

## COVID-19 Traditional Market Report

### - In Brief -

#### Issue 1: January 2021, Nairobi Metropolitan area, Kenya

The bi-monthly Traditional Market Report (TMR), developed by EatSafe, tracks the behaviors and daily decisions being made by vendors and consumers in Marikiti and Madaraka market, in Machakos and Kiambu county, in the Nairobi Metropolitan area, Kenya. 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 report provides a baseline assessment of accepted indicators that help determine the resilience of market systems across both markets as market actors cope with business and food security choices under COVID-19.

The assessment is based on a panel of vendors (n=30) and consumers (n=30) from Marikiti market and Madaraka market who are surveyed on monthly basis via phone interviews through December 2021; these results are based on data gathered in January 2021. Results are presented on bi-monthly basis.

#### Insights from vendor perspective:

- 98% of vendors stated that the pandemic had an immediate impact on their business.
- 93% of vendors reported a decrease in the number of customers in the last 9 months.
- 56% of vendors found it “not (very or at all) difficult” to follow new COVID-19 rules in the market.
- 80% of vendors started sharing resources with other vendors due to COVID-19 (including hand washing facilities, suppliers, and transportation).
- 77% of vendors used marketing strategies (discount, services, credit, advertisement) to increase the number of customers and sales in the last month.
- 63% of vendors from these two markets have borrowed money from informal cooperatives (chamas), friends, relatives, and banks due to COVID-19.
- 73% of vendors aim to continue with their business even if COVID-19 continues.

#### Insights from consumer perspective:

- 93% of consumers interviewed said their household has been financially impacted by the COVID-19 pandemic (fewer business opportunities, increased costs, loss of job).
- 50% of consumers considered most of their regular vendors trustworthy; reasons were knowing the vendors well, the freshness/quality of products, knowing about the origin of foods; reasons for mistrust were not knowing the vendors well, and changing quality of foods.
- 3% of the consumers have been asked for feedback by vendors and/or market officials in the last 9 months.

#### Food Prices:

- While food prices for all vegetables have increased between Nov20-Mar21 (kales +37%; carrots +27%; cabbage +21%) prices for animal source foods and pulses only fluctuated little (milk +6%; beef +4%; eggs +1%; omena -7%; green grams -5%; beans rosecoco -2%; lentils -1%).

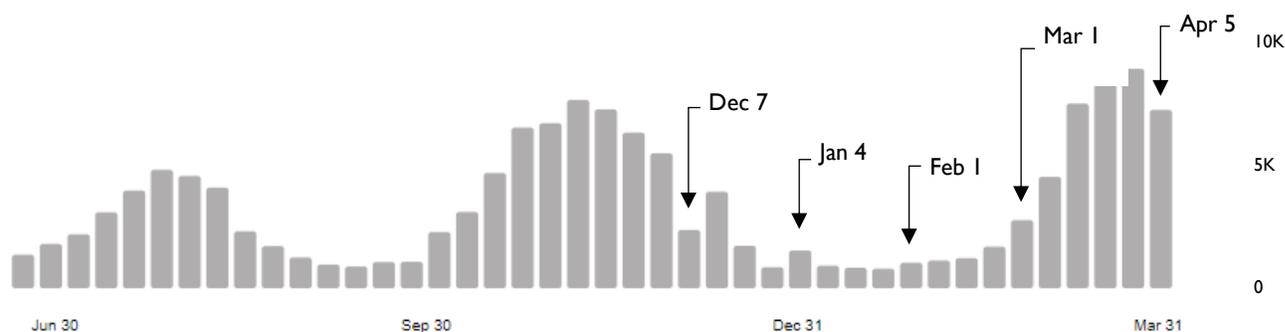
# COVID-19 Traditional Market Report

## Nairobi Metropolitan area, Kenya

January 2021

### Background on COVID-19 situation in the country and metropolitan area

The incidence of Kenya's national COVID-19 cases has been significantly decreasing since November 2020 and reached a weekly average of 999 cases in January, during the time of this report. The number of cases has since picked up again with



**Figure 1. Confirmed COVID-19 cases in Kenya, weekly (WHO, 16th April 2021).**

a significant increase being observed between February to March 2021 (Figure 1).

Between 3<sup>rd</sup> January and 16<sup>th</sup> April 2021, 148,128 confirmed cases of COVID-19 and 2,420 deaths have been reported by the Ministry of Health in Kenya. As of 15<sup>th</sup> April 2021, the daily rate of confirmed cases was 981. Almost half (49%) of all confirmed cases were in the age group below 39 years. Overall, [Nairobi had the highest number of confirmed cases \(349\); Kiambu county had 49 and Machakos county 12](#). Of all confirmed cases in the county, 8% of cases in Kiambu were in Thika town and 8% of cases in Machakos county were in Machakos town.

