# KEEPING FOOD MARKETS WORKING IN BEIRA, MOZAMBIQUE

Policy options toolkit





#### **ACRONYMS AND ABBREVIATIONS**

**EAP** Expert Advisory Panel

**FAO** Food and Agricultural Organization

**GAIN** Global Alliance for Improved Nutrition

**GRCN** Resilient Cities Network

**HLPE** High Level Panel of Experts on Food Security and Nutrition

IPC Integrated Food Security Phase Classification

**KFMW** Keeping Food Markets Working

MUFPP Milan Urban Food Policy Pact

**ODI** Overseas Development Institute

**SETSAN** Technical Secretariat for Food Security and Nutrition

**SME** Small and Medium sized Enterprises

**SUN** Scaling Up for Nutrition

**UCLG** United Cities and Local Governments

**UNICEF** United Nations Children's Fund

**VAM** Vulnerability Analysis and Mapping

**WASH** Water Sanitation and Hygiene

**WFP** World Food Programme

**WHO** 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**

GAIN would like to thank the local government and urban residents of Beira, Mozambique for their participation and contributions to this toolkit; and wishes them good health, well-being, resilience, and prosperity as they transform their urban food systems.

We gratefully acknowledge the funding by the Netherlands Ministry of Foreign Affairs, the Department of Foreign Affairs of Trade and Development of Canada and Irish Aid Foundation. All photographs included in this document have been taken with consent for use in publications.

#### RECOMMENDED CITATION

Global Alliance for Improved Nutrition. 2021. Policy options toolkit: Beira, Mozambique. 2021. © The Global Alliance for Improved Nutrition (GAIN) 2021.

The contribution of third parties do not necessarily represent the view or opinion of GAIN.

### **Table of contents**

1. Introduction	1
2. Urban food system challenges under COVID-19	3
2.1 COVID-19, urban traditional food markets	3
2.2 COVID-19, rapid urbanisation and Zero Hunger	3
2.3 COVID-19, local government and urban food systems	4
3. Mozambique: Beira and COVID-19	5
3.1 Mozambique	5
3.2 Beira	6
3.2.1 Findings from GAIN's rapid needs assessment	6
3.2.2 Insights from policy workshops	7
3.3 Beira: governance of markets	8
4. Policy options for Beira	9
5. Closing comments	17
Appendices	
Appendix A: Details of policy options activities in Beira	
Appendix B: Examples of problem statements and problem trees	19
Appendix C: List of GAIN's keeping food markets working: policy and coordination, expert advisory panel members.	21
Appendix D: Food systems and the food environment	23
Figures	
Figure 1: Beira—Policy workshop 1	1
Figure 2: Location of Beira and Pemba.	5
Figure 3: Water, sanitation and hygiene (WASH)—market problem tree (Beira)	19
Figure 4: Food systems conceptual framework	24
Tables	
Table 1: Urban food environment policy and coordination themes	10
Table 2: Prioritised traditional urban food market challenges and co-designed policy options $\dots$	14
Table 3: Problem and objective tree rationale	20

## 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



Figure 1: Beira—Policy workshop 1, July 2021

and nutrition security, and market resilience—with an emphasis on vulnerable urban communities, including those on low incomes, while applying a gender lens.

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.

<sup>1</sup> 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.

<sup>2</sup> See Appendix A.

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

<sup>4</sup> 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, urban traditional food markets

**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

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>.

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

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

<sup>7</sup> 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

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

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

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

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>.

<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. MOZAMBIQUE: BEIRA AND COVID-19



Figure 2: Location of Beira and Pemba.

#### 3.1 Mozambique

Mozambique, including the cities of Beira and Pemba, is rapidly urbanising (Figure 2). Almost 40% of the population now resides in cities/urban areas<sup>11</sup>. Adolescents (under the age of 18 years of age), the fastest growing demographic, presently comprises about 52% of the population<sup>12</sup>. At the start of the pandemic, Mozambique was recovering from two socio-economic and environmental shocks, namely: hidden debt crises and a succession of cyclones (2019—2021)<sup>13</sup>. Despite a reported 1.3% economic contraction during the pandemic, future economic growth is predicted to be positive<sup>13</sup>.

Even so, cities/urban areas remain challenged by inequality and urban development capacity constraints. Poverty is widespread with some 80% of urban residents living in neighbourhoods (bairros)

with limited basic services such as health, potable water and sanitation<sup>14</sup>. Communities in Mozambique face on-going public health challenges like tuberculosis, malaria, and HIV/AIDS as well as poverty, climate change and in some places, conflict<sup>15</sup>.

