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Urban Food Dynamics in Botswana: Insights from Gaborone's Central Business District

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Abstract

Urbanization is changing the circumstances, livelihoods and lifestyles of people in Southern Africa. In this context, little is known about food available to cities, food sources accessible to urban dwellers, or factors influencing food consumption. Applying a food systems conceptual frame, the paper provides empirical findings from Gaborone, Botswana characterizing urban food supply, documenting food sources, and examining consumer food choice. Engaging a qualitative, exploratory approach, the research reveals adequate supply and multi-faceted sources from which to acquire food in Gaborone's CBD, and consumer choices grounded in economic factors together with issues of social status and aesthetics. A number of fundamental issues and questions arise from this preliminary research relating to food policies and research agendas in the region. In particular greater attention to urbanization trends, foreign import strategies and food consumption practices is warranted.

Key words

Urban; Food; Botswana

Introduction

Africa is entering an urban age. Urbanization, according to the World Food Programme (2002) is perhaps the most dominant demographic process in recent decades. Population shifts from rural to urban settings bring with them changes in landscape, food dynamics and livelihoods, as well as unprecedented challenges in ensuring access to nutritious, affordable and appropriate foodstuffs for city dwellers. Africa's urban population reached 395 million or 40 percent of the total population in 2009, and is expected to reach 50 percent of total population by 2030 (UNCHS, 2009). Now is the time for researchers to ensure that proper information and understanding is put forward regarding urban life, and in particular issues related to food production, consumption and security. Currently, substantial attention has focused on rural-based agricultural production and food issues, and to some extent supply to urban centres. Preoccupation with farming system analysis and caloric availability means little is known regarding where people access food, how they do so, and why they make particular consumer choices in acquiring foodstuffs for themselves and their households in African cities. In short there is need for better understanding of food systems and food dynamics in urban Africa (Atkinson, 1995; Crush & Frayne, 2011a; Maxwell, 1999; Ruel et al., 2008) in order to achieve food security, defined as 'a situation that exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life' (FAO, 2002).

This paper focuses on the most urbanized sub-region on the continent, Southern Africa, and highlights Gaborone, Botswana given its rapidly urbanizing and urban-dominant population. More specifically, the paper features preliminary research on food dynamics within Gaborone's Central Business District (CBD) to complement and extend empirical findings generated through the African Food Security Urban Network (AFSUN) since 2008. AFSUN's baseline study of 6450 households across eleven Southern African cities reveals adequate food availability given that food supply in the region rests on 'a very well developed, highly sophisticated food marketing [and production] system ... and a well organised informal food marketing system.' (Crush & Frayne, 2011b, p. 782). Further, the AFSUN study suggests a broad range of formal and informal food access points for urban dwellers. Regional data reveal that the greatest proportion of surveyed households use supermarkets to access food (97 percent of Batswana respondents), as well as small shops/take away/restaurants (56 percent) and informal/street food (29 percent) (Crush & Frayne, 2010). Despite adequate food availability and access points, some 77 percent of Southern African respondents reported conditions of food insecurity, 80 percent face challenges from rising food prices, and issues of food inaccessibility and poor food quality are paramount (Frayne et al., 2010). In Botswana specifically, 400 households were surveyed from three Gaborone residential neighbourhoods, Old Naledi, Broadhurst and White City/Bontleng, with households ranging from low- to high-income. AFSUN results indicate that 82 percent of all Batswana respondents reported food insecurity with a strong correlation between poverty and food insecurity. Interestingly, while 43 percent of low income households reported food insecurity, some 34 percent and 23 percent of middle- and high-income respectively also reported food insecurity; 95 percent of households across all income levels reported poor dietary diversity resulting in unbalanced diets (Acquah, 2009).

The AFSUN study raises questions regarding urban food security in Gaborone, Botswana. If food is available and accessible to urban dwellers, and income level does not tell the whole story (given that a cross-section of Batswana residents reported food insecurity), what shapes people's reported food insecurity and dietary diversity? The goal of this research is to explore food availability, access and consumer choice in Gaborone's CBD as a way to contextualize urban food dynamics and relate such dynamics to food security issues in Botswana. It complements the AFSUN baseline study by offering an in-depth, qualitative exploration of how food 'works' in Gaborone, and extends geographical reach by focusing on the CBD as an additional mixed-residential, multi-functional area of the city. Gaborone itself may not be clearly representative of other cities in Botswana given that it is the largest and the capital, or in the region given its status as a medium-income centre. Nevertheless, the case study remains valuable for the insights and questions it raises regarding urban food security in Botswana, as well as Southern Africa more broadly.

The paper is organized as follows. It begins with a background section detailing urbanization processes and food dynamics in Southern Africa nations, including an overview of existing research on urban food issues in the region. It then provides a conceptual frame for investigating the urban food system and summarizes the methodological approach taken for the empirical study. The paper continues with three distinct sections of research findings: the first characterizes the nature of urban food supply in Botswana (availability); the second documents food sources available to residents of Gaborone (accessibility); and the third examines consumer choice in accessing these food sources (consumption). The paper concludes by summarizing these findings, identifying areas for future research, and offering food-for-thought for policy makers and planners committed to urban food security in Africa.

