

# KEEPING FOOD MARKETS WORKING IN MACHAKOS, KENYA

## Policy options toolkit



October 2021



## ACRONYMS AND ABBREVIATIONS

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<b>EAP</b>	Expert Advisory Panel
<b>FAO</b>	Food and Agricultural Organization
<b>GAIN</b>	Global Alliance for Improved Nutrition
<b>GRCN</b>	Resilient Cities Network
<b>HLPE</b>	High Level Panel of Experts on Food Security and Nutrition
<b>IPC</b>	Integrated Food Security Phase Classification
<b>KFMW</b>	Keeping Food Markets Working
<b>MUFPP</b>	Milan Urban Food Policy Pact
<b>ODI</b>	Overseas Development Institute
<b>SETSAN</b>	Technical Secretariat for Food Security and Nutrition
<b>SME</b>	Small and Medium sized Enterprises
<b>SUN</b>	Scaling Up for Nutrition
<b>UCLG</b>	United Cities and Local Governments
<b>UNICEF</b>	United Nations Children’s Fund
<b>VAM</b>	Vulnerability Analysis and Mapping
<b>WASH</b>	Water Sanitation and Hygiene
<b>WFP</b>	World Food Programme
<b>WHO</b>	World Health Organization

# ABOUT GAIN AND GAIN'S COVID-19 RESPONSE

The Global Alliance for Improved Nutrition (GAIN) is a Swiss-based foundation launched at the UN in 2002 to tackle the human suffering caused by malnutrition. Working with governments, businesses and civil society, we aim to transform food systems so that they deliver more nutritious food for all people, especially the most vulnerable.

GAIN's Keeping Food Markets Working (KFMW) programme is an emergency response to the COVID-19 crisis, providing rapid support to food system workers, to small and medium enterprises supplying nutritious foods, and to keeping fresh food markets open. To find out more about this program see <https://www.gainhealth.org/impact/our-response-covid-19>.

## ACKNOWLEDGEMENTS

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## COVER PAGE PHOTOGRAPHS

Left: entrance to Machakos market (Machakos, Kenya); Right: inside Machakos market (Machakos, Kenya)  
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# 1. INTRODUCTION

**GAIN's** policy and coordination work under the **Keeping Food Markets Working (KFMW)** programme, during and beyond COVID-19 focuses on collecting evidence and understanding urban food environments and the wider food systems in which they are embedded (See Appendix D). Efforts centre on **urban traditional food markets** as well as the **co-design of policy options** to be considered by policymakers in six cities, and/or urban counties<sup>1</sup>. The six cities/urban counties are: Beira and Pemba (Mozambique), Machakos and Kiambu (Kenya) and Rawalpindi and Peshawar (Pakistan). These endeavours aim to enhance good governance, urban food and nutrition security, and market resilience—with an emphasis on vulnerable urban communities, including those on low incomes, while applying a gender lens.



Figure 1: Machakos—women vendors at policy workshop 1, 25 May 2021

Between September 2020 and September 2021<sup>2</sup>, GAIN adopted a **participatory approach** to its policy and coordination work. It engaged with a range of urban food systems stakeholders including policymakers, traditional food market vendors and market committees, and other small and medium sized enterprises (SMEs).

Activities included:

- i. Mapping stakeholders, urban food systems and food related governance.
- ii. Conducting Rapid Needs Assessments of the perceptions and practices of traditional urban market stakeholders under COVID-19, using vendor surveys, key informant interviews and focus groups with policymakers, vendors, women's groups, and SMEs, as well as desktop research and satellite imagery analysis<sup>3</sup>.
- iii. Sharing assessment feedback and co-designing policy options in two policy workshops (See Figure 1, Chapter 4 and Appendices A and B).

An **Expert Advisory Panel** comprising 12 members (See Appendix C), of which at least two are based in each country (Mozambique, Kenya, and Pakistan), are part of this GAIN initiative. The panel is an advisory body, providing the KFMW initiative the benefit of their diverse expertise, including in the areas of public health, food systems, food safety, small and medium sized (food related) enterprises, and urban governance. Eighty percent of the panel are women. Additionally, there are two GAIN co-chairs, Ann Trevenen-Jones<sup>4</sup> who is based in the Netherlands and Obey Nkya, who based in Tanzania.

1 GAIN is also collaborating with local stakeholders, including local policymakers, traditional markets, and universities, to design a city level, food systems data dashboard (prototype), in Beira (Mozambique), Kiambu (Kenya) and Rawalpindi (Pakistan). This responds to the need for accessible and disaggregated food systems data at the city level, in 'one place', which policymakers and other stakeholders can use to better inform decisions and activities.

2 See Appendix A.

3 <https://www.gainhealth.org/impact/our-response-covid-19/effective-policy-making-and-coordination-during-pandemic/urban>

4 Sharelle Polack (GAIN, Switzerland) was a former co-chair until June 2021.

**Policy options toolkits**, like this one, are tailored to each city/urban county. These toolkits are designed to build on the understanding of the local context during COVID-19, to be attentive to stakeholder voices as well as local government mandates, budgets and any existing food and nutrition policy and to be practical. Four thematic policy areas with supporting activities and a selection of policy options, from which empowered local government (city/urban) policymakers can choose to address their prioritised challenges are presented in this toolkit.

Responses, successes and learnings during the pandemic and the way it has spotlighted the existing fragility of urban food systems presents an opportunity to act to reshape urban food systems towards equitable, inclusive, sustainable, and resilient systems that advance food and nutrition for all. Following the sharing of these toolkits with local policymakers, case studies will be developed as a means of more widely sharing the value and learnings of this policy and coordination work with other cities.

**POLICY OPTIONS** in this toolkit are a selection of actions or levers that strive to:

- i. Coherently connect, where possible, with existing food systems and nutrition policy strategies across government spheres as well as those explicitly or implicitly recognised in local government mandates, regulations and plans.
- ii. Be part of an emergency response that addresses the particularities of cities/urban counties and their food environments; while being attentive to those most vulnerable, like the urban poor, informal market vendors as well as being gender sensitive.
- iii. Foster present and future proactive, participatory 'one city' action by local policymakers and other urban food system stakeholders.

Where policy options are framed by the 2030 Sustainable Development Agenda's commitment **to people, planet, prosperity, peace, and partnerships**.



## 2. URBAN FOOD SYSTEM CHALLENGES UNDER COVID-19

The COVID-19 pandemic together with the ensuing economic crisis have threatened public health and had an additional impact on food and nutrition security, particularly for the most vulnerable. Emergency responses are further hampered by insufficient reporting of the impact of the pandemic on women and children. COVID-19 has also worsened the impact of existing challenges, like climate change, issues of long, complex food supply chains, and inequality in urban communities. Additionally, pandemic responses like school closures, lockdowns and curfews have had unintended impacts e.g. cessation of regular school meals, job losses, increased food waste and disrupted access to food.

### 2.1 COVID-19 and urban traditional food markets

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**Urban traditional food markets**, sometimes referred to as informal or wet markets, are a vital node in cities and urban areas food systems. These markets are closely linked to urban residents' food availability, accessibility (including affordability) and food safety, and hence support food security and nutrition, provide income and job opportunities—particularly for women and those with low incomes<sup>5,6</sup>. However, markets also contribute to food loss and waste.

Urban traditional food markets are not uniform in shape, function, or situation along the formal-informal space. Many cities have formally mandated central retail, wholesale markets, or neighbourhood markets. However, there are also purely informal permanent and periodic markets that operate outside of local government jurisdiction, or markets that have extended beyond their formally gazetted areas. While these markets may look similar, they have unique governance needs and opportunities.

### 2.2 COVID-19, rapid urbanisation and Zero Hunger

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**Rapid urbanisation** in sub-Saharan Africa and South-Asia places stresses on urban infrastructure. It drives demand for more affordable housing alongside improved water, sanitation, and hygiene (WASH) systems and for transforming local food systems. The way people intersect with the wider food system in urban areas differs from what is seen in rural communities in several aspects. For example: by types and diversity of available food; affordability and availability of convenient and processed foods; constraints to urban agriculture and dependence on long food supply chains extending outside the city. Furthermore, vulnerable urban communities, like those with low incomes, in Africa and South Asia, face an increased incidence of malnutrition from underweight, micronutrient deficiencies, and overweight/obesity, with tremendous impact on health and well-being<sup>7</sup>. For these reasons, progress towards achieving **Sustainable Development Goal 2 on Zero Hunger**—to end hunger, achieve food security and improved nutrition and promote sustainable agriculture—has also been lagging. Additionally, during the **COVID-19** crisis, dietary diversity has decreased and child malnutrition and mortality—particularly in low- and middle-income countries—is expected to increase<sup>8,9</sup>.

