

COVID-19 SURVEY RESULTS

IMAPACT OF THE PANDEMIC ON RURAL POPULATIONS IN NORTHWEST KENYA
AUGUST 2020

The BOMA Project &
The Busara Center for Behavioral Economics





Executive Summary

This report provides an analysis of the COVID-19 impact survey conducted in June 2020 by The BOMA Project and The Busara Center for Behavioral Economics. The survey sampled 461 women enrolled in BOMA's Rural Entrepreneurship Access Program in Isiolo, Marsabit and Samburu counties in Northern Kenya. The survey was designed to provide greater detail on how women in these counties were coping with the economic and social aftershocks of the COVID-19 pandemic. More specifically, the survey sought to understand the impact of COVID-19 on individuals and households by examining four criteria: economic, psychosocial, food security and resource access and utilization. The results of the study can provide insight into the impact of the pandemic on populations in Isiolo, Marsabit and Samburu. However, given that the sample consists exclusively of BOMA participants, the results should not be generalized across the entire population.

The report highlights the extent to which the COVID-19 pandemic has impacted surveyed populations. At the time when the survey was

"Almost all respondents (97%) indicated there was some change to their personal income due to the COVID-19 pandemic." administered, respondents were not optimistic about the situation in Kenya improving in the next month, and many are exhibiting signs of heightened stress due to the pandemic. The restrictions on movement, closure of markets, disruption of key supply chains, and social distancing guidelines put in place by the Kenyan government have had far-reaching consequences in terms of food security, income generation, time spent on

regular activities and resource access.

When it comes to food security, over 60% of respondents reported difficulties in obtaining their normal amounts of food due to market closures, supply shortages and price increases, contributing to many households having to limit portion size or the number of meals per day. Additionally, almost all respondents (97%) indicated there was some change to their personal income due to the COVID-19 pandemic. Many respondents cited challenges around buying and selling stock, and a decrease in customers for their businesses. The results also indicate a clear shift in how participants allocated time for various daily activities. Compared to the time period before the outbreak of the coronavirus pandemic, respondents spent less time on paid work or business activities, and more time on childcare and taking care of the elderly, household chores, and fetching water and firewood.

Despite these challenges, the respondents are demonstrating remarkable resiliency in continuing to keep their businesses operational and reaping financial gain in the form of cash and food/goods. This has been made possible by participants diversifying to different income streams, and leveraging improved linkages to market opportunities. It is encouraging to see that despite the magnitude of this shock, women are still able to rely on their businesses for income and resources.

Insights from this survey are also important for informing discussions about the modalities for providing cash support in response to COVID-19. The results show that existing barriers around uptake and usage of mobile money persist with agent access and usage comfort levels. As mobile banking platforms continue to be leveraged to provide support delivery for populations in these areas, these challenges will need to be addressed.

A large number (80%) of participants cite BOMA mentors as a source of information about COVID-19. It is critical for BOMA to ensure that mentors are equipped with accurate, up to date information — symptoms, prevention measures, access to healthcare, testing and treatment — to be able to continue to support participants. Additionally, provided the challenges around food security being faced across all regions, BOMA will continue to work to link participants to functioning markets and distributors. Finally, BOMA has worked to secure additional support stipends to cushion the impact of the COVID-19 pandemic on vulnerable households.





BOMA woman entrepreneur Mercy Lekolo started a business sewing COVID-19 masks to navigate the economic shocks of COVID-19

Introduction

The World Health Organization (WHO) declared COVID-19 a world health emergency in January 2020. In Kenya, the first COVID-19 case was reported on March 13, 2020. Since then, the infections have grown exponentially. Despite the various measures put in place by the Kenyan government, projections indicate that the virus is likely to spread further and have wideranging and adverse effects.

In June 2020, Busara collaborated with The BOMA Project to survey women participants enrolled in BOMA's Rural Entrepreneurship Access Program (REAP) program. The survey was designed to assess the impact of COVID-19 on low income populations in Marsabit, Isiolo and Samburu Counties in Northern Kenya. More specifically, the survey seeks to understand the impact of COVID-19 along the following criteria: economic impacts, psychological impacts, impacts on food security as well as the effect on resource access and utilization. The BOMA Project will leverage the survey findings to design targeted interventions that enable our participants to successfully navigate the shocks of the pandemic.

