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SUPERMARKETS
AND INFORMAL
FOOD VENDORS IN
WINDHOEK, NAMIBIA

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Abstract

Much of the literature on urban food systems has focused on the expansion of supermarkets and their ability to reach urban consumers. However, the current pace of urbanization and rising urban poverty have been accompanied by a major upsurge in informality and a growing role for the informal food sector. One of the persistent arguments in the literature on supermarkets is that the expansion of modern retail undermines the informal food sector. Critics of this argument suggest that there are two conditions under which this may not occur: first, when there is spatial differentiation with supermarkets servicing higher income areas and the informal sector targeting low-income areas. The second is when there is market segmentation – when the formal and informal sectors focus on the sale of different product types. This paper examines the case of Windhoek, Namibia, which has undergone a major supermarket revolution in the last two decades. It suggests that the informal food sector is vibrant and growing but that neither explanation fully accounts for its resilience. By examining the strategies of vendors, it suggests the concept of cohabitation as an alternative explanation. This concept may be a pertinent factor in other cities too.

Keywords

informal food sector, urban food system, supermarket revolution, food security, urbanization, Windhoek

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Introduction

Rapid urbanization in Africa has been accompanied by a major transformation in national and local food systems (Battersby and Watson 2019, Crush and Battersby 2016, Frayne et al 2018, Tacoli 2017). Reardon and colleagues argue that this transformation is being driven by a “supermarket revolution” that involved progressively greater control over food supply and marketing by international and local supermarket companies (Reardon and Berdegue 2002, Reardon et al 2003, 2004, Weatherspoon and Reardon 2003). Proponents of the model argue that the revolution has proceeded in waves and that the domination of supermarkets over food systems in the Global North will inevitably diffuse to Africa. The first wave occurred in larger cities and richer countries in North America, Europe, some Latin American countries, and South Africa in the 1980s and 1990s. The second occurred from the mid-1990s onwards in Southeast Asia, Central America, and Mexico. The third occurred in the late 1990s and early 2000s in countries such as China, Vietnam, India, and Russia. Africa outside South Africa is seen as part of the fourth wave of the revolution (Altenberg et al 2016, Dakora 2012).

According to the model, the spread and domination of supermarkets is not only inevitable but means that other forms of food retail come under severe competitive pressure (Reardon and Hopkins 2006). Without protective measures, supermarkets will eventually displace and eliminate the informal food sector, destroying livelihoods and increasing unemployment in the process. Kennedy et al (2004: 1), for example, argue that “competition for a market share of food purchase tends to intensify with entry into the system of ... large multinational fast food and supermarket chains. The losers tend to be small local agents and traditional food markets.” Reardon and Gulati (2008: 17) similarly assert that “the mirror image of the spread of supermarkets is the decline of the traditional retail sector.”

One of the reasons for the increasing domination of supermarkets is their ability to utilize economies of

scale and undercut small retailers by offering lower prices to consumers (Minten et al 2010). Minten and Reardon (2008) review food pricing evidence from several countries and argue that supermarkets have an immediate price advantage for processed food. Over time they begin to charge lower prices than traditional markets for fresh produce as well. Banwell et al (2012) suggest that in Thailand, supermarkets are driving out small fresh produce providers, while Gorton et al (2011) found that consumers prefer supermarkets over wet markets on virtually every indicator. The competitive advantage of the latter in the supply of fresh produce is thus in decline (Kelly et al 2015). In Zambia, Miller (2008) notes that “informal sector producers have often experienced displacement in local markets for basic foodstuffs.” Louw et al (2007: 25) argue that in South Africa there is “strong evidence that the informal sector is losing significant market share as a result of the encroachment of supermarkets into the territories occupied by the informal sector.”

This paper tests these arguments about the destructive impact of supermarket expansion on other food retailers including informal markets and vendors. The first section of the paper examines various empirical studies from around the world that call the inevitable-destruction argument into question. Because the evidence for informal food sector survival and resilience is ambiguous and contradictory, it may be that the answer is context-specific. In that event, further case studies are needed to build a more general knowledge base from which to derive policy lessons for the informal food sector (Skinner and Haysom 2017, Skinner and Watson 2017, Skinner 2019). The Windhoek (Namibia) case is relevant because of the overwhelming presence of supermarkets throughout the city and, simultaneously, an important informal food sector. Neither of the current models of informal sector survival – spatial differentiation and market segmentation – fully explain the Windhoek situation. This paper therefore proposes an alternate cohabitation explanation to account for the resilience of the informal food sector.