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5 <https://www.ifpri.org/blog/growing-cities-growing-food-insecurity-how-protect-poor-during-rapid-urbanization>

6 <https://data.unwomen.org/features/three-ways-contain-covid-19s-impact-informal-women-workers>

7 <https://www.gainhealth.org/sites/default/files/publications/documents/gain-mufpp-ruaf-a-menu-of-actions-to-shape-urban-food-environments-for-improved-nutrition-october-2019.pdf>

8 <http://www.fao.org/3/cb4474en/online/cb4474en.html>

9 <https://www.nature.com/articles/s43016-021-00319-4>

## 2.3 COVID-19, local government and urban food systems

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The pandemic has placed an enormous burden on local governments service resources and budgets. Local governments are instrumental in providing an enabling environment for all residents, within the administrative area. They are at the forefront of urban planning and development and delivering essential basic services including water, sanitation, health, food systems, education, and mobility (for more details on food systems and urban food environments, see Appendix D). As such, local governments are closely involved in the emergency response to the impact of COVID-19 and further designing policy and coordination tools to support long-term resilience beyond the pandemic.

As part of efforts to overcome challenges arising from COVID-19, local governments, in cities and urban counties, have been coordinating with national and provincial governments alongside initiatives from local and/or international organisations. For example, on expanded forms of social safety nets, reduced/ temporary removal of taxes and bank charges, communication campaigns, and nutritional and medical support services. Even so, many of those in the informal sector, like food market workers and street vendors, have not benefited sufficiently from these measures because of their informality (lack of necessary records/papers).

Within local governments, policymakers have a variety of mandated powers and policy options that can be better shaped to respond to the pandemic and mitigate impacts on food security and nutrition. Applied principles of good governance alongside other policy options like regulation, urban planning, economic incentives, public procurement and communication campaigns, can help reshape the food system within cities/urban counties. A key component of this is the routine and quality multi-stakeholder engagement by policymakers which fosters a dynamic space for the address of equity, inclusivity and innovation. Stakeholders should encompass those elected and administrative in the public sector, the private sector, including SMEs and public and private partnerships, community-based organisations, non-government/non-profit organisations, research centres and academics.

Ultimately, local policy and coordination around emergency responses to the pandemic also contribute to pursuing the realisation of the 2030 Sustainable Development Goals and addressing urban **resilience** i.e., the capacity for people, nature and their social, economic and environmental systems, to cope with sudden change and continue to develop. It involves mitigation, adaption, transformation and innovation, and learning<sup>10</sup>.

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<sup>10</sup> Resilience description informed by Stockholm Resilience Center interpretation. See: <https://www.stockholmresilience.org/research/research-news/2015-02-19-what-is-resilience.html>

# 3. KENYA: MACHAKOS AND COVID-19



Figure 2: Location of Machakos and Kiambu.

## 3.1 Kenya

Kenya, including the counties of Kiambu and Machakos (Figure 2), continues to urbanise rapidly, with today around a third of the population considered to be urban<sup>11</sup>. The urban population in Kiambu and Machakos Counties, the two communities engaged in this initiative, is even higher, at around 60% and 50% respectively. The World Bank estimates that almost 60% of residents in Nairobi and about 50% nationwide live in informal settlements<sup>12, 13</sup>. These expanding, yet densely settled areas face several barriers to equality, have high rates of poverty, poor environmental quality, public health challenges, crime, and lack essential services like electricity<sup>14</sup>.

Rights of all citizens to the highest attainable health, freedom from hunger and access to adequate and safe food is recognised in the Constitution of Kenya article 43(1) and Vision 2030. This right together with policies and action plans, such as, the National Nutrition Action Plan (2018–2022) illustrates the political will to realise food security and healthy diets for all. However, this will is challenged by the vulnerability and number of low-income urban residents and the current state of their food systems. The informal economy, comprising 15 million people, including domestic workers and those who work and are connected to urban traditional informal markets and street vendors, is a vital part of the Kenyan economy; a part that is extremely vulnerable to shocks<sup>15</sup>, like the COVID-19 pandemic, climate change and economic slowdowns<sup>16</sup>.

The prevalence of moderate to severe food insecurity in the country is almost 70% for the 2018–2020 period, an increase of 15% over the 2014–2016 period<sup>16</sup>. During 2020, increasing food insecurity was accompanied by a decrease in dietary diversity, with staple foods like cereals prioritised by communities<sup>16</sup>. Among children under 5 years old, an estimated 4% suffered from wasting, 20% from stunting and 5% from overweight. Moreover, anaemia was prevalent in almost 30% of women of reproductive age in 2020<sup>16</sup>. Floods, droughts, and desert locusts in eastern Kenya further exacerbated this situation by reducing availability and access to food<sup>17</sup>. It is in this context that communities faced the pandemic.

Nairobi was one of the hardest hit areas by the COVID-19 pandemic and response measures. High numbers of infections were reported and impacts, such as food supply chain disruptions, health care service constraints, diminished economic activity, loss of livelihoods and debt, were widely experienced. The government responded swiftly to the first official reported COVID-19 cases, in March 2020, with a wide-ranging lockdown, including mobility restrictions, school closures and sudden shutdowns of many urban traditional food markets. This was followed by a series of COVID-19 waves and partial lockdowns. Nightly curfew and mandatory wearing of facemasks in public became the new normal. A Food Security War Room (FSWR) was established to monitor the food security situation and provide technical advice to the National COVID-19 Response Committee. Measures like the National Hygiene Program (NHP)—‘Kazi Mtaani’, kitchen gardens and a social cash transfer programme were a few of the government initiatives aimed at providing relief and pandemic management

11 <https://knoema.com/atlas/Kenya/Urban-population>

12 <https://documents1.worldbank.org/curated/pt/364621576423240976/pdf/Project-Information-Documents-Integrated-Safeguards-Data-Sheet-Kenya-Informal-Settlements-Improvement-Project-2-P167814.pdf>

13 <https://data.worldbank.org/indicator/EN.POP.SLUM.UR.ZS?end=2018&locations=KE&start=2018&view=map>

14 <https://www.mdpi.com/2071-1050/12/18/7717>

15 <https://foreignpolicy.com/2020/04/10/kenya-labor-coronavirus-pandemic-informal-workers-economic-crisis/>

16 <http://www.fao.org/documents/card/en/c/cb4474en>

17 <https://www.tandfonline.com/doi/full/10.1080/23311886.2021.1885122>

to many vulnerable Kenyans.<sup>18</sup> Many market vendors appear to have earned too much to qualify for social protection and those without sufficient formal documentation have struggled to apply for relief. Coping strategies employed by urban poor households have included using credit services and selling assets, like bicycles and sewing machines<sup>19</sup>. The pandemic has also worsened pre-existing gender inequalities. Women and girls' resident in informal settlements were disproportionately impacted by the pandemic and its mitigation measures<sup>20</sup>. Many lost their informal jobs including in the food markets, faced a greater debt and care burden as they struggled to support their households (including children at home from school) and were found to be more vulnerable to sexual and gender-based violence<sup>20</sup>.

## 3.2 Machakos county

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Machakos town is the capital and largest town in Machakos county, located approximately 60 km southeast of Nairobi. Machakos county is semi-arid, with a 'hills and plateau' landscape and a small peri-urban belt between the county and Nairobi. Subsistence crops like maize, sorghum and beans predominate and mangoes are farmed commercially. Like Nairobi County, Machakos county is rapidly urbanising with a population of approximately 1.4 million people.<sup>21</sup> Urban traditional markets in Machakos town typically source foods from other surrounding counties including Kiambu and Busia and across the border from Tanzania. The true scale of the pandemic is difficult to determine due to many families struggling at home with or without reporting cases and with limited access to care. In response to the pandemic, Machakos county repurposed the Kenyatta Stadium into a hospital to facilitate mass testing and to isolate and care for mild to moderately ill patients<sup>22</sup>.

### 3.2.1 FINDINGS FROM GAIN'S RAPID NEEDS ASSESSMENT

In early 2021, traditional food market vendors in Marikiti market (Machakos), were surveyed as part of GAIN's Rapid Needs Assessment. Most of these vendors had worked in Machakos for more than 10 years and about a third for three years or less. Overall, almost two thirds of the vendors were women. Of the vendors (8% men, 92% women) who owned their market business, women were in the majority. Almost all vendors sold vegetables and fruits with 14% also selling grains. Women significantly focused on vegetables and fruit sales, while the few vendors who sold meat and poultry were all men. These differences regarding gender and food products need to be considered when designing policy options to keep food markets working during and beyond COVID-19. All surveyed vendors reported a substantial decrease in customers, an increase in suppliers' prices and suppliers discontinuing deliveries during the pandemic. Vendors adopted strategies like advertising their business through their networks and offering credit to cope with these challenges<sup>23</sup>.