In early March, Kenya started rolling out nationwide COVID-19 vaccines. As of 14<sup>th</sup> of April 2021, 295,975 vaccine doses have been administered. The country's vaccination plan foresees to cover [30% of the population by June 2023](#). While within the first phase (March -June 2021) healthcare and frontline workers including security personnel and teachers will be prioritized, the second phase (July 2021- June 2022) targets the most vulnerable, including elderly and adults with comorbidities. In the third phase (July 2022 – June 2023) community workers, and service provider in hospitality and the tourism sector will be targeted. By the time of these assessments (January 2021) the vaccination rollout had not started yet.

### Market characteristics and changes due to COVID-19

**Marikiti market** and **Madaraka market** are informal open-air markets situated in Machakos town (Machakos county) and Thika town (Kiambu county), near Nairobi (<70km) (Figure 2). Thika and Machakos town have about 250,000 inhabitants. In both markets, the major food items sold are fruits, vegetables, pulses, roots, and tubers. Outside of the markets, in proximity also meat, fish, eggs, and dairy are offered by butcheries, small retailers and vendors.



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## Marikiti Market, Machakos, Machakos county, Kenya

The traditional open-air market is in the urban area of Machakos town, the capital of Machakos county (Figure 2).

During the pandemic, the Marikiti market noticed a drop of vendors from 1,500 before COVID-19 to about 800, according to the market association. The decrease in vendors is assumed to be related to the relocation of many vendors in the town caused by reduced business opportunities. About 4,000 consumers visit the market every day with numbers increasing to up to 10,000 consumers on the market days, which are usually on Mondays and Fridays.

Due to COVID-19 the market association installed eight hand washing stations within all entry and exit gates of the market. The county government added two storage water tanks for refilling the hand washing stations and maintaining an adequate amount of water. Mask wearing was enforced by the market association for both consumer and vendors and vendors are instructed to not serve any customer not wearing the mask correctly. Furthermore, customers were not allowed to touch commodities but had to point at the commodity they would like to purchase. The market association also used posters in strategic positions of the market to create awareness on hand and personal hygiene for both consumers and vendors. They also instituted a patrol schedule to ensure everyone was complying with the requirements. The market opening and closing time was revised and shortened from 5am to 6am for opening and 7pm to 6pm for closing, during the initial lockdown period.



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

## Madaraka market, Thika, Kiambu county, Kenya

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 the main market days being Tuesday and Friday (Figure 3). Based on the market association, the number of retailers and wholesalers increased during COVID-19 to 2,500 and 500, respectively (from about 1,500 and 350, pre-COVID-19). Since many people in Thika town and surrounding areas



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have lost jobs in other sectors, they tried to become involved in food trade to earn their living. Based on the increase in vendors and the accompanied increase in competition, profit margins for most vendors have decreased. Also, market space is becoming even more sparse with the increasing number of vendors. While the number of vendors increased during the pandemic the number of consumers was reported to have decreased from about 5,000 pre-COVID-19 to about 3,000 nowadays. Due to COVID-19 the market is advised by the Ministry of Health that vendors and consumers need to wear face masks and wash their hands regularly, furthermore the market is fumigated on a regular basis.



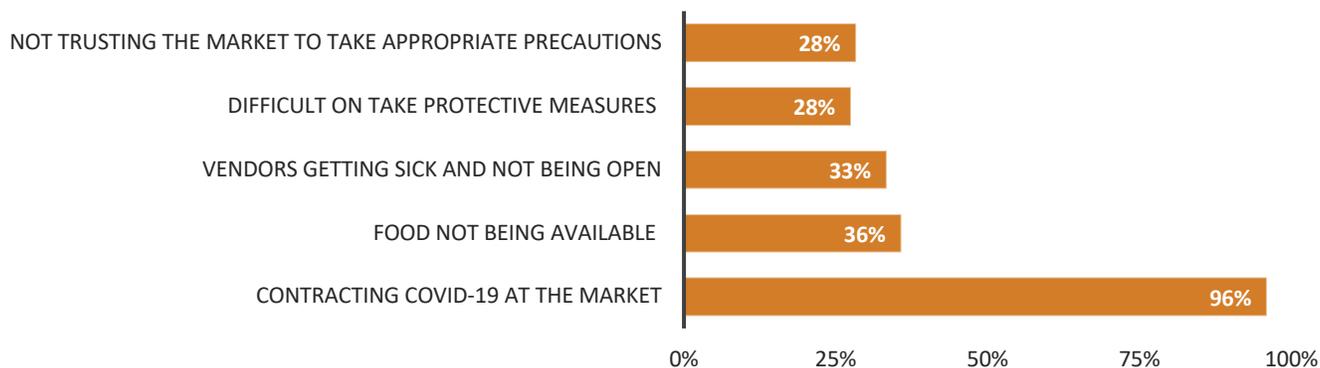
**Figure 3. Vendors in Madaraka market, Thika, Kiambu, Kenya.**

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

In addition to the assessment of resilience, a rapid COVID-19-assessment of approximately 40 consumers and 40 vendors from each market started in September 2020 and has been repeated every two weeks. The [results](#) are being summarized and published in market specific bulletins every month. Results below are from both markets and for all rounds between

#### Consumers: Greatest concerns when shopping at the market in the last 2 weeks



September<sup>1</sup> and January 2021.