Inside the Revolution

Critics of the supermarket revolution in Africa have questioned its supposed inevitability, the lack of attention to the obstacles confronting supermarket supply chains, and the potentially disruptive impact of supermarkets on traditional forms of retail (Abrahams 2010, 2011, Crush and Frayne 2018a, Humphrey 2007, Vink 2013, Skinner 2019). Minten (2008), for example, argues that supermarkets target higher income rather than poor consumers in Madagascar and therefore “it seems unlikely that global retail chains will further increase their food retail share in such poor settings.” Madevu et al (2007) found that supermarkets in Tshwane, South Africa, have had a major impact on corner stores and greengrocers but that the informal sector has been more resilient. Supermarkets dominate high-income areas and informal vendors continue to dominate low-income areas. Abrahams (2007) makes a similar argument about informal sector resilience in Johannesburg.

The argument that supermarkets and the informal food sector are spatially differentiated and serve clientele in different parts of the city is a plausible explanation for why the informal food sector might survive and thrive, provided that supermarkets stay out of low-income areas of a city. Berger and van Helvoirt (2018: 12), for example, argue that in Nairobi, Kenya, supermarkets “increase food access mainly for the higher income – and already food secure – consumers in the city, while the poor and food insecure are largely excluded from patronizing supermarkets and rely on the informal market.” However, this argument for spatial differentiation starts to break down if supermarkets begin to target lower-income consumers in poorer areas of the city, as has been happening in many South African cities (Battersby and Peyton 2016, Caesar and Crush 2016). A snapshot of the food purchasing habits of over 6,000 poor households in 11 African cities conducted by AFSUN in 2007–2008 found that nearly 80% shopped at supermarkets while 70% patronized the informal food sector. At the very least, this suggests that many low-income

households patronize both (Crush and Frayne 2018). There was considerable inter-city variation in levels of supermarket patronage, however, from a high of 97% in Msunduzi and Windhoek to a low of 16% in Lusaka. The greater the overall level of supermarket patronage, the lower the level of informal sector patronage (and vice-versa).

Empirical evidence from other parts of the world suggests alternative explanations for the resilience of informal and small-scale retail in the face of rapid supermarket expansion. In Brazil, for example, Farina et al (2005) show that “different formats of retail stores live together in the Brazilian market, compete for consumer preference and, at the same time, complement each other.” While small retailers are more expensive, consumers are willing to pay more for the convenience they offer and also benefit from the lower transport costs involved in accessing their services. In Taiwan, Huang et al (2015) demonstrate that the social interactions offered by informal vendors are critical for customer satisfaction and create a positive incentive for patronage. Schipmann and Qaim (2011: 359) compare supermarkets and wet markets in Thailand and find that “the rapid expansion of modern retailers seems to be more associated with the growth of high-quality, differentiated market segments rather than a direct competition for traditional market shares.” Similarly, Si et al (2016) find that in Nanjing, China, wet markets are the preferred source of fresh produce while supermarkets dominate the market for processed foods.

The concept of differentiated market segments also helps explain why supermarkets will not necessarily undermine the informal food sector. In addition, Suryadarma et al (2010) argue in Indonesia that the decline of numbers and profitability of traditional market retailers should not automatically be attributed to the rapid expansion of supermarkets. Rather, the main causes of decline are that “traditional markets are plagued with internal problems and face increasingly bitter competition from street vendors” (Suryadarma et al 2010: 79). This observation highlights an important point with general applicability: the informal food sector is not an

undifferentiated whole and competition between different types of food vendor need to be factored into any explanation of decline.

In the African case, the disintegration of spatial differentiation accompanying supermarket intrusion into low-income areas does not automatically mean the end of differentiated market segmentation. Peyton et al (2015: 26) suggest that, in Cape Town, supermarket expansion is “often incompatible with the consumption strategies of the poorest households.” Poor households patronize informal vendors because they are able to buy food on credit, purchase small quantities on a daily basis, and access street vendors and spazas on foot within residential areas and at transportation hubs (Battersby et al 2016). Not only are formal sector wholesalers and markets major suppliers of products to the informal sector, but mobile vendors source produce at supermarkets and cluster near supermarkets in order to take advantage of their customer base. How effective these strategies are in the long run and whether the informal food sector is able to survive and grow are unresolved questions. In addition, competition with supermarkets is far from the only challenge facing informal food sector businesses. The national and municipal policy environment is a key enabler or inhibitor. While policies oscillate between “benign neglect” and “active destruction” (Crush et al 2017), examples of active support and encouragement are rare (Skinner 2019).