The qualitative Rapid Needs Assessment, comprising key informant interviews and focus group discussions, reinforced the findings of the vendor survey, and provided greater depth to the understanding of food and nutrition as it relates to the urban food system and traditional markets in Machakos. Participants agreed that wearing masks in the markets was the most important COVID-19 safety measure but observed that many were not wearing these masks correctly. Pre-pandemic, water, sanitation, and hygiene were challenges, with markets characterised by limited and poorly serviced facilities. Initial government support to provide handwashing stations was said to be undermined by lack of consistent management and water supply. Participants called for better enforcement of the COVID-19 safety regulations in the markets. Vendor participants stressed that they were proactively leading on implementing safety measures and even bringing in their own water for handwashing<sup>24</sup>.

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18 <https://www.gainhealth.org/resources/reports-and-publications/covid-19-qualitative-assessment-factsheet>

19 <https://www.gainhealth.org/resources/reports-and-publications/covid-19-qualitative-assessment-factsheet>

20 <https://reliefweb.int/sites/reliefweb.int/files/resources/bp-kenya-social-protection-101120-en.pdf>

21 Kenyan National Bureau of Statistics. (2019). 2019 Kenyan Population and Housing Census: Volume II.

22 <https://maarifa.cog.go.ke/156/machakos-county-converts-kenyatta-stadium-into-make-shift-hospital-in-fight-against-covid-19/>

23 <https://www.gainhealth.org/resources/reports-and-publications/covid-19-vendor-survey-factsheet>

24 <https://www.gainhealth.org/impact/our-response-covid-19/effective-policy-making-and-coordination-during-pandemic/urban>

**“The county government really helped us when corona [COVID-19] started by bringing us water. After around one or two months, they stopped. We now have to fend for ourselves and supply our own water.”**

—FOCUS GROUP PARTICIPANT [MARKET LEADERS], MACHAKOS

Widespread food system disruptions related to the transport network were also reported. This was especially evident during the initial lockdowns and exacerbated by the reliance on food sources outside of Machakos county in 2020, when there appeared to be confusion (and some reports of corruption) around whether food could be transported with/without permits, under the mobility restrictions. At the same time, customers were said to be avoiding public transport to commute to markets because of fear of catching COVID-19 in the vehicles and the markets. Some vendors adapted to this situation by becoming mobile and selling food closer to residential areas. Food quality, safety and food loss and waste reportedly worsened under these conditions. Participants also felt that the government messaging could be improved and that the government needed to take their viewpoints and those of the wider community more seriously into consideration.

**“No one has helped us. We have been contributing money at the market. We will give 10 [KES] each for someone to bring water every day.”**

—FOCUS GROUP PARTICIPANT [VENDOR], MACHAKOS

Vendors, SMEs, and participants in general reported decreased purchasing power linked to disrupted food supplies, increased prices and loss of income and jobs. This was especially the case for those with micro and ad-hoc informal sector jobs, like those who load and offload produce at farm gates and urban traditional markets. Food security and nutritional health as well as financial and mental wellbeing of many households were said to be impacted.

**“There was a problem. The products were no longer in the market because there were no vehicles to carry them, and if you get one it is charged at a very high price. So sometimes we can sit there without work because we don’t have the means to carry our goods...”**

—FOCUS GROUP [VENDORS], MACHAKOS

Vendors said that their financial and mental health problems were intertwined with the supply and demand related pandemic and mitigation measures and the extensive use of mobile finance in the markets. They were under pressure from customers who were desperate to buy on credit, those who would reverse transactions after ‘buying’ produce and inadequate management of their digital finances (as recognised by themselves). There were some reports of vendors avoiding answering their mobile phones, as the mobile service provider was also the loan provider (and debt collector).

“... I used to sell six crates but nowadays I sell one crate or less... When I was taking six crates [of tomatoes], I had people from the grocery. The people from the grocery were coming and buying to go and sell it elsewhere. But when the corona came in, **they didn't come these days**. [Why?] Some have children, they closed the business because of their children so they don't bring them to the market and get corona. **They closed the business so that the disease would end**. The problem I have started there, from the month of March. Now my business is at the very bottom, **I am doing very badly**. Even tomato sellers increased their prices because of vehicles... We wait for the products here and the suppliers have increased the prices, thus we're not making any profit. It is just a challenging situation.”

—FOCUS GROUP [VENDOR], MACHAKOS

### 3.2.2 INSIGHTS FROM POLICY WORKSHOPS

Both policy workshops conducted in Machakos town confirmed the findings of the Rapid Needs Assessments and provided further insight into the current food environment and pandemic circumstances. Workshop 1 participants comprised a variety of urban food environment stakeholders from vendors to SMEs, women vendor groups and government officials. Workshop 2 built on Workshop 1 and focused on policymakers, with an emphasis on local government officials. Policy option responses were co-designed during these workshops (See Chapter 4 and Appendix A).

According to participants, Machakos county did not have robust policies that could provide an enabling environment to keep food markets working and facilitate resilience. They recognised that at national level, clearly defined food and nutrition policies and strategies did exist and felt that these should be devolved or coherently transferred to local county governments. Key priorities that needed to be addressed during the pandemic, to keep food markets working were presented as: i) food quality and safety; ii) public health guidelines, regulation and enforcement; iii) investment in improved market infrastructure, security and basic service provision like water, sanitation, lighting and waste management; iv) economic levers e.g. public procurement and revised tax rebates and market levies; v) opening hours; vi) resilient, food supply chain ; vii) enhanced urban traditional food market governance and business models (including infrastructure, basic services and financial management); and viii) car parking near markets. Food safety<sup>25</sup> was identified as the most critical priority, while governance and management challenges were considered a cross-cutting and a necessary part of all solutions.

25 This priority was possibly influenced by GAIN's EatSafe initiatives in the county, as part of another Keeping Food Markets Working workstream.

### 3.3 Machakos county: governance of markets

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In Kenya, traditional food markets fall under the county government mandate, with a market Master (Superintendent) overseeing administration<sup>26</sup>. Other county government employees, such as security personnel, inspectors, and cleaners also work in the markets. Officers from the Department of Public Health are mandated to inspect markets to assess hygiene and ensure that public health measures are implemented. However, many of the transient and/or informal markets are not officially recognised by the administration and therefore regulation and service provision is limited.

Vendors operating in the market can be connected to various Commodity Based Associations, for example, the Onion Wholesalers Association, as well as market committees that represent their interests. In principle, anyone can sell in the markets but there is structure of wholesalers and brokers (marketing agents), the latter being said to influence prices of agricultural produce and create barriers to open trade<sup>27</sup>. Additionally, vendors are required to pay levies, based on produce weight (not quality), to the county government (market gate charges). Most vendors must pack their produce in “uniform units of sale”, like wooden crates, to facilitate ease of paying levies and operating in the market. Recently, the Ministry of Agriculture has advocated for standardised units of sale for agricultural produce to minimise farmer exploitation. For example, tomatoes are required to be sold in standards of 40kg wooden crates (52 cm x 35 cm x 60 cm) or in large wooden crates of 64 kg. There are also specifications for selling potatoes among others. According to the Expert Advisory Panel (see Appendix C), this standardisation has been met with resistance from some vendors.

According to policy workshop participants the coordination between the national and county government was viewed as weak. For example, a director from the National Ministry of Trade reported that they had created model market designs that could be useful for counties. However, county governments, like Machakos and Kiambu, are pursuing their own models with little if any reference to these designs. According to workshop participants, if food security, nutritional wellbeing, and food systems resilience, particularly of traditional urban food markets, is to be realised, then more needs to be done by policymakers and other food systems stakeholders, including market committees. National and local government policy coherence and implementation thereof was identified as an area that should be strengthened alongside the extensive enhancement of multistakeholder engagements and partnerships.

Departments of Agriculture, Food Security and Cooperative Development and Finance and Economic Planning intersect on initiatives which target the urban traditional food markets. However, policymakers recognised that there is a need to better synergise this collaboration and improve policy coordination, so that incentives are not aligned with any one department’s aspirations. Furthermore, in both Machakos and Kiambu counties, traditional food market committees are a vital part of market governance, public and private partnerships and multistakeholder participation with local and other government spheres. The efficacy of these committees was said to be largely unknown, though they are elected by market vendors.