Urbanization & food in Southern Africa

Broad international recognition of food security challenges exist yet progress towards achieving a food secure population in Southern Africa is slow and complex. Global food prices erode gains made in national food production while population growth, urbanization and environmental changes exert pressure on available food supplies, food access and food consumption patterns (FAO, 2008; Maxwell, 1999). Recent food crisis in the region during 2007-2008 emerged from numerous factors, including rising oil prices, export restrictions, speculation, macro-economic imbalances, growing bio-fuel demand, changing diets in the developing world, and drought in food sourcing nations (Headey, 2011; Wodon & Zaman, 2010). Sub-Saharan Africa as a whole was significantly affected on account of increased dependency upon Asian cereal imports over the last three decades to feed national populations comprised largely of urban residents and net consumers (Bryceson, 2009; Wodon & Zaman, 2010). Daily existence of urban dwellers is increasingly tenuous given their reliance on cash income for food purchases, limited access to agricultural land, growing inequalities between social groups, and broad changes in lifestyle and consumption patterns (Ruel et al., 2008).

Urbanization has rapidly and substantially changed the circumstances, livelihoods and lifestyles of people in Southern Africa over the past few decades. With almost 40 percent (some 373 million people) of the population already living in cities, and forecasts predicting steady growth to 66 percent by 2050 (Frayne et al., 2010), the region is clearly entering an urban age. Botswana is no exception. Currently, some 60 percent of Batswana live in urban settlements, compared to 12 percent in 1975 (UNCHS, 2009). Long considered one of the fastest growing cities in Africa, the capital of Gaborone had a population of 186,007 in 2001, which increased to 228,166 in 2010 and is expected to approach 300,000 by 2021 (CSO, 2008). Gaborone receives disproportionately high in-migration in that it offers employment and academic opportunities, healthcare facilities, social services and 'modern' amenities. Further, poor agricultural returns, drought and low-level rural investment drive people from the rural areas to major cities (Hovorka 2004; Krüger, 1998). Natural population growth is also booming on account of permanent urban resident expansion. Batswana are increasingly city-centred with regular traditional commutes between villages, cattleposts, and ploughing fields, now including urban homesteads; urban-based employment is revered and socializing revolves around cinemas, restaurants and public spaces in the city.

Persistent urbanization trends, increased reliance on imported foodstuffs, as well as changes in cultural norms are influencing contemporary diets in Southern Africa (FAO, 2008; Maxwell, 1999). Urban growth in Africa has contributed to re-shaping food sourcing, particularly from local agricultural production to external supply networks, and food acquisition strategies, particularly from subsistence oriented to commercially purchased goods (Crush & Frayne 2009). Urban growth has also influenced supply of and demand for wheat-based products or convenience foods throughout the region (Drakakis-Smith, 1994; Johns & Sthapit, 2004). Changes in retail methods have meant new processing, preparation and storage regimes, facilitating broad distribution of food throughout cities and reshaping the urban landscape (Drakakis-Smith, 1997; Weatherspoon & Reardon 2003). Despite these shifts, little is known about how food 'works' in African cities and people's daily interactions with foodstuffs in cities are poorly understood.

Existing scholarship does offer some insights on urban food availability vis-à-vis rural-based farming and foreign imports. Specifically, improved food availability through technological advancement and seed varieties remains the dominant avenue for addressing Africa's food insecurity (Garrity et al., 2010; Godfray et al., 2010). Such measures are deemed appropriate for cities given the assumed flow of foodstuffs from rural to urban areas. Further, some scholarship claims urban bias of state-led efforts, which benefit urban consumers through import price controls (e.g. Moseley et al., 2010). In Southern Africa, governments made enormous political and economic efforts to achieve regional stability in grain production through both of these means with the hope of, in part, reaching urban residents who rely on market mechanisms for foodstuffs (Porter et al., 2007). Yet while food supply in the region is generally adequate, citizens do not have equal or universal access to sufficient food (Frayne et al., 2009); food accessibility has become a more prominent focal point than availability in recent scholarship.