Informal Food in Windhoek

Nickanor et al (2017) give a detailed account of the Namibian supermarket revolution and South African supermarket expansion in Windhoek. There are 25 South African-owned supermarkets (from all the major supermarket chains), six supermarkets owned by the local chain Woermann Brock (WB Supermarkets), and 12 independently owned local supermarkets (Table 1) in the city. Although there is at least one supermarket in every constituency, they tend to be concentrated in higher-income areas (Table 2). Some budget supermarkets, including WB Supermarkets and Shoprite’s USave subsidiary, are located closer to the poorer informal settlements towards the north of the city (Figure 1).

Although there have been several small-area case studies of Windhoek’s informal sector (Amwele 2013, Kambwale et al 2015, Nickanor 2014, Seibes-Bock 2004), there has been no comprehensive census of the informal food sector. National-level statistics indicate rapid informal sector growth, increasing from 64,502 employees in 2008 to 450,075 in 2016. According to the 2016 Labour Force Survey, two-thirds of employed people in the country were in informal employment and nearly 60% (around 240,000) were in urban areas (NSA 2017). The recent Namibia Informal Economy case study interviewed 4,506 “own-account” enterprises around the country, of which 1,084 were

TABLE 1: Number of supermarkets in Windhoek, 2016

	No.	%
South African-owned		
Shoprite/Checkers/USave	10	23.3
Pick n Pay	4	9.3
Spar	4	9.3
Woolworths	2	4.7
Massmart-Walmart (Game)	2	4.7
Fruit & Veg City (Food Lover’s Market)	3	7.0
Namibian-owned		
WB Supermarkets	6	14.0
Independent	12	27.7
Total	43	100.0
Source: Company annual reports, 2016		

