



EatSafe: Evidence and Action Towards Safe, Nutritious Food

COVID-19 Traditional Market Report Brief

Nairobi Metropolitan Area | December 2021 | Issue 4

The quarterly Traditional Market Report (TMR), developed by EatSafe, tracks behaviors and daily decisions made by vendors and consumers in two markets in the Nairobi Metropolitan Area (Marikiti and Madaraka). In addition to summarizing perceptions on COVID-19 and the difficulties faced by market actors in these two traditional markets, the TMR tracks prices of selected nutritious foods every two weeks. The TMR report tracks several accepted indicators that help determine the resilience of market systems as market actors cope with business and food security choices under COVID-19 conditions. The TMR highlights three new surveys from July, August and September 2021 i.e., phone interviews of a panel of vendors (n=30) and consumers (n=30).

[Previous TMR issues are available online.](#)

Insights from vendor perspective between July and September 2021

- Share of vendors that reported a lower number of customers increased (30% Jul; 32% Aug; 48% Sep) while the share of vendors reported a higher number of customers decreased (40% Jul; 23% Aug; 21% Sep).
- Share of vendors that found it not difficult or not difficult at all to follow new COVID-19 rules in the market remained high (80% Jul; 84% Aug; 76% Sep).
- Share of vendors (100% Jul/Aug; 90% Sep) that reported sharing resources with other vendors (e.g., hand washing facilities, suppliers, transportation, sanitizers, masks) stayed high; transportation resources were shared more (37% Jul; 45% Aug; 50% Sep), while masks were shared less (40% Jul; 19% Aug; 12% Sep).
- Share of vendors that used business practices to increase sales decreased (67% Jul; 52% Aug; 34% Sep).
- Share of vendors that borrowed money due to COVID-19 decreased (37% Jul; 29% Aug; 31% Sep). In September, the money borrowed came from informal cooperatives (44%), friends or relatives (22%), banks or money lenders (11%).

Insights from consumer perspective between July and September 2021

- Share of consumers whose households' financial situation worsened remained high (87% Jul; 93% Aug; 77% Sep). In Sep, 48% coped by engaging in other income earning activities, 39% by decreasing the consumption of food, or by reducing other bills (26%).
- Share of consumers visiting the market at least once a week declined (93% Jul; 80% Aug/Sep).
- Share of consumers reported doing most of their food shopping at markets stayed about the same (73% Jul; 57% Aug; 70% Sep). Consumers also obtained food from supermarkets, kiosks, or small shops.
- Share of consumers that considered the majority of vendors as trustworthy decreased overall (63% Jul; 60% Aug; 50% Sep). Reasons for a higher mistrust included not knowing where the products come from, not knowing the vendor well, changing, and low quality of products.
- None of the consumers were asked for feedback by vendors and/or market officials in the last 30 days.

Food prices between April and September 2021

Between April and September major price changes were observed for vegetables and pulses and milk. While food prices for beans rose, cocc, kales, and milk decreased (22%, 15%, 13%, respectively) prices for carrots and cabbage increased (66%, 12%, respectively). Other price changes stayed below 10%: lentils (-9%), onion (-9%), beef (+7%), green grams (-5%), and eggs (+4%).



1. BACKGROUND ON THE COVID-19 SITUATION

While the incidence of Kenya's national COVID-19 cases increased significantly between July and August, the number of cases has been decreasing since mid-August 2021 (**Fig. 1**).

Between January 3 and September 27,

2021, 250,023 confirmed cases of COVID-19 and 5,131 deaths were reported by the Ministry of Health in Kenya. While in early August the weekly infection rate was 8,910, it decreased to 1,631 by the end of September.

In March, Kenya started rolling out nationwide COVID-19 vaccines. As of 30 September, three million people have received first, and 900,000 people have received second dose vaccines. In [Kiambu and Machakos Counties, that translates to 2.7% and 2.0% of people](#) that obtained two doses of vaccine, respectively.

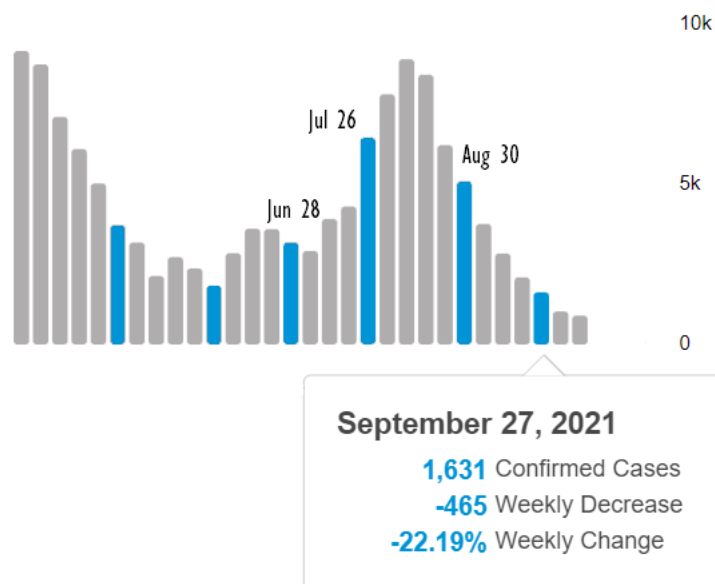


Fig. 1 Confirmed COVID-19 cases in Kenya, weekly ([WHO, Nov 2021](#))

2. MARKET CHARACTERISTICS AND CHANGES DUE TO COVID-19

Marikiti and **Madaraka** are informal open-air markets situated respectively in Machakos town (Machakos county) and Thika town (Kiambu county), less than 70 km from Nairobi (**Fig. 2**). Thika and Machakos towns have about 250,000 inhabitants. In both markets, the major food items sold are fruits, vegetables, pulses, roots, and tubers. In close proximity outside the markets, butcheries, small retailers, and vendors sell meat, fish, eggs, and dairy.

2.1 Marikiti Market, Machakos, Machakos County

The traditional open-air market is in the urban area of Machakos town, the capital of Machakos county (**Fig. 2**). During the pandemic, the Marikiti market noticed a drop of vendors from 1,500 pre-COVID-19 to about 600 in June 2021, according to the market



Fig. 2 Location of Marikiti market and Madaraka market, close to Nairobi, Kenya.

association. The decrease in vendors is likely related to the relocation of many vendors in the town due to reduced business opportunities, and the lack of vaccines to protect them. Also, the number of consumers decreased from about 4,000 daily consumers pre-COVID-19 (with a high of 10,000 consumers on the market days Monday and Friday) to about 2,000 daily consumers and about 8,000 consumers on market days.