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26 <http://kenyalaw.org/kl/fileadmin/pdfdownloads/Acts/MachakosCountyPublicMarketandStallsAct2016.pdf>

27 EAP Kenyan team



## 4. POLICY OPTIONS FOR MACHAKOS

Various policy options or levers can be adapted, modified, and applied to transform Machakos's food environment during the pandemic, as an emergency response, especially aimed at keeping urban traditional markets working. In designing and implementing this emergency response, the importance of and longer-term commitment to the vision of a more equitable, inclusive, sustainable, and resilient food environment that has the capacity to advance healthy diets for all needs to remain at the centre. Of the numerous available policy options e.g. regulation, public procurement, urban planning, regulations, zoning, multi-stakeholder engagement and communications and information campaigns, only a selection are feasible or timely in a crisis like this pandemic. Existing options can be expanded or adapted. Typically, policymakers will need to employ more than one option in response to the challenges identified, both simple and complex. Additionally, national pandemic measures impact policy options in Machakos's food environment (See Chapter 3 and Appendix D). Flexibility, learnings, and examples of best practices are also needed.

Insights from GAIN's Rapid Needs Assessment provided a foundation on which stakeholders, including policymakers could co-design policy options for response. Understanding the wider public health, food security and nutrition situation as well as local experiences and types of foods sold by female and male vendors in Machakos's traditional food markets, for example, facilitated informed tailoring of policy options. (See Chapter 3. Rapid Needs Assessment Factsheets are also available—refer Appendix A)

Given the emphasis in GAIN's KFMW COVID-19 initiative, themes and policy options are directed at actions policymakers can adopt and/or further explore. **Four themes** with associated policy and coordination activities emerged from the Rapid Needs Assessment and policy option workshops, with stakeholders in Machakos (See Table 1). These themes are:


- i. Good governance and urban food environments.
- ii. Knowing your city.
- iii. Mobilised, food proactive city.
- iv. Externally networked city.

Icons associated with each of these themes can be found in Table 1. These serve as visual cues to highlight themes and the different linkages between themes and the range of co-designed policy options (See Table 2).

Stakeholders identified and defined specific problem statements. Perceived causes and impacts together with stakeholder roles and responsibilities, as well as prioritised problem-solution areas were critically explored during the workshops. Appendix B provides an example of a problem statement as well as problem tree and relevant legislation (Figure 3 and Table 3) that were developed during Machakos Policy workshop 2. Table 2 presents a selection of prioritised key problems alongside possible policy options—as co-designed.



Table 1: Urban food environment policy and coordination themes

Theme	Description and activities
 <p><b>Good governance and the urban food environment</b></p>	<p>Good governance, in the context of the urban food environment, encompasses a diversity of resident communities, dietary preferences and environmental contexts. During a crisis, like the pandemic, it may seem as if enhancing existing and/or developing new, good governance tools and practice are less of a priority. However, taking time during response planning and coordination to be clear about good governance provides a vital foundation and leadership for responses. A reminder that this does not need to be a lengthy process or about extensive documentation. Rather the emphasis is on coherence and been practical.</p> <p>Three valuable good governance interpretations are:</p> <ol style="list-style-type: none"> <li>a people and planet specific, <b>nutritious food environment vision</b>.</li> <li><b>commitment statement</b>.</li> <li><b>principles</b>.</li> </ol> <p>These three interpretations, help guide daily, routine public sector practice, show leadership and can inspire and harness urban residents, food market committees and organisations’—whether non-profit, public, or private sector. Examples of visions are: ‘Good Food Charter’s’ like those for Bristol (<a href="https://bristolgoodfood.org/">https://bristolgoodfood.org/</a>). <b>Scaling up for Nutrition</b> (SUN: <a href="https://scalingupnutrition.org">https://scalingupnutrition.org</a>) is another country-level resource which already supports in Kenya, Mozambique and Pakistan, SUN aims to inspire ‘new ways of working collaboratively to end malnutrition, in all its forms....[with government ...uniting] people—from civil society, the United Nations, donors, business and researchers—in a collective effort to improve nutrition’. (See: <a href="https://scalingupnutrition.org/about-sun/the-vision-and-principles-of-sun">https://scalingupnutrition.org/about-sun/the-vision-and-principles-of-sun</a> ).</p> <p>It is useful to critically think of how these interpretations intersect the local, urban <b>sustainable development goals</b> strategy. For further guidance for local policymakers about the SDGs and cities see: <a href="https://sdgcities.guide/">https://sdgcities.guide/</a></p> <p>Principles of ‘good governance’ to consider with a traditional food market lens are:</p> <ul style="list-style-type: none"> <li>• Participation and representation (e.g. inclusive, equitable and gender attentive multi-stakeholder platforms—informal or formal).</li> <li>• Fair and due process with respect to ‘appointments’ to technical and management food and nutrition committees.</li> <li>• Effective, efficient, and quality service delivery and public asset management, informed by best practice and appreciation of the local, urban food environment as a social, economic, and environmental investment.</li> <li>• Knowledge empowerment, and communication.</li> <li>• Accountability, transparency, and learning.</li> <li>• Resilience and sustainability: with an openness to innovation, systems thinking and transformation e.g. circular, regenerative food systems and urban planning market synergies with, for example, roads, transport, energy, and WASH infrastructure.</li> <li>• Respect for human rights (including the right to safe and nutritious food).</li> <li>• Respect for the law and ethical conduct.</li> </ul>



## Know your city: people, food, and environment

Know and understand the character and dimensions of your city's/urban community's food environment within the administrative area. The focus here is urban residents, food security and nutrition, specifically around urban traditional food markets and vulnerable communities. Examples of theme activities are:

### A. Health, food security and nutrition data

Having information about residents—who they are, their health and food security and nutritional well-being—and the food environment, gives policymakers a better picture of who is and may become vulnerable, gender sensitivities, food, and nutrition status, localised climate change, needs and opportunities as well as data gaps. As important as having this information in one, accessible place for as many stakeholders, as possible, to update and use. Machakos, like many urban counties and cities in Africa and Asia, lacks comprehensive, easily accessible data on the food environment. There is an opportunity to start identifying and bringing together as much robust, relevant data, as quickly as possible and to form relationships with those who can help support data collection and access.

Secondary data about the local population (e.g. size, age, gender, income, serviced households, health etc.) are often available even if not always most recent. National statistics and local government databases are useful data resources as are internal government departments (e.g. public health, agriculture, development and planning, water and sanitation). Municipalities, like Machakos, also have some records about the formal urban traditional food markets. It is valuable to know about the number of vendors, gender and age composition of vendors and market committees, number and type of traditional markets, food diversity and prices, in the administrative area.

Less available and accessible are food security and nutritional well-being data specific to local, urban administrative governance areas. Local universities as well as organisations, like the United Nations Children's Fund (UNICEF), Food and Agricultural Organisation of the United Nations (FAO) and World Food Programme (WFP) can provide secondary data and facilitate rapid assessments and primary data collection, at the city or urban community level—this is especially so during crises like this pandemic.

The National Information Platforms for Nutrition (NiPN: <https://www.nipn-nutrition-platforms.org/Kenya-202>; also see: <https://www.nipn-nutrition-platforms.org/IMG/pdf/nutrition-info-system-kenya.pdf>) initiative in Kenya, is a recent and valuable evidence source for policymakers—including those at county level. It aims to strengthen national capacity to manage and analyse nutrition data from across sectors and make it available to policymakers. Other data sources, at a city, sub-national and national level, include: reliefweb (<https://reliefweb.int>), annual *State of the Food Security and Nutrition* reports (<http://www.fao.org/publications/sofi/2021/en>), the Food Systems Dashboard (<https://foodsystemsdashboard.org>), Integrated Food Security phase Classification (IPC: <http://www.ipcinfo.org>), WFP's Vulnerability Analysis and Mapping (VAM) alongside its Hunger Hub (<https://dataviz.vam.wfp.org/>) and the World Health Organization (WHO: <https://www.who.int>).

"KNOW YOUR CITY..." continued on next page



## Know your city: people, food, and environment

(CONTINUED)

### B. Map: local food environments

Maps of different types of food and nutrition related information can be partially mapped and/or in map layers which can be overlaid to show synergies, challenges, and opportunities. This supports data and better informs policy and coordination decision-making during the pandemic and beyond (as part of an on-going sustainability and resilience tool). Mapping can be a high technology or low technology activity. Data collectors can use mobile phones and google maps, satellite maps, printed street maps or own drawn sketch maps. Everyone can be part of data collection even everyday residents and informal vendors. This type of mapping is informed by urban planning and community asset mapping (see: [https://www.youtube.com/watch?v=\\_tkLFCJUjYI](https://www.youtube.com/watch?v=_tkLFCJUjYI)). To gather and coordinate the flow of information, consider arrangements with a mobile phone company (e.g. toll free texts to share data), community radio, market champions, SME business networks or working with the wide network of community work-ers (e.g. from the Department of Health) and harnessing school networks. Consider mapping some or all of the following:

- i. type and size of markets.
- ii. location of and connections between markets.
- iii. urban food relationships (including urban development plans) between traditional markets and/or for example: street vendors, low-income neighbourhoods, public-private-non-profit food procurement programmes (e.g. schools with feeding schemes), larger and increasingly more formal food markets, urban and peri-urban agriculture, transportation routes, community health clinics, and/or municipal waste disposal.
- iv. urban and peri-urban and rural food supply chains. This includes food production (location, type and seasonality of foods), processing and transportation, nutritional information and food prices over time. Attention should especially be paid to staples and local and indigenous, nutritious foods.
- v. stakeholders e.g. list and map the type and role/s of a diversity of food environment stakeholders from policymakers, government (National/Provincial/Local) departments, non-profit and private sector food programmes, schools, hospitals, research institutes, informal market vendors, market committees and SMEs.
- vi. public policies, regulations, programmes, budgets and financial tools as well as communication campaigns.
- vii. public assets that could be of value e.g. green space, urban agriculture (some could be private), buildings, car parks, schools.
- viii. social capital e.g. ask residents to voluntarily map activities, like food sharing, bartering, pop-up food gardens/stalls, alternating shopping trips with neighbours activities.