Research investigating urban food accessibility in Southern Africa emerged in the late 1990s (e.g. Drakakis-Smith, 1997; Johns & Sthapit, 2004; Satterthwaite, 2000) focusing on the extent and effectiveness of urban food sources. Studies note, for example, grocery store expansion throughout the region over a sixty-year period (D'Haese & Van Huylenbroeck, 2005; Louw et al., 2007; Weatherspoon & Reardon, 2003). Factors contributing to this trend include trade liberalization and foreign direct investment, economic growth and positive political changes, urbanization dynamics, as well as increased household income and an enlarged middle-class (Emonger & Kirsten, 2009). The AFSUN study found that 79 percent of low-income households frequent grocery stores, especially to purchase large quantities of staple foods (Crush & Frayne, 2010). Grocery stores also offer greater variety of products, as well as ‘modern’ options for Africans including pre-packaged foods (Drakakis-Smith, 1994). Hawkers and street vendors also provide consistent sources of affordable nutrients to urban dwellers in terms of fruit, vegetables and meat products (Dierwechter, 2004; Horn 1995; Ohiokpehai, 2003). The AFSUN study reveals that 70 percent of low-income residents across Southern Africa access street foods and informal markets on a regular basis (Crush & Frayne, 2011b). Further, urban agriculture provides means of accessing and selling foodstuffs in Southern African cities (Frayne, 2004; Hovorka, 2004; Johns & Sthapit, 2004; Mbiba, 1994; Maxwell, 1995). Studies as early as the late 1980s and continuing throughout the 1990s and 2000s demonstrated clearly the impacts of household food production to urban livelihoods (e.g. Drescher, 1999; Mbiba, 1995; Rakodi, 1988; Rogerson, 1994; Sheldon, 1999). Recent research points to low participation rates in contemporary urban food production and little income generated from sale of home-produced food. This suggests that benefits from urban agriculture may not be as significant for Southern Africa today as in previous periods given rapid urbanization and resultant resource competition amongst urban dwellers for key inputs (Crush et al., 2011). Finally, rural remittances allow urban dwellers access to foodstuffs in village communities by maintaining personal farmsteads and rural plots (Flynn, 2005; Frayne, 2004; Rakodi, 1995; Smith, 1998).

Existing scholarship, therefore, offers numerous insights on urban food availability and accessibility. Few studies, however, examine how urban food sources may be accessed in relation to one another or provide insights on urban consumer patterns in terms of, for example, what food sources they target, at what times, for what foodstuffs, and why. Indeed urban consumption specifically remains a major gap in existing scholarship on food in Southern African cities. Further, research on urban food availability, accessibility and consumption remain compartmentalized without clear understanding of their connectivity within food systems.

Conceptual framework

This study applies a food systems approach as its conceptual framework (adapted from Bowler, 1992; Dolan & Humphrey, 2004; Gregory et al., 2005; Yu et al., 2010). Food systems involve dynamic interactions and activities between and within the biophysical and human environments that affect food production, processing, distribution, appropriation, preparation and consumption. Fluidity amongst system components means that, for example, consumer preferences determine production chains or distribution structures determine affordability rather than strict linearity between components (i.e. production to consumption). Food system outcomes are shaped by shocks and stresses of broader processes, namely political, economic, or ecological, as well as decisions made and actions taken by individuals and households. Much food systems research focuses on the former, especially climate and environmental change studies (Baro and Deubel, 2006; Bohle et al., 1994; Fraser et al., 2005), or examines system components individually-defined and as stand-alone entities (Goodman, 2002).

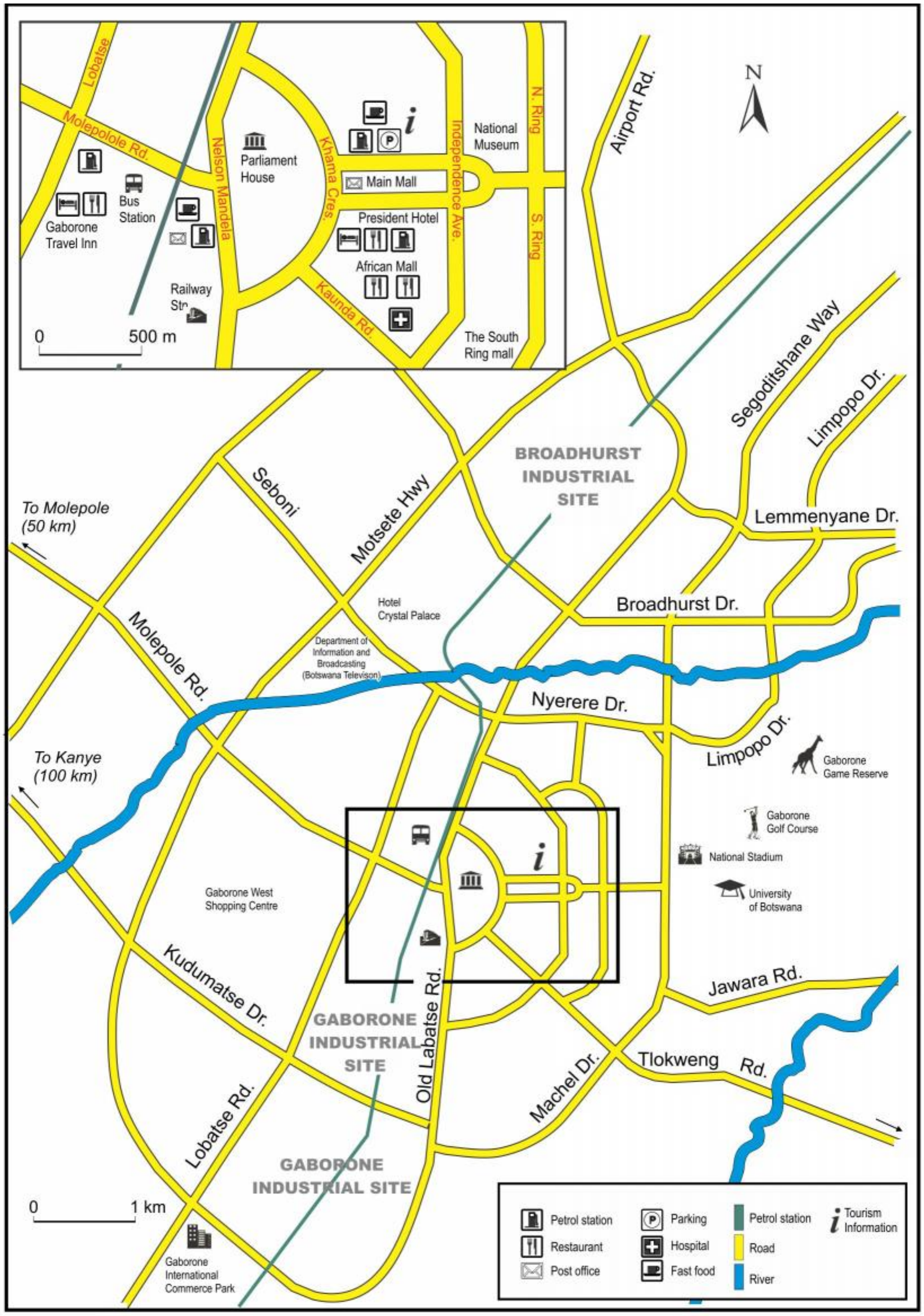
This study applies and extends the food systems approach by holistically exploring facets of food availability, accessibility and consumption.