Due to COVID-19, the market association installed eight hand washing stations at all entry and exit gates. The county government added two storage water tanks for refilling hand washing stations and maintaining adequate amounts of water. Although the market association enforced mask wearing for both consumers and vendors, instituting a patrol schedule to ensure compliance, they stated to be increasingly reluctant in enforcing the COVID-19 protocols due to lack of support from county government, especially in provision of security and water. Vendors were instructed to not serve any customer wearing the mask incorrectly. Furthermore, customers were prohibited from touching commodities and were instructed to instead point at what they would like to purchase. The market association also used posters in strategic positions of the market to create awareness on hygiene, which highly contributed to raising awareness in the marketplace.

2.2 Madaraka market, Thika, Kiambu County

This traditional open-air market is one of the trade corridors to northern counties including Garissa, Wajir, Mandera, Marsabit, Machakos and Muranga, as well as Somalia. Most of the commodities traded in this market are sourced from Nyeri, Laikipia, Meru, Narok and Nyandarua counties as well as Tanzania, especially onions. The market is in a peri-urban setting in Thika town, close to the main road. It operates 24-hours with Tuesdays and Fridays as the busiest days (**Fig. 3**). The market association reports that the number of retailers and wholesalers increased during COVID-19 to about 2,200 and 500, respectively (from about 1,500 and 350, pre-COVID-19). Since many people lost jobs in other sectors, they became involved in food trade to earn their living. Even after the COVID-19 restrictions have eased the number of traders is still higher than pre-COVID. Based on the increase in vendors and the accompanied increase in competition, profit margins for most vendors have decreased. Market space is decreasing due to the increasing vendors. While the number of vendors rose, consumers declined from 5,000 pre-COVID-19 to about 3,000 recently.

Following national advice, the market is fumigated on a regular basis and, in collaboration with the county government and support from GAIN, has installed two water tanks and built hand washing stations on two



Fig. 3 Vendors in Madaraka market, Thika, Kiambu, Kenya.

main entrances. However, during the period between July and September, Thika town faced a severe water shortage which affected supply of water to the market. The market committee worked closely with the county government to engage Thika water services company which promised constant supply of water to the market. The market association ensures strict adherence to COVID-19 prevention protocols within the market (e.g., the wear of face masks and regular washing of hands). GAIN supported the renovation of sections of Madaraka market which has improved the market infrastructure and increased the safety and ambience of the market.

2.3 Bi-Weekly Consumer and Vendor Survey Results under COVID-19

In addition to the resilience assessment, EatSafe continues to conduct rapid COVID-19 market surveys of 40 consumers and 40 vendors from each market. This activity began in September 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 July¹ and September 2021.

2.3.1 Impact of COVID-19 in the Markets

From the rapid assessment, 79% of consumers reported concerns when shopping in the market in the last couple of weeks before the assessment. **Fig. 4** shows the following top three issues: (1) fear of contracting COVID-19 (75%), (2) not trusting the market to take appropriate precautions (37%), and (3) inconvenience of having to take

protective measures (35%). When asked about the measures consumers saw currently implemented in the markets, the following measures were reported: mandate to

consumers and vendors to wear face masks (84%), set-up of washing facilities or hand sanitizer (72%), provision of COVID-19 communication (25%), mandate to distancing (24%), demand to cleanliness behavior (23%) and cleaning of

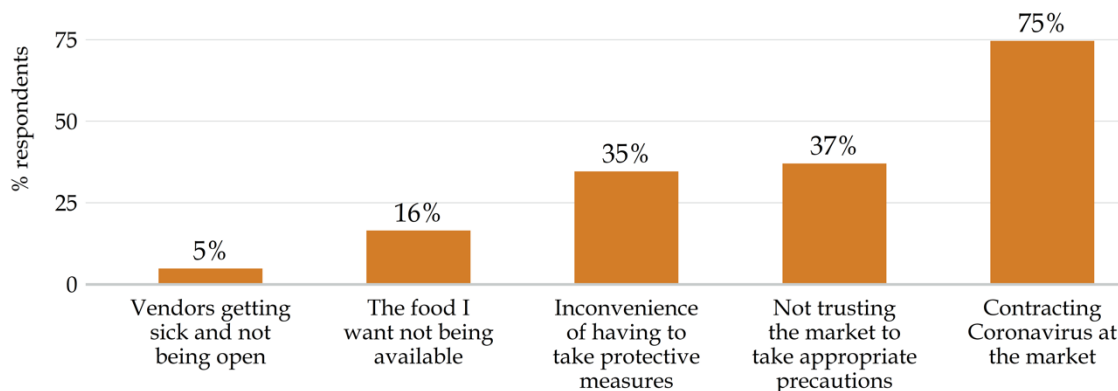


Fig. 4 Consumers: Greatest concerns when shopping at the market in the last two weeks

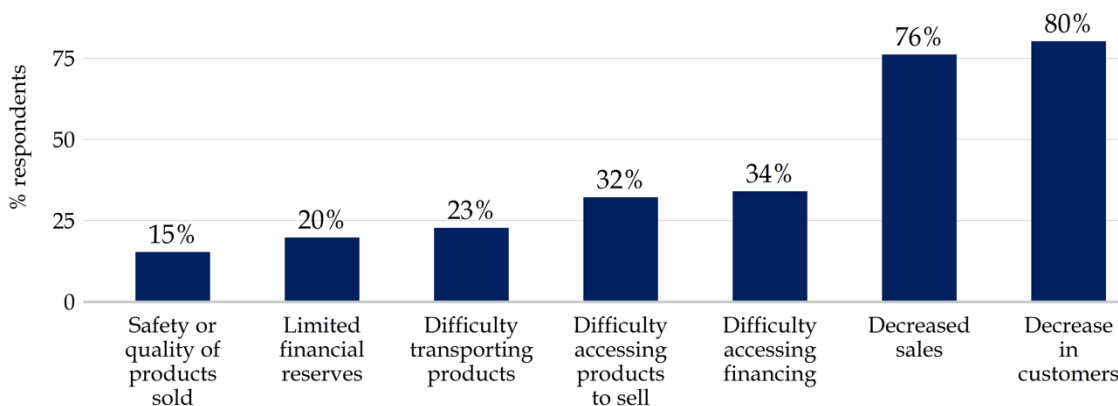


Fig. 5 Vendors: Immediate impact on business due to COVID-19

markets with disinfectant (14%). Almost all vendors (95%) interviewed in the bi-weekly assessments reported that their business was currently impacted by the ongoing pandemic. Most vendors stated that they experience decreased customers (80%) and sales (76%), while 34% and 32% respectively, had difficulties accessing financing and products to sell, difficulty to transport goods (23%), limited financial reserves (20%) and issues with the safety or quality of products sold (15%) (**Fig. 5**).