Background on The BOMA Project

The BOMA Project (BOMA) is a U.S. nonprofit and Kenyan non-governmental organization (NGO) with a proven track record of delivering measurable results, and a transformative approach to alleviating poverty and building economic resilience in the arid and semi-arid lands (ASALs or drylands) of East Africa.

To date, the BOMA PROJECT has helped over 33,000 women start new businesses in Eastern Africa. BOMA's mentors empower women entrepreneurs with the skills and confidence to start new businesses. They

"Women participants in REAP are able to feed their families, make long-term investments in health and education, and reduce the gender gap in their households and communities."

use their income to educate their children and keep them healthy, to fight the devastating impact of climate change, and to become respected leaders in their patriarchal communities.

BOMA's participants live in areas that suffer from some of the highest poverty rates in the world. The region's low population density and lack of infrastructure mean there are no large employers, presenting a shortage of livelihood opportunities. Many of the villages where BOMA works are miles from the

nearest trading post, paved road, public transportation, school, health center, or financial institution.

BOMA's Rural Entrepreneur Access Program (REAP) helps ultra-poor women build a pathway out of extreme poverty by providing them with seed capital, business and life-skills training, a savings program, and two years of intensive mentoring. After six months of enrolment in REAP, women begin contributing to a savings group, which they use to access loans for business expansion and to cope with shocks such as drought and emergencies. By increasing income, building savings, providing access to credit, raising awareness of health and educational resources, and acquiring social capital, women participants in REAP are able to feed their families, make long-term investments in health and education, and reduce the gender gap in their households and communities. Many of them have started livestock trading businesses, convenience stores and other businesses, and become respected leaders in those communities. Over a 24-month period, on average, these women achieve a 79% increase in household income, a 1,748% increase in savings, and a 21% increase in girl child school enrollment.

Given the huge disruption the COVID-19 pandemic has caused globally, it is critical for BOMA to understand how its participants are coping with the shock. While their enrollment in the REAP program may better equip women

to deal with this shock, it is important to understand the unique challenges they face as a result of the pandemic. In turn, BOMA will use these findings to ensure that the organization's response is tailored to these women's survival and specific recovery needs.

Research Objectives and Questions

The main objective of the survey is to better understand how people in three ASAL counties in Kenya, specifically those in BOMA's REAP program, are coping with the COVID-19 pandemic and the effect of associated government prevention measures. Since the first case of COVID-19 was reported in Kenya in early March, the Government of Kenya (GoK) moved quickly to implement health, hygiene and social distancing measures to prevent the virus from spreading. At the time of data collection in June 2020, some of the key measures put in place by the GoK were as follows:



- 1. A nationwide curfew from dusk to dawn from 7 p.m. to 5 a.m.
- Social distancing guidelines that limited public gatherings, notably affecting markets, religious services, funerals, cultural ceremonies and eateries.
- 3. Limited the carrying capacity of public transport to 50%.
- 4. Closure of schools.
- 5. Increased hygiene measures, including a face mask mandate in public spaces and hand washing stations required at the entrance to all businesses.
- 6. Cessation of movement in and out of the Nairobi Metropolitan Area, and the counties of Kilifi, Kwale, Mombasa and Mandera.
- 7. Cessation of movement of persons through the Kenya-Tanzania and Kenya-Somalia borders, except for cargo vehicles.

Law enforcement officials were empowered to enforce these guidelines, and people found to be in offense were liable to fines or imprisonment. Given the wide-ranging extent of these measures, residents in the three surveyed areas experienced profound aftershocks to their lives and livelihoods. The negative effects were exacerbated, given that many of the people in the region already live in extreme poverty.