### C. Develop a monitoring, evaluation, and learnings framework

It is important to develop and/or align with existing key performance indicators (including proxy indicators where necessary), to monitor, evaluate and to learn about the performance of policy option responses—especially amidst a highly changeable socio-economic, public health and environment circumstance. This can also build towards a more comprehensive resilience framework. For practical guidance on how to set up your own framework, policy-makers may find the Milan Urban Food Policy Pact (MUFPP) Monitoring Framework Handbook and Resource Pack useful. This brings together the principles and real urban food systems experience of the MUFPP together with the Food and Agricultural Organization of the United Nations (FAO) and the RUAF Global Partnership on Sustainable Urban Agriculture and Food Systems. (<https://www.milanurbanfoodpolicypact.org/the-milan-urban-food-policy-pact-monitoring-framework-handbook-and-resource-pack/>)

Theme	Description and activities
 <p><b>Mobilised, food proactive city</b></p>	<p>Mobilise the diversity of food system stakeholders including traditional market vendors, urban/peri-urban agricultural producers and residents to proactively be part of the local food environment's pandemic response, sustainability, and resilience. Policymakers can support and coordinate this by promoting the accessible, digital e-governance tools, regular community engagement, and sharing information and communication. They can encourage two-way sharing of information about the urban food environment, facilitated by, for example: i) peer-to-peer groups (existing and new) which can offer access to vulnerable communities, such as those with HIV/AIDS, the elderly, mobile informal vendors; and ii) establishment of toll-free phone numbers. Policymakers can also critically consider how existing arrangements e.g. market vendor fees and zoning, can be restructured to support emergency food or cash relief.</p>
 <p><b>Externally networked city</b></p>	<p>Food environments—in cities and urban communities—are unique. However, there are best practices, learnings, tools and innovations that cities/urban counties can share with each other, and which can be modified and adapted.</p> <p>Possible city networks and platforms to consider are:</p> <ul style="list-style-type: none"> <li>• Milan Urban Food Policy Pact (MUFPP): See: <a href="https://www.milanurbanfoodpolicypact.org">https://www.milanurbanfoodpolicypact.org</a> (Nairobi City County is a signatory)</li> <li>• Food Action Cities. See: <a href="https://foodactioncities.org">https://foodactioncities.org</a></li> <li>• Resilient Cities Network (GRCN): See: <a href="https://resilientcitiesnetwork.org/">https://resilientcitiesnetwork.org/</a></li> <li>• ICLEI—Local Governments for Sustainability: See: <a href="https://iclei.org">https://iclei.org</a></li> <li>• C40 Cities (C40). See: <a href="https://www.c40.org">https://www.c40.org</a></li> <li>• United Cities and Local Governments (UCLG). See: <a href="https://www.uclg.org">https://www.uclg.org</a></li> </ul>

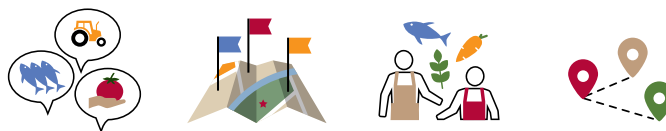


Table 2: Prioritised urban traditional food market challenges and co-designed policy options

Market pandemic challenges and resilience focus area	Policy options
<p><b>Food Safety and public health inadequate infrastructure, water, sanitation and hygiene (WASH) and drainage services*</b></p> <ul style="list-style-type: none"> <li>insufficient ownership by vendors and market committees to manage what is within their roles re: the infrastructure and services*</li> <li>use of contaminated water in production of some foods</li> <li>spoiled food from transport, lack of cool room storage over number of days to sell food, too much handling</li> <li>poor personal hygiene</li> <li>lack of food safety knowledge and/or applied guidelines and practices</li> </ul> <p><i>*Infrastructure options (see next row)</i>  <i>**More on food loss and waste later in table</i></p>	<ul style="list-style-type: none"> <li>Food safety surveillance programmes: introduce government monitoring and empower market stakeholders to self-monitor, regulate and keep tracking records to support type of challenge, traceability of challenges and inform remedial action.</li> <li>Urgently work with county officials and market committees to establish (and train) solid and liquid waste management protocols with supporting services. The aim is to reduce waste, promote awareness of food quality and safety and manage waste in a safe manner for people and the environment.</li> <li>Promotion of champions: local county government officials and market vendor champions to raise awareness of food loss and waste as well as food safety and hygiene guidelines and practices. Consider synergies with existing public health and agricultural community workers.</li> <li>Establish mechanisms whereby champions at county government and in the market can work together. Work with the committees to develop and assign roles and responsibilities regarding management of water, energy, sanitation and hygiene market infrastructure and services. This needs to be underpinned by an efficient communication mechanism between role-players. For example, to report water supply interruptions or sanitation issues.</li> <li>Conduct/facilitate rapid training, through a series of short and regular sessions, of government officials, market stakeholders and champions about food safety and hygienic guidelines and practices. Resource existing qualified and experienced government officials and materials as well as GAINs' Eatsafe materials to support this training.</li> <li>Review (and map) legislation around food safety and waste** to maximise sales/consumption opportunities but also ensure compliance.</li> <li>Review relevant COVID-19 regulations and synergise where relevant with food safety, hygiene and market operations.</li> <li>Unlock vendor to vendor relations (peer to peer) to lead and share good food safety practices in the market.</li> <li>Raise awareness of food safety and public health and hygiene standards and guidelines through consistently messaged campaigns with consistent messaging for vendors and consumers—via champions, market events, posters and signage and community radio.</li> </ul>



## Market pandemic challenges and resilience focus area

## Policy options

### Market infrastructure

- Including WASH services, and operational management.
- Cold storage infrastructure with associated management and services e.g. renewable energy, security, space allocation, food safety practices and oversight.
- Increasing number of vendors, and stalls inside the markets.

- Rapid market infrastructure and service audits (with quantity and quality assessments)
- Review and develop possible synergies and opportunities re: public sector asset management and capital budget investment
- Public and private (and non-profit) partnerships for structure and operational co-designing.
- Inclusive multi-stakeholder engagement: establish a management team with a clear electoral system and defined management processes. Stakeholders include market committees and relevant municipal service departments who can support investment and management e.g. to define emergency response, market policy, planning and coordination, market design, market operational management—including of municipal services and fees as well as review of fees and financial models, maintenance, and approaches to managing the number of vendors and stalls. Include youth and gender focal points (If none then establish them) from market committees and relevant municipal departments.
- Co-design market infrastructure: needs to be participatory while considering flows of daily market operations and management, as well as essential needs like running potable water and toilets.
- Design for services and security: how best to provide basic services that can be easily maintained, are reliable and cost effective (economically, socially, and environmentally). Consider options like, renewable energy and boreholes; and fencing and security cameras.
- Design for food and people. e.g. women vendors who have highly perishable products like vegetables and fruits versus women and men vendors who sell products with longer life spans. Consideration of women and youth vendors/consumer needs in the market (e.g. maternal and childcare needs, produce specific: fruit and vegetables, and equitable representation in market committees).
- Design for food quality, safety and reduced and/or regenerative food waste: prioritise addressing WASH and cold room infrastructure and related services to reduce loss of food quality and food waste, and to promote access to safe and nutritious fresh food while also facilitating personal hygiene as well as compliance with pandemic and other public health regulations. Review infrastructure design that supports regenerative food waste options.
- Establish an internal public sector technical committee (across departments and including agriculture, urban planning and development and water, sanitation and health) to support coordinated service provision to markets and planned WASH infrastructure and cold storage.