FIGURE 1: Spatial Distribution of Supermarkets

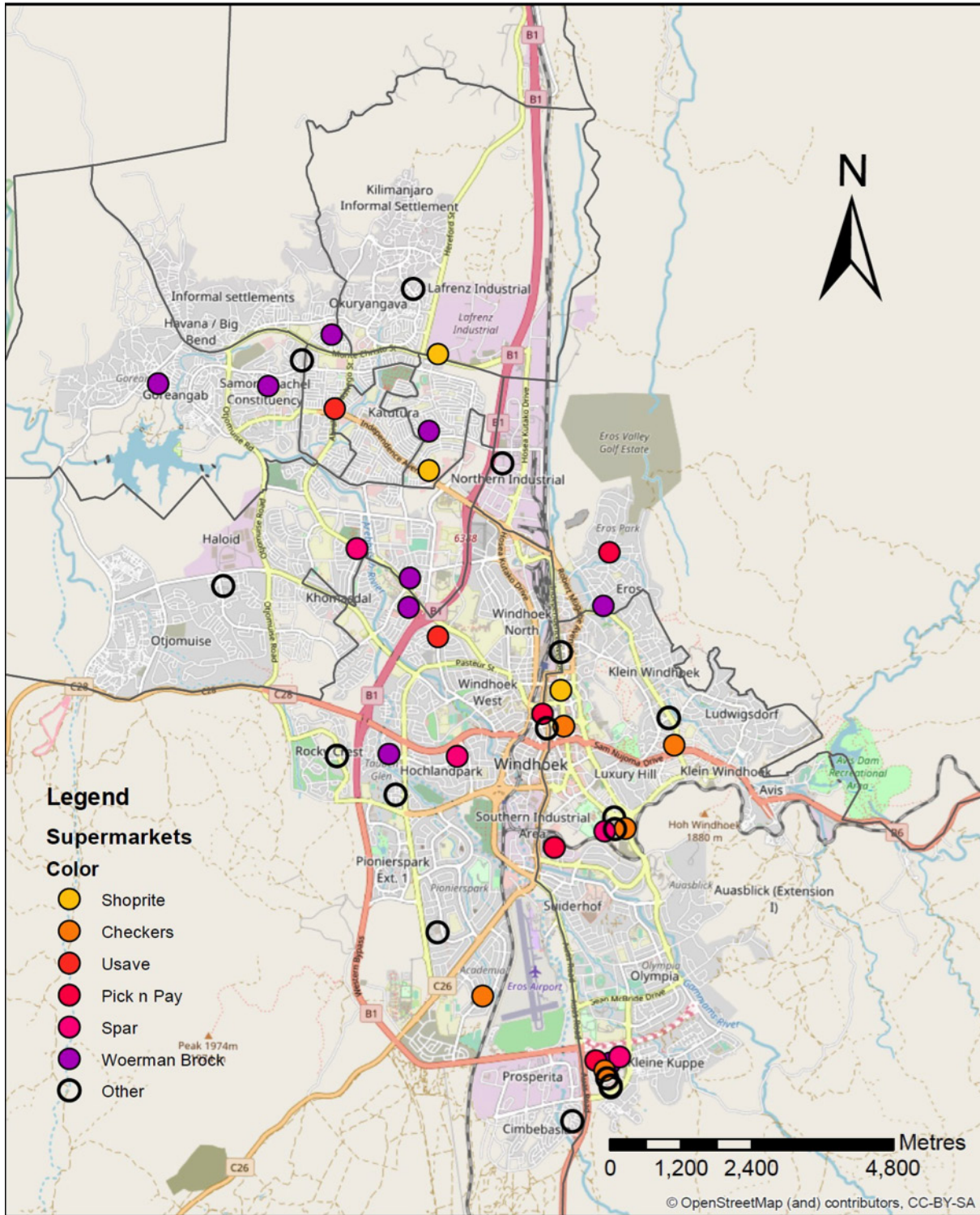


TABLE 2: Location of Corporate Supermarkets by Constituency

	Total	% Poor/severely poor*
Windhoek East	12	0.0
Windhoek West	9	0.0
John Pandeni	1	4.3
Katutura East	2	4.5
Katutura Central	1	8.3
Khomasdal	1	14.7
Samora Machel	1	37.5
Tobias Hainyeko	1	36.1
Moses Garoeb	1	77.8
Total		100.0

*Based on 2016 NSA-NHIES poverty indicators

in the urban section of Khomas region (in which Windhoek is located) (Government of Namibia 2017). Nationally, 54% of enterprises were engaged in wholesale and retail trade (including selling fruit and vegetables, *kapana*, and other types of food service activities). Most (62%) enterprises were established between 2010 and 2016. Close to half had been in operation for more than five years.

The informal food sector is concentrated spatially in the centre and north of the city and consists of four main types of vendor: food vending stands, mobile vendors, tuck shops, and market stalls. Food vending stands are located both outside and inside houses, near workplaces (especially government offices and hospitals), at loading zones for long distance bus routes, and close to open markets. Some stalls are more permanent (including mobile caravans) while others are makeshift structures covered with umbrellas or cardboard boxes, or a simple table or plastic crate covered with a shade net. Clusters of stands are known as informal markets. These stands primarily sell fruit and vegetables, *matangara* (cooked offal), traditional meals (with mopane worms and dried spinach), fresh or cooked chicken, and processed foodstuffs such as carbonated drinks, chips/crisps and sweets/candies. Home cooked meals prepared on site or at home include *mahangu pap*, rice, pasta, potato salad, chicken stew, beef stew, *kapana*, *oshinghali* (mashed cow peas), macaroni salad, butternut, and cabbage.

The City of Windhoek has attempted to improve the operating environment for informal food vendors by constructing 10 “open markets” where vendors pay a fee in exchange for a stall or a space. These open markets are located in low-income areas of the city. In the average open market there are a variety of registered and unregistered traders selling products such as dry food ingredients, cooked food, *kapana*, and fresh meat, together with clothing, shoe repair and hairdressing stalls.

Mobile vendors include young men selling fish door to door, women following construction sites and selling cooked food to workers (beef stew, *matangara*, *vetkoekies*, *mahangu pap*, and *oshikundu*), and some who sell their produce from the back of vehicles. Tuck shops, located mainly in the informal settlements, are small fixed structures selling a range of processed snacks and fresh produce. Scattered among the tuck shops are numerous informal liquor outlets.