To arrive at a nuanced understanding of the impacts of the pandemic, the key questions we hoped to answer from the survey are:



- a) What are the perceptions and current knowledge levels of COVID-19 within the communities?
- b) What are the main sources of information for COVID-19?
- c) What are the effects/impact of COVID-19 and the associated prevention measures on individuals and households along the following criteria:
- i) Mental well being
- ii) Economic well being
- iii) Food security
- iv) Resource constraints and access
- d) How do the responses vary based on demographic characteristics such as age and geographic location?

Methodology

TARGET SAMPLE AND SELECTION CRITERIA

The study was conducted with a random sample drawn from BOMA's pool of participants. Respondents were selected from three counties in Northern Kenya: Isiolo, Samburu and Marsabit. The final sample size was 461 respondents. A two-stage sampling design was employed by randomly selecting participants based on (1) county and (2) BOMA mentor. Each mentor was assigned 6-8 participants from her/his location to survey.

Due to government restrictions on movement and gatherings and to prioritize health and safety, all surveys were conducted via phone. The survey was administered by BOMA's mentors who have established relationships with the participants. The mentors live in the same regions as the participants, speak the local languages, and have first-hand knowledge of the situation in each location. The respondents may therefore feel more comfortable with the mentors as compared to unfamiliar enumerators. However, talking to a mentor does introduce the potential for bias as participants may be inclined to respond in a certain way based on their relationship with the mentor and his/her connection to BOMA. The recruitment selection criteria were as follows: respondents had to be 18 or older, have access to a mobile phone, and live in a region with good network connectivity. The only locations that could not be included due to a lack of network connectivity during the survey period were Ngurunit, Swari and Dadacha Bassa.

SURVEY DESIGN AND ENUMERATOR TRAINING

The survey tool consisted of 46 questions covering knowledge about COVID-19, psycho-social indicators, food security, income and expenditure changes, M-PESA accessibility, daily activities, menstrual hygiene and family planning. The tool was programmed in the mobile CRM platform TaroWorks, and data was collected via tablets. The survey design was a collaborative effort between BOMA and Busara, and the survey received Institutional Review Board Approval as a component of Busara's larger research project of the effects of COVID-19 in Kenya.

A total of 65 BOMA mentors were used to administer the survey. Two levels of training on the survey tool were provided. The core survey team – composed of representatives from Busara and BOMA – first trained BOMA Field Officers and M&E Officers on the survey tool via Zoom. From there, Field Officers trained mentors, supported by the representatives from the central survey team. In addition to an overview on survey questions and general survey-related ethical concerns, the trainings also included dedicated sessions to translation. The survey tool was written in English, but was administered in local languages, primarily Samburu, Borana/Gabra, Rendille and Turkana. To ensure consistency in translation, translations were provided in text boxes below each question.

After training was completed, all mentors conducted 1-3 pre-tests of the survey tool using active, but not sampled, BOMA participants. Data from the pre-test exercise was reviewed by the survey team and adjustments were made to the tool based on feedback from the exercise.

SURVEY CONSTRAINTS

While this survey was designed to gather information specifically related to the effects of the coronavirus pandemic, we were faced with methodological challenges related to the absence of a baseline. Questions were phrased to probe participants to compare aspects of their life before the pandemic to now (during the pandemic). This method, while adequate, has its drawbacks. Relying on this form of recall comparison means that we cannot say with absolute certainty that all responses are unique to the pandemic. To mitigate this challenge, where possible, we have brought in data from BOMA's monthly monitoring to bolster analysis and provide context for the results.

Additionally, it should be noted that while the participants sampled are all active in BOMA's REAP Program, they are not all equally vulnerable. By design, participants enrolled in REAP belong to especially vulnerable populations, even in their already poor communities. Therefore, those who are at the early stages of REAP may be more vulnerable than the average BOMA participant. However, through their enrollment in REAP, all women received assets and access to resources that can actively help them get through the crisis. Those who have been enrolled in REAP for a longer period have access to savings

"Those who are at the early stages of REAP may be more vulnerable than the average BOMA participant. However, through their enrollment in REAP, all women received assets and access to resources that can actively help them get through the crisis."

and a more mature business that may position them to be more resilient to shocks than the average community member. For this reason, while the results of the study can provide insight into the situations in Isiolo, Marsabit and Samburu, they should not be generalized across the entire population.

