. However, this is largely due to the smaller average household size in predominantly informal settlements and consolidations of extending families in Delft and Vrygrond as grown-up children reside with their parents in backyard dwellings (source: field research notes). Thus the low variation per 100 households says less than one may have expected about, for example, the demand for products and services generated by a household, though it may indicate that the households do not control or influence individual consumption behaviour. Numbers enterprises per 1000 people may be the preferred proportional measure.

The lowest proportional level of micro-enterprise activity in numbers of businesses occurs in Delft South: 20.9 per 1000 persons, which is half the proportional number in Browns Farm (the difference is smaller per 100 households, as discussed above). The highest rate was found in Sweet Home Farm of 51.1 businesses per 1000 persons. This site includes a number of businesses operating on the periphery of the site including brick recycling, the selling of chickens and goats, activities which potentially skew the result. Imizamo Yethu recorded a rate of 38.5 per 1000 peoples, a rate similar to Browns Farm. The second lowest intensity of micro-enterprise business per 1000 persons was found in Vrygrond (26). These figures may suggest that there are proportionally greater levels of micro-enterprise activities relative to the population in predominantly Black African townships with high levels of informal settlement than in mixed race and / or predominately Coloured townships with more formal settlement (Delft South). It is important to note that we have insufficient evidence to infer that the variable of race exerts an influence on enterprise scope and scale. The high level of unemployment in Delft South may also exert an influence on the comparatively lower scale of micro-enterprise activity.

The frequency and proportion of the identified micro-enterprise activities per business type in each site are shown in **Table 7**. The data reveals that retailing liquor (n=841 / 19.6% of total) and grocery products (n=639 / 14.95% of total) are the most common micro-enterprise types for all five sites together. The top three business categories (i.e. liquor, spaza and house shop) together comprise 46% of all identified micro-enterprises. The next most frequently observed businesses are hair care services (n=280/ 6.5%) (including barbers shops and hair salons), take aways (n=253 / 5.9%) (including street braais, vetkoek sellers and kiosks operators), religious services (n=162 / 3.7%) (churches, mosques, preachers), street traders (n=141 / 3.51%), mechanical services (car mechanics, panel beaters) (n=138 / 3.2), green grocers (n=123 / 2.88%) and businesses engaged in recycling glass, plastic or metal (n=117 / 2.7%). Other economically important business sectors include educares (and crèches) (n=115 / 2.6%), health care services (n=104 / 2.4%) (traditional doctors and medicine) and building services (n=90 / 2%).

The ranking and relative scale of business types within a site varies across the five sites. Liquor sales (which includes taverns, shebeens and off-sales combined) as a percent of category activities are 17% in Browns Farm, 13% in Delft South, 30% in Imizamo Yethu, 27% in Sweet Home Farm and 20% in Vrygrond. We can deduce that sites with predominantly informal settlements have higher frequencies of liquor trade, though the settlement dynamic is not necessarily a causal factor in the high number of liquor outlets, which may rather be a reflection of market niche characteristics and preference for small size venues (see Charman et. al., 2013). In the case of spaza businesses, their frequency as a percentage of all business types are 10% in Browns Farm, 20% in Delft South, 12% in Imizamo Yethu, 14% in Sweet Home Farm, and 21% in Vrygrond. The greater proportion of spaza shops in Delft and Vrygrond sites needs to be understood in the of a transitional process in which immigrant entrepreneurs set up shop in competition to South Africans. The enterprise survey data substantially support this findings, as detailed in Leidemann (2013) and Charman, Petersen and Piper (2012). House shops that sell miscellaneous grocery items (such as cigarettes, cooldrink, sweets and chips, and frozen meat) but lack the infrastructure, brand features and range of stock characteristic of spaza shops were the third most common micro-enterprise type in Browns Farm (13.4%), Delft South (14.5%), Sweet Home Farm (9.23%) and Vrygrond (7.42%) (category total = 537). The third most significant business type in Imizamo Yethu, in contrast, was takeaway foods (9.18%), though houseshops were nevertheless important and comprised 7.68% of micro-enterprise types.

Table 7: Micro-enterprise frequency: enterprise numbers per category / site

SITE		AGRICULTURE	APPLIANCE REPAIR	ART AND CRAFT	BUILDING SERVICES	BUSINESS SERVICES	CAR WASH	COMMUNITY SERVICE	DRUG DEALER	EDUCARE	ENTERTAINMENT SERVICE	GREEN GROCER	HAIR CARE	HEALTH SERVICES	HOME MAINTENANCE SERVICES	HOUSE SHOP	LIQUOR SALES	MEAT, POULTRY & FISH RETAIL	
BROWNS FARM		10	22	1	39	28	22	6	8	42	7	72	132	49	0	229	295	53	
% OF TOTAL BROWNS FARM ACTIVITY		0.58	1.29	0.06	2.28	1.64	1.29	0.35	0.47	2.45	0.41	4.21	7.71	2.86	0	13.4	17.2	3.1	
DELFT SOUTH		7	6	0	22	17	6	8	8	32	30	21	63	5	0	131	120	17	
% OF TOTAL DELFT SOUTH ACTIVITY		0.78	0.67	0	2.44	1.88	0.67	0.89	0.89	3.55	3.33	2.33	6.98	0.55	0	14.5	13.3	1.88	
IMIZAMO YETHU		0	7	4	9	7	5	0	2	10	7	4	44	23	0	46	183	4	
% OF TOTAL IMIZAMO YETHU ACTIVITY		0	1.17	0.67	1.5	1.17	0.83	0	0.33	1.67	1.17	0.67	7.35	3.84	0	7.68	30.6	0.67	
SWEET HOME FARM		5	4	0	6	0	1	0	5	6	7	13	12	12	0	37	111	25	
% OF TOTAL SWEET HOME FARM ACTIVITY		1.25	1	0	1.5	0	0.25	0	1.25	1.5	1.75	3.24	2.99	2.99	0	9.23	27.7	6.23	
VRYGROND		10	14	0	14	16	3	3	17	25	10	13	29	15	0	49	132	14	
% OF TOTAL VRGROND ACTIVITY		1.52	2.12	0	2.12	2.42	0.45	0.45	2.58	3.79	1.52	1.97	4.39	2.27	0	7.42	20	2.12	
TOTAL		32	53	5	90	68	37	17	40	115	61	123	280	104	0	492	841	113	
SITE		MECHANICAL SERVICES	MICRO-MANUFACTURE	PERSONAL SERVICES	PHONES	RECYCLING	RELIGIOUS SERVICES	RESTAURANTS	SHOE REPAIR	SPAZA GROCERY RETAIL	SPECIALIST STORE	STREET TRADE	TAILOR	TAKEAWAYS	TRANSPORT SERVICES	TUCK SHOP	WHOLESALE	WOOD AND COAL	MISCELLANEOUS
BROWNS FARM		34	32	6	36	68	65	3	15	185	10	51	21	125	45	0	0	0	0
% OF TOTAL SITE ACTIVITY		1.99	1.87	0.35	2.1	3.97	3.8	0.18	0.88	10.8	0.58	2.98	1.23	7.31	2.63	0	0	0	0
DELFT SOUTH		52	22	1	10	16	38	5	4	181	7	17	11	36	3	0	2	4	0
% OF TOTAL SITE ACTIVITY		5.76	2.44	0.11	1.11	1.77	4.21	0.55	0.44	20.1	0.78	1.88	1.22	3.99	0.33	0	0.22	0.44	0
IMIZAMO YETHU		10	5	12	4	5	13	6	2	77	10	26	8	55	8	1	0	0	2
% OF TOTAL IMIZAMO YETHU ACTIVITY		1.67	0.83	2	0.67	0.83	2.17	1	0.33	12.9	1.67	4.34	1.34	9.18	1.34	0.17	0	0	0.33
SWEET HOME FARM		3	4	2	4	18	11	2	3	56	1	11	1	19	12	0	0	1	0
% OF TOTAL SWEET HOME FARM ACTIVITY		0.75	1	0.5	1	4.49	2.74	0.5	0.75	14	0.25	2.74	0.25	4.74	2.99	0	0	0.25	0
VRYGROND		39	9	1	4	10	35	1	1	140	11	11	6	18	3	0	0	6	1
% OF TOTAL VRYGROND ACTIVITY		5.91	1.36	0.15	0.61	1.52	5.3	0.15	0.15	21.2	1.67	1.67	0.91	2.73	0.45	0	0	0.91	0.15
TOTAL		138	72	22	58	117	162	17	25	639	39	116	47	253	71	1	2	11	3