¹ Global Alliance for Improved Nutrition. 2021. COVID Bulletin. Kenya Issue #21-22. July 2021. A USAID EatSafe Project Bulletin. [Available online.](#)

3. MARKET RESILIENCE UNDER COVID-19

This TMR highlights three new data sets from July, August, and September 2021. Data were collected through monthly panel interviews with 30 vendors and 30 consumers from both Marikiti market and Madaraka market. Food prices for this report have been assessed between July 21 and September 21 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.

For most of the vendors (67% Jul; 80% Aug; 64% Sep) the changes in the number of customers were attributed to COVID-19. By contrast, the share of vendors that reported a higher number of suppliers in the last 30 days increased (30% Jul; 29% Aug; 41% Sept) and those that reported a lower number decreased (27% Jul; 13% Aug; 10% Sep). About half of the vendors (40% Jul; 55% Aug; 45% Sep) stated that the number of suppliers stayed about the same. **Fig. 6** shows that the three major reasons for higher numbers in suppliers

were due to price (100% Jul; 78% Aug; 75% Sep), seasonality (56% Jul; 78% Aug; 75% Sep) and quality aspects (56% Jul; 67% Aug; 75% Sep). Between July to September, the share of vendors that reported a lower number of customers in the last 30 days increased (30% Jul; 32% Aug; 48% Sep) and the share of vendors reporting a higher number of customers decreased from 40% in July to 23% in August and to 21% in September (**Fig 7**). Looking at the

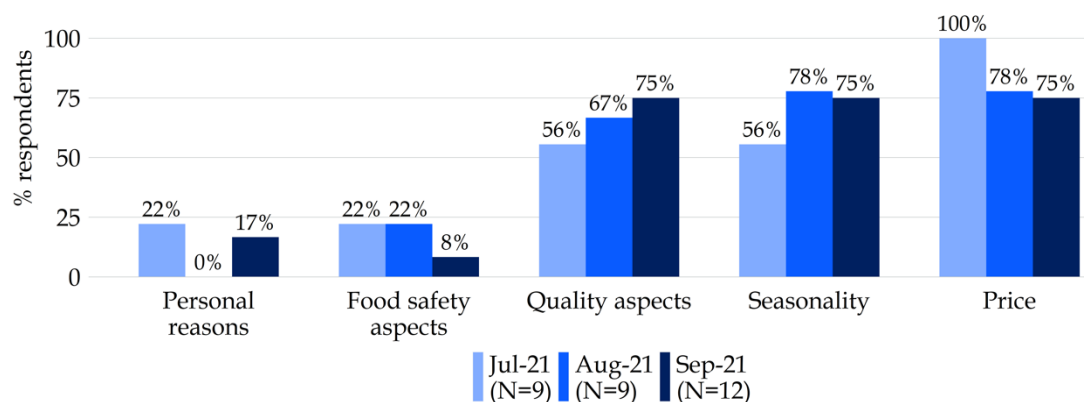


Fig. 6 Vendors: Major reason for higher number in supplier(s), last 30 days

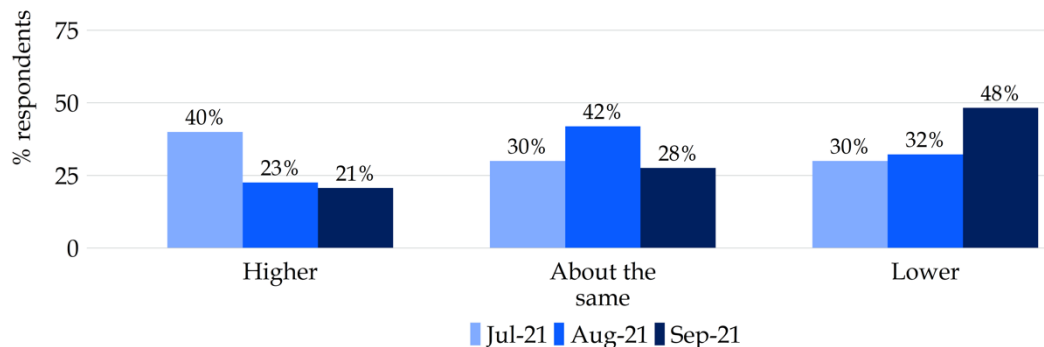


Fig. 7 Vendors: Changes in the number of customers, last 30 days

actual number of customers on a typical day this trend can be confirmed. The share of vendors reported to have below 15 customers on a typical day increased from 34% in July to 48% in August and to 55% in September and the share of those that reported more than 15 customers decreased accordingly.

3.2 Diversity

Diversity has multiple dimensions, including (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 September, the number of different products sold by the vendors did not change substantially (**Fig. 8**). Most vendors sold “2-5” or “6-15” products (80% Jul; 74% Aug; 76% Sep). Overall, vendors reported some changes in food groups sold compared to before COVID-19 in the last 30 days before the assessment. However, there were less changes over the three months. While in July, 77% of vendors

mentioned to have stopped selling or sold less of certain food groups and 83% of vendors sold more or new food groups, these shares decreased to 58% and 71% in August

respectively and to 52% and 69% in September

respectively. Food groups which stopped selling or sold less were mainly vegetables, pulses, plantain, roots and tubers; food groups that were sold more or newly added were from the group of fresh fruits, vegetables and grains. Major reasons for selling new, more, less, or stopped selling of certain food groups were similar between food groups and months. Overall, reasons included changing demand, price changes and seasonality. However, an additional reason for newly added food groups mentioned was an increased supply.

The share of consumers visiting the markets at least once a week in the last 30 days decreased from 93% in July to 80% in August and September. In terms of actual numbers, the share of vendors visiting the markets twice a month or once a month increased from 0% and 7% in July to 10% in Aug/Sep (**Fig. 9**). The major reason for consumers

visiting the markets was to buy foods or other goods for themselves or the own family (93% Jul; 20% Aug; 83% Sep).

Other reasons included working in the markets (27% Jul/Aug; 20% Sep), buying food for their own business (20% Jul; 23% Aug/Sep), or social reasons (3% Jul; 10% Aug; 7% Sep).