Based on the rapid assessment, 71% of consumers reported concerns when shopping in the market in the last two weeks. Those with concerns identified the following issues: (1) fear of contracting COVID-19 (96%), (2) food wanted not being available (36%) and (3) vendors getting sick and not being open (33%). One third of consumers (84%) had observed changes

<sup>1</sup> Global Alliance for Improved Nutrition. 2021. COVID Bulletin. Kenya Issue #1. 15th September 2021. A USAID EatSafe Project Bulletin.

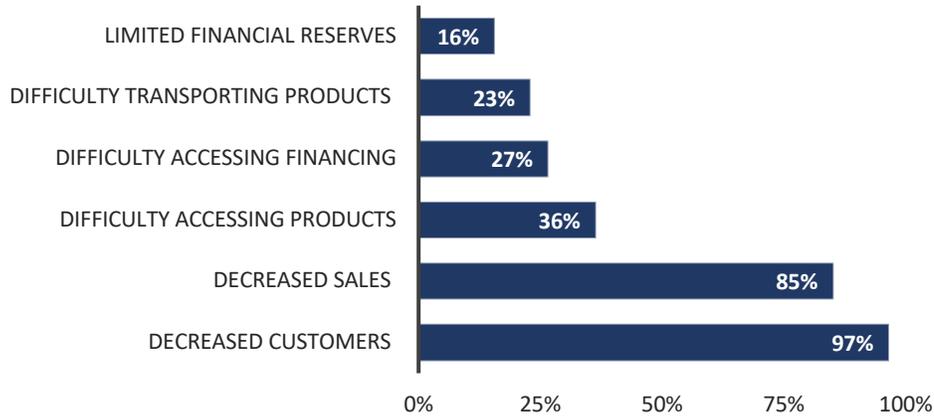


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in the markets due to COVID-19, mostly stating the set-up of washing facilities or hand sanitizer (90%), the mandate to all consumers (84%) and vendors to wear face masks (82%), and the mandate to keep distancing (58%).

### Vendors: Immediate impact on business due to COVID-19



Almost all vendors (98%) interviewed in the bi-weekly assessments stated that the pandemic had an immediate impact on their business. Most vendors stated that they experience decreased customers (97%) and sales (85%), while 36% had difficulty to access products to sell, access financing (27%), transporting products (23%) and limited financial reserves (16%).

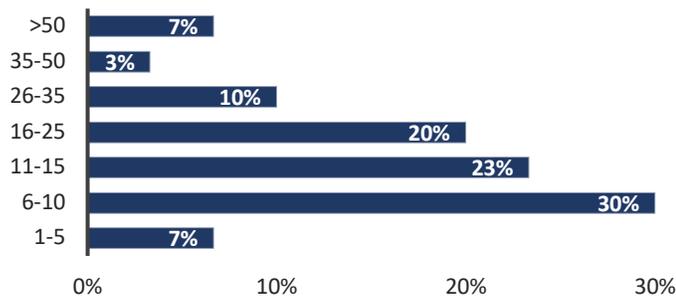
### Market System Resilience under COVID-19

Unlike the bi-weekly data presented above, the team has been collecting market system resilience data each month, analyzing and reporting on it on a bi-monthly basis. Data for this assessment round (1) were collected between 13th – 23rd of January 2021 from 30 vendors and 30 consumers in both Marikiti market and Madaraka market. Food prices for this report have been assessed between 20<sup>th</sup> of November 2020 and 19<sup>th</sup> of March 2021.

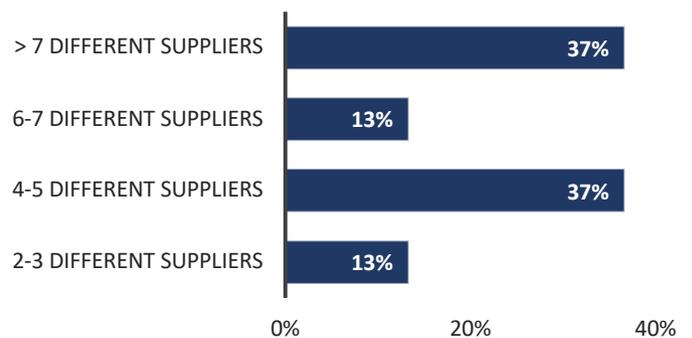
### Connectivity

**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. While most vendors reported between 6-25 customers on a typical day, the answers seemed mixed, like the number of suppliers. While none of the vendors reported to only rely on one supplier, 13% of