Table 8: Micro-enterprise frequency: proportion per category / site

SITE		AGRICULTURE	APPLIANCE REPAIR	ART AND CRAFT	BUILDING SERVICES	BUSINESS SERVICES	CAR WASH	COMMUNITY SERVICE	DRUG DEALER	EDUCARE	ENTERTAINMENT SERVICE	GREEN GROCER	HAIR CARE	HEALTH SERVICES	HOME MAINTENANCE SERVICES	HOUSE SHOP	LIQUOR SALES	MEAT, POULTRY & FISH RETAIL	
BROWNS FARM PER 100 HHs		0.07	0.15	0.01	0.27	0.2	0.15	0.04	0.06	0.29	0.05	0.5	0.92	0.34	0	1.6	2.06	0.37	
BROWNS FARM PER 1000		0.24	0.53	0.02	0.93	0.67	0.53	0.14	0.19	1	0.17	1.72	3.15	1.17	0	5.47	7.04	1.27	
DELFT SOUTH PER 100 HHs		0.06	0.05	0	0.19	0.15	0.05	0.07	0.07	0.28	0.26	0.19	0.56	0.04	0	1.16	1.06	0.15	
DELFT SOUTH PER 1000		0.16	0.14	0	0.51	0.39	0.14	0.19	0.19	0.74	0.69	0.49	1.46	0.12	0	3.03	2.78	0.39	
IMIZAMO YETHU PER 100 HHs		0	0.12	0.07	0.15	0.12	0.08	0	0.03	0.17	0.12	0.07	0.73	0.38	0	0.76	3.04	0.07	
IMIZAMO YETHU PER 1000		0	0.45	0.26	0.58	0.45	0.32	0	0.13	0.64	0.45	0.26	2.83	1.48	0	2.96	11.8	0.26	
SWEET HOME FARM PER 100 HHs		0.16	0.12	0	0.19	0	0.03	0	0.16	0.19	0.22	0.4	0.37	0.37	0	1.15	3.46	0.78	
SWEET HOME FARM PER 1000		0.64	0.51	0	0.77	0	0.13	0	0.64	0.77	0.89	1.66	1.53	1.53	0	4.72	14.2	3.19	
VRGROND PER 100 HHs		0.15	0.21	0	0.21	0.24	0.05	0.05	0.26	0.38	0.15	0.2	0.44	0.23	0	0.74	1.99	0.21	
VRGROND PER 1000		0.4	0.56	0	0.56	0.63	0.12	0.12	0.67	0.99	0.4	0.52	1.15	0.6	0	1.94	5.24	0.56	
SITE		MECHANICAL SERVICES	MICRO-MANUFACTURE	PERSONAL SERVICES	PHONES	RECYCLING	RELIGIOUS SERVICES	RESTAURANTS	SHOE REPAIR	GROCERY RETAIL (SPAZA)	SPECIALIST STORE	STREET TRADE	TAILOR	TAKEAWAYS	TRANSPORT SERVICES	TUCK SHOP	WHOLESALE	WOOD AND COAL	MISCELLANEOUS
BROWNS FARM PER 100 HHs		0.24	0.22	0.04	0.25	0.47	0.45	0.02	0.1	1.29	0.07	0.36	0.15	0.87	0.31	0	0	0	0
BROWNS FARM PER 1000		0.81	0.76	0.14	0.86	1.62	1.55	0.07	0.36	4.42	0.24	1.22	0.5	2.98	1.07	0	0	0	0
DELFT SOUTH PER 100 HHs		0.46	0.19	0.01	0.09	0.14	0.34	0.04	0.04	1.6	0.06	0.15	0.1	0.32	0.03	0	0.02	0.04	0
DELFT SOUTH PER 1000		1.2	0.51	0.02	0.23	0.37	0.88	0.12	0.09	4.19	0.16	0.39	0.25	0.83	0.07	0	0.05	0.09	0
IMIZAMO YETHU PER 100 HHs		0.17	0.08	0.2	0.07	0.08	0.22	0.1	0.03	1.28	0.17	0.43	0.13	0.91	0.13	0.02	0	0	0.03
IMIZAMO YETHU PER 1000		0.64	0.32	0.77	0.26	0.32	0.84	0.39	0.13	4.95	0.64	1.67	0.51	3.54	0.51	0.06	0	0	0.13
SWEET HOME FARM PER 100 HHs		0.09	0.12	0.06	0.12	0.56	0.34	0.06	0.09	1.74	0.03	0.34	0.03	0.59	0.37	0	0	0.03	0
SWEET HOME FARM PER 1000		0.38	0.51	0.26	0.51	2.3	1.4	0.26	0.38	7.14	0.13	1.4	0.13	2.42	1.53	0	0	0.13	0
VRGROND PER 100 HHs		0.59	0.14	0.02	0.06	0.15	0.53	0.02	0.02	2.11	0.17	0.17	0.09	0.27	0.05	0	0	0.09	0.02
VRGOND PER 1000		1.55	0.36	0.04	0.16	0.4	1.39	0.04	0.04	5.56	0.44	0.44	0.24	0.71	0.12	0	0	0.24	0.04