## Market pandemic challenges and resilience focus area

## Policy options

### Insufficiently planned and coordinated network of formal and informal urban traditional food markets

**Emergence of informal 'street' markets and more street vendors** because of pandemic measures inside markets, such as, spacing and response to residents' fears of catching COVID-19 in vehicles, like taxis, and inside the market

- Formalise informal urban vendors and markets and develop integrated networks of wholesale markets, retailers, and urban traditional formal-informal markets (including transient/mobile markets and street vendors).
- Urban planning and development department: collaborate with mobilised residents to gather data and map urban markets to support decision-making (See Table 1). Also map key supply chains and stakeholders from farm gate to market (See Table 1).
- Inclusive multi-stakeholder engagement with equitable representation of women and youth vendors and urban residents. Multistakeholder engagement to review how best to formalise informal vendors and markets and improve relations with wholesalers.
- Longer-term planning to improve the market system given existing resources and potential for development (supported by public and public and private/ nonprofit partnerships) in Machakos. Refer to 'Capacity of market' (in Table 2) for options to support vendors and markets in the interim.
- Explore supporting and linking those vendors who must move outside the market to social safety nets, facilitate usual market fee waiver and/or advocate for additional support from municipality in 'finding new vendor locations' e.g. involve urban planning and mapping to see available space that could be used, and types of resources needed e.g. mobile WASH, using car parks on weekends or school spaces after school hours.
- Communication campaign: improve awareness of options for vendors and importance of social spacing in markets. Use market posters, community radio, mobile and social media platforms as well as existing champions in the market, and associated health care workers etc. Build on peer-to-peer communication.
- Use communication campaign with multiple channels like community radio, durable market posters and mobile messaging, to foster better connectivity between markets, making food more available to residents, and to share information of value to vendors e.g. food price trends, production updates in peri-urban and rural areas and as per cross-border routes.

### Disrupted food system, disconnected urban traditional markets

Urban traditional markets disconnected from food production (pandemic, economic and climate change drivers)

- Shorten food chains and enhance availability of nutritious foods year-round: consider strengthening locally sourced and indigenous, year-round food production.
- Preference and support residents, schools and other public spaces for urban agriculture as well as coherent connections with peri-urban production areas. Multistakeholder engagements and urban planning required to support this option.
- Use mobile technology to communicate and promote access to information about local food sources (e.g. e-soko), food prices and local alternatives that are nutritious and desirable.



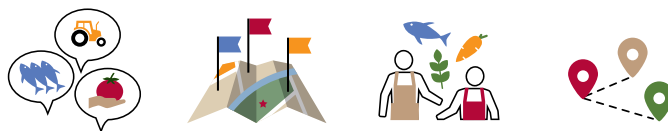
## Market pandemic challenges and resilience focus area

## Policy options

### Food waste

- Shorten and streamline food chains with resultant reduction in food loss and waste. This aims to maximise use of produced food, reduce demand on household income and increase access to healthy and safe diets for all.
- Develop public procurement principles around nutrition and priority purchasing from urban traditional markets. Use public procurement as a mechanism to reduce the volume of food waste e.g. plan to purchase a range of staple and nutritious foods at a certain point before quality and safety deteriorate.
- Public procurement opportunities: secure contracts with vendors and SMEs e.g. transporters to purchase percentage of perishable foods that cannot be sold in a timely fashion due to curfew limits. Food can be used for: partnerships with school feeding schemes, hospital meal programmes, municipal canteens etc.
- Inspire and encourage private and non-profit sectors to procure food from urban traditional markets, for example for canteens, clinics, school meals and hotel catering, with an emphasis on healthy diets for people and planet (ideally supported by policy or principles—See Table 1).
- Regenerative waste management: engage wider food systems stakeholders including peri-urban farmers as possible demand drivers of organic market food waste (for compost) and/or engage municipal waste management to harness vendors skills on wasted produce. Both options support alternate income and job streams for vendors and enhance resilience.
- Use inclusive multi-stakeholder engagement: consult vendors, Market Committees, and other stakeholders when reviewing options and innovations.
- Promotion of food waste market champions (market and country government)— consider synergies with public health and agricultural community workers.
- Provision of short, regular technical training support in markets and for champions
- Review (and map) legislation around food safety and waste to maximise opportunity but also ensure compliance.
- Food waste communication and information campaigns e.g. social media, WhatsApp / texting, community radio, peer to peer, champions, pamphlets and 'durable' posters.
- Explore food sharing schemes to support well-being of vulnerable communities and access to healthy, safe diets for all.
- Consider innovative processes and technologies that reduce food loss and waste e.g. cool rooms and dried produce.





Market pandemic challenges and resilience focus area	Policy options
<p><b>Urban agriculture and ineffective use of urban/peri-urban green space.</b></p>	<ul style="list-style-type: none"> <li>• Urban planning and integrated development linked to residents who desire to be active in community planning, and mapping of possible public and private spaces that can be used short or long term for urban agriculture. In Machakos town this may require extending beyond the administrative boundaries to better connect the city with the peri-urban and nearby rural agricultural production areas. This will require agreements and administrative coordination plans.</li> <li>• Review zoning and supporting ordinances with a view to promoting urban / peri-urban agriculture, short food chains to supply market and innovative food processing.</li> <li>• Promote school, work, hospital, municipal and other nutritious, climate smart food gardens.</li> </ul>
<p><b>Loss of income, jobs and purchasing power (vendors, consumers and those in market related SMEs).</b></p> <p><b>Financial and mental health stress. Insufficient fiscal and emergency social safety net response for 'informal' vendors—especially women, youth and vendors who have moved out of the markets and street vendors</b></p>	<ul style="list-style-type: none"> <li>• Options mentioned previously will assist in providing some relief.</li> <li>• Consider designing a public works programme with National government as short-term income/job relief for those impacted; accompanied by skills transfer where possible and aligned with priorities of local government.</li> <li>• Start multi-stakeholder and financial institutions dialogue to provide financial management support, debt relief and other options. This should also connect with participatory market governance and administrative management support from local government.</li> <li>• Review of market and other vendor fees as well as fees for basic service provision like water and sanitation. Consider public health, food security and nutritional wellbeing as well as social support value of reduced or otherwise restructured fees.</li> <li>• Assist those who do not have all the necessary documentation and/or may appear above the income threshold line to apply for social safety net support and connect them with networks of private, public and non-profit support schemes where possible.</li> <li>• Raise awareness of relief and support options including mental health services, through information and communication campaigns and include peer-to-peer resources, all municipal departments and other government programmes e.g. community health workers.</li> <li>• Through equitable representation in market committees, government departments and multi-stakeholder compositions—women and youth voices should be included. (See Table 1)</li> <li>• Policymakers should be generally proactive in this regard and sensitive to vendors who may fall outside of the usual market governance, health and financial processes.</li> </ul>

## 5. CLOSING COMMENTS

The policy approach to keeping food markets working should include the cornerstone of food systems ‘good governance’, while also being dynamic and able to evolve. **It’s important to start somewhere, to keep a record of the journey** and to remember that in the real world, and especially during crises, themes and options are never perfect or complete. Start collecting information, mapping a city’s food system and stakeholders, set-up informal/formal multi-stakeholder platforms and technical advisory and management committees (some will be long lasting, and some will be an emergency, temporary response as needed). Interpretation of priorities (what can be done, by whom and when), toolkit options and the ways in which stakeholders engage are for the local policymakers of Machakos and residents to determine.

While this toolkit emphasises an emergency response, that is attentive to gender and especially for vulnerable people living in Machakos, this experience can also present a valuable learning journey for other cities and urban communities—with successes, opportunities, and challenges—to build from and share. The uniqueness of Machakos and its food system context are to be recognised, though where similarities with other cities exist, similar policy options may apply.

# APPENDICES

## Appendix A: Details of policy options activities in Machakos

Activity	Timeline	Notes
<b>Mapping:</b> Stakeholders, urban food systems and food related governance	October 2020–July 2021	Initial mapping updated ahead of each activity e.g. Rapid Needs Assessments and policy options workshops
<b>Rapid needs assessment:</b> Desktop studies and satellite imagery analysis	November 2020–February 2021	Desktop (internal) to support design of assessment and policy co-design process, and better understanding of context during pandemic. Satellite imagery analysis shared in policy option workshops.
<b>Rapid needs assessment:</b> Vendor surveys, key informant interviews and focus groups	December 2021–March 2021	<b>Factsheets available:</b> Download from: <a href="https://www.gainhealth.org/impact/our-response-covid-19/effective-policy-making-and-coordination-during-pandemic/urban">https://www.gainhealth.org/impact/our-response-covid-19/effective-policy-making-and-coordination-during-pandemic/urban</a> Or ask GAIN Kenya
<b>Sharing assessment feedback and co-designing policy options:</b> Policy options workshop 1  Policy options workshop 2	04 May 2021  & 25 May 2021  10 August 2021	Virtual Event Participants: Policymakers  In-person event held at Gelian Hotel Participants: vendors, market authority rep-resentatives.  Virtual event Participants: Policymakers

## Appendix B: Examples of problem statements and problem trees

Below are examples of problem statements and problem-objective trees as developed by stakeholders in Machakos, Policy Option Workshop 2 (see Figure 3). This multi-stakeholder process was adapted from the Overseas Development Institute (ODI) toolkit which policymakers may like to explore further. See: ODI Toolkit, Successful Communication, A Toolkit for Researchers and Civil Society Organisations. [www.odi.org/publications/5258-problem-tree-analysis](http://www.odi.org/publications/5258-problem-tree-analysis).

