

Promoting healthy urban food systems

Report of a scoping assessment in Harare



**Training and Research Support Centre
Ministry of Health and Child Care
Civic Forum on Human Development**



**In the Regional Network for Equity in Health in
east and southern Africa (EQUINET)**



**June 2022
Harare, Zimbabwe**

With support from OSPC

Table of contents

Executive summary.....	2
1. Background.....	2
2. Methods.....	5
3. Food markets and consumption from urban agriculture.....	7
3.1 The legal and policy position on urban-grown foods.....	7
3.2 Urban agriculture and marketing in practice in Harare	10
4. Urban ultra-processed food marketing and consumption	13
4.1 The legal and policy position on ultra-processed foods	13
4.2 Urban ultra-processed food markets and consumption in Harare.....	15
5. Discussion: Issues for a health-promoting urban food system.....	20
5.1 Interactions between locally-grown and ultra-processed foods in Harare	20
5.2 Enhancing the role of healthy, ecologically sound urban agriculture	22
5.3 Managing the health issues in ultra-processed foods.....	25
5.4 Evidence gaps for future research	26
6. References	28

Cite as: TARSC, MoHCC, CFHD (2022) Promoting healthy urban food systems: Report of a scoping assessment in Harare, EQUINET, Harare

Team: R Loewenson, A Kadungure TARSC, V Nyamandi, M Maphosa (MoHCC) S Chaikosa, G Maphosa-Mumhure (CFHD)

Roles:

Design and survey protocols: R Loewenson (RL), A Kadungure (AK) TARSC, V Nyamandi (VN), M Maphosa (MM) with review inputs from S Chaikosa, (SC) CFHD

Data collection tools: RL, with review inputs from AK, SC, VN, MM

Document review: RL and AK, with input on law and policy documents to cover from VN and MM

Interview and group discussions: SC, G Maphosa-Mumhure (GMM) CFHD, AK, VN and MM

Analysis and report: RL with inputs from VN, AK, MM, SC and GMM

Acknowledgements

We acknowledge with thanks the participants of the interviews and group discussions who participated voluntarily after giving informed consent. We thank Open Society Policy Centre for a financial contribution to the costs of the work and the author institutions (TARSC, MoHCC, CFHD) for their in-kind contribution. Thanks for peer review of the report by Mr John Manyara City of Harare. Many thanks to the City of Harare for co-hosting the review meeting and to the delegates in the May 27th review meeting, shown in *Appendix 1* for their review of and contribution to the findings and recommendations.

All photographs used with permission from sources as cited or under creative commons license. Cover photos Chitungwiza market, C Mware CFHD 2022; Ultraprocessed food vending Harare, A Kadungure TARSC, 2022

Executive summary

Urban areas in east and southern Africa experience a combined burden of under-nutrition, obesity and non-communicable diseases (NCDs), with liberalised trade and rising urbanisation shifting consumption to imported ultra-processed foods at the expense of locally grown foods rich in vitamins and essential nutrients. Ultra-processed foods specifically refer to processed refined foods, with additives such as high sugar, salt, trans fats or preservatives, flavours or colourants and limited or no whole food. With limited recent published evidence from Zimbabwe, this scoping assessment implemented by TARSC, MoHCC and CFHD within EQUINET explored the contribution of urban commercial ultra-processed food markets and urban agriculture to local food systems and diets in Harare, Zimbabwe's capital city. It covered 66 public domain laws, policies and research papers, 7 structured interviews with key actors, 6 structured group discussions with Harare residents and a checklist on 10 tracer food products in 11 vending sites in Harare. It intends to inform stakeholder discussion on actions to promote health in Harare's food system and evidence gaps for substantive formal research. Despite limited numbers, the multi-methods approach enabled triangulation of common findings. A stakeholder meeting reviewed, validated and provided further input to the findings and proposals.

Harare has conducive conditions for and a long history of urban agriculture on plot (around homes in backyard gardens) and off plot (in open land, including temporarily permitted in land zoned but not yet used for residential purposes). Urban agriculture is not a prohibited activity, but is regulated where it violates ecological and public health concerns. National policy acceptance of urban agriculture has had mixed implementation at local level, with local authorities sometimes destroying crops and sometimes enabling them. As rising commercial food prices, food stress and NCDs have become more prevalent in the city, local authorities, state and non-state actors have given more attention to urban farming and consumption of traditional foods. The assessment found a wide range of cereals, vegetables, legumes and fruits grown in the city, many seen as 'staple foods' consumed daily. Grown foods are sold in a range of formal and widely distributed informal vending sites, from neighbours, including on credit, through barter or exchange, and in street stalls of cooked food. Locally grown foods were generally seen to be nutritious, but with food safety and public health concerns from unsafe stock feeds, unhygienic preparation and market settings and practices. The marketing and consumption of locally grown foods was observed to have increased in Harare due to its affordability, availability, to adult preferences for these foods as part of their indigenous diet and culture, and encouragement of their health benefit by health practitioners. The COVID-19 pandemic, lockdowns and disruption to food markets and transport were noted to have led more people to grow, buy and consume locally grown foods, also seen to boost health and immune systems.

Local food and beverage processing is promoted in policy and with various tariff incentives, as is food fortification to add key nutrients to foods. Policy documents note a shift in urban diets in Zimbabwe towards ultra-processed foods as a public health challenge. Existing laws prohibit the import or sale of 'unwholesome, diseased or contaminated' foods' and regulate the importing, manufacture, labelling and sale of 'adulterated' foods. Labels intend to inform consumer choice, and while Zimbabwean consumers report reading labels, nearly half indicate that they do not understand the information on them. A 2021 government-led policy dialogue called for improved regulation of ultra-processed foods.

In the assessment respondents noted a range of ultra-processed foods widely sold in Harare, including sweetened baked foods, sweets, sweetened beverages, 'energy drinks', cooked fast foods and processed instant foods. They were observed to have high levels of sugar, salt, flavours and trans fats, and various additives, and to lead to malnutrition, obesity, dental decay, diabetes, digestive, heart and other chronic conditions. However, their packaging, easy preparation, availability in transport, market, school, and other commonly frequented sites across the city, and addictive nature make them attractive to consumers. Children and young people were particularly noted to be consuming these foods, seeing them as 'high status' and responding to peer pressure. Their increased consumption was also observed to be promoted by wide advertising on billboards, buildings, street signs, and vendor stands, fast-food promotions, discounted prices and other marketing tactics. Most respondents indicated that their consumption had fallen during the COVID-19 pandemic due to trade, marketing and transport disruptions and declining incomes. When restrictions were lifted, old patterns were, however, noted to re-emerge. Some

respondents indicated that people were not aware of the harmful health impacts of ultra-processed foods, while others suggested people disregard the risks. While products were generally labelled and the tracer sweetened beverages assessed complied with legal requirements on labelling, many other products did not fully comply. Residents said they did not understand the technical information on labels or find clear information on the health implications, contrasting this with the clear information on tobacco and alcohol labels. There was particular concern expressed over how to reach children with information on the harms as they are a key target for these foods, and largely unaware of but potentially at high risk of their impacts.

The assessment findings suggest an inverse interaction between locally grown and ultra-processed foods in the city, that became particularly evident during the pandemic. Residents are faced with a choice of both food types at sites spread across the city, although with stronger advertising and promotion of fast foods. In the assessment food handlers of both types of food did not have or display medical certificates. However there is some indication that accessible vending of locally grown and traditional street foods reduces the sale and purchase of ultra-processed foods in adults, reflecting some preference in this age group for these foods. In contrast the increased consumption of sweetened foods by young people was said to shift their taste away from grown foods, warning of a risk of a longer-term future rise in NCDs. Environment and public health concerns are noted for both locally grown and ultra-processed foods, but the findings suggest that the laws have been more rigorously enforced on informal sectors growing or vending grown foods than in relation to the labelling and sale of ultra-processed foods.

Proposals are made to promote healthy food systems, drawing from the documents reviewed, the proposals made by respondents, residents and evidence and from stakeholder inputs at the review meeting. While protecting health and environments, they generally seek to promote urban agriculture and the local production and processing of nutritious, accessible and affordable alternatives to ultra-processed foods, including to slow rising NCDs. Specific measures are outlined in *Section 5* of the report to:

- Promote and widen public awareness on the health risks of ultra-processed foods and the alternatives in health promoting foods and food systems.
- Strengthen communication, inclusive participation, co-ordination, dialogue and a proactive partnership within and between authorities, residents, vendors and producers involved in urban agriculture, grown food vending and processing, and in measures to address ultra-processed foods.
- Promote and expand current initiatives that recognise and provide land, Agritex support for on- and off-plot urban agriculture and ensure adequate land for urban agriculture in city master plans.
- Provide tax, innovative financing, technology, research and development, skills and market support for healthy, organic food producers, processors and retailers and work with 'early adopter' business leaders and health professionals to promote healthy processed alternatives.
- For ultra-processed products, review current laws to control their import and consumption, revise labelling laws to add health warnings and visual symbols, and to prevent ultra-processed product advertising and sale in areas frequented by children and young people.
- Increase council provided market spaces, accredit health, environment and hygiene standards in all vending sites, provide prototype food vending stalls and microfinance support.
- More assertively promote locally grown and traditional diets in urban dwellers and young people, drawing on local civil society, youth peers and social media used by young people.
- Strengthen monitoring of food quality and safety, monitor compliance with labelling and advertising laws, and require public display of certification of food handler medical checks.
- Improve resources for a wider local presence of inspection services, a strengthened role of mandatory Standards Association of Zimbabwe assessment of foods and train and use useful applications to widen monitoring, including by civil society and community monitors.

Zimbabwe has many institutional capacities to address evidence gaps for health promoting food practice. Regular surveys could include evidence to monitor and report on food sources, practices and diets. Research could widen to other cities and social groups and to assess port health systems on food imports. The issues found and proposals for intervention made in this assessment suggest a more immediate potential to map current stakeholders and initiatives in Zimbabwe, and to gather evidence on legal and policy frameworks and good practice from other countries for how they have addressed the issues noted.

1. Background

The nutrition profile of urban areas in east and Southern Africa currently combines under-nutrition, obesity and non-communicable diseases (NCDs). The Food and Agriculture Organisation (FAO) note that liberalised trade and rising urbanisation has shifted consumption to imported ultra-processed foods high in sugar, trans-fats, sodium at the expense of locally grown vegetables, fruits and cereals that are rich in essential nutrients (Loewenson et al., 2021). Ultra-processed foods refer to processed refined foods, with additives such as high sugar, salt, trans-fats or preservatives, flavours or colourants and limited or no whole food. Young people with prolonged and growing exposure to these conditions are particularly at risk of ill health later in life, with regional actors raising concerns over the health and biosafety impacts of commercial imports (AFSA, 2014; ACBio, 2020). Many processed foods are imported through transnational corporates and their strategies have increased availability and affordability of processed foods through supermarket chains as well as low-priced sale to local vendors, promoting uptake through adverts and various forms of sponsorship. This and threats of trade disputes or litigation against regulatory controls have weakened government efforts to regulate harmful practice (Igumbor et al, 2012; McKee and Stuckler, 2018; Wanjohi et al., 2021). Many strategies used in low income countries to promote consumption of ultra-processed foods are severely restricted in high-income countries. A commercially-driven transition towards ultra- processed foods is creating obesogenic environments and rising NCDs in many cities in Sub-Saharan Africa (SSA) (Awusosi, 2019; Igumbor et al., 2012).

SSA governments in their national level strategic and policy reports, articulate some appreciation of the direct negative health impacts of commercial activity linked to food and unhealthy diets and concern over rising levels of NCDs and the associated burden on health services (such as Kenya MoH 2015). Yet state intervention has been inconsistent and subject to pressure from various interests. For example, after Zambia imposed a 25% excise tax on sweetened soft drinks, threats of a Coca-Cola pull out from the country led to a later repeal of this tax in 2015 (Mukanu et al., 2021). At the same time public health action is possible: Mauritius, despite being a sugar producer, applies excise taxes on sugar content of sugar sweetened non-alcoholic beverages, given the impact on NCDs, doubling this tax in 2020 and extending it to imported, non-staple sweetened products (MRA, 2021). While commercial actors see opportunity in urban demands for fast and processed foods, and in genetically modified foods, public health actors raise the risks of these practices for NCDs and malnutrition. When this shifts diets away from locally produced food crops, it leads to a mix of urban under-nutrition, obesity and non-communicable diseases (NCDs). Underlying these outcomes are labour, tax, trade, marketing and pricing policies that favour commercial over health objectives, with commercial interests using narrative, institutional and structural measures to influence policy, law, interventions and their implementation (Loewenson et al, 2021).

The COVID-19 pandemic increased food-related stress, with the disruption of supply chains and markets and rising food prices. It also opened new thinking in the region on promoting greater local trade in food, including in urban areas, and including to prevent the underlying NCDs (hypertension, cardiac disease, diabetes) that make people more vulnerable to pandemic risk. Acting on urban food systems thus implies strengthening public health evidence and dialogue.