Vendors: Number of customers on a typical day



Vendors: Number of suppliers, last month



vendors relied on 2-3 suppliers, 37% on 4-5 suppliers, 13% on 6-7 suppliers and 37% on more than 7 different suppliers for their business. Almost all vendors (93%) reported experiencing a decrease in the number of customers in the last 9



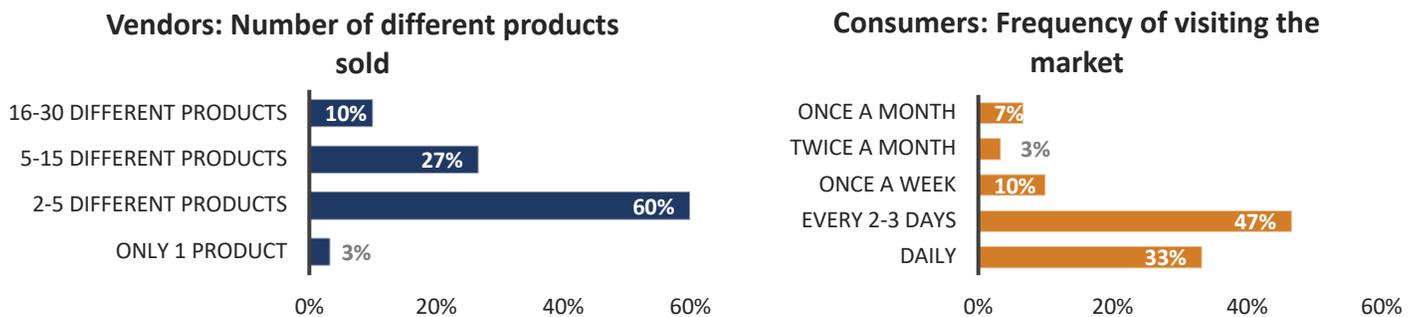
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months, i.e., the time since COVID-19 has been present in the area. About two third of the vendors (67%) reported a change in suppliers last month. Major reasons for the change in suppliers were an increase in supplier's prices, quality aspects and seasonality.

## Diversity

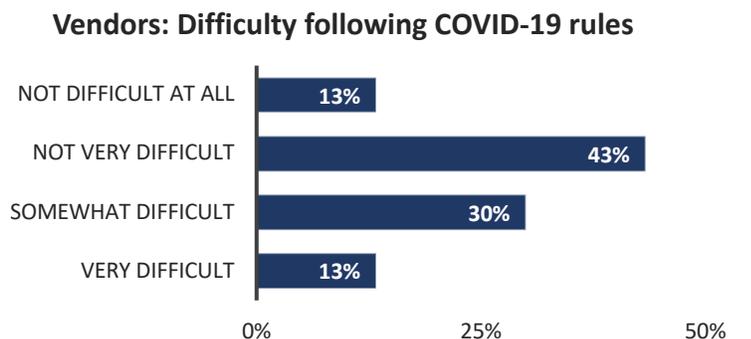
**Diversity** has multiple dimensions, including (1) the amount of variation in a system (including the frequency and purpose of visiting the markets from consumer perspective) and (2) the balance between different types (e.g., types of products, firm sizes, marketing channels, or end markets) or (3) market system composition, (i.e., how aspects of a market system are related to each other). Most vendors in this assessment (60%) sold between 2-5 different products. While none of the vendors sold more than 30 products, only 3% of the vendors sold only one product in their businesses. More than one



third (37%) of the vendors reported changing the commodities sold in their business in the last month mainly due to seasonality but also based on request by customers. A large share of interviewed consumers went shopping in the market every 2-3 days (47%) or even daily (33%). Almost all consumers (97%) said the purpose for visiting the market has been to buy foods or other goods for themselves or their family; 17% also visited the market to buy for their own business or workplace and 17% stated to work at the market.

## Equity and fairness

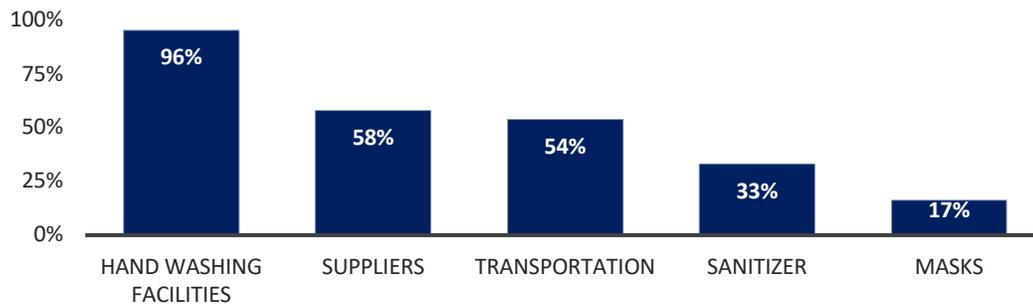
From a systems perspective, **equity and fairness** refers to the level or degree of equality and fairness inherent in formal and informal rules and laws. In our assessment we asked the panel of vendors how difficult it was for them to follow the new rules and regulations put in place due to COVID-19. The analysis revealed a mixed picture. About half of the vendors found it not very difficult (43%) or not at all difficult (13%). One third of vendors mentioned that they found it somewhat difficult or even very difficult (13%) to follow new rules including the mandate to wear face masks, hand washing, and social distancing in the market space.



