

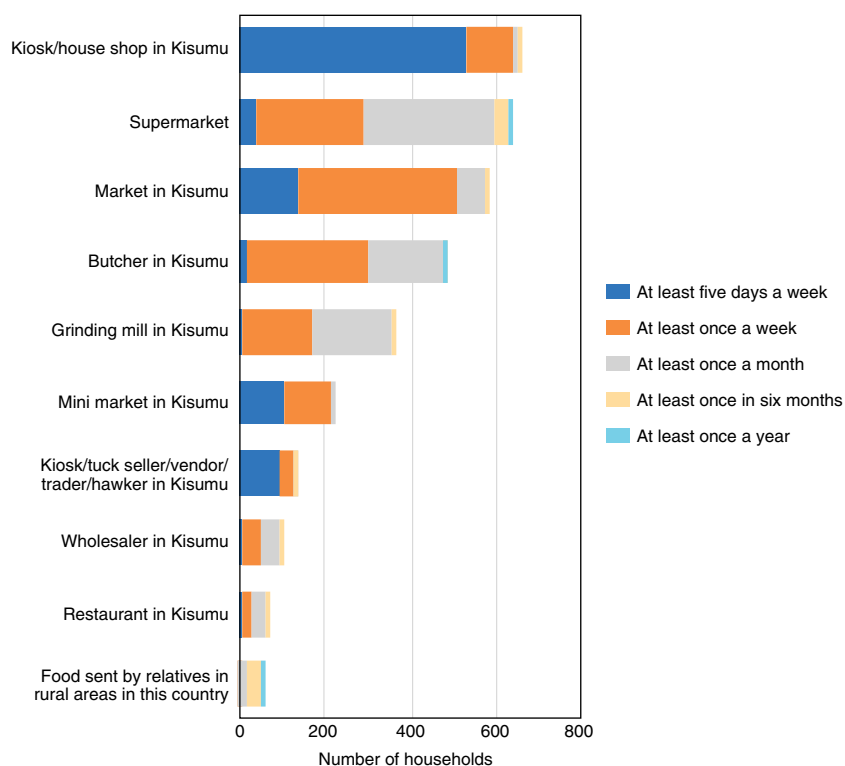
# Addressing food security in African cities

In sub-Saharan Africa, the food system impacts on a number of urban development issues such as poverty, unemployment and poor health. Informal traders meet the food needs of many poor urban households. However, supermarket chains are changing this, demanding particular policy and planning responses.

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Research in poor neighbourhoods in sub-Saharan African cities shows high levels of household food insecurity. It also shows the important role of informal food traders in meeting the food security needs of poor urban households. The term ‘informal’ usually refers to traders who are non-compliant with municipal licensing and regulation. The growth of the supermarket system in urban areas, especially in the past decade, is affecting informal food traders in various ways, and as a result, a complex relationship between these different food outlets is emerging. Informal traders can be economically undermined and spatially marginalized by the supermarket system, whereas in other cases, supermarket growth creates opportunities for them. Poor households use a range of available food-supply opportunities, but their ability to access affordable and healthy food is shaped by the rapidly changing food system. Here we discuss evidence about urban food insecurity and the food system in sub-Saharan Africa, drawing on the case of Kisumu City in Kenya. We argue that new policy and planning perspectives on urban food security are vital and need to recognize the complex nature of the entire food system.

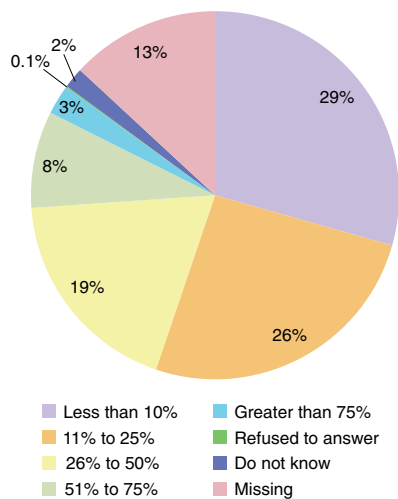
Although generally described as a rural issue, in the context of global and national policies food insecurity is increasingly an urban challenge<sup>1</sup>. The Food and Agricultural Organization’s Food Insecurity Experience Scale survey of 146 countries in 2014–2015 found that 50% of urban populations in least-developed countries were food insecure, compared with 43% in rural areas<sup>2</sup>. Food insecurity is also integrally linked to a range of developmental issues. Food access and poverty are directly inter-related, with food expenditure being a significant component of most low-income household budgets. Income can limit food access but households’ decisions on food depend also on the cost of meeting other basic needs and family priorities. Households’ ability to meet their food security needs is also constrained by limited access to adequate clean water, sanitation, energy and safe storage.