While there is wide evidence on urban food systems in Kenya and South Africa, there is less on Zimbabwe (Loewenson et al., 2021). It is difficult to extrapolate to urban Zimbabwe even from neighbouring countries, due to Zimbabwe's unique socio-economic features. A comprehensive assessment would cover the spectrum of foods, and systems from ports to households in different urban centres in the country. To help to identify the focus for follow up work, it was proposed to carry out a scoping assessment on the contribution of urban commercial ultra-processed food markets and urban agriculture to local food systems and diets, and to discuss the findings with key stakeholders to identify follow up actions and evidence gaps for research. The work was thus implemented by Training and Research Support Centre (TARSC), Ministry of Health and Child Care (MoHCC) and Civic Forum on Human Development (CFHD) under the umbrella of the Regional Network for Equity in Health in east and southern Africa (EQUINET).

The assessment was implemented in Harare, the largest city and capital of Zimbabwe. The population of the city grew rapidly in the 1980s from half a million in 1980, fuelled by rural-urban migration, but its growth slowed thereafter under the combined impact of structural adjustment, rising unemployment, housing shortages and economic challenges. The demographic profile is shown in *Table 1*. Harare has a mix of high, medium and low density suburbs, together with informal settlements in Hopley and Hatcliffe.

Table 1: Profile of Zimbabwe and Harare: 2013 and 2017

Description	Census 2012		Inter Censal Demographic Survey 2017	
	Zimbabwe	Harare	Zimbabwe	Harare
Total Population	13 061 239	2 123 132	13 572 560.	1 973 906
Average Household size	4.2	3.9	4.2	3.7
% population in 'Agriculture' occupation group	49.7	2.4	52	2.4

Source ZIMSTAT 2013, 2017

The overall food and nutrition situation in Zimbabwe is well documented in other sources (eg: FNC, 2014, 2018, 2021a,b), so not repeated here. In 2020, the Food and Nutrition Council (FNC) noted that only 54% of households nationally consumed acceptable diets, down from 62% in 2019. The FNC observed a deterioration in the quality of urban diets, with Epworth, Chinhoyi urban, Bulawayo and Harare having the highest proportions of households reporting severe or moderate hunger. The ingredients for a simple healthy meal are estimated to cost a working person in Zimbabwe nearly 22% of their average income (WFP, 2020). While households prioritise food purchases, coping strategies in response to economic stress commonly include reducing the number of meals per day, limiting portion sizes and consuming less expensive or less preferred foods (FNC, 2021a). During the COVID-19 pandemic, rural households were found to be more able to cope with the pandemic impact than urban households (FNC, 2021b). The assessment thus sought to understand the situation with respect to the marketing and consumption firstly of urban grown foods, and secondly of ultra-processed foods in urban Harare, including during the COVID-19-19 pandemic.

2. Methods

The work was carried out in a series of steps between March and May 2022:

1. Mapping from secondary sources the current legal and policy provisions and trends relating to urban food systems in Zimbabwe and Harare for commercial processed foods and urban grown foods and the health outcomes noted, together with recommended improvements to urban food systems. The review covered documents post 2015 and laws currently in force, with 66 documents included.
2. Seven anonymised structured interviews with purposively selected policy / food system actors covering central and local government health and food safety officials; a local authority health official, civil society representing workers; informal workers; informal residents and food consumers within Harare. The interviews explored the current situation in relation to urban commercial processed foods and urban agriculture, the issues and challenges for healthy local food systems, how practices changed during the COVID-19 pandemic (2020-2021). Written transcripts of the interviews were used for thematic content analysis.
3. Implementation of a structured checklist of a sample of 10 tracer foods, viz 5 commercially produced and 5 grown foods in Harare, with respect to availability, pricing, labelling/health information and nutrition claims of processed foods, and for handlers of fresh foods, to check for availability and validity of their annual medical certificate. The tracer foods were:
 - i. 5 tracer commercial ultra-processed foods: sugar sweetened beverage (Pepsi); hard sweets (Charhons/ Crystal candy); fresh oil-cooked potato chips; processed packet chips (Jiggies); sweetened buns
 - ii. 5 tracer foods- foods grown *in Harare* urban agriculture: mealies; avocados; green leafy vegetables (fresh or dried); tomatoes; eggs

The assessment covered the tracer foods vended for the 3 month period February-April 2022 in 11 market sites in the city, 2 large supermarkets; 2 smaller supermarkets in high density areas; 4 informal sector vendors, one each near a school, a bus terminus, a workplace and in an informal settlement; and 3 sites vending locally produced foods, one each in a low density, a medium density and an informal settlement. The information was obtained from public domain products in vendor sites, with the sites anonymised. The data was compiled for analysis.

4. Six structured group discussions, one each with formal workers and informal workers; two with urban youth and two with residents of informal settlements. The discussions explored the uptake of the tracer foods above from commercial markets and urban agriculture; what is affecting uptake and how practices changed during the COVID-19-19 pandemic (2020-2021).

Table 2 summarises these sources of evidence used in this report. Guides and tools were developed for each of the above methods (available from the authors) and written information was complemented by photographic evidence, with photographs following ethical duties to obtain open scenes or to obtain permissions for any photographs showing individuals. The photographs used in the report are credited.

Table 2: Sources of evidence

Source of evidence	Total number included	Key actors covered
Published documents from online and grey literature	66 documents	All related to urban agriculture and ultra-processed foods in urban food markets
Structured informant interview	7 individuals	Central government food safety official Local government food safety official Local government health official Organisation of formal sector workers Organisation of informal sector workers Representative of informal residents Organisation of food consumers
Structured group discussion	6 groups 48 participants in total	Formal sector workers Informal sector workers Urban youth in a medium density area Urban youth in a high density area Male residents of informal settlements Female residents of informal settlements
Structured checklist on 10 tracer products in food markets	11 sites 8 sites vending processed foods 3 sites vending locally grown foods	2 large supermarkets in areas of different density 2 smaller supermarkets in high density areas Informal sector vendor near a school Informal sector vendor near a bus terminus Informal sector vendor near a workplace Informal sector vendor in an informal settlement Food vendor in a low density residential area Food vendor in a medium density residential area Food vendor in an informal settlement.

The assessment was implemented with the national health authority after debrief and authority. The document review used secondary data and interviews and group discussions implemented after informed consent was obtained, with information obtained anonymized in the text. Various limitations are acknowledged. There was limited published literature on urban food systems in Zimbabwe, particularly on more recent experience before and during the pandemic. The interviews and discussions helped to address such gaps. February to April after the rains are months of more availability and better household food provisioning, so other times of year may show different seasonal profiles to what is captured in the report.

As it was a preliminary scoping assessment, the findings are limited in geographical scope (only in Harare), in the scope of tracer foods (only the 10 selected) and in the relatively low number of group or individual discussions. This was intentional as the assessment intended to identify evidence gaps for substantive formal research, including after discussion with relevant stakeholders. A multi-methods approach made it possible, however, to judge robustness of findings by triangulating common findings across the different methods used. We thus consider the findings reported to be useful input to dialogue on public health issues in urban food systems. The stakeholder meeting provided an opportunity to validate and add to findings.

A summary brief of the findings and proposals was circulated to key stakeholders. A stakeholder review meeting was held in end May 2022 to review, validate and discuss the findings and proposed actions to improve urban food systems, and the evidence gaps that may be addressed through follow-up formal research. The report presents the evidence from the document review and the field assessment first on food markets and consumption from urban agriculture, and then in relation to ultra-processed foods. It outlines the interactions between these two food systems. Finally, it discusses proposed strategies for improvements to health promoting urban food systems, and raises evidence gaps that may need to be addressed in follow up research, integrating also the inputs from the stakeholder review meeting.

3. Food markets and consumption from urban agriculture

3.1 The legal and policy position on urban-grown foods

According to Zimbabwe's 2013 Constitution, The state has a duty to ensure that people can grow and store food, and a duty to promote adequate nutrition (Sec 15). Section 77 provides the right to sufficient food (GoZ, 2013a). Zimbabwe has also committed to the Sustainable Development Goals (SDGs), with the target of SDG 2: Zero Hunger to end hunger and all forms of malnutrition by 2030 with a commitment to universal access to safe, nutritious and sufficient food at all times of the year. Economic and social realities act as barriers to achieving these rights and commitments. For example, *Figure 1* shows the significant cost escalation at certain periods, before and during the pandemic, albeit falling into 2022, that affect the realisation of the right to food.

Figure 1: Food Inflation, Zimbabwe, 2018-2022



Source: Trading Economics, 2022 online at <https://tradingeconomics.com/zimbabwe/food-inflation>

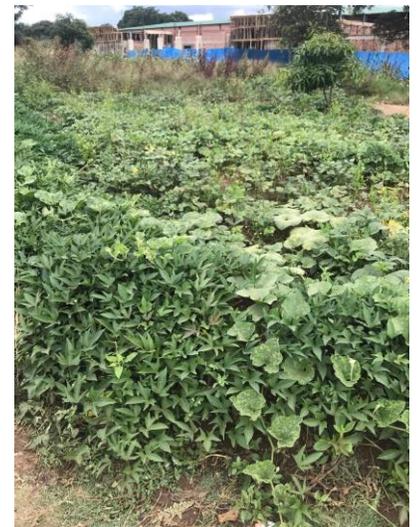
Urban agriculture is not generally a prohibited activity in law. The law provides for its regulation where it violates ecological and public health concerns. Various laws specify what this implies.

- The 2001 Urban Councils Act Section 198 gives councils powers to assign land under council control for cultivation and farming that is not required for other purposes, and gives powers to councils to inspect, ensure quality and improve marketing of locally grown produce, including through council markets (GoZ, 2021b). Councils have powers (in Section 83) to regulate or prohibit crop cultivation that poses a risk to public health and safety or to natural resources, and

in Section 93, to regulate market gardens, vegetable or fruit production, storage and handling where the produce is intended for local sale to the public (GoZ, 2011b).

- The 2002 Environment Management Act CH20:27 prohibits or restricts the cultivation or use of land on public stream banks or adjacent to artificially conserved water, water sources and wetlands, and may order any person cultivating in these areas to remove, harvest or destroy the crops grown (GoZ, 2002b). The Harare Protection of Marginalized Land by-laws provide, however, for an exception if EMA has issued a permit/licence to cultivate wetlands or land within 30m of naturally defined banks of a public stream, river-course, bed or banks. (GoZ, 2014b)
- The 2018 Public Health Act CH15:17 empowers the health ministry to inspect any process in the processing and marketing of food for human consumption (Section 62), to improve food quality through intersectoral collaboration (in Section 84), and to prohibit the import or sale of 'unwholesome, diseased or contaminated' foods' (Sections 91 and 92). The Act provides for reporting of public health risks and breaches to a relevant authority and provides for a range of powers to regulate public health standards, require health impact assessments, and set codes of practice and control strategies for activities with public health risks, all of which may be invoked for specific food-related processes and products (GoZ, 2018a). While the 2001 Food and Food Standards Act Ch 15:04 covers food standards generally, it does not have specific provisions for foods produced in urban agriculture (GoZ, 2001a). In the stakeholder meeting the MoHCC noted that the Food and Food Standards Act is currently under review, and that stakeholder input will be obtained in the review process.

However urban food production faces multiple levels of disconnect between policy, implementation and reality. Harare has several conditions favourable to urban food production, including reasonable rainfalls, large residential plot sizes, large open spaces within the city boundaries and vleis that absorb water from rains with soil moisture retention enabling an early and a late crop in the wet season (Mbiba, 1995). There is a long history of urban agriculture in the city, on-plot (around homes) and off-plot (in open land). For example, when Waterfalls suburb was first established, residents were allocated larger allotments for residential units and to grow food for consumption and sale. When Mabvuku and Tafara were established in the late 1960s, a large area of land was demarcated for agricultural allotments, managed by the local municipal office. In Epworth food production was encouraged by local officials. During ESAP in the 1990s, urban agriculture was fostered, and it expanded by 90%. Urban local governments adopted the 2002 Nyanga Declaration on Urban and Peri-Urban Agriculture, committing to support and incentivise urban agriculture for urban food security and livelihoods (Toriro, 2018). The Harare Declaration on Urban and Peri-Urban Agriculture in Eastern and Southern Africa 2003 committed local governments to develop policies and instruments to enable and integrate urban agriculture into urban economies (Toriro, 2018). Since then, peri-urban farmers have been recognised as targets of support for small grain production in the 2016 Interim Poverty Reduction Strategy Paper (GoZ, 2016b); annual state of the nation addresses have supported urban agriculture, as has 2013 Agenda For Sustainable Socio-Economic Transformation, but without specific measures stated (GoZ 2019b, 202, 2021; GoZ, 2013b). While the Comprehensive Agricultural Policy Framework (2012-2032) has no specific reference to urban agriculture (GoZ, 2012a), a government-convened 2021 national dialogue noted that with rising food costs, it has become cheaper to produce than purchase food, and that government is in the process of developing a plan to boost urban and peri-urban production for urban food security. The dialogue noted that this means reviewing how vending takes place in cities and for school feeding programmes to use locally grown foods to develop healthy food habits in children. The COVID-19 pandemic is noted to have raised policy awareness that the shorter the value chain the more resilient the food system, with a call for sustainable urban cultivation that also does not affect the environment and water tables in urban areas (MoLAFWRR, 2021).



