



Putting Food Environments on the Agenda

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Florian Kroll, PhD | DSTI-NRF Centre of Excellence in Food Security
www.foodsecurity.ac.za | fkroll@uwc.ac.za | 0725010756



Photo credit: Florence Gallez <https://www.dodho.com/khayelitsha-township-by-florence-gallez/>

Triple Burden & Nutrition Transition

Triple Burden of Malnutrition - South Africa

- Stunting (kids under 5): 28%
- Overweight and Obesity: 67.9%f / 38.2%m
- Micronutrient Malnutrition: FCS 23% borderline, 29% poor

Simelane, T. et al 2023. National Food and Nutrition Security Survey: National Report: HSRC: Pretoria.

Nutrition transition:

From high-fibre, micronutrient-rich and diverse whole, plant-based foods to refined and ultra-processed products high in sugars, fats and additives, as well as more meat

“Urban lifestyles”

National Food and Nutrition
Security Survey

REPORT SOUTH AFRICA



FOOD SYSTEM

FOOD ENVIRONMENT

External Domain



Personal domain



AVAILABILITY

Presence of food sources or products



PRICES

Monetary value of food products



VENDOR AND PRODUCT PROPERTIES

Vendor properties (typology, opening hours, services) and product properties (food quality, composition, safety, level of processing, shelf-life, packaging)



MARKETING AND REGULATION

Promotional information, branding, advertising, sponsorship, labelling, policies



ACCESSIBILITY

Physical distance, time, space and place, individual activity spaces, daily mobility, mode of transport



AFFORDABILITY

Purchasing power



CONVENIENCE

Relative time and effort of preparing, cooking and consuming food product, time allocation



DESIRABILITY

Preferences, acceptability, tastes, desires, attitudes, culture, knowledge and skills