### PROBLEM STATEMENT

Urban food markets are a key source of affordable and nutritious food for many people in Kenya. However, most of the food markets lack adequate basic infrastructure especially water and sanitation facilities, drainage and waste management, and hygiene routines. This is further pressured as the markets are also overcrowded and poorly organised. Sanitation is especially problematic during the rainy season. Marikiti market (Machakos) is currently served by one toilet block. As the market is large, with an average of 3000–4000 visitors every day, there is need for more toilet blocks. This should be accompanied by more water to allow for proper sanitation. The local government should ensure market infrastructure improvements and essential services supplied as a basic need for vendors and customers and support market authorities in managing the market.

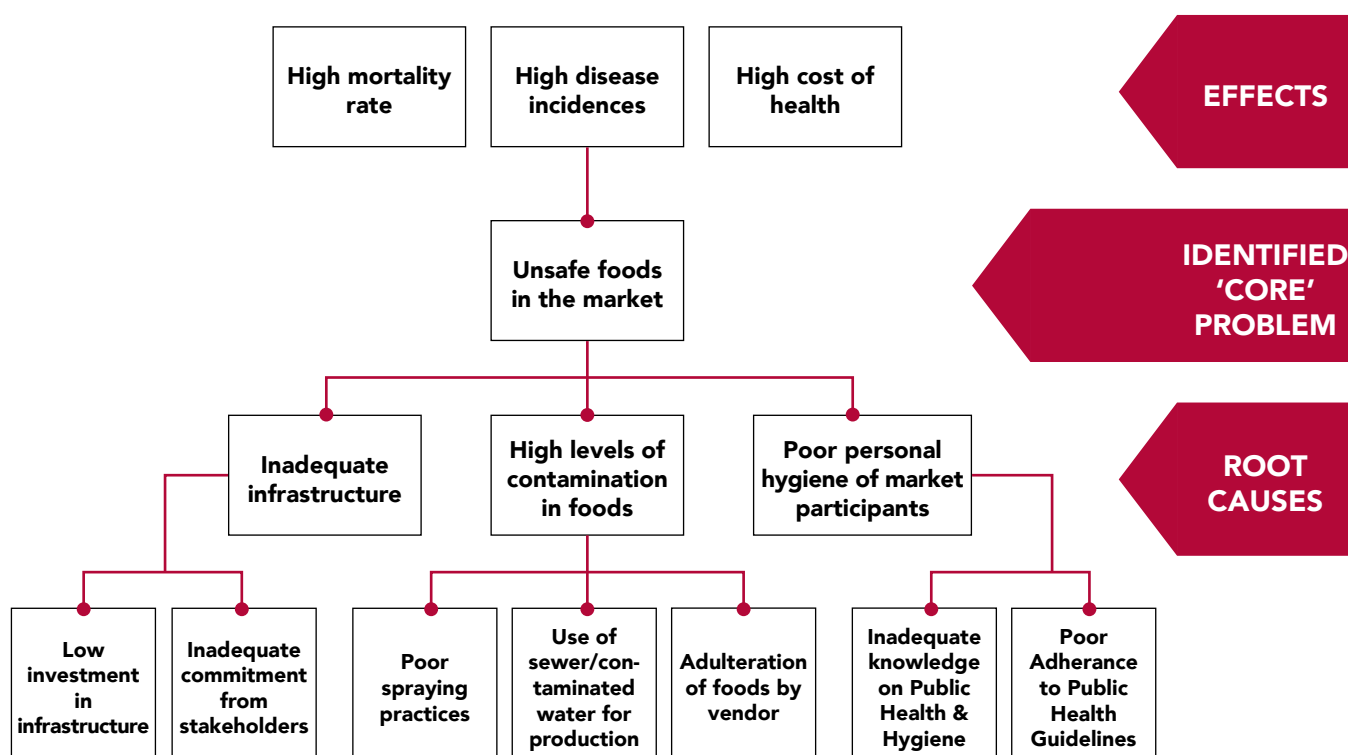


Figure 3: Unsafe Food in the Market—Market Problem Tree (Machakos)

Problem trees were then positively reframed, by stakeholders during workshop 2, flipping problems into objective trees solutions. See Table 3 below for a selection of existing policies at National and County level that guide food systems in Kenya.

Table 3: Selection of existing policies at national and county level that guide food systems in Kenya

National policies guiding urban food systems	
1	<b>Constitution of Kenya article 43(1)</b> and <b>Vision 2030</b> give every person the right to the highest attainable health, freedom from hunger and access to adequate and safe food
2	<b>Kenya Health Policy (2014–2030)</b> : guides and directs health sector investments with 6 policy objectives, of which 3 are directly linked to nutrition
3	<b>National Food and Nutrition Security Policy (2017–2022)</b> : provides frameworks for addressing food and nutrition security by addressing production and supply
4	<b>National Nutrition Action Plan (2018–2022)</b> : seeks to address all forms of malnutrition sustainably with an overall aim of ‘optimal nutrition to all Kenyans’
5	<b>National Agriculture extension policy (2004)</b> : defines modalities for effective agricultural extension management and organisation
6	<b>Policy framework for Education (2012)</b> : incorporates basic preventive and promotive health in curriculum at the basic levels
7	<b>National Industrialization Policy (2012–2030)</b> : addresses agricultural processing and value addition of perishable and non-perishable food products
8	<b>National Trade Policy (2009)</b> : aims to facilitate Kenya’s transformation into a competitive export-led economy, enhance regional integration and widen participation in both domestic and international trade
Machakos county policies guiding urban food systems	
	<b>Machakos County food safety act:</b> provides and enforces food safety <b>Machakos County government open air market act:</b> designates areas for vendors’ operations

## Appendix C: List of GAIN's keeping food markets working: policy and coordination, expert advisory panel members

Name	Home base	EAP country team
<b>Cornelia Maputsoe-Liku</b>	Kenya	Kenya
Cornelia is a Lecturer in the Department of Development Studies at the Catholic University of Eastern Africa, Kenya. She has broad experience in project planning and management, gender analysis, research and training.		
<b>Jane Musindi</b>	Kenya	Kenya
Jane has over 20 years of experience in the agribusiness industry in Kenya, Uganda, Tanzania and Ghana, where she has strived to empower agricultural micro, small and medium enterprises (MSMEs) in the areas of agronomy support, market linkage and business system support, including crop forecasting and planning. Jane is also involved in policy advocacy in the Kenyan agriculture industry to improve the business environment for smallholder farmers and MSMEs.		
<b>Delia Grace Randolph</b>	Kenya	Kenya
Delia is an epidemiologist and veterinarian with 20 years' experience in low- and middle-income countries. Currently a Professor of Food Safety Systems at the Natural Resources Institute UK, Delia previously led research on foodborne disease at the International Livestock Research Institute (ILRI) in Kenya. Her research focuses on food safety in the domestic markets of developing countries.		
<b>Jane Wambugu</b>	Kenya	Kenya
Jane has worked with Kenya's Ministry of Agriculture for 27 years. In that time, she has mainstreamed nutrition in departments (crops, livestock and fisheries) and enabled the Ministries of Agriculture and Health to work together on nutrition interventions through the creation of the Agri-Nutrition Linkages Technical Working Group. In response to the COVID-19 pandemic, Jane coordinated the development of national guidelines and 1 million kitchen garden initiatives across Kenya.		
<b>Jane Battersby</b>	South Africa	Mozambique
Based at the University of Cape Town, Jane is a geographer who has worked on urban food security, food systems and their governance in the African context since 2007. Her research interests lie in the relationships between food environments, urban systems and social systems, and in the dual burden of malnutrition. Her current focus is the development of food sensitive policies and planning at the urban and neighbourhood scale.		
<b>Samuel Mabunda</b>	Mozambique	Mozambique
The former Chief of the National Malaria Control Program, Samuel has 20 years' experience in malaria planning, coordination and policy. Samuel is a medical doctor by training and is currently Senior Lecturer in the department of Community Health, where he teaches malaria epidemiology, research methods and public health at the Eduardo Mondlane University in Maputo		
<b>Danielle Resnick</b>	USA	Mozambique
Dr. Danielle Resnick is a Rubenstein Fellow in the Global Economy and Development Program at the Brookings Institution and a Non-Resident Senior Research Fellow at the International Food Policy Research Institute (IFPRI). She is a political scientist who focuses on the political economy of development, particularly in sub-Saharan Africa. Her research includes the impacts of public sector reforms on accountability and efficiency, and urban governance and informality.		