This paper is based on two main sources of data on the informal food sector collected by the Department of Statistics and Population Studies at the University of Namibia through the African Food Security Urban Network (AFSUN) and Hungry Cities Partnership (HCP). First, a citywide survey of 875 households was conducted in 2016. The survey collected a wide range of demographic, economic, food sourcing, and purchasing behaviour data at the household level, including patronage

of supermarkets and informal vendors. Second, 20 in-depth interviews were conducted with informal vendors selling food at different locations in different formats.

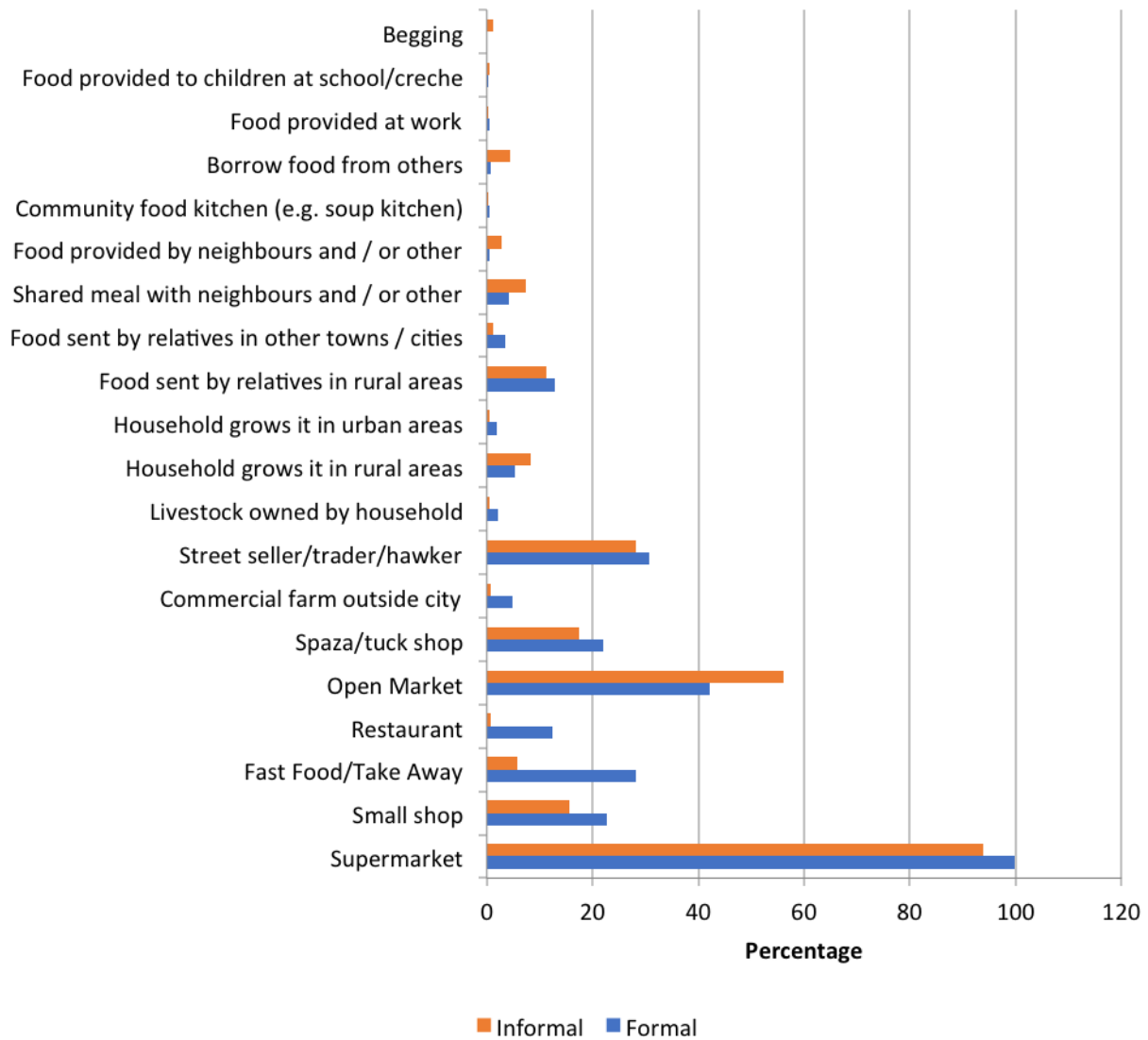
Household Food Sourcing

Most households in Windhoek obtain food by purchasing it. Urban agriculture is very limited, but poorer households do receive informal food transfers from rural areas (Frayne 2005). As Figure 2 shows, nearly all households in formal (99%) and

informal (94%) housing areas had sourced some of their food from supermarkets in the month prior to the survey. The second most important source was open markets, where 56% of the informal and 42% of the formal housing households had sourced food. Next were street vendors, patronized by 28% of informal and 31% of formal housing households. Finally, the tuck shops were patronized by 18% and 22% of informal and formal housing households respectively.