## 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. Most vendors (80%) stated that

**Vendors: Resources shared with other vendors due to COVID-19 (n=24)**

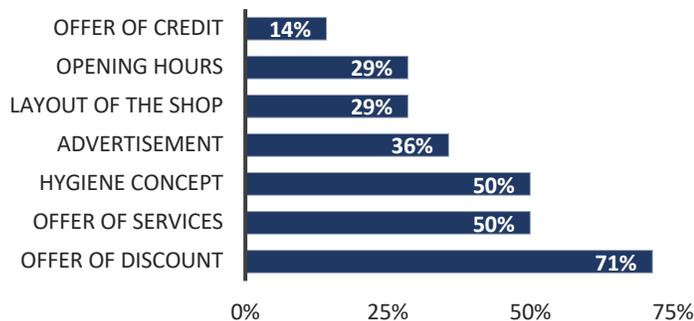


they started sharing resources with other businesses. Those that shared resources mainly shared new hand washing facilities (96%), suppliers (58%), transportation (54%), sanitizers (33%) and face masks (17%) with other vendors.

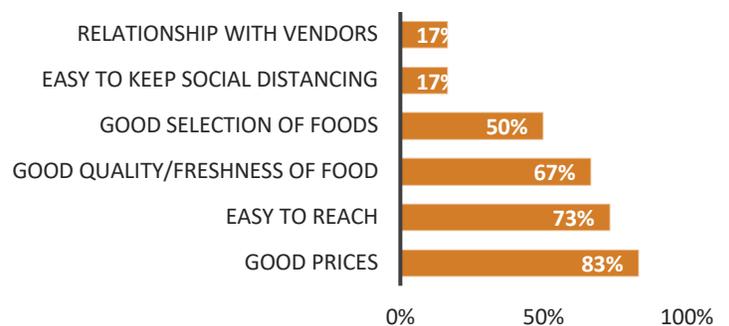
## Competition

**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 has been measured based on changing vendors practices based on what they had seen at competitors. Almost half of the vendors in this panel (47%) reported that they changed their own business practices based on

**Vendors: Business practices changed based on competitors (n=14)**



**Consumer: Reasons for buying at the market (n=27)**



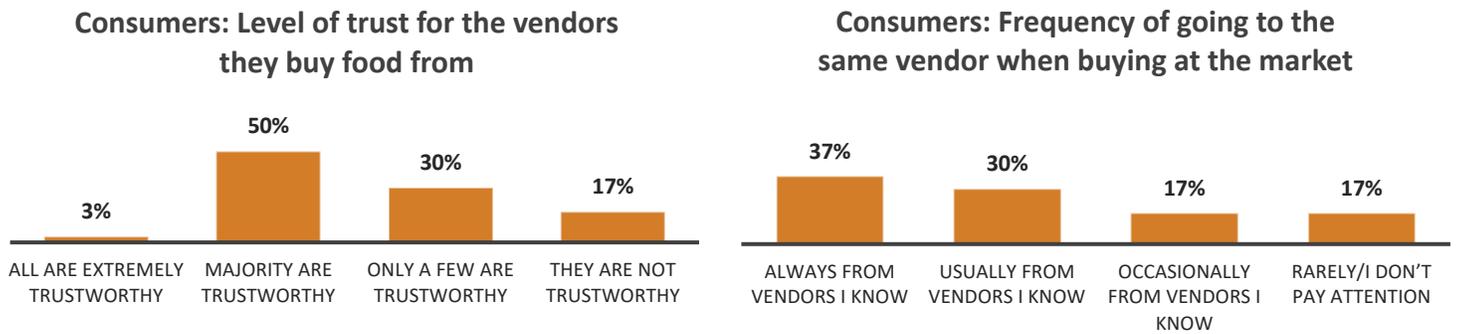
competitors. Over two third of those that made changes to their business practices based on competitors offered discount (71%), services (50%), or changed the hygiene concept (50%), besides a couple of other practices. The reason mentioned by vendors was majorly the wish to increase sales with additional practices. Most consumers (80%) reported they did most of their food shopping at the market. Reasons for buying food at the market were due to good prices (83%), easy access from home (73%), good quality/freshness of food (67%), and the good selection of foods offered in the markets (50%).