Demographics

We sampled 461 respondents for the survey. All of the respondents are female and currently enrolled in REAP. The respondents' ages range from 19-91 years old, with the mean age being 36. The majority of respondents speak Samburu (53%) as their primary language, followed by Borana/Gabra (34%). Less than 8% of respondents speak Rendille/Samburu, Turkana and

Kiswahili as their primary languages. The respondents reside in 3 counties: Isiolo (13%), Marsabit (47%) & Samburu (40%). For the purpose of analysis, the respondents are split into 5 locations, listed in Table 1 below. Those in Samburu County are split into two locations based on the administrative subcounties. The Maralal location encompasses the sub-counties of Samburu East and Samburu West, while the Samburu North location corresponds with the Samburu North sub-county. Similarly, Marsabit County is split into 2 locations also based on sub-counties. The Marsabit location encompasses the subcounties of Laisamis, North Horr and Saku, and the Moyale location corresponds with the Moyale sub-county.

Samburu North and Moyale are analyzed separately from the rest of Samburu and Marsabit counties. Their specific geographies contribute to unique patterns of behavior as compared to the rest of the region. Samburu North is highly isolated and the BOMA participants in this region often face greater challenges in accessing markets, healthcare facilities, schools, and network. Moyale is located on the border of Ethiopia. In addition, the population is predominantly Muslim, resulting in lending patterns that are markedly different from the rest of Marsabit. The BOMA Project began working in the Samburu North and Moyale regions three years ago. As a result, for

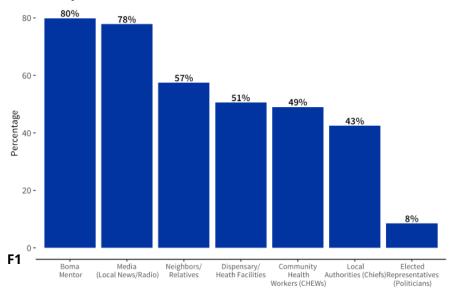
programmatic purposes, it is important to provide insight into how patterns of behaviour may differ in these areas as compared to the other regions where BOMA has worked for a longer period of time.

Research Findings

GENERAL KNOWLEDGE ABOUT COVID-19

Almost all respondents (97%) indicated familiarity with the coronavirus pandemic. The most commonly cited sources of information about COVID-19 were BOMA Mentors (80%) and Local Media (78%), followed by Neighbors/Relatives (58%), Health Facilities (51%) and Community Health Workers (49%).

How do you know about the coronavirus?



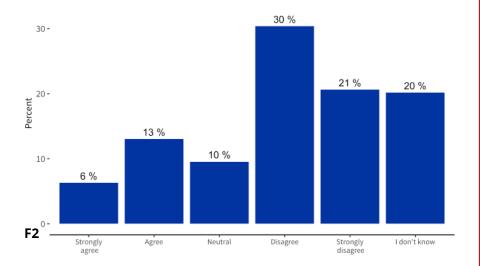
When the first cases of COVID-19 were reported in Kenya in March, BOMA provided all mentors with digital information packets containing key information about the virus to help them in sensitizing participants. Further, all participants received hand sanitizers.

In order to gauge their perception about the pandemic in Kenya and its associated effects on the community, respondents were asked if they

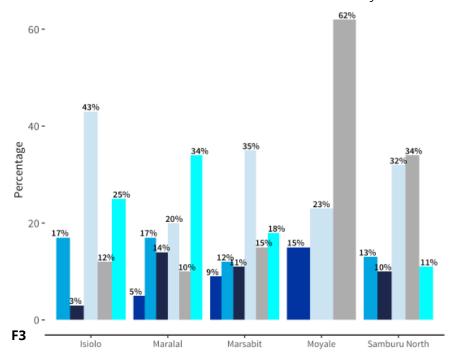
believed the coronavirus situation would be better in Kenya in one month. The responses were notably pessimistic: 51% of respondents either disagreed or strongly disagreed. Just 19% agreed or strongly agreed, and 30% were either neutral or did not know. (See figure 2 on page 11)