First, urban food availability stems from national agricultural production and foreign import channels. Food supply to the city is shaped by factors of local agriculture production, including environmental conditions, farmer knowledge and abilities, farming systems, subsidies and support mechanisms, economies of scale, and sociocultural norms. Beyond national borders, food available to cities is wrapped up with broader processes of globalization and food chain dynamics. Regional and international flows influence what foodstuffs are produced, where and for whom – abundance of a certain crop in one part of the world may influence what appears on grocery store shelves in the city. Trade regulations and barriers, environmental conditions, and political will shape food flows across the globe. Second, urban food accessibility relates to the retail sources and access points from which food is purchased or otherwise acquired. Cities offer a wide range of sourcing options in terms of the variety, quality, price, consistency, origins and popularity of foodstuffs they offer. The urban food system is thus multi-faceted with many access points for urban dwellers in terms of sources and food products. Third, consumption of urban foodstuffs relates to individual and household decision-making, as well as consumer choices regarding where to purchase or acquire food, along with what foodstuffs to consume directly. Selecting food sources may be influenced, for example, by convenience, food preference and cost whereby proximity to one's home or work, length of queues or purchase wait times mark convenience; produce appearance, freshness, nutritional value and preparation considerations mark food preference; and price fluctuations or sales on particular items mark cost. In sum, applying this conceptual framework to Gaborone's CBD facilitates insights on patterns of urban food availability (food supply), accessibility (food sources) and consumption (food choices) in a holistic way.

Study site & methodology

Gaborone CBD serves as the study site given the variety and cross-section of urban dwellers and food sources represented within it. The CBD is located close to low- to high-income residential neighbourhoods, functions as a transport corridor and an employment hub for government offices, retail stores and those self-employed. It includes Main Mall, a large pedestrian retail zone, and The Station, a public square with transport and retail access (see Figure 1, BTB, 2010). Six grocery stores, ten fast food outlets, seventeen hawking stands, twenty vendors, two restaurants, one convenience store, one butcher shop, and two wholesalers were present in the CBD during data collection (May to July 2009). These sources offer foodstuffs for urban residents across all income levels, as confirmed by key informants, research participants and existing research (Crush & Frayne, 2010, p. 28).

Figure 1: Gaborone Central Business District



The sampling strategy employed was purposive and guided by saturation points to facilitate data collection from a range of food source owners/managers and local consumers, and to ensure comprehensive documentation of respondent information. The sample is not meant to represent the broader Gaborone population yet the investigation remains reflective of, and provides preliminary insights on, food-related dynamics within the CBD itself. Twenty-eight owners and/or managers were interviewed in order to characterize each food source in terms of food inventory and availability, stocking preferences, supply issues, marketing strategies, consumer base and shopping patterns. Thirty-five consumers were interviewed regarding their location and types of food purchases and activities (e.g. meal-planning, grocery shopping, eating out). The purposive sample itself focused on adult consumers willing to participate in a fifteen-minute interview; recruitment took place during key business hours with those waiting to pay for their purchases at grocery stores, hawker/vending stands, and fast food outlets. Saturation point was reach after twenty interviews with no emergent data after this point.