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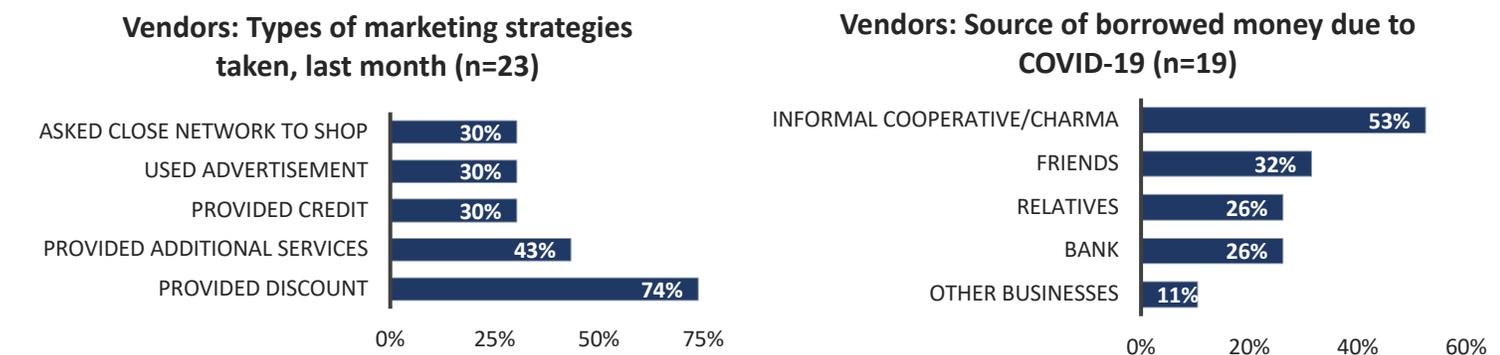
Half of the consumers (50%) said they consider the majority of their regular vendors trustworthy while 30% said only a few vendors are trustworthy, or they are not trustworthy at all (17%). For those consumers that describe the vendors as



majority or extremely trustworthy (n=16) the reasons included knowing the vendors well/buying regularly from the same vendors (50%), the freshness/quality of products (38%) or knowing about the food value chain and where the food origins (31%). For those consumers that only described a few vendors as trustworthy or not at all trustworthy, major reasons included not knowing the vendor well/buying irregularly from the same vendors (43%), changing quality in the products that vendors sell (36%), not knowing where the food origins (29%) and the vendor using different business methods (29%). The overall good level of trust might also be reflected in terms of vendor loyalty. Over 37% of consumers always visited the same known vendors, and 30% usually visited the same vendors; 17% went back occasionally; 17% went back rarely or did not pay attention.

### 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.



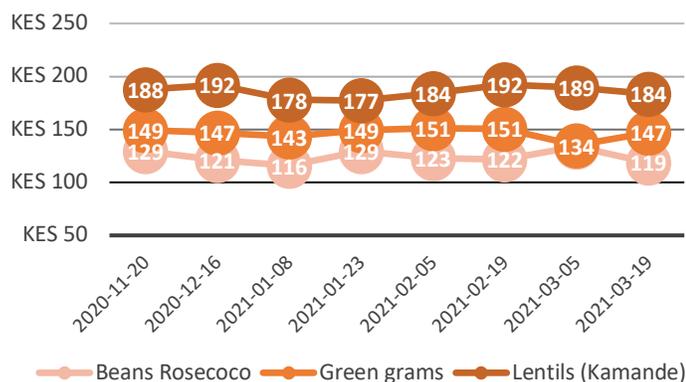
Most of the vendors (77%) used marketing strategies to increase the number of customers and sales during the last month. Strategies taken included the provision of discount (74%), additional services (43%), provision of credit (30%), use of advertisement (30%) and to ask the close network to shop in the own business (30%). About one third (30%) of vendors were aware of business training and support being offered by market authorities due to COVID-19. More than half (63%) of the vendors reported borrowing money to pay for any unexpected expenses due to COVID-19. The sources for this money were diverse. While more than half of the vendors (53%) relied on informal cooperatives so called “charmas”, 32% relied on friends and (26%) on relatives, 26% also relied on banks and 11% on other businesses.

Only one of the consumers (3%) have been asked by market officials or vendors to provide feedback in the last 9 months.