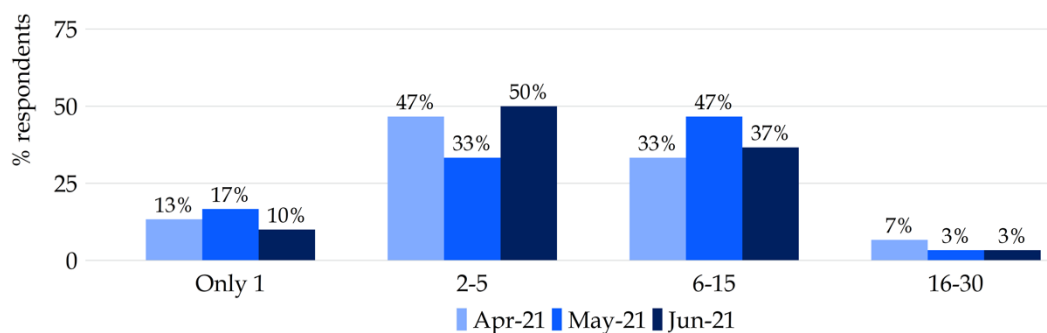


Fig. 8 Vendors: Number of different products sold

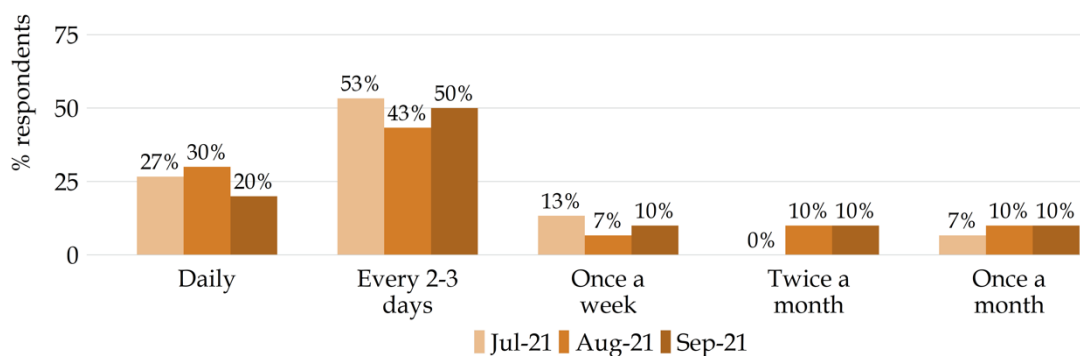


Fig. 9 Consumers: Frequency of visiting the markets, last 30 days

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 (80% Jul; 84% Aug; 76% Sep) did **not** find it difficult or **not difficult at all** following new rules and regulations in the markets including the mandate to wear face masks, hand washing, and social distancing. In September, a small share of vendors (7%) did not see or were not aware of any COVID-19 rules and regulations in place in the market space (**Fig. 10**).

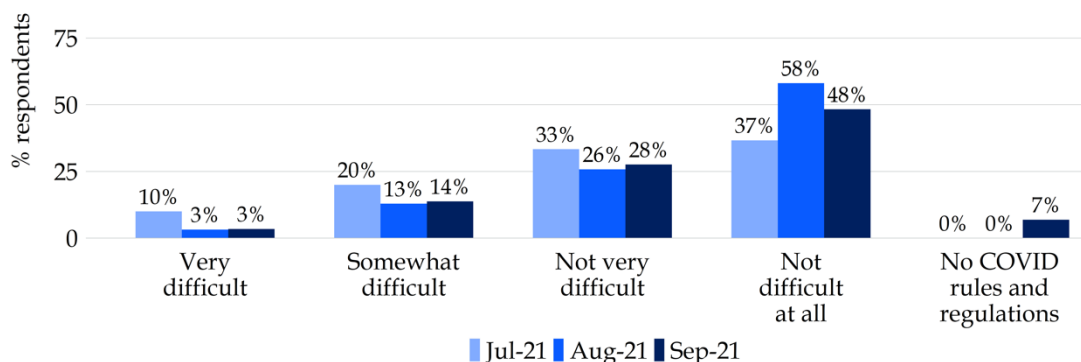


Fig. 10 Vendors: Difficulty following COVID-19 rules, last 30 days

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 (100% Jul/Aug; 90% Sep). **Fig. 11** depicts the shared resources which included were majorly new hand washing facilities (93% Jul; 100% Aug; 88% Sep), as well as suppliers (50% Jul; 48% Aug; 50% Sep), transportation (37% Jul; 45% Aug; 50% Sep), sanitizer (43%; 26% Aug; 31% Sep) and masks (40% Jul; 19% Aug; 12% Sep). While sharing of transportation increased from 37% in July to 50% in September, sharing of masks decreased from 40% to 12% over the same period.

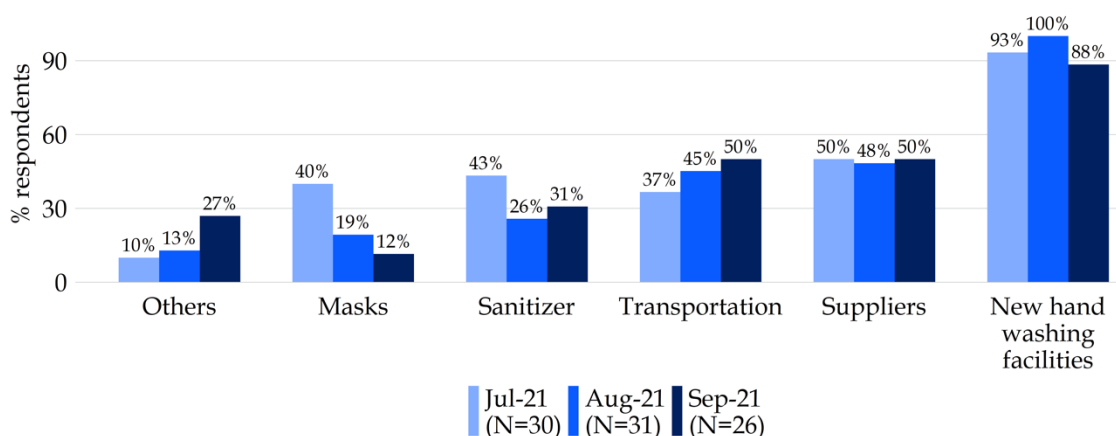


Fig. 11 Vendors: Resources shared with other businesses, last 30 days

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 September, the share of vendors that reported any changes to their own business practices based on competitors in the last 30 days varied (27% Jul; 13% Aug; 28% Sep), as did the type of changes to business practices. While in July and August vendors majorly changed practices related to offer of discount (38% Jul; 50% Aug)

and opening hours (38% Jul; 25% Aug), in September the offer of services (62%) were reported by most vendors

(Fig. 12). Reasons for changing practices were

driven by the wish to increase sales (75% Jul; 100% Aug; 75% Sep).