In mid-March 2020, the first COVID-19 cases were reported. In February 2020, 1.6 million Mozambicans were estimated to be living with severe to acute food insecurity (as per the Integrated Food Security Phase Classification), and 67.5 thousand children were acutely malnourished <sup>16</sup>. At the start of the pandemic, this situation was projected to worsen, with a rapid increase in COVID-19 cases and deaths <sup>17</sup> and an estimated three million residents projected to face high levels of food insecurity, across the country <sup>18</sup>.

An advisory body to National Government, the Technical-Scientific Commission for the Prevention and Combat of the Pandemic, was established early in the pandemic. Government COVID-19 containment measures avoided a full lockdown, and introduced an evening curfew, reduced trading hours and number of stalls in the food markets, social distancing, face masks, regular handwashing, and intermittent border closures. An overwhelming majority of Mozambicans surveyed (82% women; 86% men) reported a decrease in household income since the beginning of the pandemic<sup>19</sup>. Earning an income, food security and health care were the top priorities reported. Additionally, almost 80% of Mozambicans raised mental health concerns, because of the pandemic and curfew response<sup>19</sup>. These priorities and mental health concerns were equally shared by men and women<sup>19</sup>.

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

<sup>12</sup> https://www.unicef.org/mozambique/en/adolescent-social-norms

<sup>13</sup> https://openknowledge.worldbank.org/handle/10986/35214

<sup>14</sup> https://documents1.worldbank.org/curated/en/248561541165040969/pdf/Mozambique-Poverty-Assessment-Strong-But-Not-Broadly-Shared-Growth.pdf

<sup>15</sup> http://www.healthdata.org/mozambique

<sup>16</sup> https://doi.org/10.4060/ca9123en

<sup>17</sup> https://covid19.who.int/region/afro/country/mz

<sup>18</sup> https://doi.org/10.4060/ca9123en

 $<sup>19\</sup> https://reliefweb.int/sites/reliefweb.int/files/resources/mozambique\_rga\_infographics.pdf$ 

#### 3.2 Beira

Beira, in Sofala province, is a port city located in the central eastern part of Mozambique, with a population of 550,000<sup>20</sup>. There is widespread undernourishment in the city, with 70% of the population affected by moderate to severe food insecurity<sup>21</sup>. The precarious infrastructure is particularly problematic in Beira because of the extensive damage from Cyclone Idai, in 2019, followed by Tropical Storm Chalane (2020) and Cyclone Eloise (2021)<sup>22</sup>. A reported 176 municipal buildings were destroyed by Cyclone Idai here (including marketplaces)<sup>23</sup>. The destruction in Beira, caused by back-to-back environmental disasters (climate change) like cyclones, combined with sea-level rise, has led to flooding. These environmental disasters combined with the current COVID-19 pandemic led to the loss of livelihoods, income, and jobs<sup>24</sup>, and escalated the already alarming food insecurity with malnutrition impacts.

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

In early 2021, traditional food market vendors in Beira who were surveyed as part of GAIN's Rapid Needs Assessment reported a significant decline in customers, alongside decreased supply, an increase in supplier prices and changes in supplier credit policies. This was accompanied by a decrease in the diversity of food (which Beira usually enjoys)—some of which was attributed to seasonal change. Beira was also affected by border closures and import restrictions, which led to the prices of everyday food products rising. Of the vendors surveyed, most owned and operated their businesses, while almost 65% of the vendors surveyed were female. Female vendors were found to mainly sell legumes, fruit, vegetables and root vegetables, whereas male vendors tended to sell poultry, fish, dairy, eggs and packaged goods<sup>25</sup>.

"The municipality has worked very hard, but we, the people, are sometimes ignorant... even adult people have to be forced to wear a mask, knowing that the situation is not right."

—FOCUS GROUP PARTICIPANT [WOMEN VENDORS], BEIRA

The deeper qualitative Rapid Needs Assessment, comprising key informant interviews and focus group discussions, found that traditional urban food market vendors and other urban food stakeholders, including policymakers, believed that residents were avoiding the markets, because even with measures like facemasks, handwashing and 2-metre spacing between vendor stalls, they felt at risk of contracting COVID-19 while at the markets as well as during the commute to and from the markets. Facemasks were reported to be used only variably in the markets. Moreover, shorter trading hours and curfew meant that some residents, due to working hours and commute times to home, were often unable to visit the markets. Limited trading hours and reduced purchasing power, due to loss of income and jobs, resulted in reported changes in purchasing behaviours, fewer sales, decreased food diversity, loss of food quality and increased food waste. This experience is complex. For example: fishmongers who typically fish in the morning and sell their catch later, were especially hard hit by revised trading hours and the evening curfew; with a knock-on impact on fish in diets and food waste<sup>26</sup>.