Chart 1: Percentage of enterprise types per site

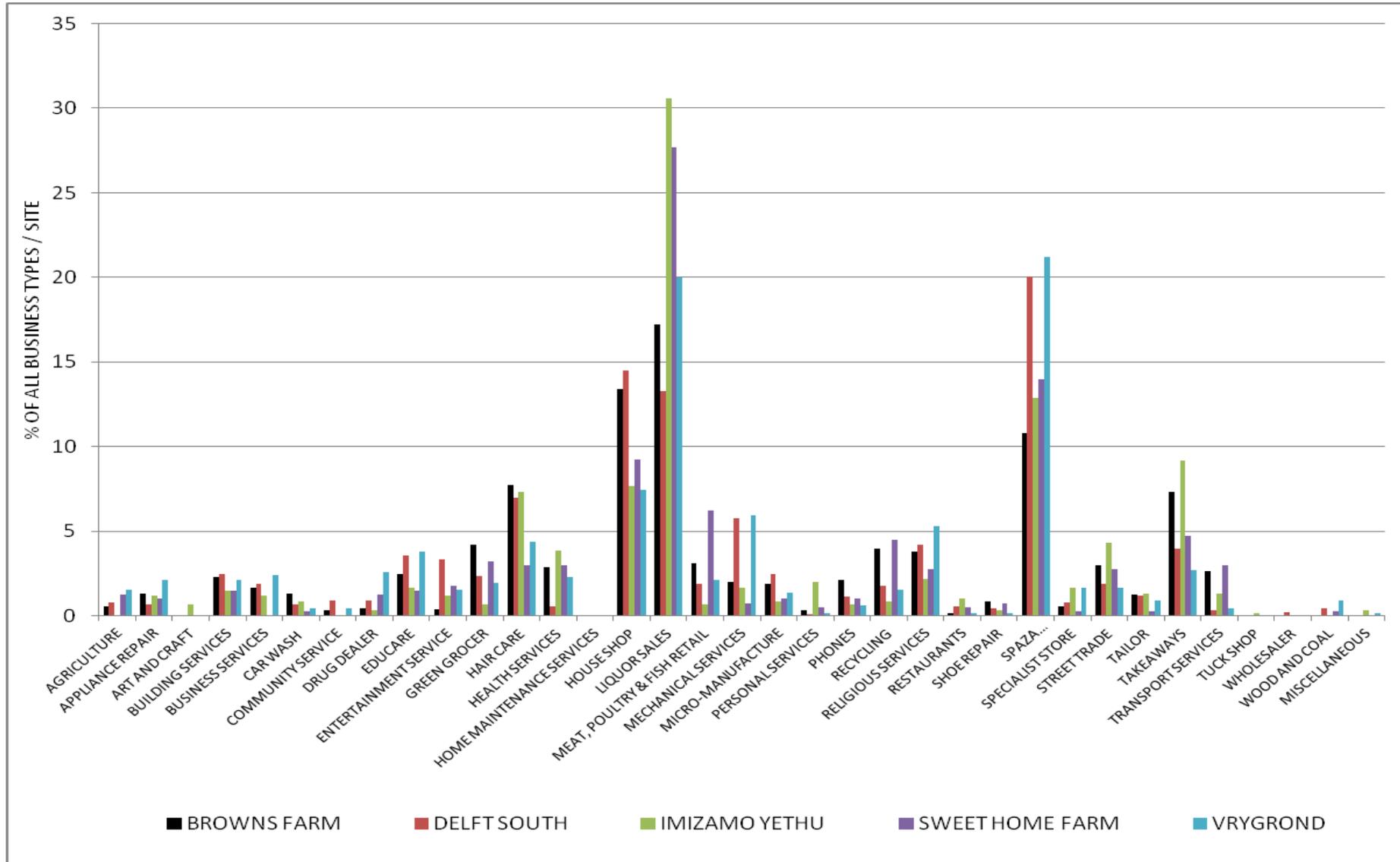
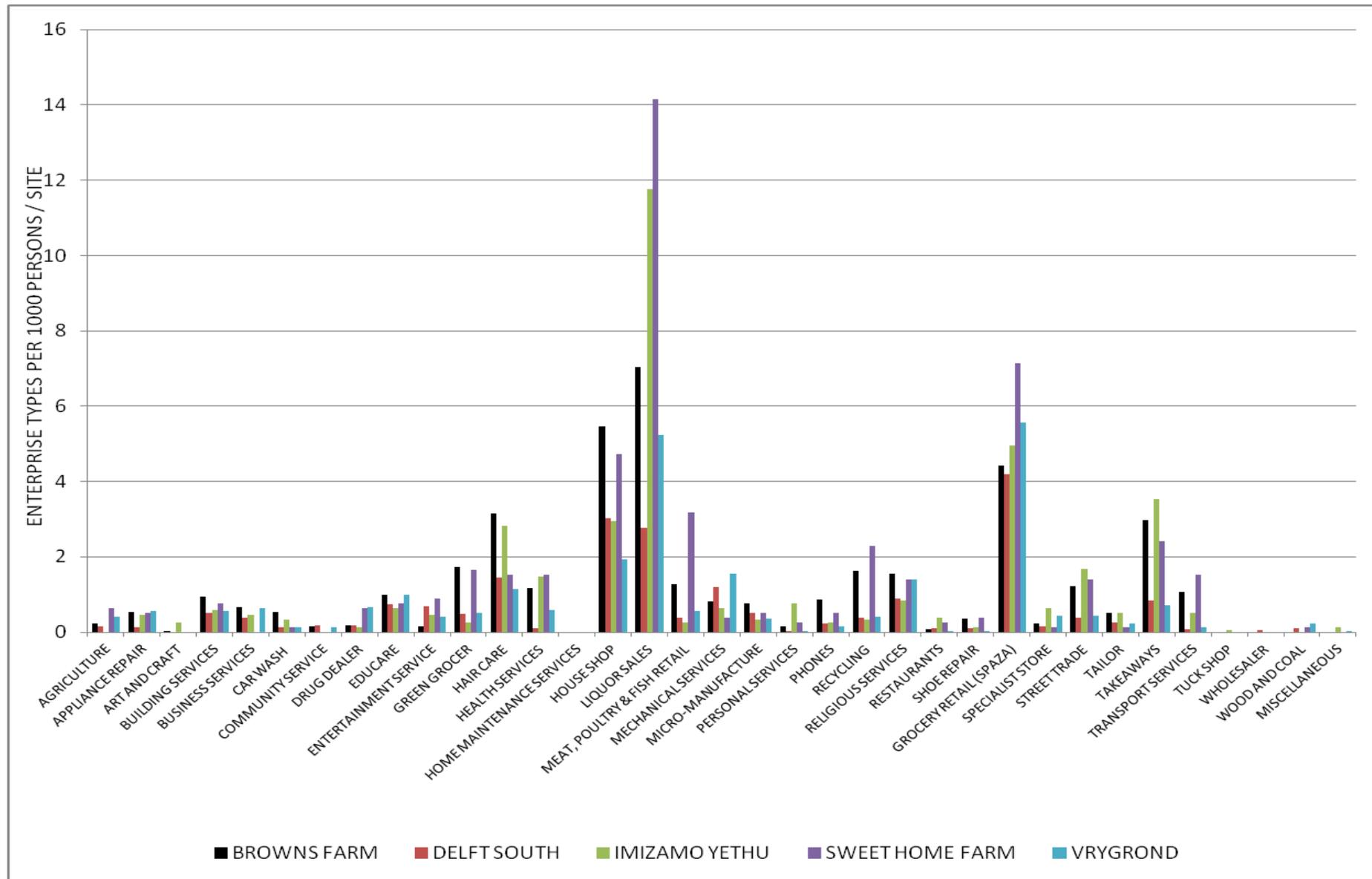


Chart 2: Proportion of enterprises per 1000 people



Whilst liquor retailers, grocery businesses house shops predominate in all sites, the research identified subtle variations across sites. The patterns and variations are shown through a comparison of the data on micro-enterprise numbers per business category (**Table 7**), against the proportion of micro-enterprises per 100 HH and 1000 people per business type (**Table 8**). The data is further expressed in **Chart 1**, which shows the percentage of enterprise type of all identified businesses in each site and **Chart 2**, which shows the relative proportion of enterprise type per 1000 persons for each site. In the analysis below, we have chosen to focus on enterprises per 1000 people due to the wider variation in the data (and the role of household size, as discussed above).