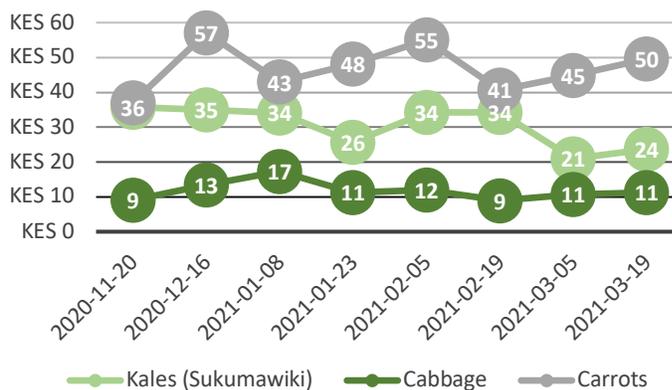
## Food prices

Tracking food prices is of great value to any market system to respond quickly to any dynamics in the food system. In this assessment, prices of different nutritious commodities and food groups have been tracked over time. Between November 2020 and March 2021<sup>2</sup>, the food prices for pulses (lentils, beans rosecoco, and green grams) decreased slightly by -1%, -2% and -5%, respectively.

Prices for selected pulses, in KES/kg



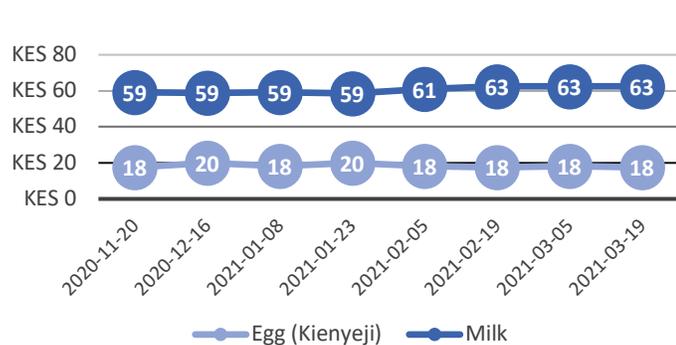
Prices for selected vegetables, in KES/kg



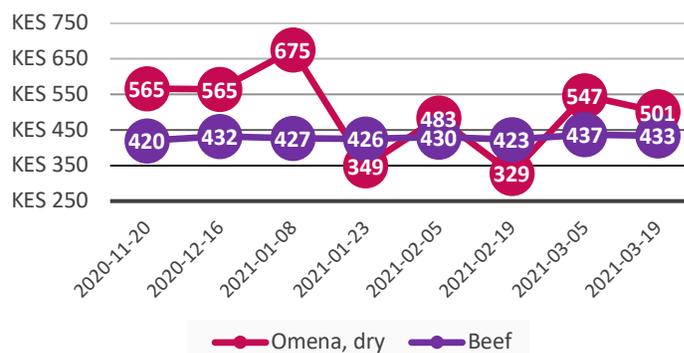
Vegetable prices for this report were assessed from kales

(sukumawiki), green cabbage, and carrots. While prices for cabbage and carrots increased by 21% and 27%, respectively, between November 2020 and March 2021, prices for kales decreased by 37% during the same time. While the price fluctuation in vegetables is mainly due to seasonality, varying quality of vegetables also determines the everyday price. For animal source foods, prices for eggs (Kienyeji), milk (raw/unprocessed), dried fish (omena) and beef (with bones) were

Prices for egg (piece) and milk (l), in KES



Prices for beef and fish, in KES/kg



assessed. While the price for eggs, beef and milk increased slightly by 1%, 4% and 6%, respectively, the prices for omena decreased by -7% between November 2020 and March 2021. Overall, the prices for omena seem to fluctuate during the months, which is mainly due to a limited supply and long supply chain with competing interests in the product, as omena is also used for animal feed. Comparing the price assessment to the weekly open air market commodity price assessment by the [National Cereals and Produce Board](#) in Machakos and Thika, the bean rosecoco price in the two markets assessed here seem to be slightly higher than the average prices in both towns. Also a comparison between the monthly food

<sup>2</sup> This assessment compares the average price from March (5<sup>th</sup> and 10<sup>th</sup> of March 2021) to the price assessment from November (20<sup>th</sup> of November 2020).



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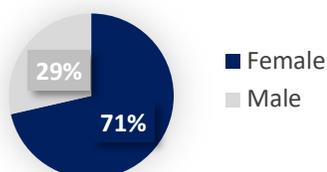
vegetable prices collected for the [Consumer Price Index \(CPI\) by the Kenya National Bureau of Statistics \(KNBS\)](#) indicates that the prices in the two markets here are slightly lower than the average national prices for the same vegetables. However, current prices and price changes over time for beef are almost identical and overall, the assessments seem very comparable to official statistics.

## Characteristics of respondent sample

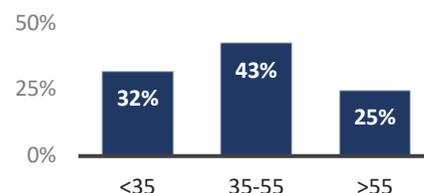
### Vendor (n=30)

- 71% of vendors in this panel are female.
- The panel has a diverse age range.
- Half of the vendors attended secondary education; 50% of vendors have primary education or lower.
- Most vendors in the panel sold vegetables, fruits, legumes, grains, also in the form of pre-packed, fresh fruits (sliced mango, melon, banana) and vegetables (packs of carrots, peas, squash etc.).
- 63% of vendors have been operating in the market for 10 years or longer and 73% of vendors aim to continue with their business even if COVID-19 continues.