<sup>20</sup> https://www.dutchwatersector.com/sites/default/files/2019-06/Summary%20Beira%20Municipal%20Recovery%20and%20Resilience%20 Plan.pdf

<sup>21</sup> https://fews.net/southern-africa/mozambique/food-security-outlook/june-2020

<sup>22</sup> https://unhabitat.org/sites/default/files/2021/05/covid19\_wash\_mz\_web.pdf

<sup>23</sup> https://www.ilo.org/wcmsp5/groups/public/---ed\_emp/documents/publication/wcms\_704475.pdf

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

<sup>25</sup> https://www.gainhealth.org/resources/reports-and-publications/covid-19-vendor-survey-factsheet

<sup>26</sup> https://www.gainhealth.org/impact/our-response-covid-19/effective-policymaking-and-coordination-during-pandemic/urban

"The [food] products were not coming to the market, people would go to the market, but they couldn't find their products, or if they found them, it was more expensive, because the transportation costs have also increased, and basically people started selling anything they could find."

**—**KEY INFORMANT INTERVIEW [VENDOR], BEIRA

#### 3.2.2 INSIGHTS FROM POLICY WORKSHOPS

Engagements during both policy workshops in Beira confirmed the findings of the Rapid Needs Assessments. Stakeholders debated at length about the number of formal versus informal urban markets that could be described as traditional urban markets in Beira—this is likely due to the overlap, in Mozambique, between municipal and non-municipal (formal versus informal) markets.

Massamba, Maquinino, Mascarenhas and Vila Massane markets were considered priority markets in which to address policy and coordination challenges during the pandemic. The importance of the municipality equipping markets with (food) product washing facilities, particularly in Munhava, Inhamizua and Manga Loforte markets, 'within the next two years' to ensure consumer access to safe and nutritious fresh products was raised. Lack of cold storage in markets was prioritised—especially for fish but also meat, fresh fruits, and vegetables. Vila Massane, Ngupua, Chingussura, Inhamizua and Mascarenha markets were identified as most in need of cold storage, which stakeholders felt the municipality should urgently address. What factors were seen to be driving the proliferation of informal markets and street vendors (those who were displaced from markets) in the city were also debated. These factors included cyclone damage, the pandemic, influx of residents to the urban community, and a combination of socio-economic drivers. When market management introduced COVID-19 protection measures, this impacted how many and which vendors could remain operational in the markets daily. Some vendors abandoned their stalls altogether.

Markets were further confirmed as: a key source of food (including diverse foods and nutrition); supporting income and jobs; under pressure due to climate change and vulnerable and damaged infrastructure—which encompassed road, water, sanitation and waste infrastructure; having some reliance on food imports from South Africa and Zimbabwe and a greater reliance on local rural producers (whose production was decreasing due to loss of land); and as daily meeting places to connect socially and to learn about food availability and quality as well as life in Beira.

Policy option responses are set against the backdrop of market investment in Beira. Rebuilding of market infrastructure in Beira is and will influence food systems governance and management. This will also require attention to the ways in which the market operates. In several Beira markets, cold rooms and renewable energy sources are presently being introduced. These are likely to re-shape how and what food is sold, as well as food quality and safety in these markets. Government and/or local vendor-led pandemic measures, including water, sanitation, and hygiene (WASH) infrastructure, services and oversight are positive market investments that will need policy options and practical strategies to support continued quality of life and advance the goal of resilience. A similar situation exists with the urban planning goals around the development of urban wholesale markets to facilitate greater access to food by traditional market vendors.

#### 3.3 Beira: governance of markets

Mozambican municipalities, like that of the city of Beira, are mandated with the responsibility of regulating (e.g. by-laws or 'posturas'), investing and overseeing markets and fairs. There are three types of markets, namely: Wholesale Supply, District and Rural or Provisional Markets. These markets are regarded as formal markets with municipalities processing licence fees and conducting inspections. Daviz Simango was president (mayor) of the municipality of Beira and founder of the Democratic Movement Party of Mozambique (MDM). He died unexpectedly in February 2021 and was succeeded by Albano Carige.