The final sample included 16 men and 19 women, ranging in age from 18 to 62. Respondents were reluctant to share, or were simply unaware of, their monthly household income and instead provided their occupational status. The sample captures a cross-section of urban dwellers, with 76 percent identified as skilled labourers including government or bank employees, administrators and retailers, and the remaining 24 percent identified as general labourers such as construction workers, self-employed individuals such as taxi drivers and non-food vendors, and university students. While lack of specific income level data may be considered a limitation of the study, self-reported income-levels are notoriously unreliable (Parodi & Sciulli, 2008) and official national statistics reflect high fluctuation and variability of cash earnings from month to month (e.g. CSO, 2010, p. 43). Further, the sample complements the range of occupations found in the AFSUN baseline study in Gaborone neighborhoods (Gwebu, 2009), corresponding to a range of monthly income with low income as less than P850, middle income P851 to P1899, and high income greater than P1900 (Acquah 2009).

Secondary data were collected from numerous resource centres and key informant interviews at University of Botswana, Ministry of Agriculture, Gaborone City Council, Botswana Agricultural Marketing Board, Office of the Destitute, Food Relief Services, and Ministry of Surveys and Urban Planning. Content analysis involved coding and sorting data according to thematic elements from all data sources based on the conceptual framework, as well as threads emerging from interviews themselves.

Characterizing urban food supply: availability

Urban food supply in Botswana flows predominantly from foreign imports, including more than 80 percent of national cereal requirements (BIDPA, 2008), 50 percent of fruits and vegetables, and all fish and special cuts and processed meats (MoA, 2010). Self-sufficiency has been achieved in beef and poultry sectors (GoB, 2005). Government policies and programs since Independence in 1966 have focused upon increasing agricultural production with an explicit rationale of decreasing reliance on foreign imports. Grain received particular attention throughout the 1970s and 1980s (GoB, 2005) with the Botswana Agricultural Marketing Board established in 1974 to guarantee producer prices for sorghum and maize and to regulate imports (Seleka, 2004). The Arable Lands Development Programme and the Accelerated Rainfed Arable Programme emerged in the 1980s, both designed to enhance dryland arable agriculture by assisting farmers with resource access (Seleka & Mmofswa, 1996). The Financial Assistance Policy (FAP) operated between 1982 and 2000, and aimed at enhancing non-traditional, commercial agricultural production such as poultry, horticulture and dairy (Hovorka, 2004). FAP assisted approximately 800 enterprises (Rebaagetse, 1999) yet again failed to substantially increase food supply or decrease food imports with many enterprises closing down once public funding ended. Recent programming includes the National Master Plan for Arable Agriculture and Dairy Development established in 2002, as well as the Zambezi Integrated Agro-Commercial Development Project, both aimed at agricultural diversification, enhanced production and decreased reliance on food imports (MoA, 2010).

While such programs have injected much financial and capacity into Botswana's agricultural sector, as a Ministry of Agriculture notes, 'producing more food locally is not easy to achieve'. One challenge is the high cost of agricultural production in Botswana relative to South Africa, its main source of food imports (Sigwele, 2007). Nevertheless, Botswana's Food Security Strategy emphasizes removing trade barriers on grain imports yet restriction still remain on other products such as poultry, piggery, dairy and horticulture so that local production can continue to be fostered (BIDPA, 2008). Another challenge is the social and economic changes brought about through urbanization processes whereby few people remain interested in farming as an occupation, especially given that agriculture must compete with more attractive formal employment opportunities and non-farming livelihood strategies (Hovorka, 2004). Many Batswana, including urban dwellers, participate in subsistence or commercial farming on a part-time (weekend) basis, thus do not aim to maximize production or profits. Youth are especially reluctant to carry on traditional farming activities.

Despite government laments regarding lack of food self-sufficiency via agricultural production, food supply to cities (and beyond) is consistent in Botswana. This is largely on account of regular, long-standing food imports from South Africa, as well as healthy national finances and socio-economic levels given its mineral-led economy to facilitate access to and sustainability of this supply. Ultimately, Botswana has endured relatively few periods of severe food insecurity in a region where food crises abound. The nation ranks 32 out of 84 African nations in terms of FAO food security assessments (FAO, 2010) and by the International Food Policy Research Institute (moderately low incidence of undernourishment) (IFPRI, 2010). The remainder of this paper documents food sources available in Gaborone's CBD and examines consumer choice in accessing these food sources.

