Ensuring food secure cities – Retail modernization and policy implications in Nairobi, Kenya

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A B S T R A C T

Retail modernization with the influx of supermarkets is drastically changing the retail environment in many developing countries, especially in the face of rapid urbanization. In Nairobi, Kenya, the expansion of supermarkets has advanced much more compared to many other African cities with the Kenyan Government strongly promoting the retail modernization. In this study, we assess the impact of the pursued retail modernization on urban food access. The study reveals the limitations of using the supermarketization as a market solution to urban food insecurity. 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. The study concludes by suggesting that food policies must embrace a new conceptualization of the food retail sector in which both formal and informal retailers coexist. Such more holistic food policies that stem from a food systems perspective are needed to build an inclusive urban food system that can tackle prevalent food insecurity in Nairobi. Although the research focused on Nairobi, the findings are of broader relevance to urban centers in the global South.

1. Introduction

Urbanization is fundamentally changing the African continent. The urban population has grown rapidly, from an estimated 230 million in 1990 to an estimated 401 million in 2010 (UN-Habitat, 2014). The trend is expected to continue. Around 2050 more than half of Africa’s population is expected to live in urban areas – compared to 32 percent in 1990 (UN, 2014). This rapid and often unplanned urban growth is a great challenge to many African governments, especially when it comes to ensuring urban food security (Crush et al., 2012; FAO, 2016). The majority of the continents new urban population growth is taking place in informal and often poor settlements, already housing around 46 percent of Africa’s urban population (UN-Habitat, 2014). Associated increases in poverty pose a great threat to urban food security as most hunger is caused by a lack of income (Sen, 1981; Crush et al., 2012).

Kenya’s capital Nairobi faces many of Africa’s broader urban challenges. With an annual growth rate of 3.8 percent since 2000, Nairobi has one of the highest growth rates of any Sub-Saharan city (UN, 2016). This growth is coupled with an increase in slums, poverty, and a high prevalence of food insecurity (UN-Habitat, 2015; WFP, 2016). Consequently, the capital has the highest number of food insecure households in the country, with around 16 percent of the urban residents considered food insecure (WFP, 2016). As opportunities for urban agriculture are often limited in African cities, the role of food retailing is key in meeting the daily food needs of city dwellers (Zeza and Tasciotti, 2010; Crush and Frayne, 2011; Badami and Ramankutty, 2015). Long dominated by small scale and largely informal traders, African food systems have undergone rapid transformation through the rise of formal supermarkets over the last decades (Reardon et al., 2003, 2004; Reardon and Gulati, 2008). Kenya, next to South Africa, Zimbabwe, and Zambia, showed the most rapid rise in the number of supermarkets (Neven and Reardon, 2004; Tschirley et al., 2015). Kenya’s supermarketization started in the mid-1990s and has since been among the most rapidly expanding sectors of the economy (Ministry of State for Planning, 2012). In 2005 supermarkets controlled 20% of the urban market (Neven and Reardon, 2004). The trend was spurred by a combination of factors including trade liberalization, increasing shares of Foreign Direct Investment (FDI) in retail, higher incomes and increased urbanization (Reardon et al., 2003, 2007; Humphrey, 2007). Today, the Kenyan Government actively stimulates this structural change in its long-term development blueprint Vision 2030. The vision aims at achieving urban food security by attracting investments in the formal retail, while hampering the development of the informal food retail (Government of the Republic of...
Kenya, 2011). The gradual transition to a modern and efficient retail environment is often associated with increased food security (Reardon and Hopkins, 2006; Reardon and Minten, 2011). It is theorized that supply chain investments and economies of scale enable supermarkets to offer lower food prices at higher quality than traditional retailers (Reardon and Minten, 2011). Due to limited public resources, retail modernization has therefore been seen as a market tool for combating food insecurity (Timmer, 2009). Nevertheless, this strategy has increasingly been questioned for predominantly bene-
difying higher income consumers, while excluding the poor consumers (Peyton et al., 2015). Other studies have shown that supermarkets can even perpetuate food insecurity by crowding out the traditional retailers, such as kiosks and street haw-
kers, that the poor rely on (Reardon and Hopkins, 2006).

It is thus questionable whether Kenya’s retail modernization strategy will ensure food security for all population groups in Nairobi. Clearly, our limited understanding on the complex market dynamics that are (re)shaping urban food systems in rapidly expanding cities across the global South, such as Nairobi, has served as the starting point of this study. This study attempts to shed light on the di-
terent roles of both formal and informal food retailers in these urban food systems, focussing on their impact on the accessibility to food – especially for the urban poor. More specifically, the objective of this study is to assess whether supermarkertization increased food security in the Kenyan ca-
pital. In order to achieve this objective, an explorative study was con-
ducted between February and May 2016. Geographic Information System (GIS) analysis at city level, market observation, retailer and consumer interviews and a consumer survey in a selected case study area were used in an attempt to bring more clarity to this complex issue.