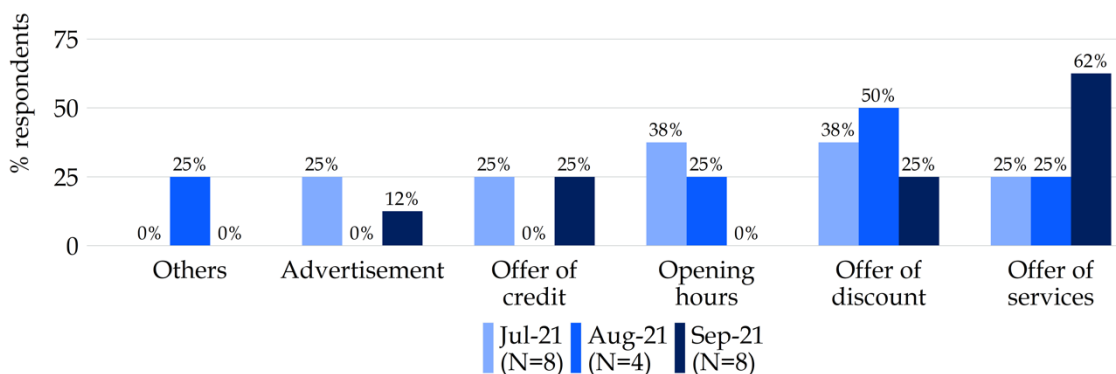


Fig. 12 Vendors: Business practices changed due to competitors, last 30 days

Similarly, most consumers made changes to the foods usually bought at the markets during the last 30 days. Most consumers (87% Jul; 67% Aug; 73% Sep) bought **less** foods and one-fifth of consumers (20% Jul; 13% Aug; 17% Sep) **stopped** buying certain foods that they used to buy before COVID-19 (Fig. 13). However, a fifth reported buying **more** foods (20% Jul; 27% Aug; 23% Sep) or **new** foods (10% Jul; 13% Aug; 23% Sep) compared to before. While consumers reduced (i.e., bought less or stopped buying entirely) the purchase of meat, poultry and fish, milk and leafy

vegetables, they increased (i.e., bought more of existing or new foods) the purchase of grains, pulses, and other vegetables. Reasons for changes in the shopping behavior were primarily due to shifts in prices.

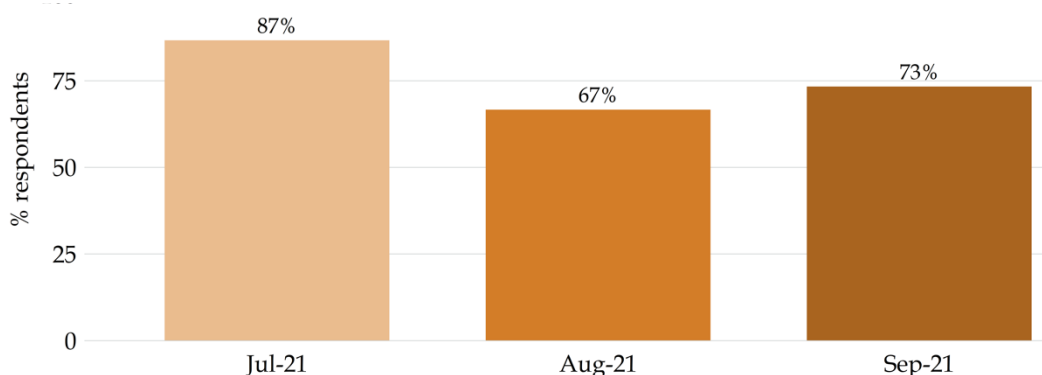


Fig. 13 Consumers: Buying less of certain food items, last 30 days

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 about the same (73% Jul; 57% Aug; 70% Sep). Besides the markets under assessment consumers also obtain food from

supermarkets (43% Jul; 33% Aug; 40% Sep), kiosks (33% Jul; 50% Aug; 33% Sep), small shops (7% Jul; 3% Aug; 20% Sep), other markets (13% Jul; 7% Aug/Sep), or food stalls (7% Jul/Aug; 10% Sep) (**Fig. 14**).

Reasons for buying food at the two markets in the last 30 days were similar between the three rounds (**Fig. 15**).

The top three reasons included (1) good prices (97% Jul; 87% Aug; 83% Sep), (2) easy access from home (70% Jul; 67% Aug; 77% Sep), and (3) good quality and freshness of food (60% Jul; 63% Aug; 67% Sep). Overall,

between July and September, reasons related to relationship with vendors, habits and good prices were mentioned less, while reasons related to good selection of foods and good quality/freshness of foods were mentioned more often by consumers.

The level of trust for the vendors that consumers bought food from decreased between July and September and remained split. While 63% and 60% of consumers considered the majority of vendors as trustworthy in July and August, the share of consumers fell to 50% in September. The other half of consumers considered only a few vendors trustworthy (**Fig. 16**).

For those consumers that only described a few vendors as trustworthy, major reasons included not knowing where the products come from (64% Jul/Aug; 60% Sep), not knowing the vendor well (73% Jul; 27% Aug; 33% Sep),