Documenting food sources: accessibility

A variety of food access points provide urban dwellers in Gaborone diverse options for meals and grocery shopping. Main Mall has two medium-sized (approximately 500m^2) grocery stores, Payless and Spar, located directly across from one another while The Station has four large-sized (approximately 1000-1500 m^2) grocery stores, Payless, Choppies, Score and Shoprite. All are arranged with fruits and vegetables, dairy, cold juices and soda, meat and bread around the perimeter of the store; interior shelves are neatly stocked with non-perishable items such as dried fruit, peanut butter, canned legumes and vegetables, cereals, sorghum meal, rice, samp, flour, dried beans, and sweets. A ‘take away’ section of prepared meals and a bakery is present in each. Staple products, including bread, sorghum, oil, and canned vegetables, are always stocked with price kept low (near cost) to attract customers; large arrays of food items are available though with less variety amongst similar items (e.g. one brand of oatmeal is available rather than several). Fresh foodstuffs are abundant. The grocery stores cater to different income groups with some focused on comprehensive access, such as Shoprite’s ‘primary business of . . . food retailing to consumers of all income levels’ (Shoprite, 2009) while others focus on specific socio-economic realms, such as Shoprite’s new store format Usave, a ‘no frills discounter’ store with ‘a limited range of essential fast-moving products offered in a functional environment at the lowest possible prices’ (Shoprite, 2009). Of the CBD grocery stores, two are Botswana-owned and operated, namely Payless and Choppies, both of which source approximately ninety percent of their food products from South Africa with some meat, milk, eggs and vegetables source from Batswana farmers, according to the store managers. The remaining grocery stores are foreign-owned with licensing agreements, decision-making, and food sourcing stemming within or from South Africa.

Hawking stands provide traditional, home cooked meals prepared most often by Batswana women and sold near work places and well-traveled locales upon provision of city council permits and minimal (or no) rental fees. Foodstuffs available include sorghum porridge, sour milk porridge, rice, mealie meal (ground maize), samp and beans, pasta, chicken stew, beef stew, fried chicken, liver, beef braai (barbeque), pumpkin, beetroot, watermelon salad (cucumber and tomato with oil), cabbage, butternut squash, and chakalaka (side dish made with oil, onion, peppers, tomato, carrot, beans and spices). Meal preparation takes place off-site at home, with food brought in large pans and kept warm via burners, for those hawkers with less permanent venues at Main Mall. Those at The Station hawkers café, ten concrete stands complete with outdoor tables and two indoor restaurants, prepare food on-site. Meals are served in large Styrofoam containers filled with a choice of one grain, one protein and a few salads for a standard price of P15. In other instances, stationary concession stands serve food on large clay plates and customers often sit around tables to enjoy their meal. Customers are varied, ranging from business people and government employees to students and shop workers. Service typically begins at 11am and ends at 2:30pm during weekdays for those at Main Mall while those at The Station hold hours from 7am until as late as 6:30pm.

Vending stands, primarily located at The Station, sell products in bulk out of trucks or at small tables again dependent upon city council permits and with minimal (no) rental fees. Vegetable and fruit vendors predominate, with produce largely originating from South Africa or purchased from local grocery stores/wholesalers, while others offer locally-sourced eggs or chicken meat. The majority of vendors open for business by 7am and close at 7pm, remaining open six to seven days per week. Vendors themselves are diverse and included a 60 year old woman selling out of her bukkie, a 28 year old bachelor, a 15 year old boy selling for his mother, a young student working a stand for her aunt, and a particularly prosperous middle-aged woman running three large stands herself. Vendors generate a wide-range of income from P1000/month to P500 or P800/day.

Fast food outlets are common in the CBD and include KFC, Chicken Licken, and Hungry Lion for those seeking fried chicken and chips, Pie City offering a variety of baked sandwiches, and Bimbos and Debonairs serving various fast food options. Originating in North America, KFC has been located in Gaborone's CBD for some twenty years. More local albeit South African outlets include Bimbos (established in the 1970s), Chicken Licken and Pie City (early 1980s), and Hungry Lion (2000s) are favourites of Gaborone residents surveyed. Raw foodstuffs used to prepare meals at the fast food outlets (e.g. chicken, beef, potatoes, vegetables) are acquired via South African headquarters, with the exception of Hungry Lion that obtains chickens from a local farm. Outlets open as early as 7am and close at 8pm, except for Bimbo's which is open 24 hours. Typical meals at chicken outlets consist of two pieces of chicken, french fries plus a drink and cost approximately P25; a meat pie and drink at Pie City costs P12; and a grilled sandwich and drink at Bimbos costs P18-25. Students and young adults have a notable preference for these foods, though managers noted business people frequenting these venues as well. Additionally, two formal restaurants are located in the Main Mall, namely Kwest and the Terrace Restaurant (in Cresta President Hotel). Given their location, customers tend to include embassy, bank and government employees with an average meal costing approximately P75. In a typical day the restaurants serve 50 lunchtime customers with fewer at dinner hours.