ACQUISITION AND CONSUMPTION



HEALTH AND NUTRITION OUTCOMES



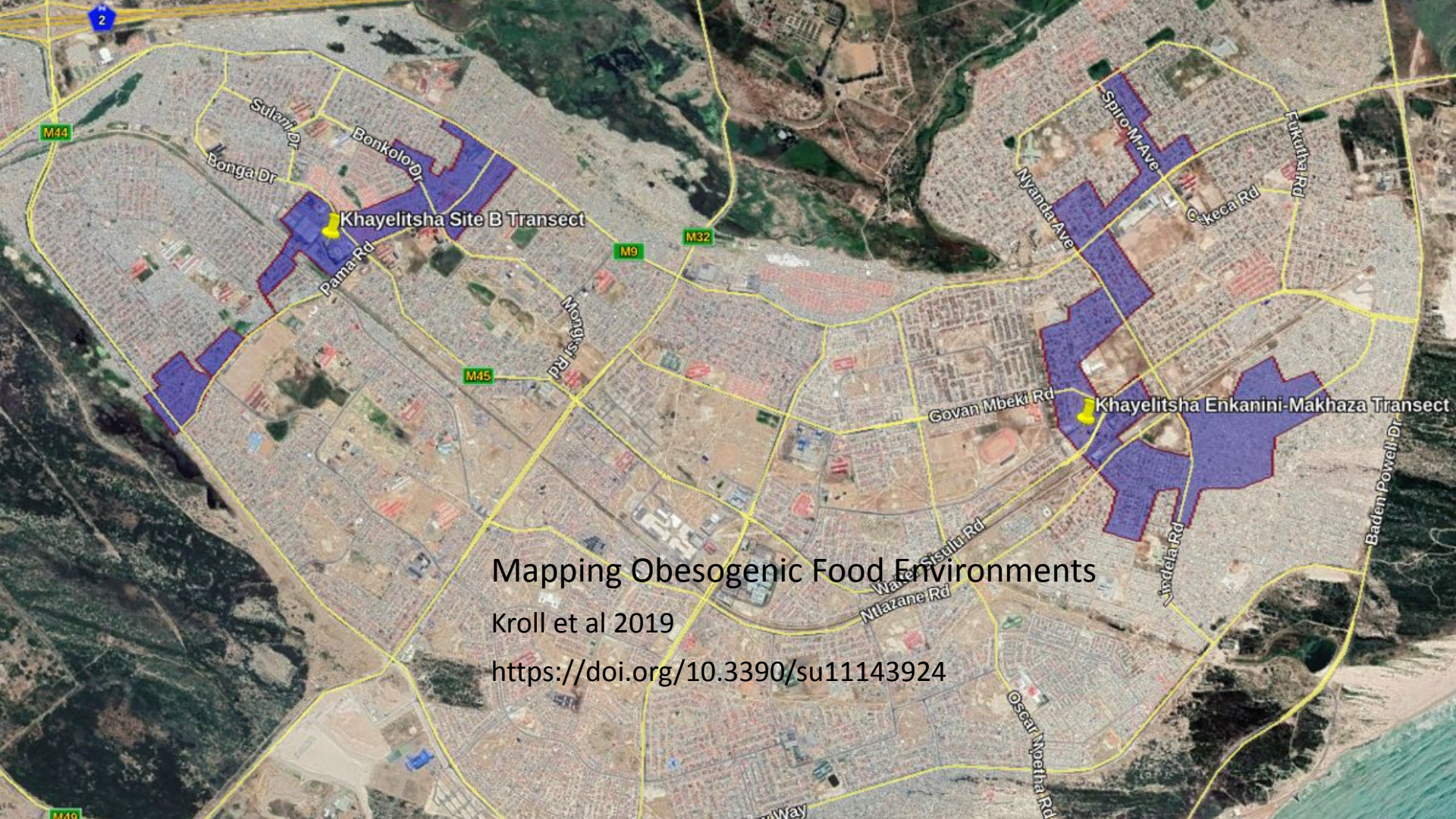
PRODUCTION, STORAGE, TRANSFORMATION, TRANSPORTATION

Ultraprocessed food - Risky



Minimally processed food - Protective