In terms of enterprise numbers per site, there is a strong degree of regularity in the frequency of type distribution across sites. Whilst majority of enterprise types account for less than 3% of micro-enterprise activity, liquor, spaza and houses hops as we have mentioned are most frequent. Informal settlements have a particularly high concentration of liquor retail businesses (up to 1/3rd of all enterprises), whilst spaza shops account about 1/5th of micro-enterprise activities in formal settlements, such as Delft South where we found 4.9 shops per 1000 people, but down to roughly 13% of all enterprise activities in the informal settlements.

Chart 2 (and Table 8) shows the dominant features of the enterprise distribution in terms of the proportional data (per 1000 persons). In the case of liquor retail, which similarly overshadows business activities in most sites, there are between 2.78 and 14.2 micro-enterprises per 1000 people, which in the case of the informal settlements amounts to 14.2 businesses per 1000 people in Sweet Home Farm and 11.8 businesses per 1000 people in Imizamo Yethu. The pattern of businesses in Delft South, as an outlier in the case of liquor retailing, shows that there is merely 2.78 per 1000 people (1.06 per 100 households). The comparatively lower incidence of liquor retailing in Delft South is probably attributable to several factors, including (a) a relatively high number of licenced venues known as Taverns (n=18), (b) comparatively more widespread evidence of drug use and sales (excluding marijuana which is widely sold in informal settlements), (c) anti-alcohol position of Muslim residents (source: field notes).

Hair Care businesses, the fourth most numerous category within the total dataset, are important and fairly numerous (>5%) in Browns Farm (3.15 per 1000 people) and Imizamo Yethu (2.83 per 1000), but less frequent in the settlements of Sweet Home Farm (1.53 per 1000) and Delft (1.46 per 1000) and Vrygrond (1.15 per 1000). This outcome is possibly a reflection of income levels in the Delft South Case, whilst in Vrygrond it might reflect the particular migrant dynamics, dominated by men working in low skilled sectors (gardeners and construction workers). The relatively high number of hair care businesses in Imizamo Yethu (2.83 per 1000 people), a proportion only exceeded in Browns Farm, is partially reflective of the high levels of income within the settlement with many immigrants operating these micro-enterprises and serving an immigrant client base with relatively higher income (deduced from field observations and informal discussions) and employed in comparatively higher skills jobs (e.g. restaurants and domestic work).

In the case of take-away food micro-enterprises, the fifth most dominant type in the dataset, businesses in this category are most numerous as a percentage of business activity in the three sites with the highest levels of informal settlement: Browns Farm (7.31% or 2.98 business per 1000 people), Imizamo Yethu (9.18% or 0.91 per 1000), and Sweet Home Farm (4.74% or 2.42 per 1000 people). As a result of the poverty constrained living conditions in informal settlements, where

households do not have direct access to water, for example, we observe that people tend to purchase food as and when required, either from spaza shops or take-away stands. The situation in both Vrygrond (Overcome Heights) and Imizamo Yethu are not fundamentally different, though the lower presence of take-away businesses (in Vrygrond, only 2.73% of all business types or 0.71% per 1000 people) may relate to the closer proximity of these sites to formal shopping malls where people can purchase food and fast food. In the case of Imizamo Yethu, the nearby availability of food outside the township may also have influenced the comparatively low intensity of trade in fruit and vegetables (n= 0.67% of business activity in the site or 0.26 per 1000 persons) and also low intensity of trade in meat, poultry and fish (n=0.67% of business activity) or 0.26 per 1000 persons. The comparative figures in Browns Farm site, for example, is that green grocer businesses account for 4.21% of all business types (or 1.72 per 1000 people) whilst meat, poultry and fish sellers account for 3.1% of all types (or 1.27 per 1000 people).

Within the dataset there are several anomalies, dissimilarities and diversity, when comparing enterprise categories across the five sites.

- The Delft South and Vrygrond sites displays a relatively low level of enterprise activity in the proportional ranking, due in part to lower levels of identified businesses in the big three categories, yet has higher levels of business in certain service categories. Building services, for example, comprise 2.44% of all enterprise types in Delft, a greater share than all sites, though proportionally lower than the number of business services per 1000 people in all other sites.
- In the case of appliance repair and educare services, Vrygrond has the greatest number of enterprises in these categories as a percentage of all activities (2.12% and 3.79% respectively) as well as the highest proportion of these business per 1000 people (0.56 and 0.99).
- Trade in meat, poultry and fish emerges strongly in Sweet Home Farm, where businesses in this category equate to 6.23% of all enterprise types and where there are 3.2 traders of these products for every 1000 persons. This result is partially an outcome of the concentration of sellers of live birds (chicken) at the intersection of the spine roads that border the site. It should be noted that many of the traders occupying this site are not resident within Sweet Home Farm but operate from this location as a result of the localities' status as a market at which one can purchase live birds.
- Mechanical services are important businesses in both Delft South (5.76% of business types / 1.2 for every 1000 persons) and Vrygrond (5.91% of business types / 1.55 for every 1000 persons) – compared to 0.81 per 1000 in Browns Farm, 0.64 in Imizamo Yethu, and 0.38 in Sweet Home Farm. This result can be attributed to two considerations: first, the formal characteristics of these settlements wherein households are accessible to vehicles and, in Delft, a sizable number of houses having off-street parking; second, the demographic compositions of the settlements wherein artisanal skills are seemingly more prevalent amongst the coloured population (based on field observation).
- Delft and Vrygrond also have comparatively higher levels of religious businesses which account for 4.21% of all business types in the former and 5.3% of all business types in the latter. This finding possibly reflects the comparatively heterogeneous nature of the settlement (Imizamo Yethu is also heterogeneous, though many religious services are not situated within the site – field observation) and the place of religion in reinforcing cultural identity. Within Vrygrond, moreover, the high number of religious service enterprises partly reflects a higher intensity of missionary activity and support services.

There are some notable 'outliers' across the sites.

- In Vrygrond, the research team identified significant drug dens (n=17 or 2.58% of business activities), which equate to 0.67 per 1000 people (0.26 business per 100 households). This finding corroborates our comments above on the influence of the drug economy.
- Within this settlement more broadly, and especially within the informal settlement of Overcome Heights, the researchers identified considerable health services businesses that included traditional healers. The characteristics of these particular enterprises as well as their spatial position are detailed in Petersen *et. al.* (2014: 8). The various enterprises in the health service category in Vrygrond comprised 2.27% of all businesses across the site. In support of the findings of Petersen, the research found a comparatively higher level of health services in informal settlements, such as Sweet Home Farm (1.53 per 1000 people) than in the formal and demographically heterogeneous settlement of Delft South (0.12 per 1000 people).
- Micro-enterprises engaged in recycling were identified in all five sites; the highest number in Browns Farm, though their significance is greatest in Sweet Home Farm where recycling accounts for 4.49% of all business types (2.3 per 1000 people). Much of the recycling entails the 'cleaning' of building rubble and resale of used bricks, slabs and tiles. The researcher learnt from interviews with the entrepreneurs that the 'old' clay bricks which they recycled from rubble are in strong demand for use in building renovations.
- The data on transport services should be viewed with caution because some of the enterprise that would have been classed within this category could not be identified during the course of the field research. So the data only reflects those businesses that were operating within the site. The result for Browns Farm and Sweet Home Farm, 2.63% and 2.99% of all enterprise types or 1.07 and 1.53 business per 1000 people respectively, reflects on the importance of the infamous informal taxis known as 'amaphela' (coach roaches) that operate in these communities.