Examining consumer choice: consumption

Preliminary research reveals that consumer choice of food access points in Gaborone's CBD is shaped by payday prices, proximity of locale, prestige of venue, and product quality and type. Eighty-six percent of respondents indicated that payday prices factor into their food consumption choices. In Botswana, payday generally occurs at end of month and thus coincides with greater food purchasing by consumers and with food retailers coordinating sales to further facilitate consumption. Respondents explained that they 'stock up' on major, non-perishable food items (e.g. grains, oil, milk, canned goods, non-perishables) at the end of the month. According to respondents: 'I mostly shop at OK Foods or Choppies at month end because that's where the best prices are for the main foods' and 'I stock up on groceries at month end... [and] go wherever the sales are.' According to a grocery store manager: 'When Batswana have money, they like to spend it . . . sales get advertised around the 20^{th} to 30^{th} [of each month]'. Payday shopping trends are not necessarily grounded in economical practice as suggested by a Ministry of Agriculture official: 'You'll spread [the fliers] out and say 'ok, I'm going to buy my rice from Spar, my cooking oil [from Payless] because it's cheaper' but . . . we're not economical here because we'll be driving to these places . . . and this will cost you ten pula in petrol.' Beyond grocery stores, other food access points in the CBD benefit from month end shopping with respondents noting their tendency to splurge or 'spoil themselves' at fast food outlets and restaurants immediately after payday. Owners of these establishments noted 'toward month end our clientele changes, you see more students and working class...' whereas throughout the month 'loyal customers, mostly business clientele' that keep them busy. Vendors reflected that 'usually people buy at month end and almost nothing at all during mid month' while hawkers saw substantial changes in clientele and noted increases from 50 to 85 people per day.

Eighty percent of respondents indicated that the location and convenience of the food sources they patronize factors into their decision to purchase foodstuffs there. A young man indicated that he was in Spar to pick up oxtail because it was 'close to home so I don't need to spend money [in travel] to get here.' In other instances, a police woman noted purchasing dinner at a grocery store next door to her employment; government employees spoke of buying lunches from hawkers or grocery stores in Main Mall; a museum manager indicated that he 'just knocked off and was asked to pick up a few things on [his] way home'; and a mother who works in the government enclave purchasing a few items from a grocery store in Main Mall because '[she passes] by here on [her] way home from work, so it's very convenient'. Generally, people's daily food purchases, either for meals or groceries, depended upon their ability to make efficient use of time in relation to their employment activities.

Seventy-four percent of respondents indicated that prestige of venue factors into their food consumption choices. Specifically, these respondents bought lunches 'out', noting the stigma attached to bringing lunch from home: 'It's a fact that people don't like bringing lunch to work, so we go out, hang out, get something for lunch. Only if money is short, you have to cook from home and carry your bag lunch'. Respondents further explained feeling uncomfortable and annoyed when bringing their own lunches. It was generally perceived that if you are employed then you are too busy to be making your lunch before going to work in the morning. Respondents tended to purchase lunch two to three times per week from hawkers, twice from grocery store takeaways, and once from fast food outlets. Each venue reflected prestige and social norms in terms of where people wished to 'be seen' eating lunch out. For example, while hawkers claimed that 'business people, locals, expats, and government, as well as shoppers... everyone eats here', others felt uncomfortable at hawker stands given the 'levels of sophistication of people . . . some people really shun going out to get food from [the hawkers]' based on pride associated with being able to purchase from more expensive sources. Fast food outlets were viewed as particularly prestigious and fifty-one percent of respondents frequenting them at least twice a month, in part to establish their identity as modern urban dwellers. Beyond lunches, respondents also noted buying breakfast or mid-morning meals from hawkers although this corresponded to convenience rather than prestige motivations (e.g. too early to eat at home).

Finally, fifty-four percent of respondents indicated that product quality (e.g. taste, freshness) or type (e.g. variety of food, portion sizes) factors into their food consumption choices. This is particularly the case given that many similar sources are located near one another and offer similar price points. Respondent product preferences hinge on taste: for example, one hawker stated that 'most people that buy here don't eat spices,' and respondents themselves made statements such as: 'the hot wings here [Hungry Lion] are the best' or '[Shoprite] has the best bread.' Respondents also noted freshness as important, thus preferring vendor-supplied produce compared to grocery store products. Some traded-off proximity and product in many instances, as expressed by one female respondent: 'day-to-day I just shop at grocery stores ... and pick up whatever I'm out of... sometimes I'll buy from vendors on my way home when the produce at the grocery store is of poor quality.' Product variety was also noted by respondents as influential to their shopping choices, particularly associated with availability of traditional and modern foodstuffs. While youth respondents prefer fast food dishes, adult respondents typically have a penchant for more traditionally-prepared fare; grocery store managers noted providing both to ensure consistent sales. Product preparation in terms of comfort food was also noted. A businessman interviewed at the grocery store, for example, indicated that he takes most of his lunches at the hawkers' cafe because he 'likes a warm meal', particularly in the cooler winter months. Product portion size also featured as a determinant of respondent shopping choices. For example, food served at hawker stands was appealing to men: 'It's affordable [for guys] to buy breakfast and lunch here [Station hawker's café] because they're very large portions . . . we eat a lot!' In contrast, this did not appeal to women: 'I can't eat all [the food from hawkers] . . . so I would rather pay less and get less for lunch at a grocery store where you can buy based on weight'; other women chose to share hawker meals with female co-workers or friends.