Under the office of the president (mayor) of Beira's municipality there are several departments and councils, including those for Urbanisation, Education, Planning and Finance, Health and Social Action, Transport, Equipment and Logistics, and Infrastructure. Markets and fair management fall under the council for Promotion of Economic Activities and Markets. This illustrates the necessary focus on specific delivery, regulation, and public asset management across several key portfolios. It also highlights the importance of having a technical advisory and/or management committee (internally and when engaging with multi-stakeholders) for traditional urban markets, comprising members from most of these council units, including, for example Urbanisation and its sub-unit Climate Resilience and Infrastructure and working with sub-units on infrastructure, water, and energy services. (Also see Chapter 4 and Table 2)

### 4. POLICY OPTIONS FOR BEIRA

Various policy options or levers can be adapted, modified, and applied to transform Beira'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 Beira'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 Beira'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 Beira (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 and objective trees (Figure 3 and Table 3) that were developed during Beira 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



Good governance and the urban food environment Good governance in the context of the urban food environment encompasses a diversity of communities, dietary preferences, and environmental factors. 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. This need not entail a lengthy process or extensive documentation. Rather, the emphasis is on coherence and being practical.

Three helpful ways to interpret good governance are:

- i. a nutritious food environment vision, catering to people and planet.
- ii. a commitment statement.
- iii. principles.

These three interpretations can 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 include 'Good Food Charters' like this one for Bristol (https://bristolgoodfood.org/).

In Mozambique, the **Technical Secretariat for Food Security and Nutrition (SETSAN)** is a valuable national unit for supporting good governance. The **Scaling up Nutrition** movement (SUN: https://scalingupnutrition.org) is another country-level resource which already supports in Mozambique, Kenya 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: https://scalingupnutrition.org/about-sun/the-vision-and-principles-of-sun).

It is useful to critically think of how these interpretations intersect the local, urban **sustainable development goals (SDGs)** strategy and implementation thereof. Local policymakers may find this cities and SDGs guidance document of value: https://sdgcities.guide/

#### Principles of 'good governance' to consider with a traditional food market lens are:

- Participation and representation (e.g. inclusive, equitable and gender attentive multi-stakeholder platforms—informal or formal).
- Fair and due process with respect to 'appointments' to technical and management food and nutrition committees.
- 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.
- Knowledge, empowerment, and communication.
- Accountability, transparency, and learning.
- 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.
- Respect for human rights (including the right to safe and nutritious food).
- Respect for the law and ethical conduct.

#### **Theme**

#### **Description and activities**



Know your city: people, food, and environment

Know and understand the character and dimensions of your city/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. It is important to have this information in one, accessible place for as many stakeholders, as possible, to update and use. Beira, like many 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 Beira, also have some records about the 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.

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). GAIN is also presently exploring city level food systems dashboards with local policymakers in Beira.

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

#### **Description and activities**



Know your city: people, food, and environment

(CONTINUED)

#### B. Map: local food environments

Different types of food and nutrition related information can be partially mapped and/or displayed in map layers which can be overlaid to show synergies, challenges, and opportunities. This supports decision-making and better informs policy and coordination 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, including local residents and informal vendors. This type of mapping is informed by urban planning and community asset mapping (see: https://www.youtube.com/watch?v=\_tklFCJUjYl). 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 workers (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.

#### 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 in highly changeable socio-economic, public health and environmental circumstances. This can also build towards a more comprehensive resilience framework. For practical guidance on how to set up your own framework, policymakers 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**



# Mobilised, food proactive city

Mobilise the diversity of food system stakeholders including traditional market vendors, urban/peri-urban agricultural producers and residents to be active parts of the local food environment's pandemic response, sustainability, and resilience. Policymakers can support and coordinate this by promoting accessible, digital e-governance tools, regularly engaging the community, and sharing information and communications. They can encourage two-way sharing of information about the urban food environment, facilitated by, for example:

- peer-to-peer groups (existing and new) which can offer access to vulnerable communities, such as those with HIV/AIDs, the elderly, or mobile informal vendors; and
- 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.



# Externally networked city

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.