**Fig. 1 | Ten most-frequently-used sources of food, Kisumu, Kenya, 2016.** Households were asked to identify all sources of food used by the household in the previous year. This included both market and non-market sources. The legend represents how frequently households used this source. The 840 household sample — drawn from Kisumu’s total population of 100,000 households — provides a confidence interval of 7% at the 95% probability level.

The food system is a major source of urban employment and livelihoods, especially in the areas of food processing and food distribution (and potentially recycling and waste management), and it often attracts women and younger generations. When access to safe and nutritious food is constrained, households end up with poor diets. The health and physical and cognitive development impacts of poor diets over a life span limit individuals’ ability to work productively and generate income. Urban economic development suffers as a result. The well-documented transition in African cities from communicable to non-communicable diseases, such as obesity

and diabetes, has been linked to changing diets dependent on cheaper processed and ‘fast’ food<sup>3</sup>. Hence the ‘triple burden of malnutrition’ — undernourishment, micronutrient deficiency and obesity — is a manifestation of the intersection of food insecurity with the changes in the food systems. The food system is also recognized as a major contributor to greenhouse gas emissions and hence climate change<sup>4</sup>, another way it impacts on urban population health and development. In a continent like Africa where urbanization is rapid and levels of poverty are high, household food insecurity and the functioning of the whole food system are becoming increasingly



**Fig. 2 | Proportion of total food purchased by households sourced directly from supermarkets, Kisumu, Kenya 2016.** Households were asked what proportion of food purchased by the household was directly sourced from supermarkets. The 840 household sample — drawn from Kisumu's total population of 100,000 households — provides a confidence interval of 7% at the 95% probability level.

central issues for policymakers concerned with the future development of urban areas.

### Where poor households buy food

How poor urban households access food supplies is a critical issue. The majority of households buy food from food retailers and little is self-grown or obtained from urban agricultural production<sup>5</sup>. Informal retailers are households' main sources of food in most cities<sup>6</sup>. They are closely attuned to the buying preferences of customers and make every effort to locate as close as possible to them, whether this is in poor neighbourhoods, at transport interchanges or in city centres where most jobs are based. They frequently 'break bulk' to sell in small quantities that households can afford, set up personal relationships with customers that allow credit arrangements, and operate for long hours. They tend to sell mostly fresh and non-processed foods. Informal retailers acquire supplies through the wider food system, ranging from small local producers to global food suppliers. In other words, informal food retailers are part of a complex urban food system, are highly dependent on both the economy and state interventions that can either support or inhibit their development, and play a vital role in addressing the food needs of poor urban households.

However, the structure and pattern of the food retail market is changing rapidly as

supermarkets expand into urban Africa and diffuse their products from wealthy to food-insecure households<sup>7,8</sup>. Large South African-based food retail chains are entering African urban markets through newly developed shopping malls, typically located in the city centre or close to wealthy areas<sup>7</sup>. Owing to their ability to achieve economies of scale and control supply chains, they are able to sell many items more cheaply than informal traders. Urban planning interventions in African cities allow for these malls and supermarkets to be strategically located as part of the overriding vision of modern and world-class cities inherent in these plans. These planning visions frequently lead to removing informal traders<sup>9</sup> whose presence is viewed as 'backward' and as sources of 'dirt' and 'disease'.

