

Changing Food Environments in Africa's Urban and Peri-Urban Areas: Implications for Diets, Nutrition, and Policy

Summary

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Rapidly changing food environments in Africa - marked by advancing urbanization, demographic changes, a growing middle class, and a nutrition transition - present complex challenges compounded by climate change; yet it also bears opportunities.

By 2050, 56 percent of Africans are projected to be living in urban areas (JRC, 2019), meaning that with current and projected population growth rates, the urban population in Africa is likely to triple by mid-century from less than 400 million in 2015 to about 1-1.2 billion in 2050 (JRC, 2019; Hannah et al., 2022). From a nutrition lens, urbanization provides better access to more varied and healthy foods, with less undernutrition as a result; yet, the flipside is the ready availability of highly and ultra-processed foods rich in salt, fat, and sugar, contributing to an increasing prevalence of overweight and obesity and related non-communicable diseases (NCDs).

These trends go hand in hand with a changing food environment. The role of the food environment, defined as *the physical, economic, and sociocultural context in which consumers engage with food systems* (HLPE, 2017) has been widely acknowledged as a central factor determining individual consumption and hence, diets and nutrition. The food environment approach offers a shift in how

food choices and consumption patterns are thought about and addressed, as it directs the responsibility of consuming healthy diets at least partially away from the consumer by recognizing that consumers make choices within the context (the food environment) they are embedded in.

To address the challenges and harness the opportunities of changing food environments through targeted policy interventions, it is hence crucial to better understand the dynamics of food environments. Carefully crafted policies, incentive structures, and regulations are powerful tools through which to address 'food entry points', and factors influencing consumer choices – i.e. the availability, affordability, accessibility, and desirability of foods. Much research is being done to gain a better understanding of how these factors shape how people interact with food (environments) and the implications on their dietary health. This understanding, if leveraged and translated into nimble policymaking, can contribute to healthier and sustainable diets and improved nutrition outcomes. A continued strong role of fresh food markets, a thriving local agro-processing sector, the use of new technologies as well as interventions to raise consumer awareness and shift behaviors, such as food labeling, are just some of the opportunities that have been identified.

Studies have shown that in cities across Africa, Asia, and also Latin America **fresh food markets** (street vendors, informal and farmers markets, etc.) are a significant source of urban food supply. For example, a study of 11 southern African cities found that 70 percent of households frequently obtained food from open-air markets (Frayne et al., 2010). Well-designed and well-functioning fresh food markets have the potential to be one of the key entry points for addressing some of the most pressing challenges that the food sector is facing, including resilience to climate change, biodiversity protection, ensuring food security, and improving nutrition. As fresh food markets present an important 'food entry point', national and municipal governments should scale investments to upgrade transportation and market infrastructure and implement a supportive policy and regulatory environment. Additionally, the **agro-processing sector** can play a central role in improving diets and achieving nutrition outcomes, and beyond that, it may create employment opportunities. It has the potential to increase the availability of healthy foods, including underutilized crops, traditional staples, and dairy by offering them in convenient forms that are more accessible for urban households and can allow consumers to incorporate nutritious choices with longer shelf life that would otherwise not be available (Badiane et al., 2022; Khonje et al. 2020; Hülsen et al., 2024). The nutritional content of processed foods depends on processing technologies, among other things. Africa is still near the beginning of a surge in the growth of its processing sector. Other than in the processing sector, **technologies** are increasingly important in the consumers' choice of what food is purchased and consumed. Social media is reshaping food advertising practices, and AI-driven techniques are having a profound impact on how the food industry is targeting consumers. To counter the trends of rising overweight and obesity levels and the associated NCDs, **policy interventions and targeted regulation** can raise consumer awareness, including mandatory front-of-package nutrition labeling, or the ban of TV advertisements of unhealthy foods to children. Governments and their partners can also

work with schools and workplace cafeterias to ensure the provision of healthy and nutritious meals. The paper further examines how food environments are changing and adapting in two African countries, Tanzania and Malawi. Drawing on data collected in five regions in Tanzania and six districts in Malawi, the findings provide important insights into how food consumption patterns and dietary health vary between rural and urban areas. **In Tanzania**, about 35 percent of the population lives in urban areas (FAO & ECA, 2018). To determine dietary patterns and nutritional adequacy across rural and urban areas, a recent analysis uses detailed food diaries from the Survey of Household Welfare and Labour in Tanzania 2007–2008 (Ameje, 2023). The regions were purposely selected to capture variations in socio-economic and geographic climate between different rural and urban locations (Beegle et al., 2012). Findings show that dietary composition remains relatively unchanged in rural and urban areas, however, those in secondary towns consume more overall, ensuring a higher probability of meeting dietary needs without exceeding the consumption of potentially harmful substances. Additionally, households in secondary towns retain the opportunity for home production, as well as exposure to greater diversity and availability of foods. Furthermore, households in secondary cities predominantly purchase food from open-air markets which focus largely on fresh produce, contrary to supermarkets providing more ultra-processed foods (Hannah et al., 2022). Higher consumption of processed foods is mainly driven by opportunity costs of time, leading individuals to prioritize saving time spent on home processing and cooking (Sauer et al., 2021). Several studies also find that as urban regions grow too quickly, healthcare and infrastructural developments fall behind (Fotso, 2007). These factors combined may cause the shift to a less nutrient-dense diet in highly urbanized regions. The Tanzanian National Multisectoral Nutrition Action Plan (NMNAP) makes a promising commitment to combat nutrition-related NCDs.

