The Traditional Market Report (TMR), developed by EatSafe, highlights behaviors and decisions made by vendors and consumers in two markets in Dar-es-Salaam, Tanzania (Kariakoo and Buguruni). This report summarizes perceptions on COVID-19 and the difficulties faced by market actors in these traditional markets, and tracks prices of selected nutritious foods every two weeks. The TMR highlights several USAID-accepted indicators that help determine resilience as market actors cope with business and food security choices under COVID-19 conditions. This TMR includes six surveys from July, August, September, October, November, and December 2021, including phone interviews with a panel of vendors and consumers (each n=30).

**Insights from vendor perspective between July and December 2021**

- Share of vendors that reported a lower number of customers decreased (63% Jul; 62% Aug; 50% Sep; 39% Oct; 45% Nov; 35% Dec) while the share of vendors reported that the number of customers stayed about the same increased (38% Jul; 34% Aug; 42% Sep; 57% Oct; 52% Nov; 61% Dec).
- Share of vendors that found it not difficult or not difficult at all to follow new COVID-19 rules in the market stayed high over all months (81% Jul; 69% Aug; 58% Sep; 87% Oct; 76% Nov; 83% Dec).
- Share of vendors (81% Jul; 97% Aug; 83% Sep; 100% Oct; 72% Nov; 74% Dec) that reported sharing resources with other vendors including hand washing facilities, masks, sanitizers, storage rooms and transportation stayed high.
- Share of vendors that used business practices to increase sales stayed low (12% Jul; 17% Aug; 12% Sep; 9% Oct; 14% Nov; 0% Dec).
- Share of vendors that borrowed money due to COVID-19 increased slightly but stayed low (0% Jul; 14% Aug; 8% Sep; 30% Oct; 17% Nov; 22% Dec).

**Insights from consumer perspective between July and December 2021**

- Share of consumers whose households’ financial situation stayed about the same increased (59% Jul; 77% Aug; 86% Sep; 77% Oct; 83% Nov; 100% Dec); all of those negatively affected reported a reduced income through fewer business opportunities (100% Jul-Nov; 0% Dec).
- Share of consumers visiting the markets at least once a week increased (68% Jul; 65% Aug; 76% Sep; 77% Oct/Nov; 100% Dec); major purpose for visiting the markets was to buy foods for themselves or family.
- Share of consumers reported doing most of their food shopping at markets stayed high (82% Jul; 100% Aug; 83% Sep; 90% Oct; 77% Nov; 100% Dec). Consumers also obtained food from other markets, food stalls, small shops, kiosks, and mobile vendors.
- Share of consumers that considered the majority or all vendors as (extremely) trustworthy stayed high (77% Jul/Aug; 79% Sep; 83% Oct; 77% Nov; 100% Dec); Reasons for a high trust in vendors included knowing the vendors well/buying regularly from the same vendor.
- Share of consumers that were asked for feedback by vendors and/or market officials stayed high (59% Jul; 61% Aug; 76% Sep; 90% Oct; 73% Nov; 60% Dec); Almost all of those providing feedback noticed that their input had been taken up.

**Food prices between July and December 2021**

Assessed food prices did not change substantially between July and December. While the prices for milk and groundnuts decreased by 9% and 3%, prices for beef liver and spinach increased by 7% and 3%, respectively.
I. BACKGROUND ON THE COVID-19 SITUATION

Despite the limited availability of precise COVID-19 data from 2021, the Tanzanian Ministry of Health displays historic bi-weekly COVID-19 data from 2020-2022 in the Situation Reports from early 2022. Based on the Situation Report #18 from early January 2022, officially, 32,393 cases and 753 deaths have been reported between March 14, 2020 and January 9, 2022 (Fig 1). During the time of this assessment (July to December 2021) cases were highest in July and August and in December 2021.