### The growing influence of supermarkets

The food access strategies of poor households are changing in response to these market shifts. Given the geographical locations of supermarkets, their inability to sell products in very small and affordable unit sizes, and their relatively limited hours of operation in which they are closed from early evening and sometimes on Sundays, food insecure households are not necessarily able or willing to shift purchases from informal traders to these new entrants. In addition, supermarkets do not sell traditional local products popular with urban consumers (for example, dried fish are consumed in Kisumu as a base protein but are not readily available in supermarkets). Research in Harare (Zimbabwe) showed that in low-income areas, households obtained their food from a range of sources: borrowing from neighbours; community food kitchens and food aid; self-production; buying from informal traders, small shops, restaurants or takeaways; and buying from supermarkets<sup>10</sup>. In other words, poor households do use supermarkets, but less frequently, and day-to-day purchases are more commonly made from informal traders.

This point is illustrated by Fig. 1, which shows the ten most frequently used sources of food in a sample of 840 households in Kisumu, Kenya. Kisumu was selected as an example of middle-sized cities that have experienced rapid supermarket growth. Food acquisition and consumption strategies were influenced by opportunities for households to access food retailers, and this depended on retailers' locations, pricing, packaging, credit arrangements, hours of operating and the kinds of food sold.

Experts are increasingly concerned about the negative impacts of the 'supermarketization' of food. They may

be providing cheaper food but some research shows they are also contributing to dietary shifts and the escalating triple burden of malnutrition<sup>3</sup>. A study on small towns in Kenya supported the view that supermarkets contribute to changing food consumption habits and nutritional outcomes, though these effects differ by age cohort and initial nutritional status<sup>11</sup>. There is also evidence that newly established supermarkets undermine and displace smaller and informal outlets nearby, especially when accompanying planning regulations attempt to 'formalize' these parts of the city<sup>9</sup>, displacing informal traders as part of the process. This can impact on food access by food insecure households that rely on informal traders, as well as on the employment and income they generate.

### Planning for the entire food system

Although supermarkets may be having a number of negative impacts, the complexity of the relationship between them and informal food retailers should be better understood. We argue that informal food distribution networks can be both negatively and positively influenced by supermarket growth (although this varies significantly with context) and we challenge both research and policy prescriptions that consider large and small enterprises as separate systems and argue for the dominance of one over the other. Research shows that the expansion of supermarkets does not necessarily reduce the importance of informal food retailers in supporting urban food security<sup>12,13</sup>.

Despite the presence of supermarkets, informal retail remains an important source of food for African urbanites who choose between formal and informal sources in ways that suggest complex food security strategies. As Fig. 2 illustrates, despite the presence of supermarkets in Kisumu, households continue to buy the majority of their food from non-supermarket sources. Supermarkets are unable to replicate all the benefits afforded to the urban poor by informal traders. In addition, although policy and planning engage formal and informal food retail as separate entities, there is a degree of symbiosis between those retailer groups<sup>14</sup>. Informal traders often use supermarkets as wholesalers, like the case of one Shoprite supermarket in Lusaka (Zambia) that has been converted into a wholesaler catering for informal traders.

Recognition of the complexity of food systems, and of achieving food security, implies recognizing the need for cross-cutting food policy measures in local and national government, as explained in the

communiqué of the meeting ‘Harnessing urban food systems for sustainable development and human well-being’ held at the Rockefeller Foundation’s Bellagio Center in March 2017 (ref. <sup>15</sup>). Urban governance, spatial planning and regulation have a key role to play in shaping access to food as well as other aspects of food security. Regulations and planning norms based on the expectation that formalizing food retail will be beneficial are leading to the erosion of informal food retail with potentially deleterious effects for the urban poor and food-system diversity. Current policies trying to remove informal outlets (for claimed reasons of health, untidiness, congestion and illegality) need to be replaced by plans and policies that recognize the importance of the entire food system in all its complexity and the symbiosis among its various parts. In city governments, there is need to develop food policy and revise urban planning regulations. New planned urban developments should incorporate both formal and informal retail outlets, and

municipalities should build more public food markets with services that support environmental and health aspects. □

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