The frequency of patronage of supermarkets and informal vendors varies considerably. Table 3 shows that two-thirds of households only shop at

FIGURE 2: Household Sources of Food in Previous Month



supermarkets once per month and only 20% do so more frequently. In stark contrast are patronage patterns of the informal food sector. Open markets are patronized weekly or daily by 63% of households. The equivalent figure for street vendors is 83% and for tuck shops 92%. Street vendors and tuck shops are patronized daily by around half of their customers. These very different patronage frequencies suggest that supermarkets and the informal sector may be serving very different household food needs. The Hungry Cities Food Purchases Matrix (HCFPM) allows further investigation of this hypothesis (Crush and McCordic 2017).

The HCFPM shows the preferred source for 30 different food items. Clear differences in sourcing emerge for a number of individual foodstuffs. For example, over 90% of households purchase cereal staples at supermarkets. Bread is the only exception with supermarkets sharing the market with open market vendors, formal sector bakeries, and small shops. Supermarkets also dominate the purchasing of frozen and fresh foods. However, other sources have a significant market share of offal (62%), fish (54%), meat (39%), and vegetables (23%). They also share the market for junk food (snacks, sweets, chocolates) and cooked food.

TABLE 3: Frequency of sourcing food across retail outlets (%)

	% of households that patronize outlet	Frequency of purchase from the source (%)				
		At least five days a week	At least once a week	At least once a month	At least once in six months	At least once a year
Supermarket	96.5	4.5	16.5	65.7	12.4	0.8
Open market	49.8	17.6	46.2	19.5	16.2	0.5
Street vendors	29.2	49.8	33.7	6.8	9.6	0.0
Spaza/tuck shop	19.4	50.9	41.2	7.3	0.6	0.0

TABLE 4: Patronage patterns for individual food items

	% Normally buying at supermarkets	% Normally buying at other outlets
Staples		
Maize meal	96.0	4.0
Bread	53.5	46.5
Rice	99.4	0.6
Pasta	99.6	0.4
Fresh produce		
Meat	61.1	38.9
Vegetables	77.5	22.5
Fish	46.0	54.0
Milk	96.9	3.1
Eggs	93.1	6.9
Fruit	91.1	8.9
Offal	38.1	61.9
Chicken	84.5	15.5
Frozen produce		
Chicken	95.7	4.3
Meat	93.3	6.7
Fish	80.0	20.0
Cooked food		
Pies/vetkoek	53.0	47.0
Meat	51.1	48.9
Chicken	62.5	37.5
Fish	64.0	36.0

Processed food		
Cooking oil	94.6	5.4
Sugar	94.7	5.3
Tea/coffee	96.8	3.2
Butter/margarine	99.6	0.4
Pop/soda/cooldrinks	81.2	19.8
Fruit juice	97.7	2.3
Sour milk/omaere	95.4	4.6
Snacks (crisps etc.)	66.3	32.7
Sweets/chocolate	57.0	43.0
Canned vegetables	100.0	0.0
Canned meat	95.3	4.7
Canned fruit	100.0	0.0

Food Vendors on Cohabitation

The data therefore suggests that there areas of market domination by supermarkets and areas of significant competition between the formal and informal food sectors, especially for fresh produce, cooked food, and “junk food”. The sale of indigenous wild foods (cooked or uncooked) is outside the realm of competition because supermarkets do not stock these products. This section addresses the question of whether informal sector food vendors perceive supermarkets as a threat to their businesses and livelihoods. Some complained about the negative impact of competition from supermarkets including loss of customers, and declining revenue and profits:

I do not really feel happy about the ever-growing supermarkets in our area. These shops are providing competition for me and my profit has decreased over the past months. Here we are only remaining with those customers that are not able to go buy at these shops or we can only get customers after hours when the shops are closed (Interview No. 8).