The research found low levels of micro-enterprises (both in relative and proportional terms) in several categories across all sites; these were agriculture, art and craft, car washes, personal services, restaurants, shoe repair, tailoring and wood and coal sales. There were no businesses identified in the category home maintenance, though the researchers have come across such business activities in other sites (in Tembisa and KwaMashu). Similarly the researchers identified very few tuckshops. This is a category used to describe business situated at a transitional point between house shop and spaza shop and particular evident in Gauteng townships. Tuck shops are characterised by small shacks positioned either on the street itself or within properties on the street frontage. The position of the tuckshop in the five sites is fulfilled by house shops, notably in Delft South, Vrygrond and the formally established portion of Browns Farm.

Across all sites, a sub-set of micro-enterprise activities (within the 32 categories that were identified in two or more sites) dominate numerically and proportionately in a pattern that is fairly consistent in all five sites. The variation within this pattern is influenced by settlement characteristics (formal compared to informal housing) and socio-cultural factors. Outside of this sub-set, patterns are less evident. Site-specific histories, social dynamics, and logistical factors, generate variance in the presence and scope of different types of businesses.

5.2 Spatial analysis: the dynamic of ‘high street versus residential area’

Field observations and visual analysis of the spatial maps indicated a distinction and contrast between the businesses that dominated residential localities (i.e. neighbourhood streets) and the businesses that dominated the ‘high street’ environment. In the five sites, we defined the ‘high streets’ as comprising (a) arterial roads (i.e. the roads that feed into mobility roads which carry inter-regional traffic) and (b) major activity streets (i.e. roads where mobility is compromised in favour of activities). We excluded all local residential streets (Class 5 in the Functional Road Classification). In the informal settlements, where formal roads do not exist, we classified roads according to their functional use.

Having identified high streets in each site, the number of businesses / type situated on the high street was extracted from the dataset and the relative proportion of the each category was analysed. The outcome is presented in **Table 9**, which includes the percentage of the category per site. **Chart 3** shows number of high street businesses per 1000 persons per site.

The quantitative data reveals that the high street sustains a very different composition and scale of enterprise distribution in each of the sites in comparison to the overall distribution discussed above (compare **Chart 2**). A general pattern is consistent across four of the five sites, with the exception of the Vrygrond site where the position of the high street is not substantially supported by transport networks and there are very low levels of activity along the major road systems bounding the site (the M5 and Military Road – these are mobility spines) (observational finding based on an examination of the map). As a consequence the level of high street business positioning (all types considered) is significantly lower in Vrygrond than in the other sites. In Brown Farm 25% of all enterprises are situated on the high street, a result that is comparative to Delft South (25%), Imizamo Yethu (26%) and Sweet Home Farm (20%), whereas in Vrygrond 11% of all enterprises are situated in high street localities. A similar low distribution of enterprise activity along the high street is observable in Browns Farm along the Landsdowne road boundary.

These findings indicate that micro-enterprises do not (or cannot due to law enforcement action) trade along a road system with high volume or high speed vehicle traffic. The small street network in Sweet Home Farm (there are three main activity streets and four local residential streets) and the limited scope of its coverage potentially skews the findings in that site towards higher levels of high street activity especially with respect to liquor and grocery retail.

In terms of enterprise numbers and shares, the most frequently occurring businesses on the high street are i) hair care services (54% of category across all sites; n=152), ii) grocery retail (spaza shops) (18% of category across all sites, n=117), iii) food takeaways (36% of category across all sites, n=91), iv) liquor sales (9% of category across all sites) and v) house shops (13% of category across all sites). Of all these business types, only hair care businesses are predominantly high street located (54% on the high street).

The data strongly indicates that liquor sales (91% residential), grocery retail (72% residential) and house shops (87% residential), as well as takeaway food businesses (64% residential), are predominantly residentially situated businesses that serve geographically localised niches, a point

we have argued in previous works that utilised the survey data (Charman, Petersen and Piper, 2012 and Charman, Petersen and Piper, 2013). The pattern holds true across the five sites. In Imizamo Yethu and Sweet Home Farm – sites where street infrastructure does not extend throughout the area due to the informal settlement dynamics – a relatively high (but still minority) 29% of grocery shops / spazas are situated on the high streets (which are indeed the only streets into the informal settlement portion). The minimal street infrastructure has little bearing on liquor retail in these sites with the great majority of such business situated away from the high streets, i.e. in residential areas (thereby corresponding to the other sites in this regard).

The high street is an important location for green grocers in four sites. High street green grocers comprised 43% of the category in Browns Farm, 57% in Delft South, 100% in Imizamo Yethu (though absolute numbers are small) and 54% in Sweet Home Farm. In contrast, in Vrygrond only 1 of the 13 green grocers traded from a high street location.

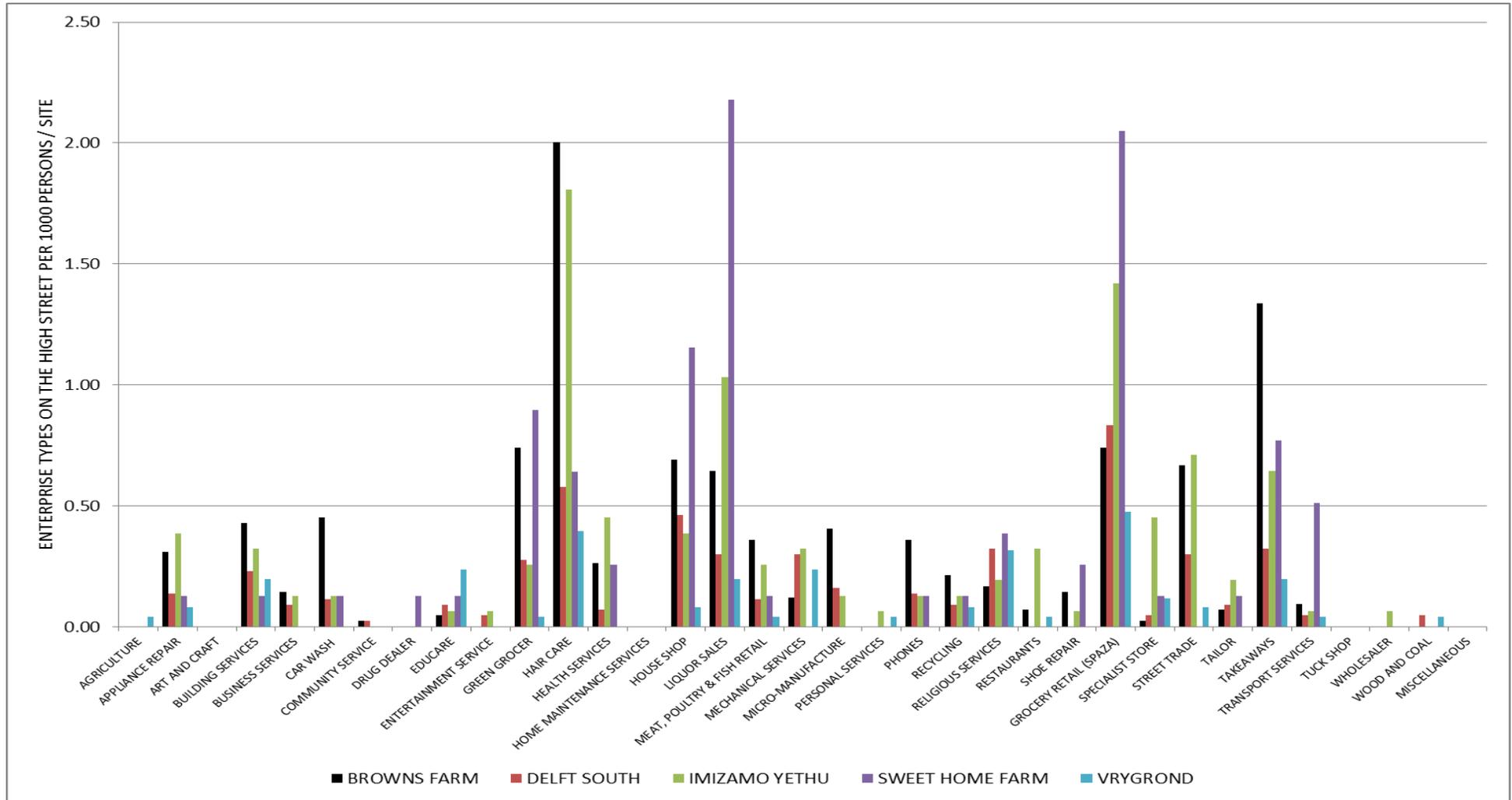
The high street is evidently an important location for service businesses. Among appliance repair businesses, building services and public phones, the categories are strong represented on the high street in Browns Farm (59% appliance repair (the majority), 46% building services and 44% public phones), Delft South (100% appliance repair, 45% building service sand 60% public phones) and Imizamo Yethu (85% appliance repair, 56% building services and 50% public phones). It is not unsurprising that the high street is a particularly important location for car wash businesses (73% of the category) and restaurants (53% of the category) as the high street provides an accessible location to a broader market.