![Confirmed COVID-19 cases and deaths 2020-2022, Tanzania mainland](Ministry of Health, 2022)

In July 2021, Tanzania received the first batch of over one million vaccine doses. As of December 28, 2021, Tanzania administered almost 2.5 million doses. According to the Situation Report #18, capturing the time until early January 2022, about 1.7 million people are fully vaccinated which translates into a share of about 2.8% of the entire population.
2. MARKET CHARACTERISTICS AND CHANGES DURING COVID-19

**Kariakoo** and **Buguruni** are informal markets situated in Ilala District respectively in Kariakoo ward and Buguruni ward, in the center of Dar-es-Salaam (Fig. 2). While Kariakoo market has three floors and spans over several blogs with a total of over 10,200 m², Buguruni market has no additional floor and about 5,700 m². In both markets the major food items sold are fruits and vegetables, cereals, condiments, banana, roots and tubers, meat, poultry, and fish. While the numbers of vendors and consumers dropped during the outbreak of COVID-19 (March 2020) numbers normalized again in 2021. In both markets COVID-19 regulations are in place mandating vendors and consumers to wear masks when entering the market, reminding of regular hand washing and temperature checks.

**2.1 Kariakoo market, Dar-es-Salaam, Tanzania**

Kariakoo is the biggest food market in Dar-es-Salaam (Fig. 2) located in a three-floor building (underground, 1st and 2nd floor) and with additional food stalls in the open-space around the building. It is estimated that a total of about 1,660 vendors sell their produce in the main market and surrounding areas to about 25,000 customers on daily basis. Apart from food vendors, agro dealers sell farm equipment and inputs.

**2.2 Buguruni market, Dar-es-Salaam, Tanzania**

Buguruni market is a traditional food market with about 2,630 vendors selling their produce to about 70,000 consumers on daily basis (Fig. 3). Like Kariakoo, the open-space around the building is occupied with market stands and salesmen selling seasonal fruits.

**Fig. 2 Location of Kariakoo and Buguruni market in Dar-es-Salaam, Tanzania (right); Kariakoo market, Dar-es-Salaam, Tanzania (left).**

**Fig. 3 Buguruni market, Dar-es-Salaam, Tanzania**
2.3 Bi-Weekly Consumer and Vendor Survey Results during COVID-19

In addition to the resilience assessment, EatSafe conducted rapid market surveys during the COVID-19 pandemic to understand consumer and vendor habits and needs related to food safety, including approximately 40 consumers and 40 vendors from each market. This activity began in January 2020 and has since been repeated every two weeks, with results summarized and published in market-specific bulletins every month. Results below are from both markets including all data rounds between August 2021 and January 2022.¹

2.4. Changes in the Markets

Based on the rapid assessment, 29% of consumers reported concerns related to food safety when shopping in the market in the last couple of weeks before the assessment. Those with concerns identified the following top two issues: (1) the food wanted not being available (55%), and (2) not trusting the market to take appropriate precautions (10%). When asked about the measures related to food safety consumers saw currently implemented in the markets, the following were reported: hand washing/sanitizer stations (53%), clean markets with disinfectant (28%), demand for cleanliness behavior (11%), and the provision of COVID-19 communication (9%) (Fig. 4). The majority of vendors (72%) interviewed in the bi-weekly assessments reported that their business faced currently challenges. The experienced challenges included: difficulty accessing products to sell (78%), decrease in customers (43%), difficulty transporting products (28%), decrease in sales (27%), difficulty getting to the market due to transport disruption (27%), difficulty accessing financing (20%), and limited financial reserves/liquidity (11%) (Fig. 5).

¹ Earlier rounds of bulletins can be found on GAIN’s website.
3. MARKET RESILIENCE UNDER COVID-19

This TMR highlights selected indicators of the market system resilience dimensions of connectivity, diversity, equity and fairness, cooperation, competition, and business strategy. Included are six data sets from July, August, September, October, November, and December 2021. Data were collected through monthly panel interviews with up to 29 vendors and 31 consumers from both Kariakoo and Buguruni market. Food prices for this report have been assessed between July 14 and December 27, 2021.

