

Food Flows

Scoping leverage points to enable food system transformation in Mukuru, Nairobi

TEP 4

Michael Hauser, Immaculate Edel, Patrick Njoroge

Food flows are lifelines of food systems. Tracing food flows helps identify vulnerabilities and design for sustainable diets, jobs and resilience.

Mukuru is a low-income, multi-ethnic settlement next to Nairobi's industrial area. The settlement houses 100,000 households and 400,000 people. Residents lack secure tenure and decent housing. Mukuru spends around \$ 3.6 million on food monthly. The informal food economy is in a dynamic equilibrium reproducing power asymmetries and food-related injustices.

HUMAN DRIVERS

- Demography**
Population growth drives food demand, increased competition over land, high social innovation, adaptive capacity.
- Economy**
Food prices increase (maize + 8%; cooking oil 33% in a year), food inflation 20%; Rising energy prices (+16% VAT). Unemployment > more food vendors.
- Infrastructure**
New access roads and evictions.
- Environment**
Pollution of rivers, inadequate sanitation and waste management.
- Governance**
Informal governance, gatekeepers and protection fees, NGOs supporting urban farming, Community Health Workers increase nutrition outreach.

FOOD SYSTEM TRENDS

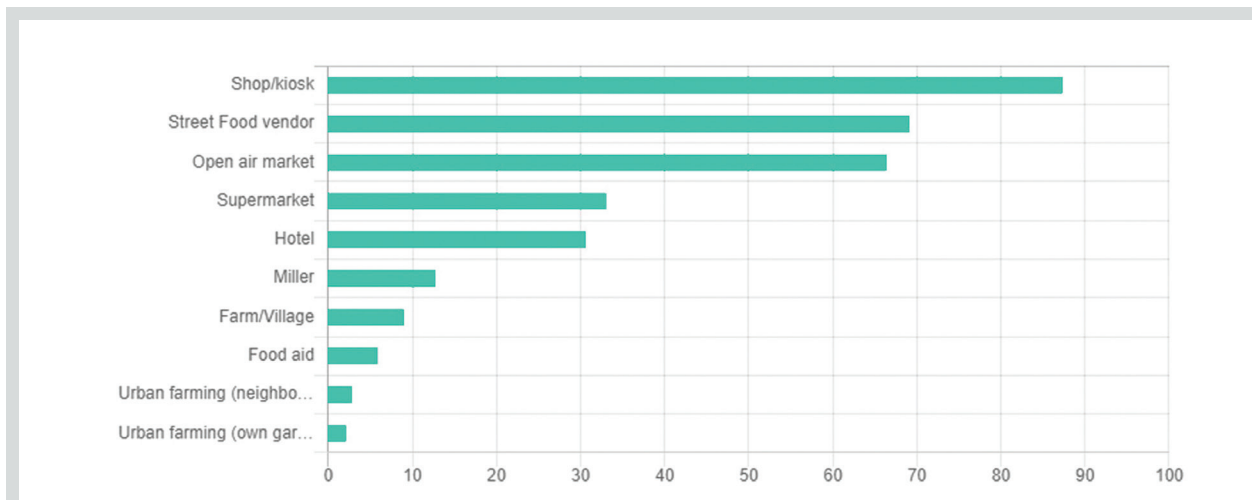
- Food supply**
Food imports through Mukuru-based vendors from Wakulima, Gikomba and Muthurwa Markets; comparably little 'domestic production': urban vegetable gardening/livestock keeping (eggs, milk, rabbits, vegetables). Rationale: subsistence, business, emergency, loss of animal manure, organic waste and energy.
- Availability**
Cooked/uncooked food from informal food vendors (69.07%) and local shops (87.29%), 'hotels' and few family-owned supermarkets. Security improved, but not for women. Lack of storage/cooling. Local millers compete with packaged flour.
- Affordability**
Mixed; Upgrading road infrastructure could mediate food prices hikes and improve availability. Vendors offer food on credit, manipulate sizes to attract customers.
- Consumption**
Mixed bag of food security/insecurity; Signs of nutrition transitions: Sugary, processed foods (instant noodles for children), animal products, low food safety. Undernutrition declined, but child malnutrition remains. Diabetes, ulcers, stunting and blood pressure.
- Regulatory environment**
No traceability of food sources, KEBS (Kenya Bureau of Standards), NEMA (National Environmental Management Authority), Urban Areas and Cities Act (2011), Urban Agriculture Promotion and Regulation Act (2015), Public Health Act – largely unenforced.



Photo Credit: Kennedy Famba

SOCIETAL RESPONSE

- Social protection**
Cash transfers/food drives, traditional food coping (e.g. reduction of meals), school dropouts and consumption shortfalls.
- Food safety**
COVID-19 protocols improved hand hygiene, positive effects on food safety.
- Urban farming**
Supported by concerns about pesticide residues; meat export from Mukuru to slaughterhouses.



Food sources in the last week of the survey among consumers in Mukuru, Nairobi

LEVERAGE POINTS

- Level 1. Resource flows**
Support multi-functional urban farming: food availability, micronutrients, income, link to school feeding, reduce food waste, biomass management, increase agency and political voice.
- Level 2. Feedback**
Increase demand for sustainable diets, change food flow governance, accountability, incentives, relations amongst actors, political economy. Social protection, new green jobs.
- Level 3. Self-organisation**
Support social capital of food vendors, access to finance. Nutrition education, food dialogues and community-led sensitisation of consumers.
- Level 4. Food paradigm**
Food-sensitive urban planning and work with local authorities to change food narrative. Support localised Mukuru Food System Strategy, policies to improve food affordability.



Source: Adapted from Google Earth

Data Collection Support: Samuel Wairimu; Evans Otibine; Jane Kahwai; Omondi Okoyo; Maureen Musya