Competition from supermarkets is always there. I can give you an example of stuff that can go without selling if there is a special in supermarkets. My milk I sell at NAD19.50 but will reduce whether there is a sale in town or not. Like in shops now, it is NAD13 so I don't do business like I always do (Interview No. 9).

It is not a good thing at all, because us that are selling in streets near these shops are losing customers. Yes, they are giving me competition. The supermarkets have affected my business in a way that if my prices are high, then people just go buy in supermarkets instead (Interview No. 17).

It is a bad thing. Most of our customers are now going to these shops instead of buying from the stalls here. Now we are no longer getting customers in the open market like in the past (Interview No. 18).

Another noted that the loss of customers to supermarkets meant that they often faced problems with spoilage of unsold goods. Alternatively, they reduced their prices to avoid financial loss:

People from this area always going to shop from supermarkets if they find out that I do not sell the goods that they are looking for. These shops are giving us difficulties in selling our goods sometimes. Most of the time people buy from the supermarkets on their way from work and end up not buying from our stands. I throw away all foods that I am not able to sell when they are spoiled. Sometimes I reduce the prices of the foods that I am not able to sell over a long period to avoid making a loss for that particular month (Interview No. 11).

Others did not see supermarkets as threatening or even relevant to their operations. One reason was that their customer base in the immediate vicinity was large and supermarkets were far away:

The increase in supermarkets does not affect my business because there are a lot of people here. Like for example, these 20 loaves of bread will be stocked up today, when people are knocking off work, and as they pass by on their way home (Interview No. 3).

These foods are in demand in this area and the shops from where people can buy their daily needs are far away. People in this area always find it convenient to buy from the stalls alongside the road (Interview No. 14).

These supermarkets do not give me competition since they operate from far. My business is not directly affected because I am just targeting school children and households in this street and nearby streets (Interview No. 7).

Others noted that they specialized in the sale of products that were not available for purchase in supermarkets:

Supermarkets are not giving me competition at all, since I am only selling cooked (food) and those that are not able to buy in supermarkets buy their lunch from me (Interview No. 16).

The products I sell are traditional dry food (which varies depending on the season), mahangu flour, beans, chilli, salt, sorghum flour, omutete, ombidi, spices, mopane worms, dry fish, moringa, capenta. You need to have stock and it's not easy to source traditional food; it's not as if you can find them in a market (Interview No. 2).

As consumers, these vendors welcomed the presence and accessibility of supermarkets. As small business operators, they were able to compete either because of locational convenience or because they were selling food not available in supermarkets or both. Others thought that the presence of supermarkets was a good thing for their businesses, in part because they brought additional custom:

The expansion of supermarkets is good for competition, and is needed in business. In our location there is need for a food place. There is no big shop here

and you have to take a taxi if you need to go to Shoprite (Interview No. 5).

It is actually a good thing that there are more supermarkets now. The supermarkets are not giving me any competition at all, even their own employees come buy from me. If there was a competition, I would not be having supermarkets' employees as my customers. They don't affect my operations (Interview No.13).

I get more customers here compared to the area where I was operating from in January. Most people that are working in these shops and those that are working at construction sites nearby always come to buy from here since most of them complain of fast-food prices in the shops located in the malls (Interview No. 13)

These comments help explain why some street vendors locate their stalls close to supermarkets rather than, as might be expected, as far away as possible.

A striking feature of informal food vending in Windhoek is the price sensitivity. Mark-ups are small and vendors are constantly on the look-out for products with resale potential. One strategy they deploy is purchasing from a variety of outlets:

I source my products from Pick n Pay in Katutura, Spar in Khomasdahl, fish from Mama Fresh, millet from my mother in the north (50kg every two and a half months). Free-range chicken is from Single Quarters. Pick n Pay normally has fresh and clean products unlike Woermann Brock and Shoprite. You can also find most products in Pick n Pay (Interview No. 5).

Boerewors and meat I buy from Rand St Butchery in Khomasdal. I buy cool drinks from Metro or anywhere there is a sale. Coffee and tea from Pick n Pay, Spar or Metro depending on the price. These shops are cheaper and they are always having food items on sale (Interview No. 12).

It is cheaper to buy in bulk than buying single items. I buy my potatoes from a vendor in Okuryangava area opposite the clinic. They are cheaper

there and big compared to supermarkets. I buy my Russians (sausages) from a shop in Southern Industrial area. Russians are cheaper there. I buy Oros and sweets from Metro. It is close by and they are cheaper compared to buying from Food Lover's Market or Checkers (Interview No. 13).