3.1 Connectivity

Connectivity includes not only the extent of connections vendors or other market actors might have but also the relationships between connected actors. Too many or too few connections can hamper the capacity to generate or sustain the growth of the market system. In this assessment connectivity is analyzed based on the vendors’ observations regarding the number and changes in customers and suppliers.

Between July and December, the share of vendors that reported a lower number of customers in the last 30 days decreased (63% Jul; 62% Aug; 50% Sep; 39% Oct; 45% Nov; 35% Dec) while the share of vendors reporting that the number of customers stayed about the same gradually increased from 38% in July to 61% in December (Fig. 6). Looking at the actual number of customers on a typical day this trend can be confirmed. The share of vendors reported to have up to 15 customers in the last 30 days decreased (69% Jul; 38% Aug; 21% Sep; 13% Oct; 38% Nov; 26% Dec), while those that reported more than 50 customers increased from 0% in July to 26% in December (10% Aug; 13% Sep; 4% Oct; 7% Nov).

Only in July (100%), August (68%) and November (64%) the changes in the number of customers were attributed to COVID-19 by most vendors.
Regarding the number of suppliers, about half of the vendors (56% Jul; 38% Aug; 50% Sep; 65% Oct; 66% Nov; 61% Dec) stated that the number of suppliers stayed about the same; the share of vendors that reported a lower number of suppliers in the last 30 days decreased (44% Jul; 59% Aug; 46% Sep; 30% Oct; 31% Nov; 35% Dec). Fig. 7 shows that the four major reasons for lower numbers in suppliers were due to seasonality (43% Jul; 72% Aug; 83% Sep; 75% Oct; 70% Nov; 67% Dec), price (14% Jul; 39% Aug; 42% Sep; 13% Oct; 40% Nov; 56% Dec), COVID-19 (71% Jul; 67% Aug; 25% Sep; 0% Oct; 20% Nov; 11% Dec) and food safety aspects (0% Jul; 6% Aug; 0% Sep; 25% Oct; 10% Nov; 11% Dec).

### 3.2 Diversity

Diversity in the context of market system resilience includes (1) the amount of variation in a system (i.e., the frequency and purpose of visiting the markets from consumer perspective) and (2) the balance between different types (i.e., types of products, firm sizes, marketing channels, or end markets) or (3) market system composition (i.e., how aspects of a market system are related to each other). In this assessment, diversity is analyzed using vendors’ observations regarding number and changes in the commodities sold and consumers’ shopping behavior.

Between July and December, the number of different products sold by the vendors did not change substantially (Fig 8). Most vendors sold “2-5” (38% Jul; 59% Aug; 54% Sep; 48% Oct; 41% Nov; 52% Dec) or “only 1” product (50% Jul; 34% Aug; 29% Sep; 39% Oct; 28% Nov; 35% Dec). Only a few vendors (16% on average between July and December) sold “6-15” products. Overall, only a few vendors reported changes in food groups sold compared to before COVID-19 in the last 30 days before the assessment, with little variation throughout the months. On average between July and December, 23% of vendors mentioned to have stopped selling or sold less of certain food groups while 12% of vendors sold more or new food groups. Food groups which were stopped selling or sold less were mainly vegetables, grains, meat, poultry and fish; food groups that were sold more or newly added were from the food group of fresh fruits. Major reasons for selling new, more, less, or stopped selling of certain food groups were similar between food groups and months. Overall, reasons included seasonality, changing demand, and price changes.

**Fig. 8 Vendors: Number of different products sold**
The share of consumers visiting the markets at least once a week in the last 30 days increased (68% Jul; 65% Aug; 76% Sep; 77% Oct/Nov; 100% Dec) (Fig 9). Out of those consumers that went at least once a week, most went either “daily” (64% Jul; 29% Aug; 41% Sep; 30% Oct; 37% Nov; 33% Dec) or “every 2-3 days” (5% Jul; 35% Aug; 14% Sep; 37% Oct/Nov; 67% Dec). The major reason for consumers visiting the markets was to buy foods or other goods for themselves or the own family (86% Jul; 68% Aug; 72% Sep; 80% Oct; 83% Nov; 93% Dec). Other reasons included buying food for relatives (5% Jul; 26% Aug; 21% Sep; 27% Oct; 10% Nov; 7% Dec) or food for their own business (14% Jul; 16% Aug; 10% Sep; 13% Oct./Nov; 0% Dec).