Discussion and conclusion

The above research findings offer preliminary insights into food availability, access and consumption in Gaborone's CBD as a way to holistically explore the food system and contextualize urban food dynamics in Botswana. In sum, food supply to cities is consistent given the reliable, long-standing flow of South African foodstuffs despite inevitable concerns associated with reliance on a single, foreign source of supply. In turn, Gaborone's CBD contains food sources that are in and of themselves plentiful and varied, offering urban residents numerous options for shopping and mealtimes. Findings also reveal that consumer choice of food access points is shaped by payday prices, proximity of locale, prestige of venue, and product quality and type. Respondents recognize urban sources as offering a wide range and consistency of foodstuffs, and make choices that go beyond economic factors into social status and food quality aesthetics.

The urban food system of Gaborone, Botswana does not necessarily require more work in terms of restructuring food supply and sources. Indeed, AFSUN results found that only 11 percent of 400 Batswana households surveyed had experienced periods of food shortage (Acquah, 2009). Further, the present research reveals no concerns of shortages or inability to access foodstuffs from existing sources; respondent choices of food sources confirm a relatively well-functioning urban food system in Gaborone's CBD. What then explains AFSUN findings regarding the substantial claims of food insecurity amongst Gaborone residents (82 percent)? It is possible that food insecurity arises not from food supply or food sources in the city but rather issues relating to consumption. It is also possible that food insecurity in Gaborone may be linked to quality rather than quantity given low dietary diversity as revealed through AFSUN, and trends associated with increased access to pre-packaged, processed, convenience foodstuffs.

Ultimately, this research together with insights from AFSUN's baseline study prompts questions regarding urban food security within Botswana, and the region more broadly. First, is the rural agricultural production focus of food policy and research agendas in Botswana warranted? The nation has successfully avoided food crisis primarily because of economic development, political stability and the ability to import adequate foodstuffs from the South Africa. While the Government of Botswana may feel ill at ease given dependence upon its neighbour, its population may in fact benefit from current arrangements given that national agricultural production cannot meet demands despite existing support of the sector. This is not a call for reduced research and development in agriculture. Rather it is a call for exploration of complementary strategies aimed at mitigating vulnerability given dependence upon foreign food imports. To this end, it is important to echo Crush and Frayne's (2010) call for greater attention to agrifood supply changes and their potential in alleviating urban food insecurity, in addition to the present focus on support for small local farmers in Southern Africa.

Second, it is essential to unravel further the realm of food consumption thereby extending a food system analysis in Botswana and Southern Africa. Specifically, what foodstuffs do urban residents purchase and why? How are food choice and consumption circumstances experienced differently by those households of varying income levels, as well as male- and female-headed households? In what ways do urban residents use food to reaffirm their social status and cultural identity? To what extent are changing lifestyles and livelihood options re-organizing household mealtimes or food preparation activities? Deeper understanding of how and why particular food choices occur requires, in part, expanding preconceived notions of urban life in Africa as necessarily impoverished and engaging broader definitions of food (in)security to ensure comprehensive understanding of how food works in cities. That urbanization has fuelled extensive and growing consumer populations is important to recognize, as are the dynamics surrounding this shift. It is also important to recognize that food insecurity of city dwellers is not necessarily based on food supply to or food sources in urban centres but rather potentially wrapped up with consumption patterns that extend beyond economic factors.

In conclusion, regardless of whether or not the current rural production preoccupation both in policy and scholarship is overcome, Botswana and other Southern African nations must acknowledge and address issues related to urban food security. For research and practice to truly engage with and address the issue of food insecurity it must embrace the complexity of the concept including aspects of physical, social and economic access, sufficiency, preferences, food safety and nutritive quality of food. That urbanization trends are irreversible and the region is fully embedded within an urban age gives this issue particular timeliness and urgency. For Botswana specifically, it is likely that agricultural production will continue to decrease on account of not only exorbitant costs and other challenges associated with rural food production, but primarily on account of socio-economic changes brought about through urbanization. Availability is ensured by food imports and sourced through multiple outlets thus the major challenge for policy makers remains how to ensure equitable access to foodstuffs, especially in light of fluctuating global food prices; further investigations into urban food consumption will be valuable to this end. That the lives of thousands of Batswana and millions of Southern Africans are now necessarily urban mean substantial shifts in their circumstances, livelihoods and lifestyles. Recognizing what this means for how food 'works' in cities must be a priority for research and development agendas alike since individual and household ability to access sufficient and acceptable foodstuffs will be a function of how the new and evolving urban food system operates in Southern Africa. This empirical study of food supply, sources and consumer choices in Gaborone's CBD is one modest step in this direction.

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