Possible city networks and platforms to consider are:

- Milan Urban Food Policy Pact (MUFPP): See: https://www.milanurbanfoodpolicypact.org (Maputo, Pemba and Quelimane are signatories)
- Food Action Cities. See: https://foodactioncities.org
- Resilient Cities Network (GRCN): See: https://resilientcitiesnetwork.org/
- ICLEI—Local Governments for Sustainability: See: https://iclei.org
- C40 Cities (C40). See: https://www.c40.org
- United Cities and Local Governments (UCLG). See: https://www.uclg.org









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

# Market pandemic challenges and resilience focus area

# Damaged and vulnerable market building (structure) infrastructure.

(Climate change, age, quality)

#### Roads and transport infrastructure

(linked to markets and SMEs: bringing food, vendors, and customers to/from market; waste management).

#### **Policy options**

- Public sector asset management and capital budget investment.
- Public and private partnerships.
- Inclusive multi-stakeholder engagement: consider establishing a market infrastructure committee (formal or informal) to inform design, as well as ongoing management once built. Include youth and gender focal points in relevant municipal departments and ensure representation in market committees.
- Public sector technical committee (across departments and including urban planning and development).
- Review of zoning and building regulation, pandemic and other public health and environmental resilience measures, and financial vendor fees.
- Consideration of the needs of women vendors in the market (e.g. childcare space, produce-specific—fruit and vegetables, equitable representation in market committees and decisions to manage structure once built).
- Structure co-designing with vendors who have specific requirements, e.g. those who sell fish.

#### WASH facilities and services.

Identified markets 'most at risk': Maquinino, Mascarenhas and Vila Massane.

# Cold storage infrastructure with associated management and services

e.g. energy, security, space allocation, food safety practices and oversight.

- Public sector asset management and capital budget investment.
- Public and private (and non-profit) partnerships.
- Inclusive multi-stakeholder engagement: establish a management team
  with market committees and relevant municipal service departments to
  support investment and management e.g. about market prioritisation,
  design and operational management once built—Including municipal
  service fees. Include youth and gender focal points in relevant municipal
  departments.
- Public sector technical committee (across departments and including urban planning and development). Focus on priority markets for WASH infrastructure and cold storage and strive to prioritise accessibility of safe, nutritious and diverse foods.
- Review (and map) legislation around food safety and waste to maximise opportunity but also remain compliant.
- Promotion of market WASH and food safety champions (in market and municipality)—consider synergies with public health and agricultural community workers. Training of champions.
- Food safety and hygiene communication and information campaigns e.g. social media, WhatsApp / texting, community radio, peer to peer, champions, pamphlets and 'durable' posters, and technical training support. Consider linking to GAIN's EatSafe materials and support.
- Review of pandemic and other public health, food safety and environmental resilience regulations and measures. Synergies where possible and strive for consistency.
- Consideration of the needs of women vendors/consumers in the market (e.g. maternal and childcare needs, produce-specific: fruit and vegetables, and equitable representation in market committees).









## Market pandemic challenges and resilience focus area

#### **Policy options**

Curfew: restricted trading hours with impacts on customers, food sales and food like bread, meat and fish which are produced/caught and sold at times on/outside the curfew limits.

Food waste, food safety and loss of food quality.

- Advocate national government and/or municipality for special case curfews and/or support for vendors who sell bread and fish.
- Public procurement opportunities: secure contracts with vendors and SMEs e.g. transporters to purchase percentage of perishable foods like fish that would otherwise go unsold under existing curfews. 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 with awareness e.g. curfew and fish sale challenges.
- Public and private procurement: to reduce volume of food waste arrangements to purchase a diversity of staple and nutritious foods at a certain point before quality and safety deteriorate.
- 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.
- Inclusive multi-stakeholder engagement: vendors, Market Committees, and other stakeholders. Together explore options for vulnerable curfew products like bread, meat, and fish.
- Promotion of food quality, safety, and waste market champions—consider synergies with public health and agricultural community workers.
- Review (and map) legislation around food safety and waste to maximise opportunity but also remain compliant.
- Food waste communication and information campaigns e.g. social media, WhatsApp / texting, community radio, peer-to-peer, champions, pamphlets and 'durable' posters, and technical training support.

Capacity of market: number and spacing of vendors, service providers and customers.

- Collect relevant data and map markets (see Table 1)
- Inclusive multi-stakeholder engagement with equitable representation
  of women vendors. Seek solutions to address spacing requirements of
  pandemic measures inside markets, support and options for vendors
  needing to move outside the market, and vendor selection process by
  market committees to decide who can remain inside the market, pay
  attention to diversity of nutritious foods available in markets.
- 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 find
  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: create 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.