Vendors: Gender



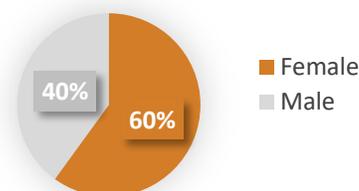
Vendors: Age Group



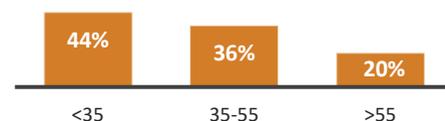
### Consumer (n=30)

- 60% of the consumers in this panel are female.
- Most consumers are in the age groups 18-35 and 35-55 years of age.
- 72% of consumers stated to have attended secondary education or higher; 28% have attended primary school or lower education.
- On average, consumers lived in households of about four to five people (including themselves).
- 57% of consumers lived in Machakos or Thika for over 10 years.
- 93% of consumers have been financially affected by COVID-19; 86% of those negatively affected reported a reduced income through fewer business opportunities; 36% of those negatively affected engaged in other income earning activities, 25% decreased consumption of food.

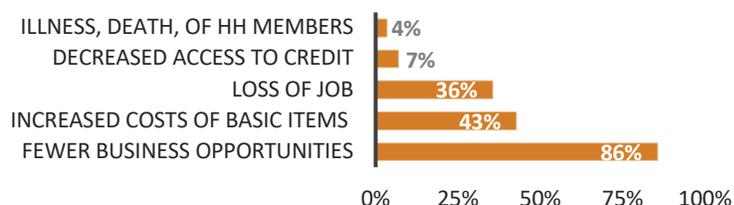
Consumers: Gender



Consumers: Age Group



### Consumers: How HH has been financially negatively affected by COVID19



## Methods assessing market characteristics under COVID-19, resilience and food prices

Insights into **resilience** have been based on interviews of 30 consumers and 30 vendors from two informal markets in Machakos and Kiambu county, who were interviewed between 13<sup>th</sup> – 23<sup>rd</sup> of January 2021. After data cleaning, market systems resilience was analyzed of 30 consumers and 30 vendors. The panel of vendors and consumers was purposefully selected from Marikiti market and Madaraka market in Machakos and Kiambu county in December 2020 (validated in January 2021) based on the respondent's gender and age profiles, which were previously assessed in the rapid assessments in both markets (see below). The same panel of consumers and vendors are followed-up each month via phone interviews, using a structured questionnaire. While data are assessed each month, data are analyzed and reported on bi-monthly basis.

Based on the [USAID Market System Resilience Framework](#), market system resilience is defined 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. While the USAID framework highlights eight domains to characterize resilience capacities, this rapid assessment includes questions on six of the eight domains (connectivity, diversity, equity and fairness, cooperation, competition, business strategy) with fast and slow indicators.

Besides data on resilience this report uses data assessed through a **rapid assessment** from 814 consumers and 821 vendors from both Marikiti market and Madaraka market. Approximately every two weeks, 40 consumer and 40 vendors are randomly selected and surveyed in each traditional market. Surveys are conducted with complete adherence to global guidelines on COVID-19 prevention and control. Data included in this report (Chapter "Market characteristics and changes due to COVID-19") have been collected between 7<sup>th</sup> of September 2020 and 8<sup>th</sup> of January 2021.

For all assessments, combined responses from the vendors and consumers in both markets are used. All data were collected via Open Data Kit (ODK) collect and stored on KoBo Toolbox; data analysis was done using Stata version 15.1.

**Food prices** are collected bi-weekly from each market for selected nutritious foods of four different food groups. Prices for this report have been assessed on eight different points in time, between the 20<sup>th</sup> of November 2020 and the 19<sup>th</sup> of March 2021. The selection of assessed commodities is based on the nutritive value, the availability and cultural acceptance of the food items. All food prices are displayed as average price for both markets and each data assessment point in standard units (kilogram, liter, or piece) in Kenyan Shilling (100 KES  $\triangleq$  0.93 US\$). For each round and food item, three comparative prices from three different vendors in each market are collected by trained enumerators at similar times and days of the week. The weight of pulses, fish, and vegetables, which are all sold in local units are assessed each time together with the price assessment and average weights for standard units are calculated. Although a direct comparison between the assessed commodities and the national price assessments by the [Kenya Bureau of Statistics \(KNBS\)](#) is not possible, we track and display official price data bi-monthly and compare the national assessments to the average monthly prices of this assessment allowing for assumptions on the validity of prices assessed.

## Global Alliance for Improved Nutrition (GAIN) 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



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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.

### **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. EatSafe is made possible by a generous contribution from USAID. 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 potentially 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 track and 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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