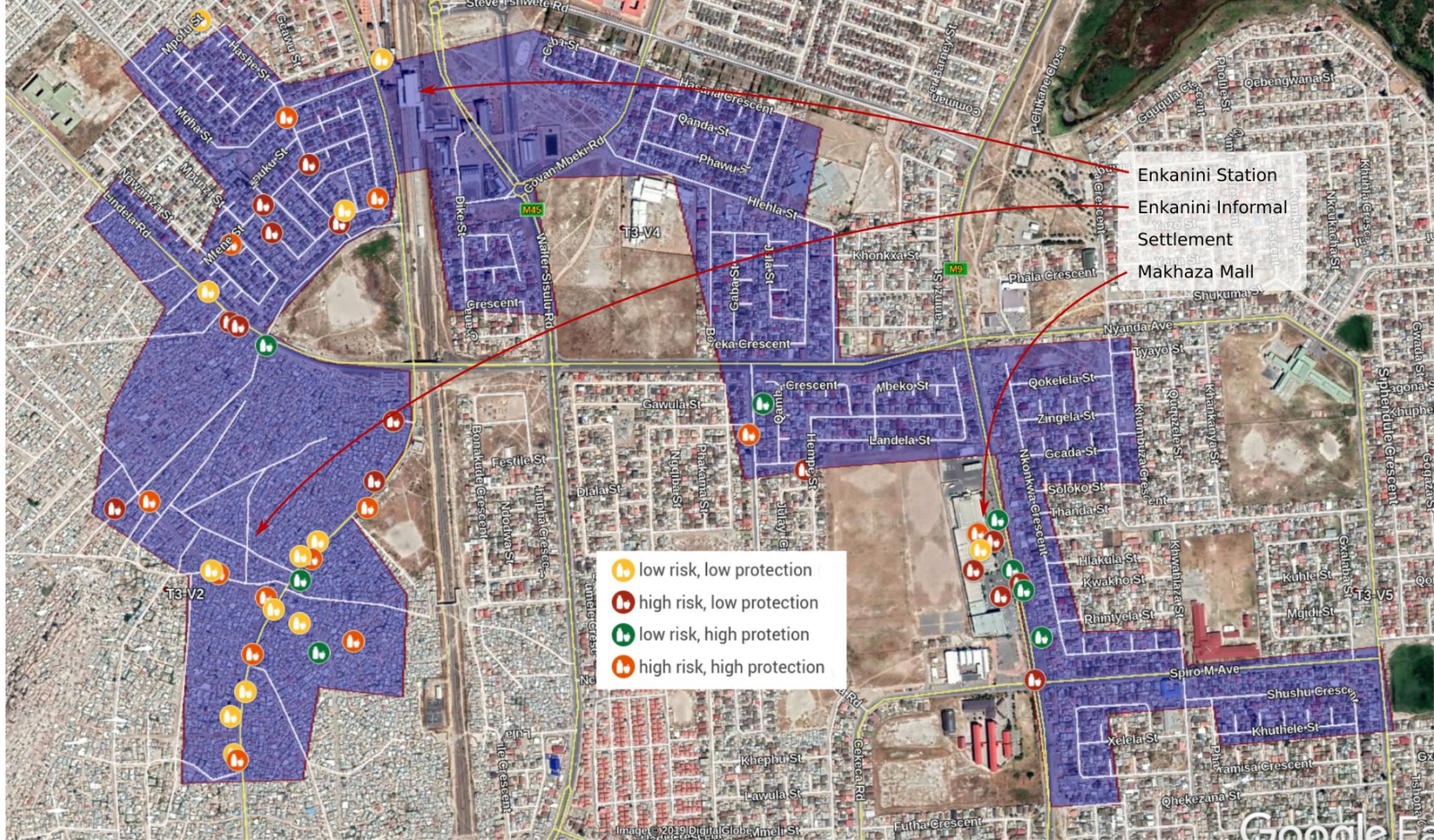


Mapping Obesogenic Food Environments

Kroll et al 2019

<https://doi.org/10.3390/su11143924>

	High Risk	Low Risk
Protective		
Vulnerable		

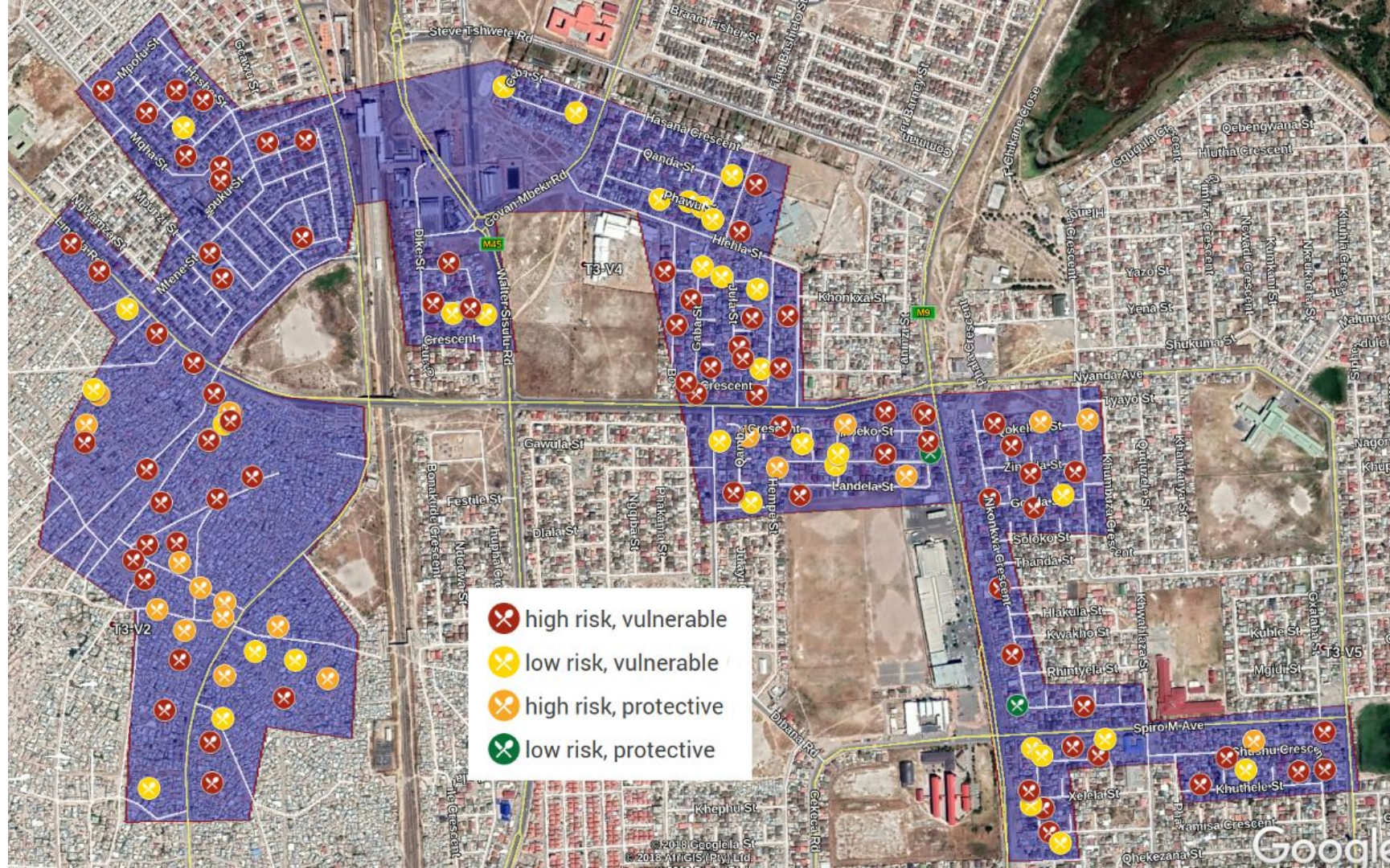