### 3.3 Equity and fairness

From a systems perspective, equity and fairness refers to the level or degree of equality and fairness inherent in formal and informal rules and laws. This assessment asked the panel of vendors how difficult it was for them to follow the new rules and regulations put in place due to COVID-19.

Overall, most vendors (81% Jul; 69% Aug; 58% Sep; 87% Oct; 76% Nov; 83% Dec) did not find it difficult (including “not very difficult” and “not difficult at all”) following new rules and regulations in the markets including the mandate to wear face masks, hand washing, and social distancing. The share of vendors that found it somewhat difficult was small (13% Jul; 24% Aug; 33% Sep; 9% Oct; 7% Nov; 13% Dec). On average, between July and December, 7% of vendors stated that no COVID-19 rules/regulations existed in the markets (Fig. 10).

### 3.4 Cooperation

Cooperation refers to market actors collaborating to achieve a common purpose or function. Cooperation is neither good nor bad and the contribution of cooperation depends on the purpose. Here cooperation was measured asking vendors if they have started sharing resources with other businesses due to COVID-19.
The share of vendors that jointly used resources with other businesses in the last 30 days remained high (81% Jul; 97% Aug; 83% Sep; 100% Oct; 72% Nov; 74% Dec). Fig. 11 depicts the shared resources which included: new hand washing facilities (100% all months), masks (69% Jul; 36% Aug; 65% Sep; 35% Oct; 43% Nov; 71% Dec), and sanitizer (62% Jul; 39% Aug; 25% Sep; 4% Oct; 19% Nov; 35% Dec). A few also mentioned storage rooms (0% Jul; 4% Aug; 5% Sep; 9% Oct; 48% Nov; 12% Dec) and transportation (0% Jul/Aug; 10% Sep; 0% Oct; 10% Nov; 0% Dec).

3.5 Competition

Competition is defined as rivalry between two or more entities. Like cooperation, competition can be negative or positive. Its contribution to system resilience capacities depends on how and why the entities are competing. Competition in this assessment was measured based on changing vendors practices based on what they had seen of their competitors and on consumers’ reasons, trust, and loyalty in the vendors from where they food.

Between July and December, few vendors reported any changes to their own business practices based on competitors in the last 30 days (12% Jul; 24% Aug; 21% Sep; 13% Oct; 17% Nov; 4% Dec) (Fig. 12). The type of changes to business practices varied, but most of the vendors that applied changes mentioned the offer of discount (50% Jul; 86% Aug; 40% Sep; 67% Oct; 80% Nov; 0% Dec). Reasons for changing practices were mainly driven by the wish to increase sales (50% Jul; 100% Aug/Sep/Oct; 80% Nov; 0% Dec).

Fig. 11 Vendors: Resources shared with other businesses, last 30 days

Fig. 12 Vendors: Business practices changed due to competitors, last 30 days
In contrast to vendors, some consumers made changes to the foods usually bought at the markets during the last 30 days. Similar shares of consumers (27% Jul; 10% Aug; 17% Sep; 20% Oct; 13% Nov; 20% Dec) bought less foods (Fig. 13) stopped buying (23% Jul; 16% Aug; 17% Sep/Oct; 10% Nov; 20% Dec), bought more (18% Jul; 13% Aug; 21% Sep; 17% Oct; 10% Nov; 20% Dec), or bought new foods that they did not use to buy before the pandemic (9% Jul; 16% Aug; 21% Sep; 10% Oct/Nov; 20% Dec). While consumers reduced (bought less or stopped) the purchase of meat, poultry and fish, and leafy vegetables, they increased (bought more or new foods) the purchase of beans, peas and lentils, grains, fruits, leafy and other vegetables. Reasons for changes in the shopping behavior were majorly due to seasonality and prices.