Malawi is one of the least urbanized, yet one of the fastest urbanizing countries on the African continent (Van Capellen & de Weerdt 2023). Nutrition and food insecurity rates are high in Malawi and the ‘supermarket revolution’ is still in the early stages. As the majority of the extremely poor live in the remote, rural areas of Malawi, with little disposable income, ultra-processed food consumption is still low in those areas. The rural and remote market food environment is still predominantly traditional and often informal, with short supply chains. Malawians rely extensively on markets for food consumption, as most households do not produce enough to last from one season to another (NSO and ICF, 2017). However, food markets, especially in rural areas, suffer from extensive market failures in the provision of nutrient-dense, perishable foods. Indeed, in urban areas, low- and middle-income households predominantly shop in larger traditional markets, while in rural areas, the predominant types of shops are tabletop vendors and neighborhood kiosks. Survey results show that especially for food items consumed daily (e.g., tomatoes, cooking oil, salt, and green leafy vegetables), 80-90 percent are sourced from such small vendors (Hülse et al., 2024). Lakes, and specifically Lake Malawi play an important role both economically and in diets. Fish consumption is culturally rooted and constitutes 70 percent of animal proteins consumed (Department of Economic Planning and Development 2019). However, animal-sourced foods are also the most expensive foods. The ratio of the relative cost of animal-sourced foods to starchy staples in a healthy diet is 3.31 (FAO, IFAD, UNICEF, WFP, and WHO 2023), making it unaffordable for many Malawians to consume or consume in sufficient quantities. Local agro-processing, storage, and transportation infrastructure is limited, especially for nutrient-dense perishable fruits and vegetables (Matchaya & Guthiga 2023). This results in low availability in local rural markets and leads to high food loss and waste along the supply chain. However, at the same time, and despite the persistently high levels of food and nutrition insecurity, the nutrition transition in Malawi is at its onset. This calls for early

interventions in the food environment and addressing behavioral patterns to avoid the rise of obesity and overweight and associated non-communicable diseases.

More needs to be done to achieve Sustainable Development Goal 2 of Zero Hunger by 2030 and the African Union Agenda 2063. At the same time, more attention must be paid to overnutrition and the overconsumption of unhealthy foods, the resulting increases in overweight and obesity, and associated NCDs. Efforts aimed at improving food environments in Africa must include a portfolio of carefully crafted individual- and community-based interventions and policies. These policies can inform and empower, guide and influence, and incentivize or discourage actions within food environments. The paper makes a set of policy recommendations that can enable policymakers and their partners to harness the opportunities presented by changing food environments while mitigating the negative impacts:

- 1. The burden of adopting healthy diets and consuming nutritious foods must shift away from solely focusing on the consumer. As governments revise their strategies and policies toward healthy and sustainable food environments, nimble and agile regulatory environments are required coupled with double-duty actions.**
- 2. Access to information and knowledge about what nutritious foods are and what constitutes a healthy diet is crucial, however, behavioral change is key and must be a focus.**
- 3. The contribution of UPFs to overweight and obesity and nutrition-related NCDs is widely recognized and must be urgently addressed. However, it is important not to demonize processed foods *per se* and instead recognize and leverage the inherent opportunities that lightly processed foods present to deliver healthy**

diets and support women's economic empowerment.

4. The role of gender norms in food environments is of particular importance and must be supported through carefully crafted interventions to seize opportunities and manage trade-offs.
5. Civil society should organize itself and be actively supported to strengthen consumers' voices in demanding their right to food and healthy diets and that the food and beverage industry deliver nutritious food options in an affordable, accessible, and desirable manner.
6. Governments and their partners must leverage the opportunities presented by digital technologies and social media to reach harder-to-reach communities and younger people with information about the benefits of healthy diets.
7. To develop policies and interventions that support consumers to adopt healthier and more sustainable diets, more research is required into several important areas. Food environments and the choices people make take place within a complex web of external and individual-based factors.

The full ZEF Working Paper and list of references are available at:

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