Vegetable growing in open spaces, Harare, TARSC 2022

A view that urban agriculture poses a threat to the environment, and that the marketing of grown foods poses a threat to public health has meant that national policy acceptance and articulated encouragement of urban agriculture has faced caution and more limited acceptance by urban planners and authorities. National policy pronouncements do not therefore always translate to local level, with local authorities sometimes destroying crops and sometimes enabling them (Toriro, 2018). This is particularly the case as previously undeveloped public lands that were used for food production have been increasingly built on, with urban agriculture shifting to more marginal, ecologically fragile land, violating regulations that prohibit cultivation within 30m of stream banks and rivers (Toriro, 2018). At the same time, as rising commercial food prices, food stress and non-communicable diseases due to dietary shifts have become more prevalent in the city, local authorities, state and non-state actors have given more attention to urban farming and consumption of traditional foods. Jekesa Pfungwa Vuliqondo, for example, is a community based organization that promotes farming and consumption of locally grown organic and traditional foods, and a Zimbabwe Traditional and Organic Food Festival in Harare in 2014 involving state and non-state actors provided a platform for reviving and promoting such natural and traditional foods (Gogo, 2014).

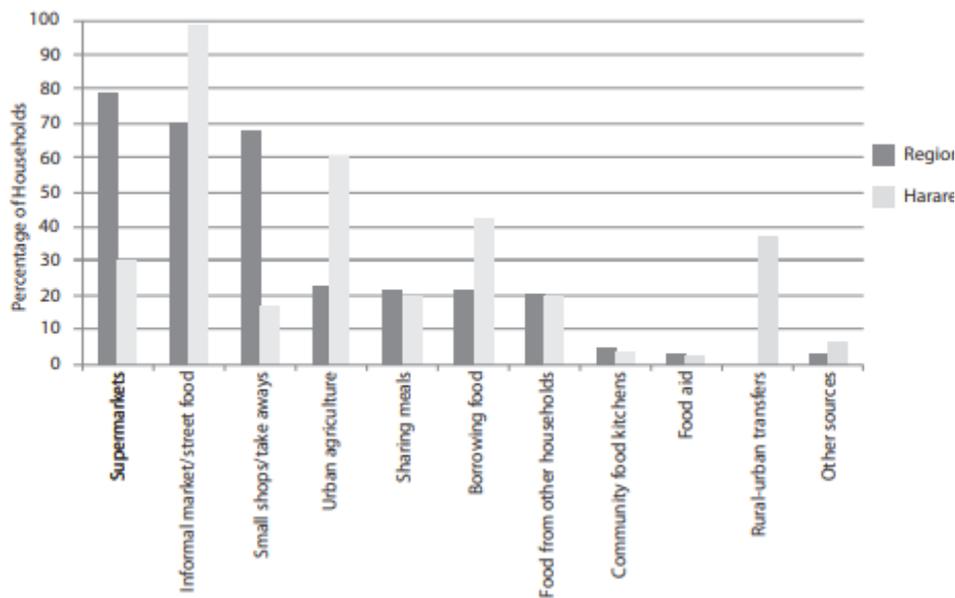
Hence while urban food production is included in the Harare Master Plan, in practice, local officials have decided whether to ignore or destroy locally grown crops on open land areas, both when it encroaches into wetlands, river banks or other legally prohibited areas, but also in other vacant land areas where legal prohibitions do not apply, with measures inconsistently applied at different times and in different areas (Toriro, 2018). Officials have also acted to control marketing of urban grown foods where it is perceived that unhygienic food handling and processing may put the public at risk of cholera, typhoid and other diarrhoeal diseases (Mbiba, 1995). Soil contamination from industrial processes also raises concern about chemical contamination of foods. Soil contamination with copper, iron, cadmium and lead has been found, for example, where welding, automobile maintenance and breaking, and waste dumping take place in Harare, with a risk of contamination of foods grown nearby through the soil and water sources used (Kanda et al, 2018).

Yet the marketing of locally grown foods has played a persistent role in Harare’s food security. By 1995, over 60% of the maize and leafy vegetables grown on-plot in Harare was consumed in households, with most of the remainder sold from homes or neighbourhood stalls, contributing particularly to women’s strategies household food and cash income (Mbiba, 1995; Mudimu, 1992).

After Operation

Murambatsvina destroyed much informal sector activity in Harare in 2005, Harare’s household dietary diversity and food security was reported to be lower than other cities in the region. By 2008 food purchases constituted the single largest household expenditure. Notwithstanding this, as shown in *Figure 2*, Harare households still sourced less food from supermarkets and more food from urban agriculture than other cities in the region, with 60% of households growing food and 40% relying on home grown food at least once a week (Tawodzera et al., 2012).

Figure 2: Food sources in Harare and other cities in the region, 2008



Source: Tawodzera et al., 2012:25

3.2 Urban agriculture and marketing in practice in Harare

Key informants (KIs), group discussions and visual observation of evidence of farming and sale of local products in Harare indicate that local food production and sale in Harare has continued, and with the rains in 2022, to have flourished. The foods are diverse. In the assessment **the most common urban grown foods in food markets** were reported to be green mealies, green vegetables (tsunga (mustard greens), covo (kale)), tomatoes, onions, avocados, sugarcane, cabbage, fruits, beans, cassava, squash, groundnuts, roundnuts, nyemba beans, sweet potatoes, herbs and sweet sorghum (ipwa), with broilers (chickens) and eggs in small livestock rearing. These foods were seen as 'staple foods', with many consumed daily for key meals. They also provided alternatives to the rising prices of processed foods. For example, sweet potatoes, mainly grown in high density areas, were noted to be replacing bread for lower income groups.



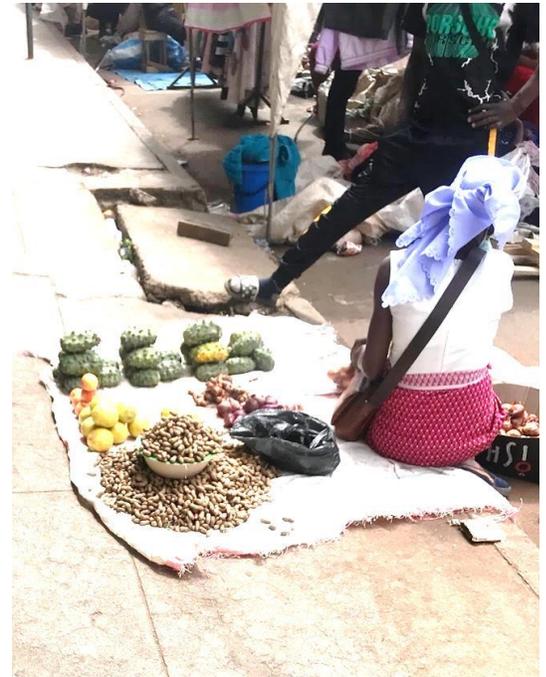
Maize cultivation on open land, Harare, TARSC, 2022

While some people interviewed suggested that Harare largely sources foods from surrounding peasant and large scale farmers, most noted that food in markets coming from urban households with backyard spaces, peri urban small scale farmers, from women in cooperatives who have been allocated agricultural plots or land in the city and garden workers from low density houses selling vegetables grown in their yards, possibly to supplement their incomes. As one KI noted "I used to carry maize from the rural areas to town but I am now taking maize to the rural areas from the city, so things are changing". Informal dwellers including those living near the Mukuvusi stream were also noted to be growing some of these foods. In the checklist assessment, vendors commonly reported these foods coming from local urban production and markets, with avocados also coming from their own household production. The widespread nature of urban agriculture was observed in maize grown in the city sold as green mealies, as roasted mealies or milled as maize grain. Traditional foods like cowpeas, millet and sorghum were reported to also be grown and sold in the city now, including in Mbare musika, with the local view of traditional foods becoming more positive amongst adults. Urban agriculture was seen to be an important means of livelihood for many urban residents, especially with a perception of central government encouragement of people to grow maize, potatoes, tomatoes, vegetables (leafy) in plots, for own consumption and markets.

Urban grown foods are sold in supermarkets, small shops, vegetable markets and by informal street vendors. Harare residents in group discussions noted mainly obtaining these foods from vendors, and sometimes from neighbours and social networks, including through barter trade or exchange. Informal workers reported buying them from larger informal markets where they work. While households are noted to be the main consumers, there is also report of canteens involved in 'braai-buy' using locally grown foods. In other formal chains, farmers/growers deliver their produce to the supermarkets and other market places, hotels and restaurants, with contracts for constant supplies from formal producers. These formal sources are said to be mainly used by middle and higher income groups, while lower income groups largely buy from informal markets and vendors.

Locally grown foods are noted to have a range of **health impacts**. They are commonly observed to be fresh, nutritious, to provide essential vitamins, nutrients and other micronutrients and to contribute to healthy immune and digestive system functioning. Consuming them is perceived to reduce NCDs. Residents reported that they taste better, are not genetically modified and are often grown using less toxic organic fertilisers.

While the foods themselves are readily available and natural, some agricultural practices, like rushing crops to market, were seen to raise the risk of toxic fertilizer or pesticide residues on food that may expose consumers to chemical poisoning. Youth residents noted this in relation to potatoes for example. Broilers fed on unhealthy stock foods (pig feed and growth enhancing chemicals) were felt to be unhealthy to eat. It was felt that the storage and marketing of grown foods was inadequately monitored to make sure they are not consumed when they are no longer fresh. Unhygienic preparation and vending practices, with food sometimes left in the open, exposed to dust and flies, were seen to raise a risk of enteric diseases. While these conditions are regulated in law, as noted earlier, public health standards are seen to be weakly implemented in open markets. In the checklist assessment none of the vendors had medical certificates, although they were all handling fresh foods. Vendors in designated sites are required to have medical examination certificates but are reported to find the costs high. Fresh foods were not labelled, and had no expiry dates or any health information.



Vending fresh foods and poor conditions, Harare, TARSC 2022



Matemba being repackaged for sale, Epworth, CFHD, 2022

While most fresh food sales are not packaged, as noted in the photo, some foods when purchased in larger quantities maybe re-packaged from labelled to unlabelled containers for sale.

Street vending of cooked food, while not currently legal, is a growing urban phenomenon, with minimally processed food, prepared on site or at homes, sold on the street for immediate consumption. It is argued to have helped to reduce unemployment, increased incomes of vendors, especially for women, and to have provided urban dwellers with inexpensive and varied indigenous meals. Street food vendors are found in open sites and temporary stalls in various public places in Harare and were reported to sell *sadza* (maize meal) and rice served with beef stew, roasted beef or pork, *mazondo* (cow heels), *musoro* (cow head), beef knuckles, roasted chicken, fish and pork trotters, steamed or roasted mealies (corn) fried potato chips and beef and pork sausages while beverages included both alcoholic and soft drinks (Njaya, 2014). Bottle store and bar patrons are reported to be major consumers of street foods in Harare, with patrons preferring their flavour to that of processed fast food, and of locally produced organic food over imported foods. However, a 2014 survey found that 98% of street food vendors were not registered by the Harare City Council, primarily because the city by-laws have no provision for street vending of cooked food, except for those at council designated vending sites with safe water, sanitation and shelter. In terms of the Harare Hawker by laws, hawkers are licensed to trade in fruits and vegetables in mobile carts and not cooked food. While the survey found some hawkers vending cooked food, this is prohibited on public health grounds due to lack of environment, waste disposal, and protective clothing measures and obstruction of free flow of traffic, and these vendors have faced raids, fines and confiscations of their food and cooking pots by national and municipal police (Njaya, 2014).

Proposals made for improvement of these conditions are discussed in *Section 5*.

The **increase in marketing and consumption of locally grown foods** was suggested in the assessment to be driven by a number of factors. Price, value for money and sale in quantities that 'suit your pocket' are a major factor, as is the fact that foods locally produced in backyard gardening can be bought on credit or in barter trade. Informal workers that vend food said that they eat or barter unsold foods before they go bad to avoid losses. *Table 3* provides, for example, the reported prices for different commonly locally grown foods.

Table 3: Prices reported for commonly consumed locally grown foods in Harare

Item	Price	Unit	Reported by
Eggs	US\$3.50 US\$1/300 ZWL	1 crate 6 eggs	Formal, informal workers, adults, youths Checklist assessment
Green mealies	US\$1 US\$1/300ZWL	2 cobs 2 cobs	Formal workers, youths Checklist assessment
Maize meal	US\$3-4	25L bucket	Adults, informal workers, youths
Vegetables	US\$25-30c US50c/150ZWL	1 bundle 1 bundle	Formal, informal workers, adults, youths Checklist assessment
Sweet potatoes	US\$5	20l bucket	Formal, informal workers, adults, youths
Avocados	US30c/100	Each	Checklist assessment
Tomatoes	US1/300	12 large or 50 small	Checklist assessment

Locally grown foods are reported to be easily available for purchase on street corners, transport routes and markets and are seen to be fresh and staple foods that enhance local diets. Formal sector workers and female adults noted that local vendors or neighbours, may give an extra item like an orange or tomatoes for free, to encourage purchases. Local social networks spread the word on households selling food, or the household puts a small banner by their gates to attract purchasers. Some of these foods are seasonal, at these times residents noted that foods like avocados may even be freely available. Others like eggs and some green vegetables are available all year round. Women residents indicated that when foods like green mealies are seasonally available they introduce them to their children, so that they learn to eat these foods as part of their local culture. Health practitioners encouraging consumption of traditional foods was also noted to have given them a new status. One respondent also noted that grown foods last longer than some processed foods, which deteriorate rapidly, while processes like drying vegetables reduces the need for refrigeration.