Market pandemic challenges and resilience focus area	Policy options
Insufficiently planned and coordinated network of formal and informal urban traditional food markets  Emergence of new informal 'street' markets because of pandemic measures inside 'formal' markets and/or failing structures and/or cyclone damage.	<ul> <li>Formalising of informal urban vendors and markets and developing an integrated network of wholesale markets, retailers, and traditional urban markets.</li> <li>Urban planning and development department working with mobilised residents to gather data and map urban markets to support decision-making (See Table 1).</li> <li>Inclusive multi-stakeholder engagement with equitable gender representation of women vendors and urban residents: consider how best to plan the market system in Beira. Refer to 'Capacity of market' above for options to support displaced vendors and markets in the interim.</li> </ul>
Loss of income, jobs and purchasing power (vendors, consumers and those in market related SMEs).  Financial and mental health stress. Insufficient fiscal and emergency social safety net response for 'informal' vendors.	<ul> <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 needs of municipality e.g. workers involved in clean-up post cyclone.</li> <li>Start multi-stakeholder and financial institutions dialogues to provide financial management support, debt relief and other options.</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> </ul>
Food supply disruptions: border closures with South Africa and Zimbabwe; and reduced production from peri-urban and rural food producers.	<ul> <li>Promote locally sourced and indigenous, year-round food production.</li> <li>Support with infrastructure and coherent farm-to-market networks.</li> <li>Use mobile technology to promote access to information about local food sources and local alternatives that are nutritious and desirable.</li> <li>Reduce food loss and waste: streamline food into markets and homes.</li> </ul>
Lack of urban agriculture and ineffective use of urban/peri-urban green space.	<ul> <li>Urban planning and integrated development linked to mobilised residents and mapping of possible public and private spaces that can be used short or long term for urban agriculture.</li> <li>Review zoning and supporting ordinances.</li> <li>Promote school, work, hospital, municipal and other nutritious, climate smart food gardens.</li> </ul>
Women vendors and market committees	<ul> <li>Through equitable representation in market committees, government departments and multi-stakeholder compositions—women's voices and empowerment can be addressed. (See Table 1)</li> <li>Policymakers should be proactive in this regard.</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 Beira and residents to determine.

While this toolkit emphasises an emergency response, that is attentive to gender and especially for vulnerable people living in Beira, 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 Beira 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 Beira

Activity	Timeline	Notes
Mapping: 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
Rapid needs assessment:  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.
Rapid needs assessment: Vendor surveys, key informant interviews and focus groups	February 2021– April 2021	Factsheets available: Download from: https://www.gainhealth.org/impact/our-response-covid-19/effective-policymaking-and-coordination-during-pandemic/urban  Or ask GAIN Mozambique
Sharing assessment feedback and co-designing policy options:		
Policy Options workshop 1	04 June 2021	Sena Hotel (in-person event) Participants: vendors, market authority representatives, policymakers, civil society.
Policy Options workshop 2	28 July 2021	Sena Hotel (in-person 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 Beira, Policy 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.

#### **PROBLEM STATEMENT**

Due to the extensive destruction of infrastructure in Beira from cyclones, potable water supply remains a challenge in city traditional food markets. This creates immense challenges in adhering to good sanitation practices. This challenge has been worsened by COVID-19, as washing hands is a required prevention behaviour.

The availability of potable water and proper sanitation are crucial to ensure the markets are safe and hygienic. Even though they are centres of intense agglomeration and therefore a risk for transmission of COVID-19 and other harmful viruses and bacteria. In addition, markets remain challenging areas to encourage proper social behaviour during the COVID-19 pandemic.

The municipality should ensure the installation of an adequate water supply in the markets, as well as toilets that are properly run and monitored. The market management should be supported to carry out awareness campaigns on good sanitation practices and to enforce COVID-19 prevention measures.

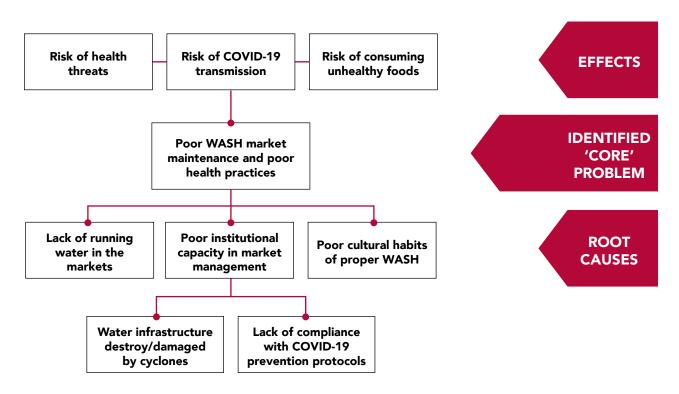


Figure 3: Water, sanitation and hygiene (WASH)—market problem tree (Beira)

These problem trees were then positively reframed, by stakeholders during workshop 2, flipping problems into objective trees solutions. See Table 3 for an expanded, more complex problem and objective tree rationale, with a focus on the urban traditional markets of Maquinino, Mascarenhas and Vila Massane.