These results are further broken down by location in Figure 3 below. Moyale and Samburu North recorded the highest proportion of respondents strongly disagreeing with the statement that the pandemic situation will be better in one month. This is notable given the unique positioning of these two locations. As a border town with Ethiopia, Moyale relies heavily on cross border trade, which significantly decreased after the government-imposed travel restrictions. Additionally, earlier on in the pandemic, most of Kenya's cases were being imported across borders. Samburu North, on the other hand, is highly isolated and occupants have limited access to various

What do you think: The Coronavirus situation will be better in Kenya in one month?



The Coronavirus situation will be better in Kenya.



KEY

Strongly

Strongly disagree I don't know

Agree Neutral Disagree 30% will be able to afford necessities for 1-4 months and 10% will be able to afford necessities for more than 4 months. (See table 4 on page 12.)

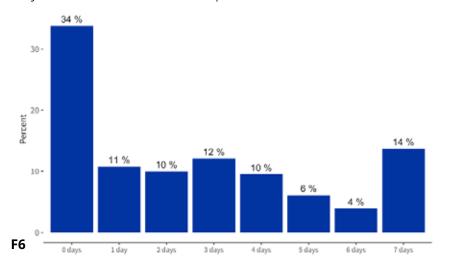
resources, such as health facilities.

Participants were asked to select which -- if any-- commodities they have had reduced access to in the past week as a result of the government measures implemented for coronavirus prevention. The respondents overwhelmingly listed food/ water (70%), followed by hygiene products (30%), shelter (30%), regular medicines (25%) and cooking fuel/gas (15%). Only 13% of respondents indicated that there was nothing they had reduced access to as a result of the pandemic. The challenges around food security are elaborated on later in the study.

Finally, participants were asked how much longer they would be able to afford necessities if the government did not lift the COVID-19 prevention measures. The responses suggest households are already strained, with 60% of respondents saying they either cannot afford resources already or will be unable to do so within 1 month. Of the remaining respondents,

To get a better sense of their mental wellbeing, participants were asked four questions from the Patient Health Questionnaire-9 index (PHQ-9). For this survey, the questions focused on how frequently someone had experienced

In the past 7 days, how many days have you or someone in your household limited portion size of meals?

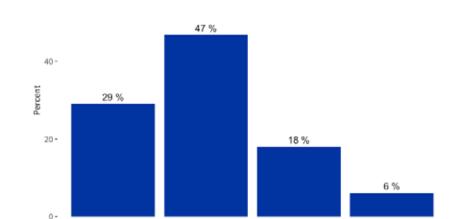


Pyschosocial impact of COVID-19.

60 -

F7

Minimal depession



Moderately severe depression

Mild depression

certain indicators of depression or stress in the last 2 weeks. Indicators included: feeling down or depressed, trouble falling asleep, feeling like a failure, and having trouble concentrating. The responses to each of the questions ranged from "Not at All" to "Nearly Every Day."

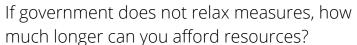
The responses from these 4 individual questions were aggregated to create a composite scale/index for statistical analysis as is standard for PHQ-9 interpretation. The scale shows where a person falls on the index (0-5: minimal to no depression, 6-10: mild depression, 11-15: moderate depression and 16-20: severe depression).

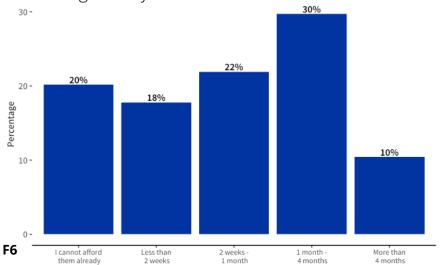
From the analysis, the majority of participants (47%) exhibit symptoms of mild stress and depression and a little over a quarter exhibit minimal to no signs of depression. On the other end, a quarter of respondents exhibit symptoms

of more serious stress and depression as compared to the previous two weeks. These results do not equate to a clinical diagnosis, but they do suggest that respondents may be experiencing increased levels of stress as a result of the pandemic. (See figure 5.)