Name	Home base	EAP country team
<b>Eduardo Sengo</b>	Mozambique	Mozambique

Eduardo is an economist with a thorough knowledge of the Mozambican and international economy. His interests centre on macroeconomics, particularly in the public finance, agrarian, financial and small business management sectors. Eduardo is Executive Director of the Confederation of Economic Associations of Mozambique.

<b>Genevie Fernandes</b>	India/ UK	Pakistan
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Genevie is a Senior Research Fellow at the University of Edinburgh, UK, and is a global public health professional with expertise in research, programme implementation, documentation and training in South Asia. Over the last 10 years, Genevie has worked with government and international development agencies on projects in maternal and child health, HIV/AIDS, tobacco control, pandemic preparedness and response, and food security.

<b>Rafia Haider</b>	Pakistan	Pakistan
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Rafia is a career civil servant and has worked extensively in local governments, food regulation, communicable disease control and waste management. She headed the Communicable Disease Control Directorate in Punjab during COVID-19 pandemic and helped establish COVID testing lab network and Central Command and Control Centre. She is currently heading the largest Waste Management Company in Pakistan.

<b>Caroline Omondi</b>	Switzerland	Pakistan
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Caroline is a sustainable supply chain expert and a Go-To-Market strategist in the food sector. She has more than 15 years of experience in the food industry and has been at the forefront of developing and implementing operational business processes to achieve growth and deliver profitability. Caroline is currently working with different SMEs and organisations as a Consultant and an Advisor to develop sustainable food supply chains and access global markets.

<b>Aslam Shaheen</b>	Pakistan	Pakistan
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Aslam has more than 33 years of experience in planning, coordination and policy development in areas including nutrition, food systems, public health nutrition, public policy, and strategy development. Through roles including acting as the Nation Focal Point for 'Scaling Up Nutrition Movement in Pakistan', Managing Scaling Up Nutrition Networks and leading the development of Pakistan Dietary Guidelines for Better Nutrition, Pakistan Multi-sectoral Nutrition Strategy, Pakistan Country Report for International Conference on Nutrition 2014. Aslam has built strong relationships with high-level policy makers in nutrition, health, and food systems.

<b>*Panayota Nicolarea</b>	Italy	Mozambique
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*Yota is an urban planner with a passion for urban food planning. Her work includes advocacy action to take forward the urban food agenda, municipal capacity building and project design and management in urban food systems. Yota is currently the UN Pre-Summit and Summit Events Lead, previously she worked with the Milan Food Policy Pact, a global agreement among city government aimed to enhance implementation of urban food policies.\*Yota stepped down from being a member of the EAP to give her full focus to the UN Food Systems Summit.*

## Appendix D: Food systems and the food environment

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**Food systems** are inclusive of people, animals, institutions, ecosystems and infrastructure (part of the 'built environment') that relate to food production, retail, consumption, diets, nutrition and health <sup>28</sup>. External drivers, such as, globalisation and trade, politics and leadership, income and its distribution, population dynamics, society, culture, and environment (including climate change), influence and shape the elements in the food system (See Figure 4).

The food environment is an integral part of the food system, forming the link between food supply chains and household's or individual's acquisition and consumption of food and in turn relate to health and nutrition. This toolkit focuses on Machakos's **food environment** around urban traditional markets, and its resilience during (and beyond) the pandemic.

Understanding this context is key to responding to the needs and opportunities of urban communities, with attention to those with low incomes, other most vulnerable (e.g. children, elderly and disabled) and gender. The urban food environment is where urban residents and the wider food system meet. It is about:

- food availability—type and diversity
- affordability—prices, purchasing power and income distribution.
- food quality and practices—food safety, convenience, and desirability.
- food markets and vendors
- messaging, advertising, and marketing<sup>29</sup>.

Local **policymakers** in Machakos urban county and town have an important role in transforming the urban food environment to be more equitable, inclusive, sustainable, and resilient. Although limited in the extent to which they can influence many of the external food system drivers, local policymakers can proactively and indirectly intersect with some drivers e.g. through food and nutrition sensitive urban planning and more coherent connections and advocacy for neighbouring public administrations and national government.

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<sup>28</sup> <http://www.fao.org/3/a-i7846e.pdf>

<sup>29</sup> <https://www.sciencedirect.com/science/article/pii/S2211912418300154>



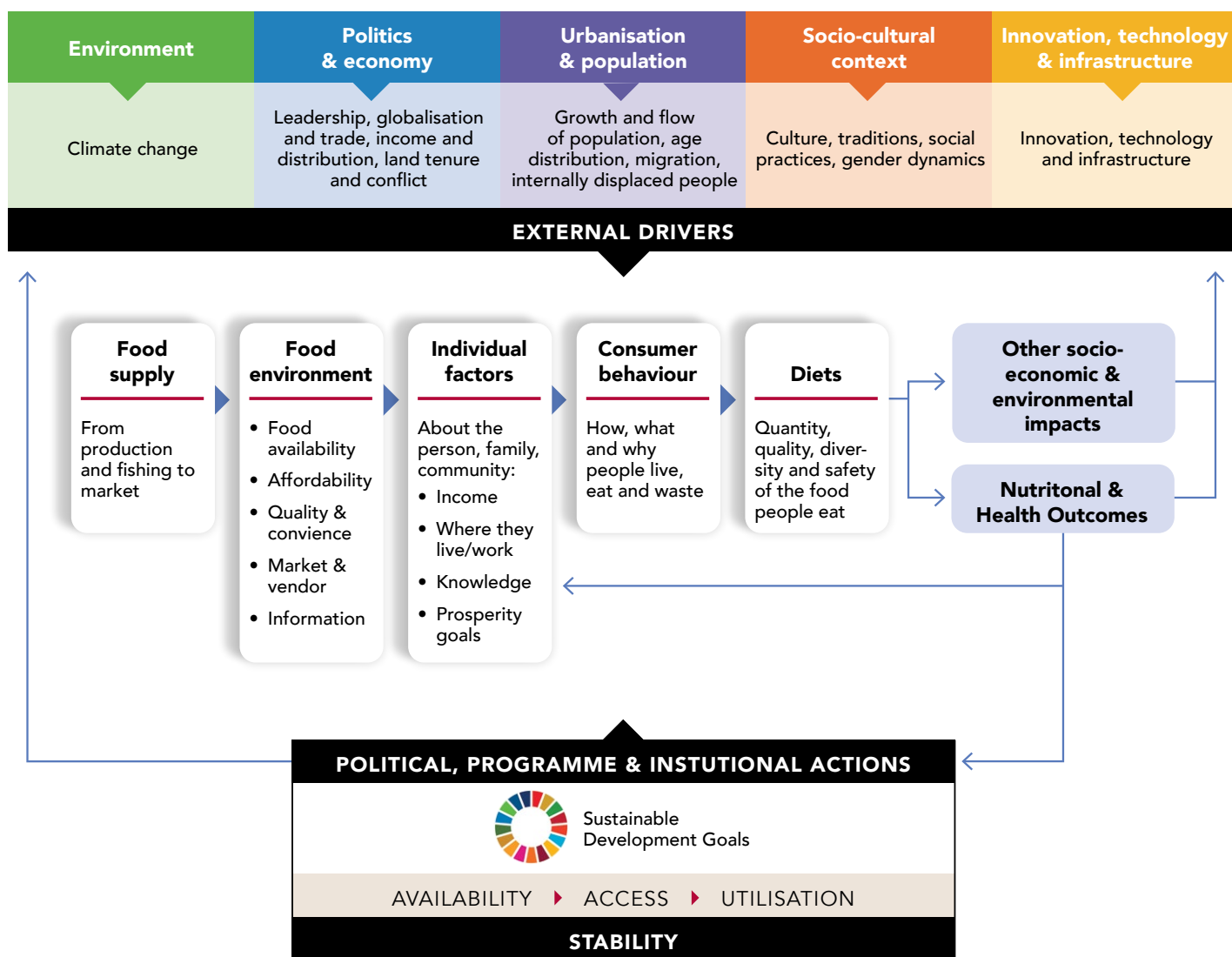


Figure 4: Food systems conceptual framework

(Adapted from the High-Level Panel of Experts on Food Security and Nutrition (HLPE) (2017). *Nutrition and food systems: a report by the High-Level Panel of Experts on Food Security and Nutrition of the Committee on World Food Security, Rome*)<sup>30</sup>

<sup>30</sup> <http://www.fao.org/3/a-i7846e.pdf>





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