There are also **factors reducing their consumption**. While they are sold at lower cost, growing them raises costs for water and chemicals, discouraging urban agriculture. As people, especially children, get used to the sugary taste of ultra-processed foods, it was also observed that they may not like the taste of locally grown foods.

The **COVID-19 pandemic was seen to have affected the situation**. While some respondents suggested that the pandemic had little impact, as community access to food markets was protected, many noted that lockdown restrictions forced more people to purchase and cook from home grown foods. These foods remained available and affordable during lockdowns, including through purchasing on credit and from neighbours, and working from home gave more time to tend to home gardens. People shared the suckers of vegetables like Covo to propagate since they were locally available when buying seeds was difficult due to movement restrictions, and those without knowledge copied what neighbours were doing. Chemicals used to control pests and diseases were also not accessible due to the COVID-19 restrictions so the food was often uncontaminated. Young people said that as they were home, they were not buying fast foods and were eating home meals, but also that reduced incomes meant that parents could no longer afford to give them money to buy fast foods. Residents said they drank more ginger, lemon and other herbal teas. Zumbani, a herbal tea grew in popularity during the pandemic for its perceived health promoting effects. Adult female residents noted "We feared COVID-19 and were advised that eating traditional foods would boost our immune system and believed so". One adult resident said "maybe lockdown should come again so that we can eat healthier at home than eating chicken and chips!"

At the same time the pandemic, especially during lockdowns, was seen to be bad period for everything. People could not move, yet movement is critical for both food producers and consumers. Young people were not able to carry out income generating activities, including those related to food markets. Some residents noted that after lockdowns people are slowly reverting to less healthy food habits, while others suggest that the shift to healthier diets maybe more long lasting. In the review meeting it was questioned why there is insufficient promotion of healthy diets as a protection against the chronic diseases and immune deficiency that increase the risk of severe illness from COVID-19.

4. Urban ultra-processed food marketing and consumption

4.1 The legal and policy position on ultra-processed foods

The marketing of commercially processed foods is governed by various **legal standards** in Zimbabwe. The Public Health Act 15:17, as noted earlier, prohibits the import or sale of 'unwholesome, diseased or contaminated' foods, and provides for the range of powers to regulate activities that may pose a public health risk noted in *Section 3.1* (GoZ, 2018a). The 2001 Food and Food Standards Act requires ultra-processed food, as 'adulterated' foods, to be correctly labelled and prohibits misleading information on the nature, composition and nutritional value of the food, including claims of a natural ingredient that is rather integrated by artificial means.

The Food and Food Standards Act in Section 5 prohibits the sale, importation and manufacture of food which is 'adulterated, falsely described, unwholesome or unfit for human consumption'. As noted earlier, the Act and its labelling requirements are currently being reviewed by MoHCC. Currently, the Act empowers inspectors to inspect, seize and test foods that fail to comply with the standards, and to destroy contaminated foods in line with a legislated process (GoZ, 2001a). Nutrition labelling is defined as "intended to inform the consumer of nutritional properties of a food" and regulations under Act (SI95, 2003, and SI 236, 2019) specify what should be on food labels, as shown in *Box 1* (GoZ, 2001a). Use of artificial sweeteners and additives requires prior written authority from the Secretary for Health and Child Care and only permitted additives set in SI 136 of 2001 can be used.

Box 1: Provisions for Food labelling in SI95, 2003 and SI236, 2019

Food labels, conspicuously placed, in English, in clear, indelible, prominent and legible letters, printed in a contrasting colour to the background of the package and with name and contents in 12pt font and all other information no less than 6pt font, should contain:

- the common or usual name of the food
- the name and address of the manufacturer/packer/distributor at the site of production;
- an accurate statement of the contents in terms of mass, measure or numerical count;
- the common or usual name of each ingredient in descending order of proportion by mass;
- the name of any artificial flavouring, colouring or chemical preservative; and notification of ingredients treated with ionizing radiation, or genetically modified above a threshold of 1%;
- the 'best before' date;
- a packing and code number and/or date on which the goods were packed;
- note of any artificial/non-nutritive sweeteners in the same font size as the product name;
- if relevant the caffeine level, (not >150mg/kg); and gluten or sulphites (if >10mg/kg) ;
- necessary direction for handling, use, or storage of the food, such as refrigeration;

Claims of micronutrient or nutrient fortification on any packaged food label are prohibited unless written permission has been granted by the Secretary for Health, and claims are prohibited that cannot be substantiated; such as to good hygienic practice, healthful or wholesome foods.

While labelling intends to support informed choices, a 2014 cross sectional study in urban and rural adults in Zimbabwe found that while 77% of adults read food labels, especially women, younger, more educated and employed people, only 41% of these people understood the information on the labels. Respondents were mostly interested in the levels of preservatives and chemicals, sugars,

fats and vitamins, expiry dates, ingredients and price in deciding on purchases. Most respondents (81%) indicated they would like to be educated on the meaning of food labels and 80% preferred the nutrition information on food labels to be simplified (Chopera et al., 2014).

As noted earlier, the 2001 Urban Councils Act provides for councils to regulate and inspect food markets. By-laws under the Act provide for standards and licensing after approval by the director for health of businesses involved with food, for mobile ice cream or food take away, and mobile vans selling cooked foods (SI36, GoZ, 2017; GoZ, 2001b). The Harare (Vendors) by-laws provide for council to set aside land or premises for vending sites, stands or stalls and to require conditions in permits or lease agreements necessary to protect public health, such as clean sanitary conditions and good hygiene, and for vendors with an infectious disease to stop vending (SI159, GoZ, 2014a).

In policy, national industrial development policy promotes food and beverage processing as a growth area, supported by tariffs on imported non basic foods and exemptions for local manufacturers from paying duties for raw materials for food processing (GoZ, 2012b, 2019c). In the 2022 national budget, the Minister of Finance proposed a flat rate excise duty of US\$5c/l on energy (caffeinated) drinks, to be combined with excise duties on cigarettes to fund interventions for NCDs. National policy proposes that the Standards Association of Zimbabwe be capacitated to enforce standards on locally produced and imported foods that pose harm to public health (2019c). Food fortification has been a major focus of policy attention, as a means of improving micronutrient supply in processed foods like sugar, oil and wheat flour. It is given profile in the 2014 National Nutrition Food Fortification Strategy (GoZ, 2014c), the FNC communication strategy (FNC, 2019a) the 2018 National Agricultural Policy Framework (GoZ, 2018c), the 2021 National Development Strategy (GoZ, 2021b), the 2016 National Health Strategy ((GoZ, 2016a) and the 2018 Government Transitional Stabilisation Programme (GoZ, 2018b).

The shift in urban dietary patterns in Zimbabwe towards foods rich in total fats and saturated fatty acids, energy dense snack foods, and carbonated sweetened beverages and alcoholic beverages is noted, albeit in fewer policy documents. The 2016 National Health Strategy notes the need to reduce obesity and overweight, largely through promoting social and behaviour change by communicating on diversified diets, consumption of fruit and vegetable and decreased consumption of sugary beverages, and ensuring that imported and exported foods comply with legal standards (GoZ, 2016a). The 2014 National Nutrition Strategy sets a similar goal for "social and behavioral change communication on healthy lifestyles and diversified diets including consumption of at least 5 servings of fruits and vegetables, decreased consumption of sugary beverages". It notes an assumption in this that "the alternative proposed foods are available, affordable and accessible" (GoZ, 2014c:47). The National Cancer Prevention Strategy states that "western diets (highly caloric food, rich in animal fat) combined with sedentary lifestyles increase the risk of cancer; and that intake of vegetables, fruits reduces risks of some cancers", attributing up to 30% of cancers to diet and nutrition (GoZ, 2014d:12). In the 2021 government convened national dialogue on food systems noted earlier, the private sector, food companies and retailers marketing and the media were seen to be shaping people's norms and perceptions about food choices, together with urbanization, income growth, technology and COVID-19. The dialogue called for improved communication to consumers to enable them to make informed choices, as well as regulation of marketing of fast food (MoLAFWRR, 2021).



Packed shelves of ultra-processed foods, Harare, TARSC 2022

4.2 Urban ultra-processed food markets and consumption in Harare

Zimbabwe imports a significant volume of its processed foods, particularly from South Africa, with the top imported products in 2019 being food preparations, bread, pastry, cakes, biscuits and other bakers' wares, wine, alcohol, spirits, cheese and curd (Gadaga et al, undated). At the same time it was noted that sale of South African fast foods fell by 71% between 2008 to 2018, attributed to consumers switching to cheaper brands or locally grown foods (Reardon et al, 2021). Limited further information was found in the literature on the distribution and determinants of consumption of ultra-processed foods in Zimbabwe's urban areas.

Respondents in the assessment noted **the most common ultra-processed foods being sold** as biscuits, fresh chips, sugar, salad creams, instant soups, pizza and fizzy sweetened beverages (particularly Pepsi, Mirinda), freezits, 'jolly juice' tinned baked beans, energy drinks (such as 'Wildcat, Dragon, Switch, Sting', sweetened juices, instant noodles, various canned foods (fish, meat and fruits), polony, burgers, hot dogs, chocolates, fried chicken and crisps, flavoured mahewu, Cerevita, cakes and donuts, 'Jiggies', and sweetened buns. These were observed to have high levels of sugar, salt, flavours and transfats, and various additives or preservatives. Adult males also noted that kachasu (alcohol) in urban areas is accessible at local area pubs, including in people's houses.

Sweetened beverages such as Pepsi and 7up, and energy drinks such as Dragon, Switch, Playboy and Monster were reported to be particularly common. They are often mixed with alcoholic drinks increasing consumption. Energy drinks are seen to provide the energy needed for manual labour. Formal sector workers report commonly consuming chicken and chips, hot dogs, pepsi, energy drinks, chocolates and cake, purchased from supermarkets or 'Simbisa' brand food shops. Cooked chips are seen as a fast-food alternative to Sadza (maize meal) "instead of waiting for food preparation at home". For informal workers, instant noodles provide an easily prepared meal that satisfies. Youth noted the same for cerevita. Tinned baked beans are often taken by children to school or eaten for breakfast, while packed snacks are sold in smaller quantities to provide easy school meals, and are available in tuck-shops. Sweets are sold everywhere, with singers on radio promoting them. Chocolates and sweets are seen as an affordable luxury food to snack on. Children are a primary target, with adults then being attracted. The 'Stumbo' - an imported sweet with a straw and big bulb – was a children's favorite now consumed by adults. Zappy (crisps) started as a children's food but is now consumed by adults, with new flavours like chicken and beef. Children are reported to see packed processed foods as a status symbol, to pester parents for money to buy them, and fear being laughed at by peers if they take homemade food to school.



Ultra-processed food marketing Harare, TARSC 2022

These foods have reached all corners of Harare. They are sold in supermarkets, fast food outlets, by wholesalers, in small shops, tuck shops, service stations, by informal street vendors, and by licensed agents (such as 'pepsi hawkers') and cross border traders. Downtown areas called 'tuckshop' areas vend these products in mass at low price, albeit under sometimes unhealthy conditions. While they are often sold in US dollars, the price is cheaper than in formal shops. Sweetened beverages are found on almost every street corner, at bus-stops, tollgates and other places targeting motorists and people, while sweets, biscuits and packed snacks are being sold in local shops, tuck-shops and even by the school gates. Residents noted that some manufacturers now have points of sale from warehouses to the public on specific days of the week. Ultra-processed foods are observed to "...have flooded every corner and market in both formal and informal shops, both large and smaller ones". Some of these foods are being sold at wholesale price from car boots in neighbourhoods. Locally made cakes and donuts/doughnuts are noted by women to be easy to cook and sell.

These foods are noted to have a range of **health impacts**. Few KIs noted health benefits, but where noted, these included consumer satisfaction and profits for those manufacturing them. Surveys report consequences in overweight and obesity co-existing with stunting and wasting, and a rise in hypertension, type 2 diabetes, irritable bowel syndrome and colorectal and other cancers (Reardon et al, 2021; Narule et al., 2018; Katsidzira, et al., 2018). Many respondents in the assessment noted that ultra-processed foods have caffeine, sugar, salt, acids and other additives that can cause NCDs, including obesity, heart problems, high blood pressure, elevated cholesterol, acne, dental decay, cancer, diabetes, kidney damage, digestive system problems and depression. The high sugar content can make children hyperactive and the foods were seen to be addictive. There was little mention of the vending conditions as these foods are often packaged, although none of the informal vendors selling buns or cooked chips were reported to have medical certificates as food handlers and the formal supermarkets did not display such certificates. One informal vendor noted that they would be happy to have such tests but were not given information about them.

Many respondents suggested that consumers are not widely aware of the health impacts of ultra-processed foods, and that those selling them do not communicate their effects. Studies in Zimbabwe have showed low levels of knowledge and awareness of the conditions and risk factors noted above, especially as these conditions progress slowly over time, but also note that as they become more prevalent, awareness is growing (Gonde and Chimbari, 2019). Limited early screening for NCDs reduces awareness, with one 2019 survey in Hatcliffe finding that 89% of participants did not know if they were hypertensive or not, almost all did not know if they had type 2 diabetes and nearly all had never checked for these conditions. While they were found to commonly consume salts and fatty acids, they did not think that their level of consumption was harmful to their health (Gonde and Chimbari, 2019). The fact that the impacts of many ultra-processed foods increase slowly over time was noted by respondents in the assessment to be a problem as people don't pay attention to it. At the same time known effects may also be disregarded: While youth noted that they commonly consume jiggies, they also appreciated the chemicals they bring into their bodies, and that the caffeine they consume in energy drinks can have a harmful, unspecified health impact.