The markets under assessment were still the most common places where consumers obtained food. The share of consumers that reported doing most of their food shopping at the markets stayed high (82% Jul; 100% Aug; 83% Sep; 90% Oct; 77% Nov; 100% Dec). Besides the markets under assessment consumers also obtain food from other markets (23% Jul; 35% Aug; 45% Sep; 37% Oct; 27% Nov; 40% Dec), food stalls (32% Jul; 23% Aug; 17% Sep/Oct; 27% Nov; 33% Dec), small shops (32% Jul; 26% Aug; 28% Sep; 37% Oct; 20% Nov; 0% Dec), kiosks (27% Jul; 19% Aug; 17% Sep/Oct/Nov; 27% Dec), or mobile vendors (9% Jul; 3% Aug; 14% Sep; 7% Oct; 17% Nov; 0% Dec) (Fig. 14).

Reasons for buying food at the two markets in the last 30 days changed slightly over the months (Fig. 15). The top three reasons included (1) good prices (73% Jul; 84% Aug; 59% Sep; 80% Oct/Nov/Dec), (2) easy access from home (9% Jul; 32% Aug; 45% Sep; 53% Oct; 43% Nov; 100% Dec), and (3) cleanliness (41% Jul; 55% Aug; 45% Sep; 20% Oct; 30% Nov; 0% Dec). Overall, between July and December, reasons related to cleanliness of the markets were mentioned less, while reasons related to convenience, easy reach from home, good selection of foods and good quality/freshness of foods were mentioned more often by consumers.
Consumers’ level of trust did not change substantially between July and November but increased tremendously in December (Fig. 15). While over two thirds of consumers (77% Jul/Aug; 79% Sep; 83% Oct; 77% Nov) considered the majority or all vendors as (extremely) trustworthy, the share of consumers that found all vendors extremely trustworthy increased to 100% in December. Less than one fourth of consumers considered only a few vendors trustworthy (23% Jul/Aug; 21% Sep; 17% Oct; 23% Nov; 0% Dec) (Fig. 16). For those consumers stating that majority or all of vendors are (extremely) trustworthy, the major reason included knowing the vendors well/buying regularly from the same vendor (94% Jul; 96% Aug; 78% Sep; 88% Oct; 87% Nov; 100% Dec). Other reasons included vendors being near to their home (42% Aug; 16% Oct), vendors being related/family member (4% Aug; 13% Sep; 8% Oct; 4% Nov) and knowing products origin (9% Sep; 13% Nov).

Similarly to the high level in trust, consumers also displayed a high vendor loyalty (Fig. 17). Most consumers always bought from the same vendors or usually in the last 30 days (45% Jul; 81% Aug; 86% Sep; 73% Oct; 63% Nov; 100% Dec). On average about one fourth of consumers (55% Jul; 19% Aug; 14% Sep; 27% Oct; 37% Nov; 0% Dec) visited the same vendors occasionally or rarely/didn’t pay attention.
3.6 Business strategy

Business practices are oriented toward generating value for customers. They can be investments in understanding customers, in building customer relationships, in tracking customer retention and growth, in investing in staff and firm capacity, and in merit-based hiring. Business strategy in this assessment has been measured based on vendors’ business practices, training possibilities and additional funding, as well as consumers’ being asked for feedback.