Food outlets per square kilometre by obesity risk

ROFE 2017 - Ahodwo and Khayelitsha $p=0.0001$

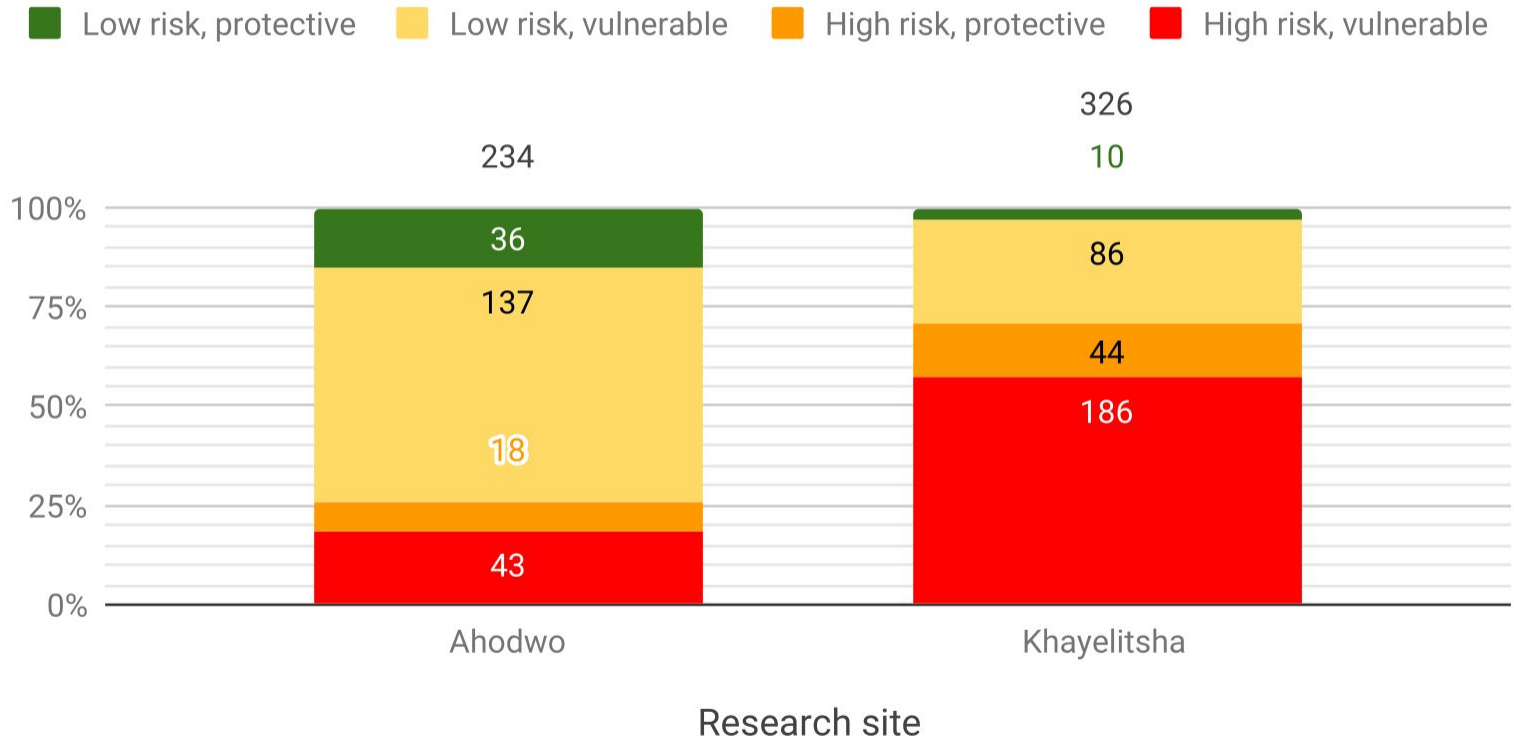
■ Low risk and protective ■ Low risk ■ High risk and protective ■ High risk