Many ultra-processed foods, especially those that are imported, were seen to by respondents in the assessment lack labels to provide consumers with information on their contents. The checklist assessment on labelling of tracer foods, summarised in *Table 4 overleaf*, indicates that the sweetened beverages assessed largely complied with labelling rules, but other products assessed did not.

Despite being labelled, except for cooked chips and sweetened buns in smaller supermarkets and informal vendors, the labels lack or do not show clearly the required information. The ingredient list is technical, with some variability in visibility and clarity of the lists, and with the list of additives and chemicals giving no indication of their risk to health and no visual symbols used. Many countries have used visual symbols to enable consumers to make informed choices, and one respondent proposed that a Standards Association of Zimbabwe symbol be used. There was no warning of additives in high levels, or differentiation of trans fats from other fats, given the particular contribution to NCDs of the former. Finally, while only two labels appeared to provide specific health information, others included terms or visuals that implied nutritional benefit. Hence for example processed chips with pictures of chickens or reference to beef and chicken imply that they actually contain such ingredients, when they actually have flavorings for this.



Popular ultra-processed food and ingredients shown, Harare, TARSC 2022

Table 4: Checklist assessment findings on labelling of ultra-processed tracer foods in Harare,

Item %	Sweetened beverage (1)	Hard sweets (2)	Oil cooked chips	Processed chips (3)	Sweetened buns
Total vendors selling the item N=8 (a)	8	7	3	7	4
products labelled	100%	100%	2 large supermarkets	100%	In 4 formal vendors
Showing batch number	100%	0%	0%	71% (b)	50%
Showing date of manufacture	0%	43%	2 large supermarkets	71% (b)	25%
Showing expiry/ best before date	100%	71%	2 large supermarkets	86% (b)	25%
Showing a health claim	1: "Not for consumption by children, pregnant and lactating women" (c)	1: "Suitable for vegetarians"	0%	0%	0%
Showing nutrient / ingredient list	100%	71%	2 large supermarkets	86%	25%
Fat % noted (d)	0%	None showing	None showing	71% indicate 24-35% fat	None showing
Sugar % (d)	11-13.3g/ 100ml 59g/100ml (c)	None showing	None showing	2.5-55g/ 100gm	None showing
Salt % (d)	1.8-22 mg/100ml 95mg/100ml (c)	None showing	None showing	0.7-2.5g/100g	None showing
Showing chemicals/ preservatives	25% (e)	43% (f)	None showing	29% (g)	None showing

(1) This mainly referred to Pepsi, but also included 7up, Mirinda and Sting (2) These were mainly Charhons and Crystal Candy hard sweets and sweetened biscuits in one response (3) This largely referred to Jiggies, but also to Chompinkins and 'Chipsy' brands

(a) 4 formal supermarkets, 4 informal vendors (b) But unclear or obscured (c) Refers to 'Sting' (d) The range of levels found for the items in different vendors shown (e) Caffeine, phosphoric acid, Cola, Emulsifier, Artificial colouring, calcium disodium, pyridoxine hydrochloride, colourants, taurine, sodium benzoate were listed (f) Approved colours and flavours, malic acid, glycerine, citric acid, colour E104, E110, E122, E128, E133 were listed (g) Permitted colourants, Maltodextrina, anticaking agent, flavour enhancers, acidity regulators E262, E330, monosodium glutamate were listed

While strict regulations exist on labelling, many imported foods or products from unlicensed sources were seen to be difficult to monitor, and make health claims or contain prohibited additives. Regulated, licensed processors are seen in contrast to meet the minimum standards. The processed foods in the checklist assessment shown in *Table 4* were all manufactured in Zimbabwe except of a sweet producer from South Africa (company names available). Residents said the lack of clear information or accessible labelling meant that they have heard of risks but do not know how specific foods affect them. This was contrasted with tobacco and alcohol, where the harmful effects are clearly noted on the product labels.

There was concern expressed over how to reach children with information on the harms as they are particularly unaware. "We just eat these foods in ignorance. We don't know what the sodium benzoate is, is it sugar, is it salt, even what they call acidifiers, we don't know



Difficult to read expiry dates and batch number, Harare, CFHD 2022

what it is... If you ask me about sadza, I know what it is prepared from so well". In the review meeting, stakeholders noted the importance of school health policies, programmes and curricula in raising children's awareness. KIs noted that unless consumers were informed on labelling content it is difficult for them to monitor or use them in making choices. Others suggested that while some consumers know the harmful impacts, they ignore them as they may not access alternatives and want to 'fill their stomachs'.

The increase in marketing and consumption of ultra-processed foods was noted in the



Ultra-processed foods advertised on municipal signs, Harare. TARSC. 2022

assessment to be driven by a number of factors. Low prices and income pressures play a key role, with some tuckshops selling these foods on credit. One respondent noted "Healthy food is expensive in Zimbabwe". Ultra-processed foods were seen to be available in retail sites at workplaces, residential areas, transport points; and are thus accessible for people who work outside home or lack in-work or nearby canteen services. Formal sector workers noted that 'dial a delivery' services can bring some fast foods like chicken and chips to workplaces, while youth reported finding these foods at school gates. Informal workers reported cooked chips or instant noodles as foods that are both filling and ready to eat or quickly prepared. Table 5 provides the reported prices for some commonly consumed processed foods.

Table 5: Processed food prices reported in group discussions and checklist assessments

Item	Price	Unit	Reported by
Chicken and chips	US\$2-3	Single serving	Formal workers, youths
Hot dogs	US\$1	1	Formal workers
Pepsi (sweetened beverage)	US\$50c	500ml	Formal and informal workers, female, male adults, checklist assessment
Chocolate	US\$1	Medium bar	Formal workers
Flavoured Mahewu	US\$1	20 Sachets	Adult women, youths
Jiggies	US\$1 ZWL31	20 packets 30gm packet	Female and male adults, youths Checklist assessment
Donuts	US\$30-50c	1 regular size	Female adults, youths
Fresh chips	US\$1 US\$1 ZWL1000-1900	Medium packet Medium portion 1 kg	Informal workers, adult men Checklist assessment Checklist assessment
Energy drinks	US\$50c-1	500ml	Informal workers, youths, adult men
Sweetened buns	US\$50c ZWL100-186	4 buns 4 buns	Informal workers Checklist assessment
Instant Noodles	US\$2	20 (meal =1)	Informal workers
Sweets	ZWL10 380 ZWL	1 sweet 280 gm packet	Youths Checklist assessment
Cerevita	US\$25c	1 sachet	Youths
Kachasu (Alcohol)	US\$50c	1 sachet	Adult men

Consumption of ultra-processed foods was observed to be driven by lack of knowledge of their health risks, by an assumption that what comes from the market is good; and by what some noted as a 'laziness' to cook or a preference for the taste of some of these foods to home cooked food. Youths note that they are affected by peer pressure to consume some of these foods. One young person commented "jiggies have become our national anthem, I can have other foods but I will always have to top with a packet of jiggies. It is difficult to go through a day without them". It was noted that people develop a taste for these foods sold in fast food places, and the phrase 'a kind of addiction' was used. However the group discussions also showed evidence of assertive and widespread marketing practices. For example some noted the promotion on mass media of days for particular fast food promotions, including "terrific Tuesday, thrilling Thursday, munchy Mondays" for Innscor promotions. Promotions include an additional piece of chicken for every meal bought, discounted prices of specific fast foods, introduction of new flavours to attract demand, colourful packaging and vendor carts prominently advertising sweetened beverages, particularly Pepsi in all areas.



Informal vendor stands advertising ultra-processed foods, TARSC 2022



Vending ultra-processed foods near an urban school. C Mware. 2022

Respondents noted that suppliers are using push marketing tactics, making sure products are close to sites people frequent or transport routes so they are consumed even without planning to do so. The push was said to be coming from producers, wholesalers, retailers and local vendors. The packaging was noted by another to make you think when you consume them you will be satisfied, that you will have a wholesome meal. However one noted that its food that "ends in your mouth" (a phrase translated from Shona meaning food that doesn't satisfy you). Examples were given of use of words like 'beef' or 'chicken' with processed foods like crisps that in fact do not contain these foods.



Health claims on adverts, TARSC 2022

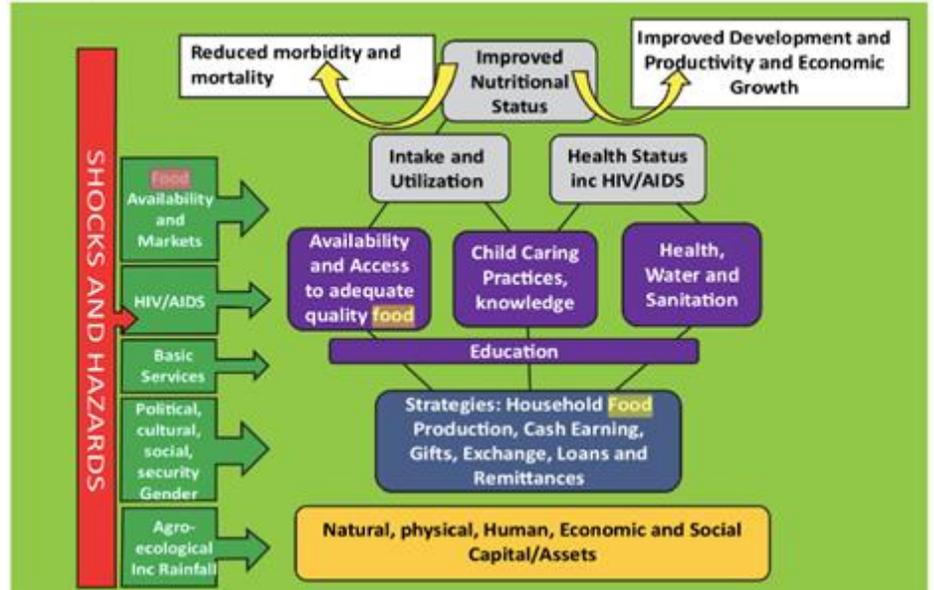
There are different views on **how the COVID-19 pandemic has affected the consumption of ultra-processed foods**. Some suggest little impact, but as noted earlier, the lockdowns were noted by many to have reduced movement and incomes. While this was noted earlier to have generated a shift to locally grown foods, residents also noted people opting for cheaper processed foods sold in local tuck shops which remained open during lockdowns. Border closures reduced imports and factory closures production of ultra-processed foods, however, reducing their presence in local markets, and vendors were not able to travel to wholesalers to purchase ultra-processed foods. Generally the consumption of these processed foods was seen to fall, with one resident noting "...we sacrificed and bought the things like cooking oil, but the ultra-processed foods which were luxuries, we scaled them down significantly". When restrictions lifted old patterns were noted to re-emerge, however.

5. Discussion: Issues for a health-promoting urban food system

5.1 Interactions between locally-grown and ultra-processed foods in Harare

Urban food systems are understood to be influenced by many sectors and actors. The conceptual framework proposed by the Food and Nutrition Council, shown in *Figure 3*, links food related health and economic outcomes to dietary practices that are affected by availability of and access to adequate quality food, environmental health, household production, activities and incomes and the underlying natural, social and economic resources and assets, norms and cultural practices that affect more proximal factors, with many sectors and actors influencing these determinants.

Figure 3: Conceptual framework proposed by the FNC for food and nutrition security in Zimbabwe



Source: FNC, 2019:80

As a key feature of this multi-actor system, Harare residents are faced with a mix of locally grown and ultra-processed foods often in the same vending points and spaces. Uniquely Harare has a greater presence and uptake of grown foods than other cities in the region, although the expansion of ultra-processed foods has been rapid and widespread.



Above: Will consumers choose the ultra-processed or the locally grown foods? Harare, TARSC, 2022

Left: Informal food vendor selling grown and processed foods near a bus terminus, CFHD 2022

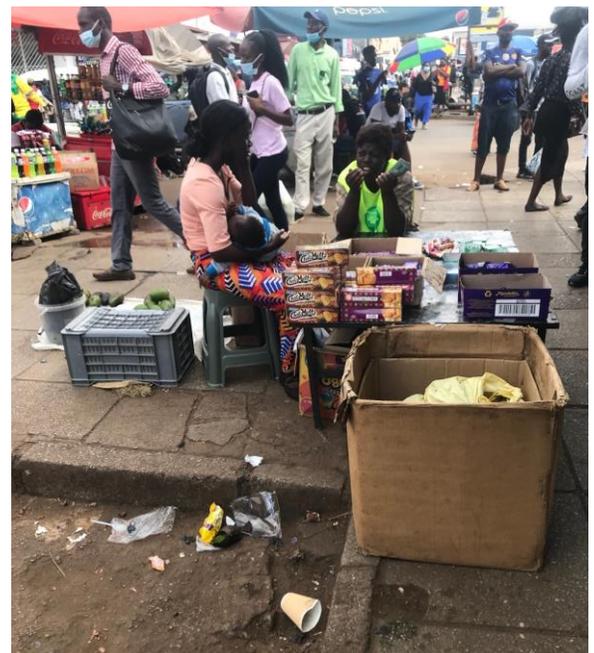
The interaction is not only in respect of the presence of both grown and processed foods at accessible vending points across the city. The two systems do appear to have impact on each other. For example, street vending of local grown and cooked foods, often traditional foods, near workplaces and transport routes was found in 2014 to have led adjacent shops to have reduced or completely stopped selling processed fast-food and snacks (Njaya, 2014). Health professionals and state authorities have voiced the health promoting impact of many of the locally grown foods marketed in the city. The earlier results suggest that many adults prefer locally grown foods and traditional diets, for their taste and nutritional benefit, noting that they also support livelihoods, incomes and local cultures, and link communities in social networks. Although traditional diets were said to have become less popular as people moved to processed foods, this may be more due to supply, with respondents of one Harare survey reporting a preference for local foods, such as dried fruits from markets or street traders, including as convenience foods (Gadaga et al, undated).