#### **PROBLEM STATEMENT**

Beira markets are missing fundamental features to ensure proper operation, such as product washing facilities and cold storage. In addition, market infrastructure in Beira has been significantly damaged by cyclones.

The lack of product storage is severely limiting the quality of fresh food and increasing the risk of loss of products for the vendor, and the risk of consuming unhealthy food for the consumer. The markets that are most affected are Maquinino, Mascarenhas and Vila Massane.

The City Council, through the Directorate for industry, commerce, markets and fairs, should urgently address this gap by equipping markets with product washing facilities and cold storage, to prevent loss of products and ensure that consumers have access to safe, healthy and fresh food.

Core Problem	Root causes	Effects
Damaged markets' infrastructure	Market infrastructure vulnerable to severe weather (Climate change)  Lack of resources for adequate	<ul> <li>Unsafe physical food environment for vendors and consumers Risk to life and loss of access to staples and nutritious food.</li> <li>Risk to vendors and market connected SME's income and jobs.</li> <li>Risk of consumption of poor quality and/or unsafe foods.</li> <li>Risk of losing revenue due to product deterioration.</li> </ul>
	investments in cold storage and product washing facilities.  Overcrowded markets.	Increase food waste (and contributions to climate change)      Pressure on infrastructure included water and sanitation.
		Public health risk and risk of theft and loss of food quality.
Objective	Needs	Results
Structurally sound and operationally— resilient market infrastructure	Resilient infrastructure: structure and operations. Supported by market committee and municipality. Possible outside investment.	<ul> <li>Accessible, safe food and nutrition—supporting food security and access to healthy diets.</li> <li>Improved physical operational safety—working and consumer sale conditions.</li> </ul>
	Adequate budgets for maintenance of cold storage and product washing facilities. Public and private partnerships to be explored so as to reduce costs to vendors.	Increased resilience: revenue and product quality.     Decreased food waste (and reduced contributions to climate change)
	Markets of sustainable size for numbers of vendors and consumers.	Markets designed for balanced number of vendors and related SMEs (bring in food for example), during opening hours; and safe flow of customers which WASH infrastructure can support.

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

Name	Home base	EAP country team
Cornelia Maputsoe-Liku	Kenya	Kenya
		nent Studies at the Catholic University of Eastern Africa, Kenya. nagement, gender analysis, research and training.
Jane Musindi	Kenya	Kenya
strived to empower agricultural inkage and business system su	micro, small and mediupport, including crop for	es industry in Kenya, Uganda, Tanzania and Ghana, where she had am enterprises (MSMEs) in the areas of agronomy support, marke precasting and planning. Jane is also involved in policy advocacy mess environment for smallholder farmers and MSMEs.
Delia Grace Randolph	Kenya	Kenya
a Professor of Food Safety Syste	ems at the Natural Resovestock Research Institu	ars' experience in low- and middle-income countries. Currently ources Institute UK, Delia previously led research on foodborne ute (ILRI) in Kenya. Her research focuses on food safety in the
Jane Wambugu	Kenya	Kenya
		·
departments (crops, livestock an nutrition interventions through t COVID-19 pandemic, Jane coor	nd fisheries) and enable the creation of the Agri-	e for 27 years. In that time, she has mainstreamed nutrition in ed the Ministries of Agriculture and Health to work together on Nutrition Linkages Technical Working Group. In response to the ent of national guidelines and 1 million kitchen garden initiatives
departments (crops, livestock and trition interventions through the COVID-19 pandemic, Jane coor across Kenya.	nd fisheries) and enable the creation of the Agri-	ed the Ministries of Agriculture and Health to work together on Nutrition Linkages Technical Working Group. In response to the
departments (crops, livestock an nutrition interventions through to COVID-19 pandemic, Jane coor across Kenya.  Jane Battersby  Based at the University of Cape and their governance in the Afrenvironments, urban systems a	nd fisheries) and enable the creation of the Agridinated the development of the Agridinated the Agrid	ed the Ministries of Agriculture and Health to work together on Nutrition Linkages Technical Working Group. In response to the ent of national guidelines and 1 million kitchen garden initiatives
departments (crops, livestock an utrition interventions through to COVID-19 pandemic, Jane coordacross Kenya.  Jane Battersby  Based at the University of Capeand their governance in the Afrenvironments, urban systems a	nd fisheries) and enable the creation of the Agridinated the development of the Agridinated the Agrid	ed the Ministries of Agriculture and Health to work together on Nutrition Linkages Technical Working Group. In response to the ent of national guidelines and 1 million kitchen garden initiatives  Mozambique  grapher who has worked on urban food security, food systems 17. Her research interests lie in the relationships between food d in the dual burden of malnutrition. Her current focus is the
departments (crops, livestock an nutrition interventions through to COVID-19 pandemic, Jane coordacross Kenya.  Jane Battersby  Based at the University of Cape and their governance in the African their governance in the Af	south Africa  Town, Jane is a geogrican context since 200 and social systems, and mozambique  Mozambique  Mozambique  nal Malaria Control Prel is a medical doctor e teaches malaria epid	ed the Ministries of Agriculture and Health to work together on Nutrition Linkages Technical Working Group. In response to the ent of national guidelines and 1 million kitchen garden initiatives  Mozambique  grapher who has worked on urban food security, food systems 17. Her research interests lie in the relationships between food d in the dual burden of malnutrition. Her current focus is the it the urban and neighbourhood scale.