Between July and December, the share of vendors that used business strategies (including advertisement, provision of discount, credit, or additional services) to increase the number of customers and sales during the last 30 days stayed low (12% Jul; 17% Aug; 12% Sep; 9% Oct; 14% Nov; 0% Dec). Vendors that did not use any marketing strategies reported to have no money for advertisement (64% Jul; 67% Aug; 71% Sep; 76% Oct; 96% Nov/Dec), no wish (29% Jul; 13% Aug; 10% Sep/Oct; 4% Nov; 17% Dec), or no need for promotion (21% Jul; 17% Aug; 10% Sep/Oct; 4% Nov; 9% Dec), or they did not think it would matter to use marketing strategies (14% Jul; 21% Aug; 10% Sep; 5% Oct; 0% Nov/Dec) (Fig. 18). Although not consistently mentioned over the months (0% Jul; 48% Aug; 21% Sep; 35% Oct; 45% Nov; 13% Dec), some vendors were aware of business training and support being offered by market authorities due to COVID-19 during the last 30 days.

The share of vendors (0% Jul; 14% Aug; 8% Sep; 30% Oct; 17% Nov; 22% Dec) reported borrowing money (e.g., from money lenders or informal cooperatives) to pay for unexpected expenses due to COVID-19 in the last 30 days increased slightly but stayed low (Fig. 19).

About two third of the consumers (59% Jul; 61% Aug; 76% Sep; 90% Oct; 73% Nov; 60% Dec) were asked by market officials or vendors to provide feedback during the last 30 days between July and December. Almost all of those providing feedback noticed that their input had been taken up (100% Jul; 95% Aug; 100% Sep; 96% Oct; 95% Nov; 100% Dec).
4. FOOD PRICES

Tracking food prices is of great value to market systems to respond quickly to any dynamics in the food system. Since the Tanzanian Trade Development Authority assesses domestic food market prices including Buguruni and Ilala markets, from several nutritious foods on a regular basis, this assessment focuses on additional (non-captured) prices of three different nutritious commodities and food groups, which are tracked over time in TSh.²

Between July and December, prices for groundnuts fluctuated slightly and varied between (2,228 TSh ≙ 1.2 USD and 3,217 TSh ≙ 1.4 USD). Over the months (Jul-Dec) the price for groundnuts increased by 3% (Fig. 20). Although the price for one kilogram of spinach fluctuated over the months (between 72 TSh ≙ 0.03 USD and 176 TSh ≙ 0.06 USD) the changes were not high in total value. Overall, between July and December, the price for spinach decreased by 3% (Fig. 21).

² As of December 27, 2021, 2,500 TSh ≙ 1.1 USD.
The price for fresh milk (raw/unprocessed) stayed almost stable between July and October (fluctuation between 2,491 Tsh $\approx$ 1.1 USD and 2,539 TSh $\approx$ 1.1 USD) but decreased between October and December. Overall, between July and December the price for milk decreased by 9% (Fig. 22).

Besides a minor drop in prices in November, the price for beef liver increased between July (9,232 TSh $\approx$ 4.0 USD) to December (9,914 TSh $\approx$ 4.3 USD) by 7% (Fig. 23).

**Fig. 22** Food price changes in milk, TSh/l

**Fig. 23** Food price changes in beef liver, in TSh/kg
5. CHARACTERISTICS OF RESPONDENTS

<table>
<thead>
<tr>
<th>VENDOR (n=29)</th>
<th>CONSUMER (n=31)</th>
</tr>
</thead>
<tbody>
<tr>
<td>59% of vendors are male (Tab. 1).</td>
<td>65% of the consumers in this panel are female.</td>
</tr>
<tr>
<td>76% of the vendors attended primary education.</td>
<td>52% of consumers have attended secondary education or higher.</td>
</tr>
<tr>
<td>38% of vendors in the panel sold fruit and vegetables, 14% grains, 7% packaged foods, and 3% dairy (as of August 2021).</td>
<td>43% of consumers lived in Dar-es-Salaam for over 5 years or longer.</td>
</tr>
<tr>
<td>80% of vendors have been operating in the market for 5 years or longer; 66% in fixed food stands, and 48% of vendors aim to continue with their business even if COVID-19 continues (as of August 2021).</td>
<td>More consumers stated that their household financial situation has stayed the same compared to before COVID-19 (59% Jul; 77% Aug; 86% Sep; 77% Oct; 83% Nov; 100% Dec). All of those negatively affected reported a reduced income through fewer business opportunities (100% Jul-Nov; 0% Dec). Coping mechanisms employed were engaging in other income earning activities (73%) or borrowing from friends and family (34%) (average for all months Jul - Dec).</td>
</tr>
</tbody>
</table>