On the other hand, young people and children are seen to be increasingly shifting towards ultra-processed foods, responding to peer pressure and perceptions of fast-foods as being high status, and drawing in adults to consuming foods that initially targeted children. As children, get used to the sugary taste of ultra-processed foods, residents observed that they may not like the taste of grown foods. Many grown foods are seasonal. While they may be freely available during high season, when they are more scarce ultra-processed foods may be more convenient and available. When foods like green mealies are seasonally available, women residents say they introduce them to their children, so that they learn to eat these foods as part of their local culture. This focus on young people may be particularly important given the longer-term impact of ultra-processed foods on obesity, hypertension, diabetes and other NCDs, and the risk of a future of significant, potentially unmanageable increases in these conditions if the current trends persist.

Environmental and public health concerns have been raised in relation to both food sources. For locally grown foods these relate to prohibitions on cultivation in urban settings where it may cause ecological degradation, and public health concerns on the storage, and vending of these foods. For ultra-processed foods the concerns relate to their contents and the information provided for controlling those ingredients that are harmful to health, as well as the environmental conditions in vending sites. Beyond a focus on the individual foods, there are thus issues affecting both types of foods relating to the wider hygiene measures and infrastructures for food marketing and the level of public information and awareness.

A further feature of the interaction between these two elements of urban food systems is in the differential implementation of legal standards. On the one hand, authorities have sometimes destroyed crops and vending sites of locally grown foods, including those both prohibited and permitted in law, while at other times ignoring, enabling or even encouraging local food production. At the same time, laws on ultra-processed foods are felt to be poorly monitored, enforced and complied with, particularly as the range of imported and informal producers and vending sites expands. Laws and their enforcement on labelling and advertising of processed foods are seen to inadequately inform and protect consumers. Under-resourced inspectorates face challenges in a context of a disconnect between intended legal standards and the situation on the ground in both food systems.

This interaction, potentially inverse, between locally grown foods and ultra-processed foods in the city was particularly noted by residents and key stakeholders during the pandemic.



Hygiene challenges in vending sites, Harare, TARSC 2022

Lockdown restrictions, trade disruptions and a fall in incomes left consumers confined to homes, closed many importers, factories and outlets providing ultra-processed and fast foods, or limited access to them due to travel restrictions. While cheap fast foods available in local tuckshops were consumed, the consumption of ultra-processed foods fell, maize fields and vegetable gardens were resuscitated and expanded, and people turned to growing and trading locally grown foods. Residents said “Our food consumption pattern during COVID-19 became more traditional because we were now eating more of our sadza and vegetables,” and that “local foods actually sustained us during COVID-19”. Residents also drank herbal teas and ate traditional foods for their perceived health and immune system promoting effects. While people maybe slowly reverting to old food habits after lockdowns, others suggest that the changes maybe more long lasting.

A more proactive development of the interface between locally grown and processed foods is the local production and processing of healthy food products that offer nutritious, accessible and affordable alternatives to ultra-processed foods. One producer of such products noted “The more people eat well, the less they have to visit the hospitals. It’s really that simple. However, there is still work to be done in convincing people that healthy eating can be affordable, and is as easy as opening a bottle of our baobab juice, or making a three-minute porridge with our banana flour,” (Kalulu, 2021:online). Zimbabwe has had a history of domestic processing of foods grown in urban areas. In the 1980s and 1990s hammer mills were used to process locally grown maize proliferated, including in urban areas (Reardon et al., 2021). Indeed contrary to respondent views, most of the producers of the tracer ultra-processed foods in the checklist assessment were based in Zimbabwe. It seems that there is both capacity and potential to shift towards processing of healthier locally produced foods. Various innovations have already been reported in processing of local foods. Kalulu (2021) outlines, for example, an initiative to popularise healthy, traditional foods in processed products from locally grown foods, such as baobab juice, green banana flour and green banana porridge. These are sold at Mbare Musika in Harare and by food vendors in the city as nutritious, affordable foods for those seeking healthy alternatives to ultra-processed but convenient foods (Kalulu, 2021). Other processed foods from indigenous foods are also found in supermarkets.

Local enterprises still face multiple barriers to processing local foods, noted earlier, that limit research and development, proof of concept and market outreach (Mhazo et al., 2003; Kalulu, 2021). At the same time they demonstrate an alternative in the interaction between processed and locally grown foods in urban food systems.

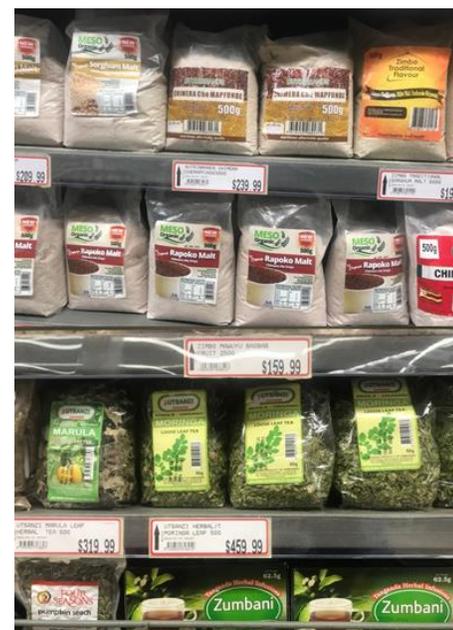
The next sections discuss two aspects of what a healthier interface between these two elements of urban food systems may involve, drawing on proposals raised in the assessment and from the stakeholder review meeting.

5.2 Enhancing the role of healthy, ecologically sound urban agriculture

Being clearer on what is permitted in line with urban plans and communicating this to producers, officials and police is commonly identified as key to promote the urban agriculture commonly articulated in national policy documents. There were diverse views expressed on this in the assessment, suggesting a need for dialogue on a shared way forward. From one respondent suggesting the prohibition of agriculture in urban areas, and others suggesting in contrast a deeper investment in urban agriculture there still appear to be relatively polarized views.



Artisinal foods baobab fruit juice, Kalulu, 2021



Harare Supermarket sale of indigenous /locally grown food products, TARSC 2022

A punitive and prohibition approach is noted by some to have driven to the margins what is a widespread economic activity within local culture that improves livelihoods, to the cost of innovation and recognition of quality. The more conditional view of government laws requiring urban agriculture of foods to be on suitable land, not cultivated on stream banks, free from environmental contamination, not watered with waste/sewer water and monitored by agricultural extension officers to make sure it meets safety and phyto-sanitary requirements seems to be more widely accepted.

There is an argument for a more assertive promotion of locally grown and traditional diets in urban dwellers, including to slow the rise in NCDs (Katsidzira et al, 2018). Beyond ad hoc awareness activities, this is argued to call for a more enabling environment for urban agriculture and local food processing, including by small and medium enterprises, including to cover the activities identified by the FNC in the 2014 National Nutrition Strategy for “demand creation for nutritious foods, with an emphasis on production, processing, preservation, storage and preparation of a more diverse food basket” (GoZ, 2014c:13).

In the assessment and the review meeting, **raising public awareness on the benefits of healthy local foods was seen to be a priority**. Various measures have been suggested to promote awareness and informed choice on healthy local foods, including on their storage and preparation. For example, food awareness festivals can promote the health benefits of local foods and harms of ultra-processed foods to promote informed and responsible choice. The Consumer Council of Zimbabwe and peer educators from various urban civil society organisations are identified as assets who can play an active role in promoting knowledge, community monitoring and enforcement of regulation and standards. Social networks can support the sharing of skills and knowledge, such as on the preparation of traditional food dishes.

The assessment showed the significant evidence held by communities at a time of rapidly changing practice, widespread informal activity and resource limitations in state systems. A healthy urban food system depends on bringing this knowledge and experience in communities to the table with various authorities and stakeholders. Collaborative urban food systems are thus argued to call for residents, vendors, food processors to strengthen their own capacities and skills and to constitute themselves into well organised associations to be able to input to laws and forums and interact effectively with local and central government (Njaya, 2014).



Food market, Harare, CFHD 2022

As a further priority, there was a consensus in the literature, amongst those in the assessment and in the review meeting that **urban agriculture and locally grown food vending needs to be recognized and enabled**, including in law, by-laws and policy, through technical guidance from agricultural extension officers and in dialogue with residents, vendors and producers, so it is done in a sound way that doesn't harm the environment and health or impinge on other residents wellbeing (Motsi, 2021; Gadaga et al., undated; Mhazo et al., 2003; assessment respondents; stakeholders).

This calls for less ambiguity on what this means and how it is enforced in practice. A range of measures were proposed that could meet this shared understanding, raised in the assessment and endorsed also in the review meeting, including:

- Compilation of a data-base of the stakeholders involved in urban agriculture and processing of locally grown goods and in other roles in urban food systems to support dialogue and co-ordination of current and proposed initiatives.
- Strengthened communication and coordination between the health, agriculture, local government, environment, industry, finance authorities, and informal sector, resident and local

producer associations to build a proactive partnership rather than criminalise the sector, to create mutually beneficial outcomes.

- Support for urban farmers in terms of land and technical guidance from agricultural extension officers, backed by political and resource support and capacities for these roles. In the review meeting this was positively viewed as also giving increased legitimacy to urban agriculture.
- Promotion of nutrition gardens at households and public institutions and expansion of initiatives. In households this may include growing a variety of crops in pots and sacks in small backyard plots, while off-plot urban agriculture would benefit from expanded government provision of land in the Pfumvudza programme for urban agriculture and the city council 'Solidarity gardens' for women producers of vegetables and other locally grown foods. This also calls for a balance in urban master plans between land for housing, urban agriculture, waste management and recycling and for green spaces.
- Wider provision of decentralised and council-provided market spaces and accreditation of informal sites on the basis of a health, environment and hygiene checklist that communities can also help to monitor.
- Regular (and spot check) assessment of food quality, pesticide residues and bacteria in locally grown and processed foods in urban markets, and regular public sector checks and certification of all food handlers for food-related infectious disease, with certificates publicly displayed.
- Tax incentives and innovative financing support for healthy and organic food producers, processors and retailers, for processing equipment, skills, packaging materials and marketing information, for healthy food promotion on mobile vendor carts, and work with 'early adopter' business leaders providing capacities for and promote healthy, locally grown/processed urban foods. In the review meeting, opportunities were identified in linking urban food systems and processing of healthy foods with eco-tourism and local economic development and it was noted that the Confederation of Zimbabwe Industries is already exploring value chains for this.
- Investment in research and development for urban food production and processing, including by SIRDC on seed varieties and for proof-of-concept testing, technology innovation and access and market expansion for local innovations in food cultivation, processing, storage and preparation.



Solidarity garden for local food production, Hatcliffe, CFHD 2022

One key informant noted that while authorities need to act to regulate harms and support health-promoting practices, such as in the measures suggested above, urban food systems also need more bottom-up processes, providing spaces where local people with knowledge or products can share information, experience and innovations. Local measures need to be reflected in and international trade agreements and tariff structures, to move from imports to marketing locally processed foods. In the review meeting, delegates urged the health system to strengthen its focus and training of health workers to give more attention to health promotion and prevention of ill health, noting that this is particularly important in relation to food systems and NCDs.

Informal sector and small scale foods vending and street foods are noted to be a key part of urban food security and to support household incomes, especially for women. One proposal made is for government to provide a code of practice for street food vendors, as provided for in the 2018 Public Health Act. The city council could enable its implementation through construction of decent shelters for rental by vendors, and co-ordinate with town planning, Harare Water Department, Zimbabwe National Road Administration (ZINARA) and Zimbabwe Electricity Supply Authority (ZESA) to provide essential public utilities such as potable water, electricity and public toilets for street food vendor sites, including such vending sites also in planned new suburbs. A further suggested option is for the city council to construct a prototype model for a food vending stall or kiosk which could be made available for sale through microfinance (Njaya, 2014).

5.3 Managing the health issues in ultra-processed foods

Many respondents in the assessment urged government to strengthen regulation and inspection of ultra-processed foods to safeguard population health. One respondent recommended banning imported ultra-processed foods altogether, and penalising illegal sale. Informal workers and youth suggested government stop the sale of jolly juice and jiggies. Others called for the level of law enforcement rigour currently applied to informal vendors and urban farmers to be applied to producers, advertisers and vendors of ultra-processed urban foods.

In relation to ultra-processed foods, international experience is noted to point to measures to promote healthy foods and discourage harmful foods through tax measures, nutrition labelling and regulation of advertising. In its own discussions on food safety, the health ministry (MoHCC) has noted the need to ensure that the food industry itself is familiar with the requirements of food safety laws, regulations and standards; and sees a need to incentivise good practice and food safety from 'farm to table', including through a national food safety authority.