Yet, the relatively low category percentage of business services (18%), specialist stores (36%), shoe repairs (36%) and tailors (23%) highlights some of the limitations of the high street as a business space. Our observations from the field indicate that factors that may influence this positioning include a shortage of affordable business premises, home-based considerations (for example child care), and poorly developed marketing strategies with many businesses in these categories being reliant on word-of-mouth marketing (source: field research interviews). Also to be found on the high streets are specialist shops, selling for example electrical goods, homeware, clothing, jewellery and financial service providers. In the course of the research we observed that high street businesses undergo daily cycles of peaks and troughs, becoming most active and animated during the surge of wage-earning workers to public transport in the early morning and their return home again in the late afternoon.

Table 9: Number and proportion of enterprises located on the high street

SITE	TOTAL NUMBER OF HIGH STREET	AGRICULTURE	APPLIANCE REPAIR	ART AND CRAFT	BUILDING SERVICES	BUSINESS SERVICES	CAR WASH	COMMUNITY SERVICE	DRUG DEALER	EDUCARE	ENTERTAINMENT SERVICE	GREEN GROCER	HAIR CARE	HEALTH SERVICES	HOME MAINTENANCE SERVICES	HOUSE SHOP	LIQUOR SALES	MEAT, POULTRY & FISH RETAIL	TOTAL
BROWNS FARM HS NOS.	441	0	13	0	18	6	19	1	0	2	0	31	84	11	0	29	27	15	256
% BROWNS FARM TYPE HS		0	59	0	46	21	86	17	0	5	0	43	64	22		13	9	28	
DELFT SOUTH HS NOS.	227	0	6	0	10	4	5	1	0	4	2	12	25	3	0	20	13	5	110
% DELFT SOUTH TYPE HS		0	100		45	24	83	13	0	13	7	57	40	60		15	11	29	
IMIZAMO YETHU HS NOS.	158	0	6	0	5	2	2	0	0	1	1	4	28	7	0	6	16	4	82
% OF IMIZAMO TYPE HS			86	0	56	29	40		0	10	14	100	64	30		13	9	100	
SWEET HOME FARM HS NOS.	81	0	1	0	1	0	1	0	1	1	0	7	5	2	0	9	17	1	46
% OF SWEET HOME FARM TYPE HS		0	25		17		100		20	17	0	54	42	17		24	15	11	
VRYGROND HS NOS.	75	1	2	0	5	0	0	0	0	6	0	1	10	0	0	2	5	1	33
% OF VRYGROND TYPE HS		10	14		36	0	0	0	0	24	0	8	34	0		4	4	7	
TOTAL HIGH STREET	982	1	28	0	39	12	27	2	1	14	3	55	152	23	0	66	78	26	527
TOTAL SECTOR	4273	32	53	5	90	68	37	17	40	115	61	119	280	104	0	492	841	97	2451
HIGH STREET % OF CATEGORY		3	53	0	43	18	73	12	3	12	5	46	54	22	0	13	9	27	
SITE	MECHANICAL SERVICES	MICRO-MANUFACTURE	PERSONAL SERVICES	PHONES	RECYCLING	RELIGIOUS SERVICES	RESTAURANTS	SHOE REPAIR	GROCERY RETAIL (SPAZA)	SPECIALIST STORE	STREET TRADE	TAILOR	TAKEAWAYS	TRANSPORT SERVICES	TUCK SHOP	WHOLESALE	WOOD AND COAL	MISCELLANEOUS	TOTAL
BROWNS FARM HS NOS.	5	17	0	15	9	7	3	6	31	1	28	3	56	4	0	0	0	0	185
% OF BROWNS FARM TYPE HS	15	53	0	42	13	11	100	40	17	10	55	14	45	9					
DELFT SOUTH HS NOS.	13	7	0	6	4	14	0	0	36	2	13	4	14	2	0	0	2	0	117
% OF DELFT SOUTH TYPE HS	25	32	0	60	25	37	0	0	20	29	76	36	39	67		0	50		
IMIZAMO YETHU HS NOS.	5	2	1	2	2	3	5	1	22	7	11	3	10	1	0	1	0	0	76
% IMIZAMO YETH TYPE HS.	50	40	8	50	40	23	83	50	29	70	42	38	18	13	0			0	
SWEET HOME FARM HS NOS.	0	0	0	1	1	3	0	2	16	1	0	1	6	4	0	0	0	0	35
% OF SWEET HOME FARM TYPE HS	0	0	0	25	6	27	0	67	29	100	0	100	32	33			0		
VRYGROND HS NOS.	6	0	1	0	2	8	1	0	12	3	2	0	5	1	0	0	1	0	42
% OF VRYGROND TYPE HS	15	0	100	0	20	23	100	0	9	27	18	0	28	33			17	0	
TOTAL HIGH STREET	29	26	2	24	18	35	9	9	117	14	54	11	91	12	0	1	3	0	455
TOTAL SECTOR	138	72	22	58	117	162	17	25	639	39	145	47	253	71	1	2	11	3	1822
HIGH STREET % OF CATEGORY	21	36	9	41	15	22	53	36	18	36	37	23	36	17	0	50	27	0	

Chart 3: Enterprise types situated on the high street per 1000 persons / site



5.3 Particular spatial dynamics

5.3.1 Liquor retailers, spaza shops and house shops

This positioning of spaza shops, liquor retailers, and house shops, largely away from the high street and in residential locations, suggests the existence of a highly localised demand for grocery items and alcoholic beverages. It is apparent that these retail businesses draw on customers residing in close walking distance to their homes. In this way home-based micro-enterprises, notably those selling uniform products such as groceries or liquor but also green grocers, appear to exploit a positional comparative advantage over their competitors. The positional advantage was illustrated in the case of houses hops in Delft South that sell home-made ice lollies, known as boompies, a popular item among children especially in Summer. Whilst the quality of the boompies varies significantly (source: field researcher taste testing), residents tend to support the nearest business that sells boompies. Children, who are the main consumers, are discouraged from going outside of their neighbourhood street to purchase these lollies.