I buy meat and cabbage from vendors in Monte Cristo road or in the open market. It is cheaper to buy from them than supermarkets. I buy macaronic, nik-naks, and sugar for Oshikundu and Otombo from Namica supermarket. I send my children to buy there while I am still here selling. The shop is also cheap. I buy Meme mahangu from Shoprite U-Save and sorghum from the open market in Okuryangava. U-Save and the open market are also at Stop n Shop area where I buy most of my goods. I buy macaroni, Meme mahangu, sugar, baking flour, yeast, soup, cooking oil. These goods are only found in supermarkets (Interview No. 15).

I only buy top score, 50 kilograms per month. When it is not enough, I add about 25 kilograms in the middle of the month. I also buy tinned fish and this I usually buy from Shoprite and Woermann. I do not buy fruits and vegetables because it is usually just seen as for people who have money. I go to the shop as frequent as I have the money to buy the top score and the tinned fish. The longest I take is two weeks to go back there. But for meats I have to do it a lot because we do not have means of refrigerating it (Interview No. 8).

These comments indicate that supermarkets are included in the spectrum of suppliers patronized. Many vendors strategically source produce at supermarkets, and take advantage of sales and price competition between different supermarkets:

I buy mainly in Shoprite, Pick n Pay, Checkers and sometimes in Spar because I check where there is a sale. The type of food I buy is mainly macaroni, rice, cooking oil, and meat (Interview No 1).

It is actually a good thing that there are more supermarkets now around Windhoek. This allows me to choose where I should go buy my products depending on the cost of the goods (Interview No. 7).

It is good that there are more supermarkets now. This gives us an opportunity to choose where we want to buy from. These supermarkets are not a competition to me. My only competitors are the unregistered vendors that come sell from here. Like at this braai site, there were only supposed to be three vendors (Interview No. 12).

Clearly, not all informal food vendors experience the supermarket revolution in the same way or respond to its challenges and opportunities in the same manner.

Conclusion

Windhoek's supermarket revolution is led by the major South African supermarket giants, predominantly through the development of shopping malls; a process that Battersby (2017) refers to as "mallification". This has not led to the demise of the informal food sector, as predicted by the supermarket revolution model, but has transformed it even as it has confined it to certain operating niches in the face of intense competition. The spread of supermarkets into the lower-income areas of the city means that the spatial differentiation argument for the survival of the informal food sector is increasingly irrelevant. There are parts of the city, especially in the informal far north, where the nearest supermarkets are some distance away and households still rely on tuck shops, food stalls, mobile vendors and informal and open markets for their daily and weekly food purchases. However, the situation is extremely fluid as new supermarkets are continuously expanding their reach into low-income areas.

A second explanation for the resilience of the informal food sector is market differentiation; that is, supermarkets and informal vendors tend to focus on the sale of a different range of products. Supermarkets in Windhoek have clearly cornered the retail consumer market for staple grains because of their ability to purchase, package, and sell in bulk. They also dominate the market for processed and frozen foods and some fresh produce such as fruit. Most of these products are imported from South

Africa and informal vendors find it difficult to compete (Emongor 2009; Nickanor et al. 2017). At the same time, there are product niches – particularly for wild foods, cooked food, and cheap meat such as offal – in which the informal sector thrives. However, if there is a market for a product, supermarkets will generally target it. Offal, for example, is increasingly sold in supermarkets located near low-income areas. In other words, there is some market differentiation but also areas of intense market competition especially for items such as meat, fish, bread, vegetables, and snacks.

The qualitative interviews provide insights into a third possible explanation for informal food sector resilience; what we refer to as cohabitation. That is, informal food vendors survive, and sometimes thrive, by taking advantage of the presence and proximity of supermarkets in at least two ways. First, shopping malls and their constituent supermarkets provide informal vendors operating nearby with a ready market in the form of their own (often low-paid) employees and mall customers. It is a common site in Windhoek to see informal vendors outside supermarkets, selling smaller quantities of goods or products that are unavailable on the inside. Second, because supermarkets are a primary source of produce for informal vendors for resale in other parts of the city, vendors are sensitive to price competition between supermarket chains and they take advantage of sales. Cohabitation strategies are clearly part of the explanation for informal food sector resilience in the context of supermarket revolutions and require further exploration in this and other cities.

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