**Tab. 1 Characteristics of respondents in this panel (as of August 2021)**

<table>
<thead>
<tr>
<th>VENDORS (n=29)</th>
<th>CONSUMERS (n=31)</th>
</tr>
</thead>
<tbody>
<tr>
<td>**Gender (male</td>
<td>female)**</td>
</tr>
<tr>
<td>Age group</td>
<td>35%</td>
</tr>
<tr>
<td>18-24</td>
<td>7%</td>
</tr>
<tr>
<td>25-30</td>
<td>7%</td>
</tr>
<tr>
<td>31-40</td>
<td>24%</td>
</tr>
<tr>
<td>41-50</td>
<td>29%</td>
</tr>
<tr>
<td>51-65</td>
<td>28%</td>
</tr>
<tr>
<td>66-75</td>
<td>7%</td>
</tr>
<tr>
<td><strong>Highest level of school attended</strong></td>
<td></td>
</tr>
<tr>
<td>No school attended</td>
<td>0%</td>
</tr>
<tr>
<td>Primary school</td>
<td>76%</td>
</tr>
<tr>
<td>Secondary school</td>
<td>24%</td>
</tr>
<tr>
<td>Higher education</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Length of operating in the market (vendor)</strong></td>
<td><strong>Length of living in Dar-es-Salaam (consumer)</strong></td>
</tr>
<tr>
<td>1-3 years</td>
<td>7%</td>
</tr>
<tr>
<td>3-5 years</td>
<td>14%</td>
</tr>
<tr>
<td>5-10 years</td>
<td>21%</td>
</tr>
<tr>
<td>&gt;10 years</td>
<td>59%</td>
</tr>
</tbody>
</table>
6. METHODS FOR ASSESSING MARKET CHARACTERISTICS UNDER COVID-19, RESILIENCE, AND FOOD PRICES

Insights into market system resilience were based on interviews with approximately 30 consumers and vendors from two traditional markets in Dar-es-Saleem, though sample size varied month to month (Tab. 2). The respondents were interviewed between July 3 and December 21, 2021. The panel of vendors and consumers was purposefully selected from Kariakoo and Buguruni markets in Dar-es-Salaam in April and validated in May. The panel was based on the respondent’s gender and age profiles, which were previously examined in rapid assessments. Interviews occurred via phone and followed a structured questionnaire.

Tab. 2 Number of vendors and consumers included in panel survey each month

<table>
<thead>
<tr>
<th>MONTH OF SURVEY (2021)</th>
<th># OF VENDORS</th>
<th># OF CONSUMERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>July</td>
<td>16</td>
<td>22</td>
</tr>
<tr>
<td>August</td>
<td>29</td>
<td>31</td>
</tr>
<tr>
<td>September</td>
<td>24</td>
<td>29</td>
</tr>
<tr>
<td>October</td>
<td>23</td>
<td>30</td>
</tr>
<tr>
<td>November</td>
<td>29</td>
<td>30</td>
</tr>
<tr>
<td>December</td>
<td>23</td>
<td>15</td>
</tr>
<tr>
<td><strong>Total # of observations</strong></td>
<td><strong>144</strong></td>
<td><strong>157</strong></td>
</tr>
</tbody>
</table>

The USAID Market System Resilience Framework defines market system resilience as “…the ability of people, households, communities, countries, and systems to mitigate, adapt to, and recover from shocks and stresses in a manner that reduces chronic vulnerability and facilitates inclusive growth.” For market systems, resilience further includes the ability to allocate resources, draw on optimal resources, and innovate to solve problems in the face of stresses. This report uses six of the eight domains highlighted in the USAID framework to characterize resilience capacities (connectivity, diversity, equity and fairness, cooperation, competition, business strategy) with both fast and slow indicators.