In the spaza sector, this advantage applies under circumstances of minimal price competition where the time and convenience advantage from shopping at the nearest shop outweighs potential savings from seeking out the cheapest shop situated outside the immediate neighbourhood. Our examination of the price of South African spaza shop owners within the dataset confirms that price competition is not widely used amongst South African spaza shops – see Charman *et. al.* 2012). Through interviews with business owners we learnt that residentially located businesses provide important home-based work opportunities for persons unable to work away from home, such as women with dependent children. This finding also applies to some traditional medical practitioners (Dold and Cocks 2002).

In the case of liquor retail, the residential distribution of these businesses appears to reflect two factors in particular: first, the localised demand for liquor purchased in small quantities on an ‘on demand’ basis amongst residents living in close proximity to liquor traders; second, the need for a diversity of drinking venues, as mentioned in the case of Imizamo Yethu, where different cohorts (age, gender, nationality etc.) meet and socialise in leisure economy context that enhances their solidarity or group identity. As a result, multiple venues and outlets are able to occupy shared geographic markets without substantial competition. Micro-enterprises that sell liquor occupy different market niches (here used in the term of customer base and range of leisure services) through strategies such as providing credit, selling particular kinds of alcohol, offering particular genre of entertainment – and ‘door policies’ (entrance control) – to influence the client base (Charman, Petersen and Governder, 2014, drawing on the qualitative data from the dataset).

5.3.2 Infrastructure and space

Transport infrastructure clearly influences the location of street based micro-enterprises, notably where the infrastructure sustains pedestrian traffic. This is evident at, for example, Philippi train station and entrance roads thereto, as well as along Delft main road, where public infrastructure and taxi services attract high volumes of pedestrian movement. In contrast, roads that serve primarily as conduits for motor vehicles do not enable intensive micro-enterprise activity. In the slum context there are no roads, so other factors are at play. Constraints of space impose a restriction on business

growth, affecting the type of business that people operate – for example, business that require storage and physical space are constrained in these areas.

There is visual evidence of clustering amongst businesses that are engaged in the same type of activity in specific locations such as transport interchanges and trading places situated on open land. The researchers found clustering amongst businesses selling traditional medicine, take-away food shops and car washers, as well as street traders that serve the commuter market by selling fruit and vegetables, cigarettes and sweets. Another example is live-chicken retailers, situated along Lansdowne Road close to the Sweet Home Farm site, where clustering has evolved in response to their proximity to formal business – the informal traders benefit from the economic linkages with neighbouring meat wholesalers and broiler farms.

6. Conclusions

This paper set out to explore four issues. Firstly, it sought to examine to what extent a small-area research approach, replicated in five sites, adds value to current understanding of the South African informal economy and micro-enterprise activities. Second, on the basis of such a research approach and outcome, it sought to provide an original insight into the question of the scope and scale of micro-enterprise activities in the township context, comparing sites of different demographic, settlement and socio-economic characteristics. Thirdly, it sought to examine the spatial distribution of micro-enterprises to see whether there were particular trends and characteristics within sites and across sites as well as in particular business contexts (such as the high street). Fourthly, it sought to consider the influence of variables such as settlement history, housing type and settlement structure as well as demographic profile on the (absolute and relative) frequency and spatial distribution of micro-enterprises.

6.1 Question one

The research draws on the SLF micro-enterprise census data from a small-area based survey of informal businesses in five sites within the Cape Town metro region. The total SLF dataset includes quantitative enterprise-level data as well as qualitative data obtained through interviews, systematic observations, informal conversations and photographs. In this paper our analysis of enterprise scope, scale and spatial distribution utilises the small-area census component, the spatial presentation of the data in maps and their analysis using GIS tool, and qualitative data in the form of field notes, interviews and observations. We do not, in this paper, delve into the qualitative survey results from the enterprise level interviews, but it must be noted that the data has the potential to answer questions about the nature of entrepreneurship and business dynamics in the particular sectors researched.

The small-area research approach seeks to address the knowledge gap on the informal sector and township economy that falls between national surveys such as the QLFS and small-scale, sector-specific case studies. In this way the research sought to generate new systematic insights into the township informal economy as well as to provide a better understanding of the *spatial dynamics* of micro-enterprise distribution and location in urban township areas – something that national surveys cannot do. The method does link up with national survey data since the research sites correlate to sub-place boundaries of the National Population Census 2011 sites. This enables us to

use accurate Census data on population demographics, household income and settlement dynamics in each site. This was used in the analysis, for example, to compare enterprise distribution in sites by a measure of population (businesses per 1000 persons) and household numbers (businesses per 100 households). The quantitative research also benefits from typical qualitative, case-study type elements. The data-gathering process, which involved extensive field research, permitted the researchers to re-examine and complement quantitative findings with qualitative insights obtained from systematic observations, discussions and participatory action-learning research. Thus there is an element of mixed methods in this research, which adds significant insight and credibility to the findings.

Accordingly, the research outcome makes a substantial contribution to area-level knowledge of the informal sector economy in several respects. First, the data provides a different perspective on the range and frequency of business types in a township context, in particular in sites with varying demographic and settlement characteristics. Compared to national surveys such as the QLFS or SESE, it shows that at the area level the micro-enterprise distribution can deviate substantially from the national (or average) picture. In these sites there is little evidence, for instance, of micro-enterprises engaged in financial services or construction. Our approach has an advantage over national studies in that it permits a much finer categorisation of micro-enterprises at settlement level. The results provide a more fine-grained and nuanced picture of what work people actually do in the informal economy. This brings to prominence the possible underreporting of shop/sales workers as well as possibly higher levels of activity in certain sectors (such as hair care, electrical and mechanical repairs). In addition, the research was able to identify particular enterprise types that hold significance in certain contexts, i.e. certain micro-enterprise patterns may be linked to settlement characteristics. Second, the geographically-informed approach enables the researchers to examine spatial dynamics and compare the position of businesses within sites, including apparently common patterns as well as contrasts between sites.

The knowledge gained from the research approach is potentially valuable for policy makers who are grappling with the challenge of township economic development. It highlights which businesses (sectors) have established markets, or the locations that give particular businesses the greatest likelihood of operating successfully (such as hair salons along the high street). By illustrating, for example, the futility of restricting residential-based businesses, the findings can add value to debates on how the state can or cannot regulate informal businesses

6.2 Question two

For all five sites combined, the research identified 4273 business activities, equating to a rate of 32 business per 1000 people and 10 businesses per 100 households.