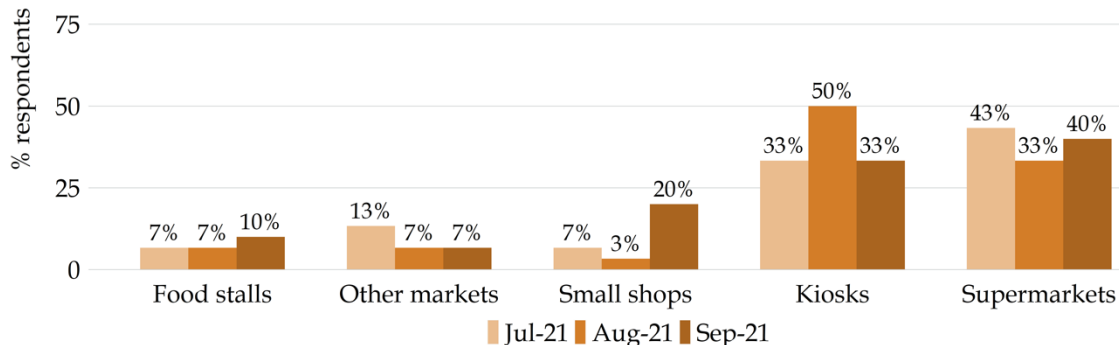


Fig. 14 Vendors: Other sources to buy food from, last 30 days

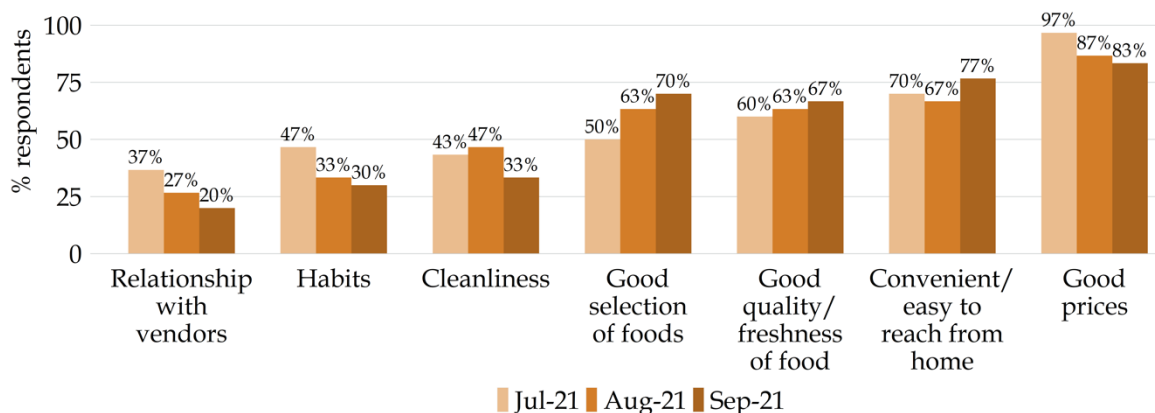


Fig. 15 Consumers: Reasons for choosing to buy food at the market

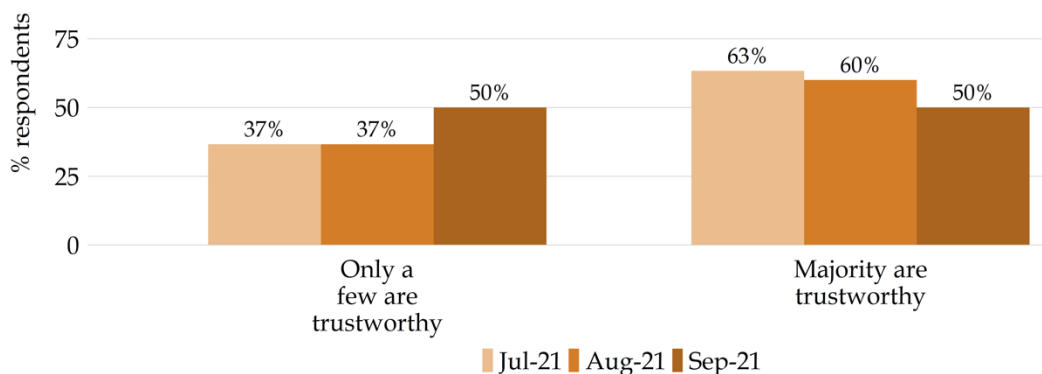


Fig. 16 Vendors: Level of trust for the vendors consumers usually buy food from

changing quality of products (27% Jul; 36% Aug; 27% Sep), and lowest quality (9% Jul; 36% Aug; 20% Sep). For those consumers stating that majority of vendors are trustworthy, major reasons included knowing the vendors well/buying regularly from the same vendor (53% Jul; 61% Aug; 67% Sep), good quality/freshness of foods (47% Jul; 78% Aug; 53% Sep) and knowing where products origin (58% Jul; 44% Aug; 47% Sep).

Similarly to the decreasing level in trust, consumers also displayed a mixed vendor loyalty (**Fig. 17**). Between July and September, about half of the consumers stated to always buy from the same vendor or usually in the last 30 days (46% Jul; 70% Aug; 50% Sep).

The other half of consumers (54% Jul; 30% Aug; 50% Sep) visited the same vendors occasionally or rarely/or didn't pay attention.

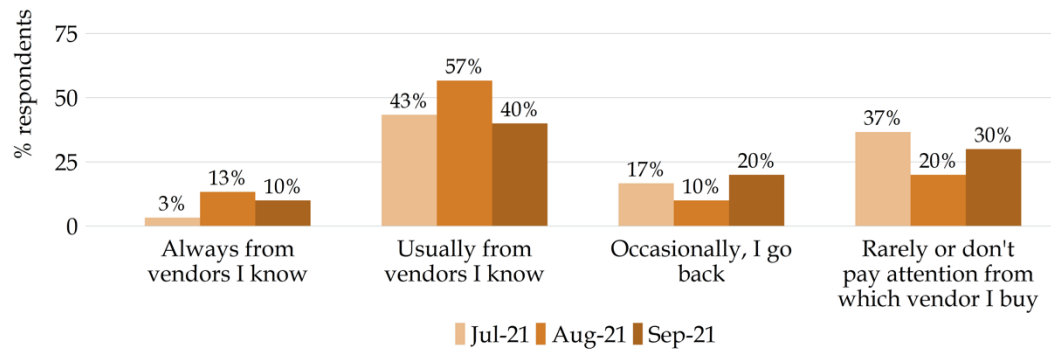


Fig. 17 Consumers: Frequency of buying at the same vendor, last 30 days

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 September, the share of vendors that used business strategies to increase the number of customers and sales during the last 30 days decreased (67% Jul; 52% Aug; 34% Sep). **Fig. 18** shows that the strategies taken varied over the months. Overall, strategies included the provision of discount (65% Jul; 56% Aug; 30% Sep), the use of advertisement (45% Jul; 44% Aug; 60% Sep), provision of additional services (50% Jul; 56% Aug; 10% Sep), and the

provision of credit (30% Jul; 6% Aug; 10% Sep). Those vendors that did not use any marketing strategies reported no need of promotion (50% Jul; 53% Aug; 37% Sep), no money for advertisement (10% Jul; 33% Aug; 4% Sep) or they did not think it would matter to use marketing strategies (40% Jul; 13% Aug; 32% Sep). Also, the vendors' awareness of business training and support being offered by market authorities due to COVID-19 during the last 30 days decreased from 30% in July to 19% in August and eventually to 7% in September.