2. Literature review

Food security has been defined as being when “all people, at all

times, have physical, social and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life” (FAO, 2009). Food security has four pillars, comprising food availability, food access, food utilization and stability of these dimensions over time. Food security in Africa has long been perceived as a predominantly rural issue that is to be achieved through rural development and increased agricultural production. Although the 2008 food crisis briefly revealed the importance of promoting urban food security, it is rarely recognized as a key development challenge in African cities (Skinner, 2016). As a result, policies have given less priority to urban food security (Battersby, 2012).

In recent food security literature the need to shift focus on urban food security is discussed, redirecting focus from productionist views on food security to views that include accessibility (Maxwell, 1999; Crush and Frayne, 2011). It has increasingly been acknowledged that urban food insecurity is not caused by food shortages but rather by people’s inability to access food. One particular stance of literature engaging with food access in an urban setting has been the literature on “food deserts”. This stance of literature frames food insecurity through lack of proximity to food retail; i.e. retail outlets are located too far away for residents to patronize them, and through low socio-economic levels, i.e. the purchasing power of households relative to the price of available food in a defined area is low (Beaulac et al., 2009). These factors refer to the allocation and affordability dimensions of the accessibility pillar of food security. Definitions of “food deserts” range from a literal ab-

ence of food retailers in a certain area to lower accessibility to healthy and affordable food in socio-economic disadvantaged areas (ibid). Su-

permarkets in the food desert literature are often seen as a proxy for

deserts and prone to food insecurity as they consequently depend on smaller shops that display higher food prices than supermarkets (Block and Kouba, 2006; Coveney and O’Dwyer, 2009). These findings echo some of the literature on retail modernization that theorizes that supply chain investments and economies of scale enable supermarkets to offer a wider range of foods at lower prices than small-scale informal re-

tailers (Reardon et al., 2003; Reardon and Minten, 2011). Supermarket growth could thus theoretically close “food deserts” by increasing access to food – both from a spatial and economic point of view.

Nevertheless, the positive effects of supermarkets on food access have also been contested by other scholars who have debated both the afforded spatial and economic accessibility of supermarkets to lower income consumers. Within that debate, also the relative importance of informal food retail has been discussed. Maruyama and Trung (2007) and Minten et al. (2010) found higher prices in supermarkets compared to informal retailers, making informal traders rather than supermarkets more accessible to low income consumers. Also Gomez and Ricketts (2013) argue that traditional retailers have flexible pricing strategies, enabling them to under-price supermarkets. As supermarkets face par-
ticular challenges in offering fruits and vegetables at competitive prices due to necessary large-scale supply chain investments, consumers often only selectively adopt supermarkets, while continuing to patronize in-

formal retailers (Goldman, 2000; Humphrey, 2007). According to Block and Kouba (2006), supermarkets disproportionately choose to open stores in high income areas for higher profitability. Such conditions were also found by Peyton et al. (2015) for Cape Town with lower in-
come consumers being faced with low access to supermarkets and thus relying on the informal food for their food access. While the same study indicated that supermarkets have been successful in entering some low income urban communities, they are often incapable of meeting the food consumption strategies of the poor. These findings illustrate the limitations of supermarkertization as a market-led strategy to alleviate urban food insecurity (Peyton et al., 2015).

3. Food security and the Nairobi food system

Food insecurity in African cities has become a critical development challenge and urban food insecurity as found in Nairobi is typical of the broader urban reality in Sub-Saharan Africa (Cohen and Garrett, 2010; Crush and Frayne, 2011; UN-Habitat, 2016). Nairobi houses the highest number of food insecure people in Kenya (WFP, 2016). Around 16 percent of Nairobi’s population, equaling 96,356 households, were found to be food insecure; i.e. to have a poor, borderline or un-

acceptable food consumption (WFP, 2016).

Food insecurity is significantly more prevalent in low-income areas, most notably in the informal slum settlements in Nairobi (Oxfam, 2009). An estimated 2.5 million residents, representing 60 percent of Nairobi’s population, live in such settlements (UN-Habitat, 2014; Skinner, 2016). Research conducted could show how much more pre-
valent food insecurity is in informal low income settlements. The Nairobi Urban Health and Demographic Surveillance System (NUHDDS) follows a population of about 65,000 individuals in 24,000 households in two slum communities – Korogocho and Viwandani – in Nairobi since 2002 (Beguy et al., 2015). Using this data set, Faye et al. (2011) found that 80 percent of the households were food insecure. Using the same data set three years later, Kimani-Murage et al. (2014) found an even higher food insecurity prevalence with 85 percent of the households being food insecure, of which 50 percent being severely food insecure. These percentages are compelling compared to the city’s average of 16 percent of households being food insecure (WFP, 2016). Poverty is a major contributor to food insecurity as lack of income owing to poor employment conditions and irregular income reduces food affordability for poor city dwellers (WFP, 2016). Low- and medium-income house-
holds spend about three-quarters of their income on food, making a nutritionally adequate diet often unaffordable, despite food being available (Dixon et al., 2007).