The highest rate of informal micro-enterprise activity was recorded in Sweet Home Farm, an informal settlement with the lowest absolute employment and an income distribution skewed towards low household earnings. Indeed, the results indicate that there are higher rates of informal business activities in informal settlements (including Browns Farm and Imizamo Yethu with their comparatively sizable informal settlements) than in the (more) formally established settlements of Delft South and Vrygrond. The reasons are not only linked to formality, but include socio-cultural

influences and locational factors. The higher proportion of enterprise activities in informal settlements is linked to the greater incident of enterprise activities on public space (along the streets, on vacant land and so forth). The comparatively low level of enterprise activities in Delft South may be attributable to a combination of factors such as levels of high unemployment, spatial disconnection between the township and the job-market or formal shopping areas and the low incident of street based business possibly a result of crime and regulatory barriers to street trading in formal areas. In the case of Vrygrond, the provision of accommodation to African immigrants provides an important income stream to homeowners who rent out back-yard shacks. In discussions with local residents we learnt that income from property rental was regarded as more stable and providing higher income than running a micro-enterprises such as a house shop.

Micro-enterprise composition displays patterns that are broadly observable across all sites. Most township businesses respond to the consumption needs of the local population for food (groceries and takeaways), liquor, household necessities, airtime, hair care services and entertainment, whereas a much smaller proportion of businesses respond to home-improvement expenditure or manufacture furniture, goods and 'infrastructure' (such as burglar bars). The most common enterprises both absolutely and relatively are liquor traders, grocery retailers and house shops. These three types of business account for 46% of the micro-enterprises identified. The rate of occurrence of these three businesses types varies slightly according to site and settlement context, with liquor traders being more prevalent in informal settlements and spaza shops slightly more prevalent in relatively formalised settlements. (The relative frequency of liquor retail enterprises in each site cannot be attributed to the overall level of demand because most cater to niche markets.)

Next most significant are food take-away businesses and hair care businesses. The results indicate a relatively low rate of occurrence of street traders, though this result reflects the classification of enterprise types (according to business activity rather than location) and does not reflect the frequency of street based business in which the high street context was specifically examined. The street is an important site of business, both in the high street context (which we examined in detail, identifying 23% of business activities in this spatial setting) and in residential streets.

Amidst the patterns noted, there is considerable diversity across the five sites in the absolute and relative prevalent of certain business types, e.g. business services, green grocers, health services, recycling businesses and mechanical services. This variation is due to various factors, including specific settlement dynamics, proximity to formal businesses in commercial / industrial areas and city infrastructure (the Coastal landfill site in the case of Vrygrond) the infrastructure situation and demographic considerations such as cultural demand for traditional medicines. We noted that business distribution is uneven and falls dramatically in those portions of the sites where housing density decreases and the neighbourhood becomes more characteristically middle class (detached houses, high levels of vehicle ownership and so forth). This is noticeable in Eindhoven, the small neighbourhood of Vukuzenzele adjacent to Sweet Home Farm, the western part of Browns Farm and southern part of Seawinds).

Lastly, the researchers identified very few instances where a micro-enterprise exports products or services outside the township or indeed the settlement, though this finding might be attributable to methodological constraints. Apart from isolated case of businesses involved in furniture

manufacture, wendy house manufacture and welding, we were unable to determine the scope or scale of business activities that originate within our sites but were marketed / supplied to outside areas.

6.3 Question three

Our observation of spatial distribution (using maps tools) indicates that pattern of micro-enterprise distribution is broadly consistent across all five of the sites. First, there is a relatively even distribution within sites (amidst the observation, noted in section 6.2, that informal settlements display a higher occurrence rate of micro-enterprises than formal settlements. Secondly, liquor retailers and spaza shops are situated largely in residential localities – i.e. they are not dependent on, or restricted by, the effect of busy streets with much pedestrian or vehicular traffic (the high street effect) and prefer an 'equidistant' spatial positioning. Thirdly, there is a concentration of enterprises along 'high streets' relative to non-high streets (as well as residential areas), except on the outskirts of sites where streets have low flows of commuter movement and high flows of vehicle traffic. The high street comprised a more diverse and different mixture of enterprise type than found in residential contexts, with service businesses more prominent and grocery / liquor retail less important. Hair salons are predominately found in the high street context. Fourthly, in residential areas, the business mix largely comprises enterprises engaged in the provision of take-away foods, houseshops selling chips, sweets, cigarettes, ice-cream, cooldrinks, and meat, game shops, grocery shops (spaza shops), liquor traders and businesses involved in recycling. There are subtle variations between sites in residential businesses. In Delft South, for example, the research identified a considerable number of home based enterprises engaged in vehicle repairs where the garage or yard provided the business premise.

These observations were supported by an analysis of the disaggregated dataset. In Brown Farm 25% of all enterprises are situated on the high street, a proportion similar to that for Delft South (25%), Imizamo Yethu (26%) and Sweet Home Farm (20%); in Vrygrond merely 11% of all enterprises are situated in high street localities. Within the high street area, the most common businesses are hair care services (15%), grocery retailers (spaza shops) (12%), takeaways (9%), liquor sales (8%), house shops (8%) and green grocers (7%). Within each category, the significance of the high street verses residential localities can be seen: for example, 54% of all hair salons are situated on high streets, whereas merely 18% of grocery retailers, 9% of liquor traders and 13% of houseshops are situated on the high street. Of all micro-enterprises categories, car washes are the most commonly situated on the high street with 73% occupying high street business localities.

Whilst many liquor sellers, grocery retails and house shops do operate from high street positions – especially in informal settlements where these are the only places accessible to cars and major pedestrian movement – their significance on the high street is much less than in the residential context where liquor and grocery businesses dominate in absolute and relative terms. Particular kinds of service business, notable hair care, are more likely to be suited on the high street than in residential localities.

The enterprise survey data (which we have analysed in separate studies) can help us understand why grocery retailers (spaza shops) and liquor traders are predominately situated in residential

areas. These businesses operate within highly localised markets, serving the neighbourhood. For this reason, the businesses are characteristically position equidistant away from each other with each business commanding a geographic comparative advantage. In the case of liquor traders, niche segments within these geographically restricted markets permit a range of businesses to operate in close geographic proximity, each catering to a different client base and thus securing a segment of the market. This finding is well illustrated in the high frequency of liquor retailers in the informal settlements of the case sites.

6.4 Question four

We have argued that the research approach permits a more sensitive consideration of the influences of settlement, infrastructure and demography. Our small-area census data indicates that these variables do influence business frequency as well as intensity (rate of occurrence), as evidenced in the relatively higher rates of economic activity in informal settlements in contrast to formal settlements. We have also seen how particular businesses, such as car repair services, are more prominent in settlements with formal housing and higher income. We are also able to show, in the case of Imizamo Yethu, for example, how the combination of local employment opportunities, an efficient transport network and a migrant population largely residing in rental units results in a distribution of micro-enterprises dominated by an economy of leisure activities (bars, taverns, nightclubs) and take-away food. In a separate study, we have shown how transport nodes and particular street dynamics aid business opportunities through providing access to an important market (pedestrians).

There are limits, nevertheless, to what the business census data can tell us about the influence of settlement, infrastructure, location and demography. These factors influence different businesses sectors in different ways. We have gained some insights through firm level interviews with key sectors (spaza shops, liquor traders, educare, traditional healers, and hair salons). Our next task is to examine the quantitative data and qualitative data looking to understand these influences. This will be explored in a separate paper.

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