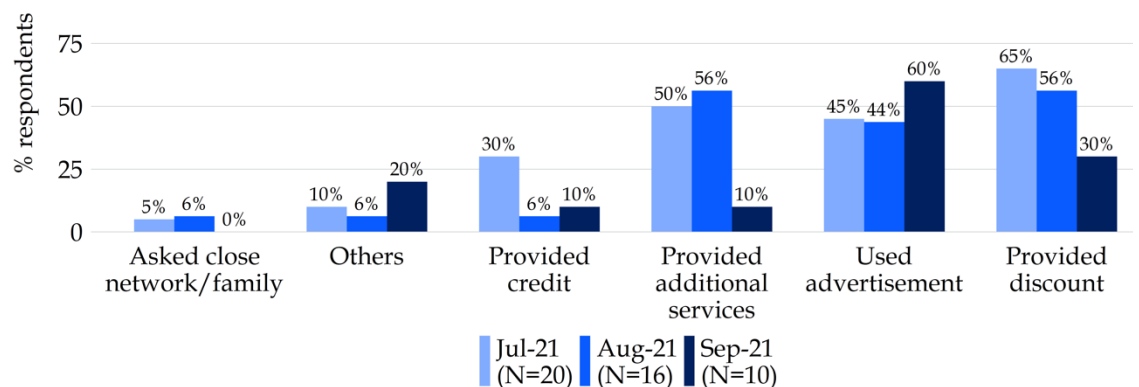


Fig. 18 Vendors: Types of business strategies taken, last 30 days

Also, the vendors' awareness of business training and support being offered by market authorities due to COVID-19 during the last 30 days decreased from 30% in July to 19% in August and eventually to 7% in September.

About one third of vendors (37% Jul; 29% Ag; 31% Sep) reported borrowing money to pay for unexpected expenses due to COVID-19 in the last 30 days **Fig. 19** depicts the diverse sources for this money which varied slightly. Over the three months, the major sources mentioned were informal cooperatives (55% Jul; 56% Aug; 44% Sep), friends (27% Jul; 11% Aug; 22% Sep), banks (18% Jul; 22% Aug; 11% Sep), and relatives (9% Jul; 11% Aug; 22% Sep). A few vendors (11%) also mentioned money lenders as source of borrowed money but only in September.

None of the consumers were asked by market officials or vendors to provide feedback during the last 30 days between July and September.

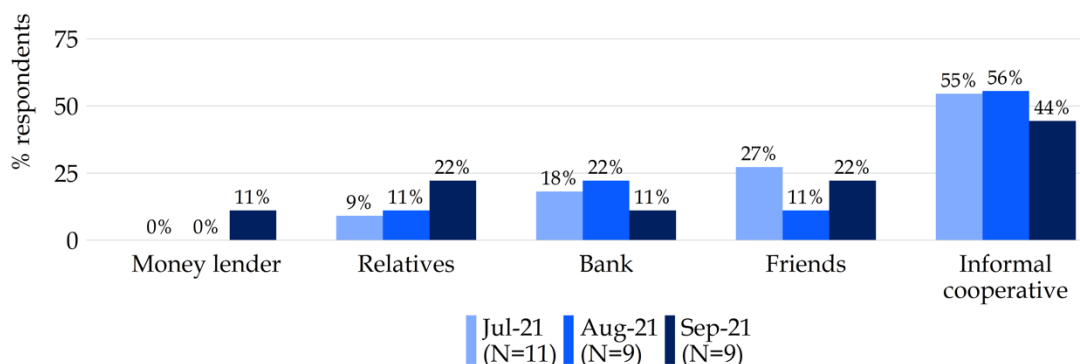


Fig. 19 Vendors: Source of borrowed money due to COVID-19

4. FOOD PRICES

Tracking food prices is valuable to market systems for quick responses to any changes to the food system. In this assessment, prices of nutritious commodities and food groups were tracked over time in KES.² Between April and September, prices for all pulses (beans rosecoco, lentils, green grams) decreased by 22%, 9% and 5%, respectively. Price changes from Aug-Sep showed a similar decrease for beans rosecoco (22%) but displayed a slight increase in prices for green grams (6%) and lentils (1%) (**Fig. 20**).

Vegetables assessed included kale (sukumawiki), green cabbage, and carrots (**Fig. 21**). While prices for carrots and cabbage increased by 66% and 12%, respectively, prices for kales decreased by 15%. However, over the last month, prices for kales and cabbage showed a decrease by 33% and 29%, respectively, and prices for carrots increased by 8%. The price fluctuation in vegetables was mainly due to seasonality, and varying quality of vegetables also determined the everyday price.

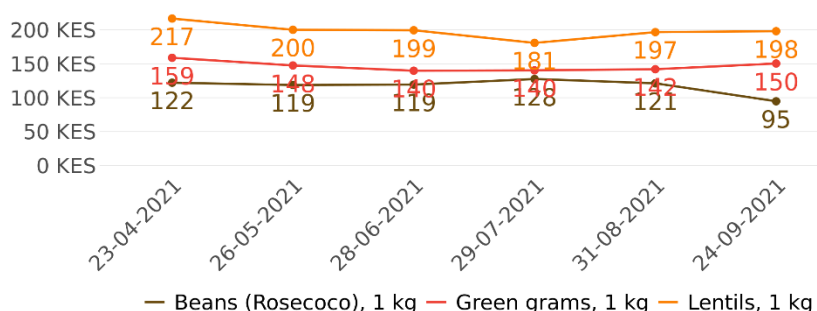


Fig. 20 Prices for selected pulses, in KES/kg

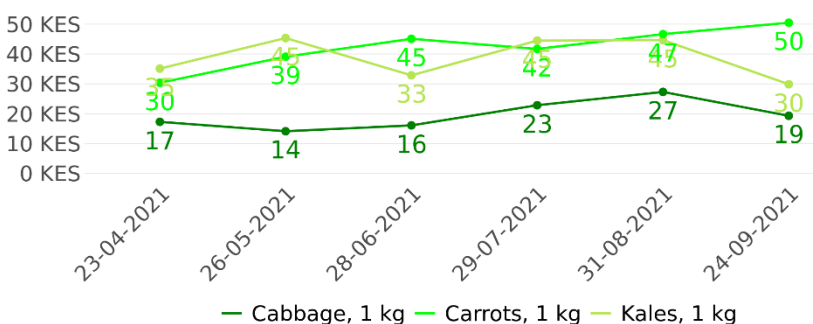


Fig. 21 Prices for selected vegetables, in KES/kg

² As of September 23, 2021, 100 KES \triangleq 0.91 US\$.