Controlling children's exposure to ultra-processed foods was seen to be a priority – in law, through advertising controls, media and school practices, and promoting healthy food alternatives.

The evidence suggests that **improved laws are now needed, including in the review of the Food and Food Standards Act, to cover the advertising, labelling and marketing of ultra-processed foods**, as for example is found for advertising of other products harmful to health, like tobacco. In particular this may now be urgent to prohibit advertising of such foods to young people and children, such as on billboards near schools, on vendor stands, in public transport routes, on buildings and related settings, and in radio, television and media that target or are accessible to young people and children. Associated with this was a suggestion for more active promotion of messages promoting healthy foods and practices in forms and media used by and designed with young people, including in schools, health centres and other public services and in music, social media and the creative economy. Legal review was also called for on labelling of processed food products, such as to provide health warnings and to apply visual symbols to indicate the level of risk of harmful additives, as applied in other countries. There was a call for clear information on standards to reach grassroots levels for people to make informed choices.



Vendor stands on street corners advertising products, TARSC, 2022

Labelling is necessary, if not sufficient, particularly as noted in this assessment, if consumer understanding of nutrition information on food labels is not well understood, and if screening of NCDs is too limited to make people aware of the health risks. Here too, **the mapping of stakeholders and inclusion of a wider reach of stakeholders in the food and nutrition committees at national and city level for strengthened co-ordination of initiatives were seen to be a priority to support measures to control the risks of ultra-processed foods and to promote the options for healthier alternatives.**

The assessment and review meeting highlighted the multi-stakeholder roles in implementing this. Families were seen to be critical, as food habits start from infancy. While the MoHCC is developing food-based dietary guidelines, it was felt that the key messages need to reach families and the public in an accessible way, including through civil society, artists, musicians, schools and tertiary

institutions. The primary health system thus needs to be equipped with resources and trained cadres to scale up screening of NCDs such as hypertension and diabetes. Residents and stakeholders also proposed that government engage fast food outlets, such as the Innscor run 'Simbisa' outlets to promote healthy food options. In the review meeting it was noted that if taxes and tariffs on ultra-processed foods were higher, their higher cost may encourage consumption of healthier alternatives, but only if these alternatives were more widely available.

Respondents in the assessment suggested that in addition to its focus on food fortification, the excessive refining of grains and food products should be stopped where this strips food of key nutrients or adds harmful additives. Various respondents called for food markets of all types to be routinely monitored and law enforcement strengthened, such as in relation to food labelling, sale of expired products, detention of foods that violate statutory provisions and improving environmental conditions in designated vending areas. With ultra-processed foods part of an international food market, Zimbabwe was urged in the assessment to apply measures and health standards applied in other countries.

With action perceived as inadequate relative to the scale of the problem, some respondents in the assessment suggested that the standards set by the Standard Association of Zimbabwe be mandatory on processed food products. Beyond standard setting, residents urged greater presence of inspectors in their neighborhoods. "Organisations that enforce food standards should be available and be seen amongst us the people. For example, if you want to find an Econet shop....the same should happen with the organisations that enforce food standards. We should be seeing them in the shops giving out the necessary information. The sellers will then also realize that once standards are enforced, they don't buy foods that give them problems from wholesalers and manufacturers".

Respondents felt that affordable access to internet and adequate public funding and transport need to be addressed as they affect capacities to regulate, enforce, reach and be accountable to communities. Inspectors were noted to face transport and other challenges to meet the scale of the task. It was suggested that the Consumer Council of Zimbabwe and other civil society organisations - after training, working with authorities, and without delegating powers of inspectors - could be more widely engaged in monitoring and reporting public health risks relating to labelling and other food practices to relevant authorities, as indicated in the Public Health Act CH15:17 Sections 32 and 125, for follow up investigation, action and feedback by authorities. Various digital apps exist to support wider awareness and engagement on compliance with standards and on harms to health. For example Yuka (<https://yuka.io/en/>) is a smartphone application that provides information on food contents from a wide range of countries using scanned bar codes, and Sunucity is a Senegalise application developed initially around COVID-19 that enables communities to inform authorities of health issues that need attention and to provide residents with relevant public health information.

5.4 Evidence gaps for future research

Harare has shown evidence of many institutional resources for past research on the urban dimensions of food security in FEWSNET, AFSUN, ZIMVAC and local institutions. In the 1990s, for example, research focussed on the functioning of the city's food system and the food security and livelihood strategies of poor urban communities. The impact of the COVID-19 pandemic and lockdowns on urban food systems, as reported in this research, the demand for prevention, preparedness and protection in future pandemic threats, and the growing impact of climate change, call for evidence on current and projected impacts of these major trends on food systems, including



Adverts for sweetened products overshadowing toothpaste adverts to address their harms to dental health! TARSC 2022

in urban areas. As this assessment showed in the pandemic, this may raise opportunities for improved practice that can be planned for.

This scoping assessment was deliberately limited in geographical and thematic scope to provide initial information. What it does indicate is a rapidly changing situation that is often informal, experienced by local communities and poorly reflected in formal routine planning. It also indicates a wealth of ideas for improvements within the communities and stakeholders involved. As one evidence gap future research could explore the situation with respect to and the responses in the marketing and consumption of urban grown foods, and of ultra-processed foods in other urban areas, and more systematically for the social groups within them. This may also extend to evidence on the functioning of port health in relation to foods crossing borders in formal and informal 'ports', and on the level of co-ordination in practice of different relevant authorities in port health.

Generally, and as endorsed in the review meeting, a **stronger focus needs to be given to the urban food system issues raised in this report, particularly in the ZIMVAC, Health, Consumer Council and other regular surveys**, to better understand the changes in consumption patterns around locally grown and ultra-processed foods and their health consequences. The regular national household surveys could include evidence to monitor food sources and practices, for health planning and for better quantification of the economic contribution of formal and informal urban food systems, including in poverty reduction. Better co-ordination of those doing assessments would also provide a more comprehensive picture of the changing situation in food systems. The review meeting also called for wider accessible and more public dissemination of findings of assessments.

In the review meeting, it was noted that **proposals for tax measures would need to be backed by research on elasticity of demand**, and evidence on options for ringfencing revenue raised for interventions aimed at preventing and managing health consequences, such as those raised in *Sections 5.2 and 5.3*.

More immediately, the issues found and proposals made in this assessment however suggest areas of intervention where it would be useful to get **information on good practice for how the issues and measures raised in this report have been addressed** in legal and policy frameworks and in initiatives in practice in other cities in Zimbabwe and internationally.

- *Within Zimbabwe*, it would be useful to implement a stakeholder and initiative assessment in the different cities, to support co-ordination and gather information for exchange of good practice.
- *For the legal review of the Food and Food Standards Act*, how are the issues and standards raised in this report addressed in other laws internationally?
- *Internationally*:
 - *For urban agriculture*: What measures have other countries in and beyond the region used to incentivise urban agriculture and small enterprise/informal processing, vending and street foods for local food systems in a manner that protects and promotes public health, ecologies and local economies? How have other urban settings and stakeholders protected and promoted indigenous foods in commercial systems? How have other urban settings encouraged the preparation and consumption of healthy local foods in young people?
 - *For ultra-processed foods*: What model laws, tax and tariff measures and effective good practice can be used to guide law reforms and labelling and advertising practices in Zimbabwe? What approaches, methods and tools have been used to protect, engage and involve young people in urban areas to shift away from ultra-processed foods? How have capacities for monitoring and action on harmful practice been strengthened through whole of society approaches and innovative tools?

The evidence gathered in the assessment, the views of respondents from communities, civil society, professionals and authorities and those expressed in the review meeting highlight a broadly shared concern that Harare, and Zimbabwe generally, is at a critical juncture in its urban food systems, with decisions and actions taken in the immediate future having long term consequences for opportunities on or challenges to health, wellbeing and sustainable development in our cities.

6. References

1. African Biodiversity Centre (ACBio) (2020) Introducing ACB's multiple shocks in Africa series: ecological crisis, capitalist nature & decolonisation for human and ecological liberation, ACBio, SA
2. Alliance for Food Sovereignty in Africa (AFSA) (2014) 'Open Letter Opposing Human Feeding Trials Involving GM BANANA,' *Pambazuka News* Issue 706 December 9 2014, Online.
3. Awosusi A (2019) 'Potential Health Impact of the African Continental Free Trade Area Agreement, *Int Health Policies*, 2019.
4. Chopera P, Chagwena DT, Mushonga NG. (2014) Food label reading and understanding in parts of rural and urban Zimbabwe. *Afr Health Sci.* 2014 Sep;14(3):576-84.
5. Food and Agriculture Organisation (FAO) FAO (2021). Zimbabwe | Agricultural livelihoods and food security in the context of COVID-19-19: Monitoring report, May 2021. Rome.
<https://doi.org/10.4060/cb4333en>
6. Food and Nutrition Council (FNC) (2014). State Of the Food And Nutrition Security Report December 2014. Available at <https://fnc.org.zw/wp-content/uploads/2019/10/Zimbabwe-2014-State-of-the-Food-and-Nutrition-Security-Report.pdf>
7. FNC (2018). Zimvac Urban Livelihoods Assessment Report 2018. FNC & ZIMVAC, Harare. Available at <http://fnc.org.zw/wp-content/uploads/2019/01/2018-ZimVAC-Urban-Livelihoods-Assessment-Report-1.pdf>
8. FNC (2019a). Food and Nutrition Security Advocacy and Communication Strategy. Available at <http://fnc.org.zw/wp-content/uploads/2019/04/zimbabwe-food-and-nutrition-communication-strategy-1.pdf>
9. FNC (2019b) Food and Nutrition Council Strategy 2019-2021. Available at <https://fnc.org.zw/wp-content/uploads/2019/04/Food-and-Nutrition-Council-2019-2021-Strategy-Document.pdf>
10. FNC (2021a). Zimvac Urban Livelihoods Assessment Report 2020. FNC & ZIMVAC, Harare. Available at <https://fscluster.org/zimbabwe/document/2020-zimbabwe-vulnerability-assessment>
11. FNC (2021b) Food And Nutrition Security Update: Report On The Implications Of COVID-19-19 And Related Containment Efforts On Food And Nutrition Security For Rural And Urban Households In Zimbabwe
12. Gadaga T, Nyanga L, Muredzi P et al (undated) The potential for marketing processed fruits and vegetables in Harare, Mimeo at <https://assets.publishing.service.gov.uk/media/57a08ce7e5274a27b20014f7/R7485h.pdf>
13. Gogo J (2014) Processed food addiction, *The Herald*, 23 Sep 2014
<https://www.herald.co.zw/processed-food-addiction/>
14. Government of Zimbabwe (GoZ) (2001a) Food and Food Standards Act Ch 15:04. GoZ. Available at <https://www.law.co.zw/download/food-and-food-standards-act/>
15. Government of Zimbabwe (2001b). Urban Councils Act Ch 19:15. GoZ. Available at <http://www.veritaszim.net/node/186>
16. GoZ (2002a). Food and Food Standards (Food Labelling) Regulations SI 2002-265 as amended by SI 2003-95. Available at <https://leap.unep.org/countries/zw/national-legislation/food-and-food-standards-food-labelling-regulations-2002>
17. GoZ (2002b). Environment management Act Ch 20:27. Available at <https://www.fao.org/faolex/results/details/en/c/LEX-FAOC047834/>
18. GoZ (2012a). Comprehensive Agricultural Policy Framework (2012-2032). Available at <http://www.livestockzimbabwe.com/Updates/Draft-%20Zimbabwe%20Agriculture%20National%20Policy%20Framework.pdf>
19. GoZ (2012b). Industrial Development Policy (2012–2016). Ministry of Industry and Commerce. Available at <https://www.tradezimbabwe.com/wp-content/uploads/2016/03/Zimbabwe-Industrial-Development-Policy.pdf>
20. GoZ (2013a). Constitution of Zimbabwe Amendment Number 20. GoZ. Accessed at http://www.veritaszim.net/sites/veritas_d/files/Constitution%20of%20Zimbabwe%20Amendment%20%28No.%2020%29.pdf
21. GoZ (2013b). Zimbabwe Agenda For Sustainable Socio-Economic Transformation (Zim Asset) - 2013-2018. Available at <http://www.veritaszim.net/node/930>
22. GoZ (2014a). Harare (Vendors) By-laws, 2014. Statutory Instrument 159 of 2014. Ch. 24:20. Available at [http://www.veritaszim.net/sites/veritas_d/files/SI%202014-159%20-%20Harare%20\(Vendors\)%20By-laws,%202014.pdf](http://www.veritaszim.net/sites/veritas_d/files/SI%202014-159%20-%20Harare%20(Vendors)%20By-laws,%202014.pdf)