In addition to data on market system resilience, this report conducted a rapid assessment of 806 consumers and 788 vendors from Karikoo and Buguruni markets. Approximately every two weeks, 40 consumers and 40 vendors in each market were randomly selected for surveys. All assessments combined responses from the vendors and consumers in both markets, and all surveys were conducted in adherence with global guidelines on COVID-19 prevention and control. Data from “Market characteristics and changes due to COVID-19” of this report are based on interviews between August 25, 2021 and January 3, 2022. All data were collected via Open Data Kit and stored on KoBo Toolbox; Stata version 15.1 was used for data analysis.

Food prices for selected nutritious foods (groundnuts, spinach, milk and beef liver) were collected approximately every two weeks from each market. Prices were assessed on 12 data points between July and December 2021 (July 14 and 28; August 12 and 26; September 8 and 25; October 17 and 31; November 14 and 28; and December 12 and 27). Foods were selected based on its nutritive value, availability, and cultural acceptance. Data for foods were collected in standard units (kilogram or liter), and prices were averaged using the Tanzanian Shilling (2,500 TSh ≙ 1.1 USD). For each round and food item, three comparative prices from three vendors in each market were collected by trained enumerators at similar times and days of the week. The weight of the food items were collected together with the price assessment, and average weights for standard units were then calculated. The Tanzanian Trade Development Authority assesses domestic food market prices including Buguruni and Ilala markets, from several nutritious foods on regular basis. Data on the official price tracking are publicly available and can be used to add on to this price assessment.
7. GAIN’S COVID-19 RESPONSE

The necessary COVID-19 lockdowns have placed a spotlight on the weaknesses of food systems across the world. In the COVID-19 context the single most important thing that can be done for the health and resilience of people and economies is to protect the nutritional status of current and future generations. GAIN has developed the Keeping Food Markets Working (KFMW) program as 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. While disease control responses to the pandemic are essential, they also disrupt food systems, depress income, and put a strain on social protection programs, which can threaten the nutritional status of the most vulnerable. The KFMW program is focused on mitigating those risks and keeping affordable nutritious foods flowing in African and Asian markets to the people who most need it. The KFMW program consists of five workstreams:

1. Building resilience of small- and medium-sized enterprises (SMEs)
2. Maintaining and reinforcing efforts in Large-Scale Food Fortification
3. **Ensuring food markets stay open and are operating safety**
4. Investing in nutrition security for key workers in the food system
5. Supporting effective policymaking and coordination during the pandemic

Through KFMW, EatSafe is working to better understand the rapidly changing situation in traditional food markets from the vendor and consumer perspective under workstream 3.

8. EATSAFE DATA COLLECTION FOR MUNICIPALITIES

EatSafe: Evidence and Action Towards Safe, Nutritious Food, is a five-year project aiming to enable lasting improvements in the safety of nutritious foods in traditional markets by focusing on the consumer. The COVID-19 pandemic has plunged the world into an unprecedented global health crisis. Difficult to manage at the best of times, traditional markets are generally crowded with customers and vendors creating ideal conditions for transmission of the virus. When market vendors and other food system workers cannot do their jobs, increased food prices and/or food shortages are likely to result in reducing demand for fresh, nutritious foods and eroding market resilience. Furthermore, real, and perceived risks can undermine consumer trust in the health and safety of food markets.

EatSafe’s COVID-19 response is working to better understand the rapidly changing situation in traditional food markets from the vendor and consumer perspective. Through bi-weekly market surveys and monthly key informant interviews, EatSafe is assessing the accessibility of safe nutritious food, availability of health and safety information and the resilience of traditional markets. EatSafe will continue to use and disseminate results to help ensure food markets remain open, that safe, nutritious food is available under COVID-19 and to support future programming for safe and resilient nutritious food markets.

This and other Traditional Market Reports can be found online on GAIN’s website.

For more details EatSafe activities, visit gainhealth.org/EatSafe or contact EatSafe@gainhealth.org.

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