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
Eduardo Sengo	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.

Genevie Fernandes	India/ UK	Pakistan

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.

Rafia Haider	Pakistan	Pakistan
--------------	----------	----------

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 Paksitan.

Caroline Omondi	Switzerland	Pakistan
-----------------	-------------	----------

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 SME's and organisations as a Consultant and an Advisor to develop sustainable food supply chains and access global markets.

Aslam Shaheen	Pakistan	Pakistan

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.

*Panayota Nicolarea Italy	Mozambique
---------------------------	------------

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 stepped down from being a member of the EAP to give her full focus to the United Food Systems Summit (UN-FSS) as Events Lead. Previous to this role she worked with the Milan Food Policy Pact, a global agreement among city government aimed to enhance implementation of urban food policies.

#### Appendix D: Food systems and the food environment

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. 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)<sup>27</sup>.

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 Beira'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>28</sup>.

Local policymakers in Beira 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.

<sup>27</sup> http://www.fao.org/3/a-i7846e.pdf

<sup>28</sup> https://www.sciencedirect.com/science/article/pii/S2211912418300154

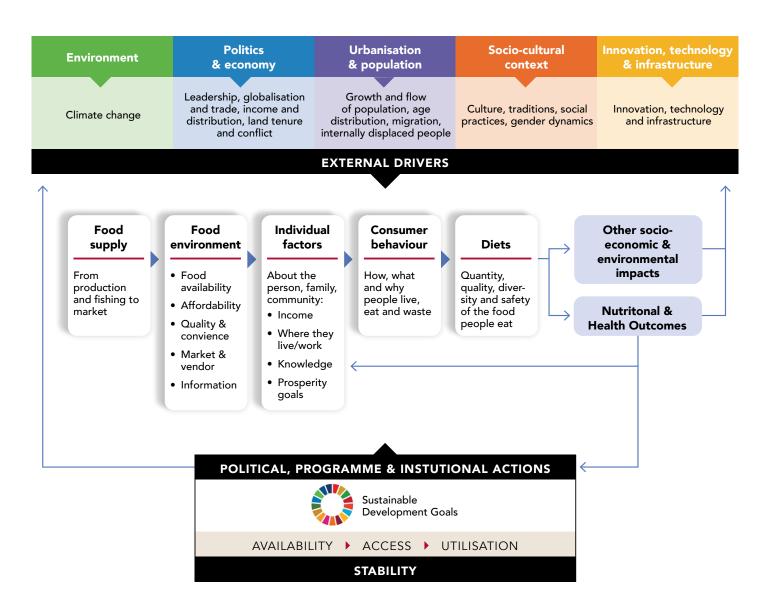


Figure 4: Food systems conceptual framework

(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)29

<sup>29</sup> http://www.fao.org/3/a-i7846e.pdf.

#### Contact

www.gainhealth.org

GAIN

The Global Alliance for Improved Nutrition (GAIN) Rue de Varembé 7 1202 Geneva Switzerland

T: +41 22 749 18 50 E: info@gainhealth.org © 2021 The Global Alliance for Improved Nutrition