Household consumption risk and vulnerability

ROFE 2017 Ahodwo and Khayelitsha $p=0.002$

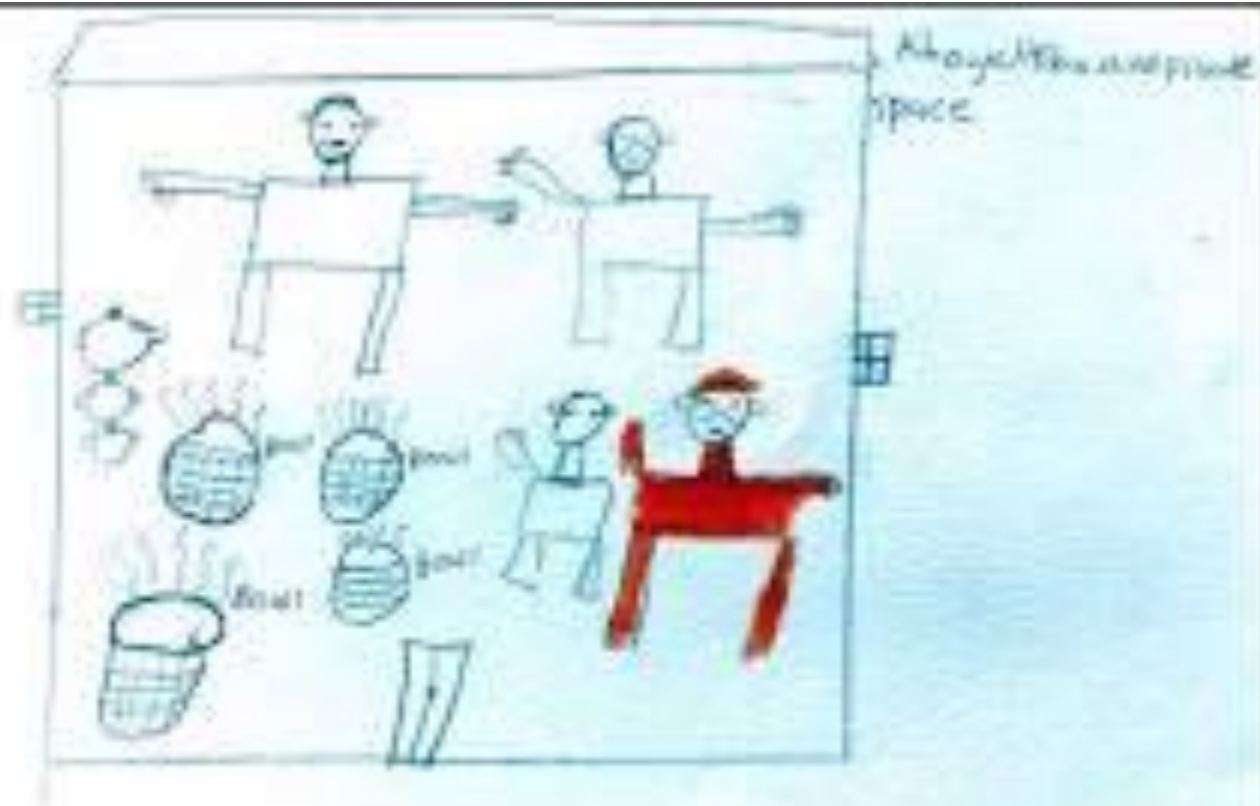




Informal traders provide cheap, affordable fresh produce

	Street Trader Average Rand Footnote 10 price per Kg	Supermarket Average Rand price per Kg	Difference in SA Rand	Percentage Difference
Cabbage	R3.90	R7.92	R4.02	103%
Tomatoes	R12.03	R22.98	R10.95	91%
Onions	R8.91	R16.16	R7.25	81%
Potatoes	R9.29	R16.49	R7.20	77%

Wegerif, M.C.A. Street traders' contribution to food security: lessons from fresh produce traders' experiences in South Africa during Covid-19. *Food Sec.* **16**, 115–131 (2024). <https://doi.org/10.1007/s12571-023-01409-w>



I noticed that they wanted urban food.



5kgs of flour, 5kgs of maize meal,

What can government do?

Zoning & Planning: Where do shopping malls get built? How are they designed?

Informal Trade Regulation: How are street traders and spaza shops supported?

Environmental Health Practitioners (Local Gov): Can the CoA criteria be reviewed for FOPL/UPFs?

Labelling (FOPL)

What can government do?

Institutional Food Environments (Schools, Clinics, Prisons)

Public Space Advertising

Digital advertising

Conscientise, Visibilise and Mobilise (eg social media campaigns; tiktok competitions?)

Silo-busting: Interdepartmental Working Groups