Animal source foods (ASF) assessed included eggs (Kienyeji), milk (raw/unprocessed), dried fish (omena) and beef (with bones) (**Fig. 22** and **Fig. 23**). While prices for milk and omena decreased by 13% and 9%, respectively, prices for beef and eggs increased by 7% and 4%, respectively, between April and September. Price changes over the last month (Aug-Sep) showed similar trends for all ASF. The varying prices for omena can be mainly attributed to limited supply and long supply chain with competing interests, as omena is also used for animal feed.

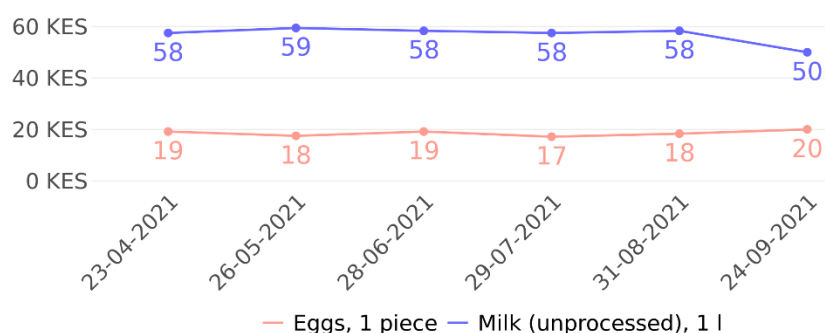


Fig. 22 Prices for eggs and milk, in KES

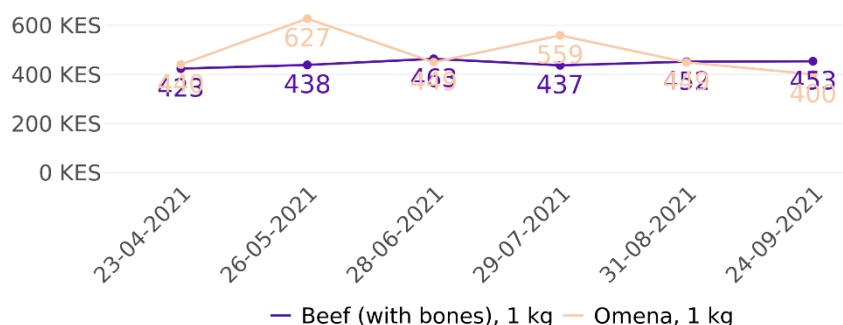


Fig. 23 Prices for meat and fish, in KES/kg

5. CHARACTERISTICS OF RESPONDENTS

VENDOR (n=30)

- 67% of vendors are female (Tab 1).
- 53% of the vendors attended primary education.
- 76% of vendors in the panel sold fruit and vegetables, 31% grains, legumes, root and tuber, and 14% packaged foods (as of September 2021).
- 70% of vendors have been operating in the market for 10 years or longer; 90% in fixed food stands, and 79% of vendors aim to continue with their business even if COVID-19 continues (as of September 2021).

CONSUMER (n=30)

- 60% of the consumers in this panel are female.
- 70% of consumers have attended secondary education or higher.
- 63% of consumers lived in Machakos or Thika for over 10 years.
- For most consumers and their households', the financial situation has worsened compared to before COVID-19 (87% Jul; 93% Aug; 77% Sep). Most of those negatively affected reported a reduced income through fewer business opportunities (95%) and increased costs of basis (food) items and services (65%). Coping mechanisms employed were engaging in other income earning activities (48%), decreasing the consumption of food (39%), or reducing other bills (26%) (as of Sep 2021).

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

	VENDORS (n=30)	CONSUMERS (n=30)
Gender (male female)	33% 67%	40% 60%
Age group		
18-24	37%	10%
25-30	27%	23%
31-40	3%	30%
41-50	30%	20%
51-65	3%	13%
66-75	0%	3%
Highest level of school attended		
Primary school	53%	30%
Secondary school	27%	47%
Higher education	20%	23%
Length of operating in the market (vendor) Length of living in Thika or Machakos (consumer)		
<1 year	10%	3%
1-3 years	7%	7%
3-5 years	10%	10%
5-10 years	3%	17%
>10 years	70%	63%

6. METHODS ASSESSING MARKET CHARACTERISTICS UNDER COVID-19, RESILIENCE, AND FOOD PRICES

Insights into **market system resilience** were based on interviews with 30 consumers and 30 vendors from two traditional markets in Machakos and Kiambu county, who were interviewed between July 21 and September 21, 2021.³ The panel of vendors and consumers was purposefully selected from Marikiti and Madaraka markets in Machakos and Kiambu county, respectively in December 2020 and validated in January 2021. The panel was based on the respondent's gender and age profiles, which were previously examined in rapid assessments (see below). The same panel of consumers and vendors are interviewed monthly via phone interviews and following a structured questionnaire.

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 shocks and 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 2,341 consumers and 2,351 vendors from Marikiti and Madaraka markets. Approximately every two weeks, 40

³ Overall, the panel included 30 consumers and vendors in this quarter. In August and September, the number of vendors was 31 and 29, respectively, due to attrition.

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 included in this report ("[Market characteristics and changes due to COVID-19](#)") are based on 540 consumer and 540 vendors interviews between July 5 and September 24, 2021. 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 (pulses, vegetables, and animal source foods) were collected approximately every two weeks from each market. Prices were assessed on April 23, May 26, June 28, July 29, August 31, and September 24, 2021. Foods were selected based on its nutritive value, availability, and cultural acceptance. Data for foods were collected in standard units (kilogram, liter, or piece), and prices were averaged using the Kenyan Shilling ([100 KES \$\pm\$ 0.91 US\\$](#)). 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 pulses, fish, and vegetables were collected together with the price assessment, and average weights for standard units were then calculated. Although a direct comparison between the assessed commodities and the national price statistics by the [Kenya Bureau of Statistics \(KNBS\)](#) is not possible, EatSafe tracked and compared official bi-monthly price data and compared the national assessments to the average monthly prices of this assessment, allowing for validation of these data.

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 safely**
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

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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.

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[Previous TMR issues are available online.](#)

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



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