23. GoZ (2014b). Harare Protection of Marginalized Land Bylaws . Available at <https://www.hararecity.co.zw/resources/download/47>
24. GoZ (2014c). Zimbabwe National Nutrition Strategy 2014-2018, Food and Nutrition Council of Zimbabwe Harare. Available at <http://faolex.fao.org/docs/pdf/zim160334.pdf>
25. GoZ (2014d). National Cancer Prevention Strategy 2014-2018. Ministry of Health and Child Care. Available at https://www.cancerzimbabwe.org/articles/Nat%20Cancer%20Prevention%20and%20Control%20Doc_18_3_14.pdf
26. GoZ (2015). Food and Food Standards (Inspection and Certification) Regulations, 2015, SI 2015-5. Available at <http://extwprlegs1.fao.org/docs/pdf/zim170804.pdf>
27. GoZ (2016a). National Health Strategy 2016-2020. Equity and Quality in Health. Living no one behind. Ministry of Health and Child Care. Available at <https://documents1.worldbank.org/curated/en/364731563173429622/pdf/The-National-Health-Strategy-Equity-and-Quality-in-Health-Leaving-No-One-Behind-for-Zimbabwe-2016-2020.pdf>
28. GoZ (2016b). Zimbabwe Interim Poverty Reduction Strategy Paper 2016-2018. Ministry of Finance and Economic Development. Available at http://www.veritaszim.net/sites/veritas_d/files/Interim%20Poverty%20Reduction%20Strategy%20Paper%20%28I-PRSP%29%202016%20-%202018.pdf
29. GoZ (2017). Harare (Licensed Premises) (Amendment) By-laws, 2017 (No. 3) Statutory Instrument 36 of 2017. [CAP. 29:15]. Available at http://www.veritaszim.net/sites/veritas_d/files/SI%202017-36%20-%20Harare%20%28Licensed%20Premises%29%20%28Amendment%29%20By-laws%2C%202017%20%28No.%203%29.pdf
30. GoZ (2018a). Public Health Act Ch 15:17. GoZ. Available at http://www.veritaszim.net/sites/veritas_d/files/Public%20Health%20Act%20%5BCHAPTER%2015-17%5Dr.pdf
31. GoZ (2018b). Transitional stabilisation programme reforms agenda October 2018 – December 2020, Towards a prosperous & empowered upper middle income society by 2030, GoZ, Harare. <https://zimbabwe.un.org/en/50093-zimbabwe-transitional-stabilisation-programme-2018-2020>
32. GoZ (2018c). National Agriculture Policy Framework (2018-2030). First Draft. Ministry of Land, Agriculture and Rural Resettlement. Available at <http://www.livestockzimbabwe.com/Updates/Draft-%20Zimbabwe%20Agriculture%20National%20Policy%20Framework.pdf>
33. GoZ (2018d). Zimbabwe School Health Policy. Ministry of Primary and Secondary Education & Ministry of Health. Available at <http://www.mopse.co.zw/sites/default/files/public/downloads/ZSHP%20final%20signed%20March%202018.pdf>
34. GoZ (2019a). Food and Food Standards (Food Labelling) (Amendment) Regulations, 2019 (No. 2) SI 2019-236. Available at <https://www.veritaszim.net/node/3785>
35. GoZ (2019b) President State of the Nation Address: 1 October 2019. Available at http://www.veritaszim.net/sites/veritas_d/files/SONA%20OCTOBER%202019%20FINAL.pdf
36. GoZ (2019c). Zimbabwe National Industrial Development Policy (2019-2023). Available at <http://extwprlegs1.fao.org/docs/pdf/zim203917.pdf>
37. GoZ (2019d). Customs and Excise (Food, Soap and Cosmetics Manufacturers) (Rebate) (Amendment) Regulations, 2019 (No. 3). SI 2019-216. Available at <http://www.veritaszim.net/node/3727>
38. GoZ (2020) President State of the Nation Address: 22 October 2020. Available at <http://www.veritaszim.net/node/4530>
39. GoZ (2021a) President State of the Nation Address: 7 October 2021. Available at http://www.veritaszim.net/sites/veritas_d/files/2021%20SONA%20OCTOBER.pdf
40. GoZ (2021b). Zimbabwe National Development Strategy 1 2021-2025. Ministry of Finance, Harare 2021. Available at http://www.zimtreasury.gov.zw/index.php?option=com_phocadownload&view=category&id=64&Itemid=
41. GoZ (2021c). Finance Act No 7. Available at https://www.veritaszim.net/sites/veritas_d/files/Act%20No.%207%20of%202021%20Finance%20Act.pdf
42. GoZ (DRAFT and undated). National Food Safety Strategy 2020-2025- document provided by Mr Nyamandi, not for citation at this stage

43. Igumbor EU, Sanders D, Puoane TR, et al. (2012) "Big food" the consumer food environment, health, and the policy response in South Africa,' *PLoS medicine* 9(7), e1001253.
44. Kalulu I (2021) Zimbabwe: Start-up finds traction with health foods made from baobab and bananas, How we made it in Africa, 13 Sep, <https://www.howwemadeitinafrica.com/zimbabwe-start-up-finds-traction-with-health-foods-made-from-baobab-and-bananas/125655/>
45. Kanda A, Ncube F, Hwende T, Makumbe P. (2018) Assessment of trace element contamination of urban surface soil at informal industrial sites in a low-income country. *Environ Geochem Health*. 40(6):2617-2633
46. Kenya Ministry of Health (MoH) (2015) 'Kenya National Strategy for The Prevention and Control of Non-Communicable Diseases 2015 – 2020,'
47. Loewenson R, Godt S, Chanda Kapata P (2021) Framings of and priorities for action on the commercial determinants of health in Sub-Saharan Africa, TARSC
48. Majuru A (2021) Untapped opportunities in processed food sector, Sunday Mail 14 Feb 2021 <https://www.sundaymail.co.zw/untapped-opportunities-in-processed-foods-sector>
49. Mauritius Revenue Authority (MRA) (2021) Excise Tax on Sugar Content of Sugar Sweetened Non-Alcoholic Beverages
50. Mbiba B (1995) Urban Agriculture In Harare: Between Suspicion And Repression. https://radar.brookes.ac.uk/radar/file/c8edc375-b4b1-a3f1-6302-7ad3289d3a59/1/Harare_Urban%20Agriculture.pdf
51. McKee M, Stuckler D. (2018) 'Revisiting the Corporate and Commercial Determinants of Health'. *Am J Public Health*. 2018;108(9):1167-1170.
52. Mhazo N, Hanyani Mlambo B, Proctor S et al (2003) Constraints to small scale production and marketing of processed food products in Zimbabwe, Food Africa internal paper, <https://assets.publishing.service.gov.uk/media/57a08ce8e5274a27b20014f9/R7485i.pdf>
53. Miller V, Yusuf S, Chow CK, et al (2016). Availability, affordability, and consumption of fruits and vegetables in 18 countries across income levels: findings from the Prospective Urban Rural Epidemiology (PURE) study. *Lancet Glob Health*;4(10):e695-703.
54. Minister of Lands, Agriculture, Fisheries, Water and Rural Resettlement (MoLAFWRR) (2021) Report of the First Stage Zimbabwe Food System National Dialogue, 3 June, 2021, Harare <https://summitdialogues.org/wp-content/uploads/2021/07/Stage-1-Feedback-form-National-dialogue-of-3-June-2021-in-Harare-FINAL.pdf>
55. Mudimu GD. (1992) Urban agricultural activities and women's strategies in sustaining family livelihoods in Harare, Zimbabwe. *Singap J Trop Geogr*. 1996 Dec;17(2):179-94. [https://www.thelancet.com/journals/langlo/article/PIIS2214-109X\(16\)30186-3/fulltext](https://www.thelancet.com/journals/langlo/article/PIIS2214-109X(16)30186-3/fulltext)
56. Mukanu MM, Karim AS, Hofman K, et al. (2021) 'Nutrition related non-communicable diseases and sugar sweetened beverage policies: a landscape analysis in Zambia,' *Global health action* 14(1):1872172.
57. Narula N, Wong E, Dehgan M et al (2021) Association of ultra-processed food intake with risk of inflammatory bowel disease: prospective cohort study *BMJ* 2021; 374 doi: <https://doi.org/10.1136/bmj.n1554> at <https://www.bmj.com/content/374/bmj.n1554>
58. Njaya T (2014) Operations of street food vendors and their impact on sustainable urban life in high density suburbs of Harare in Zimbabwe. *Asian J Econ Model* 2(1):18–31
59. Tawodzera G, Zanamwe L, Crush J (2012) "The State of Food Insecurity in Harare, Zimbabwe." Urban Food Security Series No. 13. Queen's University and AFSUN: Kingston and Cape Town <https://www.alnap.org/system/files/content/resource/files/main/afsun-13.pdf>
60. Toriro P (2018) Urban food production in Harare, Zimbabwe <https://www.taylorfrancis.com/chapters/oa-edit/10.4324/9781315191195-12/urban-food-production-harare-zimbabwe-percy-toriro>
61. Wanjohi MN, Thow AM, Abdool Karim S, al (2021) 'Nutrition-related non-communicable disease and sugar-sweetened beverage policies: a landscape analysis in Kenya,' *Glob Health Action* 14(1):1902659. doi: 10.1080/16549716.2021.1902659. PMID: 33874855; PMCID: PMC8079030.
62. World Food Programme (2020) The cost of a plate of food, UN WFP, New York, https://cdn.wfp.org/2020/plate-of-food/?_ga=2.207706267.821293362.1645637548-2049744741.1645637548
63. ZIMSTAT (2013) Zimbabwe Census report 2012. ZIMSTAT, Harare Available at <https://www.zimstat.co.zw/wp-content/uploads/publications/Population/population/census-2012-national-report.pdf>

64. ZIMSTAT (2017) Zimbabwe Inter-Censal Demographic Survey, 2017. ZIMSTAT, Harare. Available at <https://zimbabwe.unfpa.org/sites/default/files/pub-pdf/Inter%20Censal%20Demography%20Survey%202017%20Report.pdf>
65. ZIMSTAT (2019). Multiple Indicator Cluster Survey: Survey Findings Report, 2019. Harare. Available at https://www.unicef.org/zimbabwe/media/2536/file/Zimbabwe%202019%20MICS%20Survey%20Findings%20Report-31012020_English.pdf
66. Zimbabwe Traditional and Organic Food Forum – see <https://naturallyzimbabwean.com/about-us/>

Acronyms

CFHD	Civic Forum for Human Development
EMA	Environmental Management Agency
EQUINET	Regional Network for Equity in Health in East and Southern Africa
FAO	Food and Agriculture Organisation
FNC	Food and Nutrition Council
GoZ	Government of Zimbabwe
NCD	Non-communicable disease
MoHCC	Ministry of Health and Child Care
SAZ	Stands Association of Zimbabwe
SI	Statutory Instrument
SIRDC	Scientific Industrial Research Development Centre
TARSC	Training and Research Support Centre
WHO	World Health Organisation
ZIMSTAT	Zimbabwe National Statistics Agency
ZIMVAC	Zimbabwe Vulnerability Assessment Committee



Food markets at bus termini and roadside points, Harare, TARSC 2022

Appendix 1: Delegates to the stakeholder review meeting May 27 2022, Harare

NAME	POSITION	INSTITUTION
Dr R Loewenson	Director	Training and Research Support Centre
Mr A Kadungure	Programme Officer	Training and Research Support Centre
Mr Mpumelelo Maphosa	National Environmental Health Training Officer	Ministry of Health and Child Care
Mr John Manyara	Chief Environmental Health Officer	City of Harare
Mr Sam Chaikosa	Programmes Coordinator	Civic Forum on Human Development
Ms Gladys Mumhure	Renewable Energy Development Officer	Civic Forum on Human Development
Mr Handrea Njovo	Deputy Director- Nutrition	Ministry of Health and Child Care
Mrs Ruby F Tapera	Manager, Environmental Health Services	Harare City Council health department
Mrs Maria Chiwera	CWGH Executive Chairperson, Senior Program Officer WAG.	Community Working Group on Health (CWGH)/ Women Action Group
Mrs Rosemary Mpfu	Acting Executive Director	Consumer Council of Zimbabwe
Mr Nathan Banda	Health and Safety Officer	Zimbabwe Congress of Trade Unions
Mr Wisborn Malaya	Secretary General	Zimbabwe Chamber of Informal Sector Economy (ZCIEA)
Mrs Sibongile Mangena Chikore	Principal Agronomist	Ministry of Agriculture: Agricultural Technical and Extension Services (AGRITEX)
Mr Tserayi Machinda	Programmes Manager	Urban Councils Association of Zimbabwe
Mr Victor Bhoroma	Value Chains & Sector Development Analyst	Confederation of Zimbabwe Industries
Ms Mebho Mutara	Peer Educator, Residents Ass and Womens' Group	Hatcliffe residents
Ms Shumirai Musiwarwo	N/A, Urban Youth	Urban youth
Mr Shadreck Tondori	National Coordinator	Homeless Peoples Federation
Caroline Jacquet	Project Manager	BioInnovation Zimbabwe (BIZ)
Gigi Wing-Davies	Africa Climate Justice Business Development Manager	HIVOS

Apologies

Mr Victor Nyamandi	Director: Environmental Health Services	Ministry of Health and Child Care
Ms Mara Nyawo	Nutrition Manager	UNICEF
Ms Judith Mujegu	Harare City Planning Dept	Harare City Council ,Town Planning Division
Mrs Tumisang Thabela	Permanent Secretary	Ministry of Education Sport, Arts and Culture
Mr Robson Mavondo	EMA Harare Manager	Environmental Management Agency
Ms Yvonne Mavhunga	Deputy Director - Programmes	Food and Nutrition Council of Zimbabwe
Anna Brazier	Editor	Naturally Zimbabwean