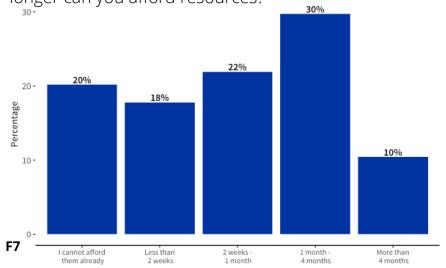
Severe depression

These results align with what we are seeing in BOMA's monthly monitoring data, where participants are reporting psychosocial concerns (fear, anxiety, stress, stigma and mistrust). The monitoring data for June across all locations highlighted how participants are reporting fears of going out to buy stock and meet suppliers, a reduction in their business operation hours,





If government does not relax measures, how much longer can you afford resources?



a suspension of trading due to health concerns and challenges in obtaining stock. As is clear from the results of this survey, and supported by routine monitoring data, communities in Northern Kenya have been severely impacted by the coronavirus pandemic. They are experiencing shocks due to market closures, restricted access to resources/movement and fears of falling ill, all of which could contribute to the levels of stress and depression being reported above. There is also a statistically significant (p=.05) relationship between depression levels and how much longer a participant responded that she could afford necessities. In addition to COVID-19, many residents in Samburu North are simultaneously dealing with the ongoing forest evictions. Over the past few months, the government has begun forcefully removing communities from areas

designated as protected land, resulting in many households being forced to move to temporary *manyattas* while awaiting permanent relocation.

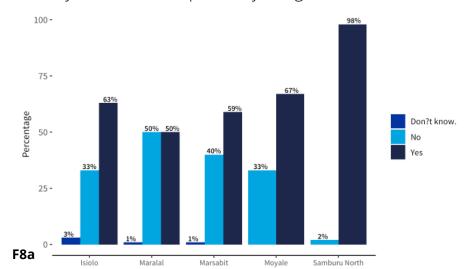
IMPACT ON FOOD SECURITY

One of the key concerns related to the pandemic is the potential effect on food security. In order to combat the spread of coronavirus, at the end of March, the Kenyan Government imposed restrictions on movement and social gatherings (including markets), while also implementing a strict dusk to dawn curfew. These prevention measures affected the movement of food

and goods, as well as people's ability to access their normal markets and resources. Additionally, restrictions resulted in more people being at home due to children being out of school and relatives being unable to move freely for work. All of these factors affect a household's food security. The following series of questions were designed to further probe these effects.

The majority of participants (66%) indicated that they or someone in their households have had to limit portion size at least 1 day in the past week. Similarly, 64% indicated that they or someone in their households had to reduce the number of meals eaten in a day at least 1 day in the past week. (See Figure 6-7)

In the past 7 days, have you or any household member experienced difficulties in going to food markets due to mobility restrictions imposed by the government?



Over the course of the previous week, most participants experienced some form of difficulty in accessing food. Specifically, 64% experienced difficulties in going to food markets; 61% experienced difficulties in buying food due to markets being closed; 66% have been unable to buy their normal amount of food due to shortages in the markets; 86% reported difficulties in buying their normal amount of food due to the price of food being too high, and 83% reported

difficulties in buying their normal amount of food due to a drop in household income. A breakdown of these responses by location is illustrated at left in Figure 8a. (See also 8b-8e, page 13). While these difficulties are being faced across locations, they are particularly pronounced across all indicators in Samburu North, which as mentioned before, is more isolated than other areas outlined in the report.

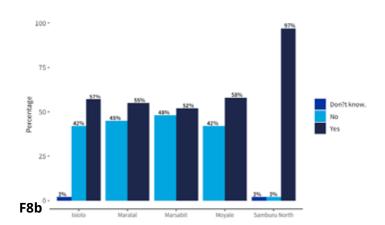
The challenges around food security reported in this study are supported by analysis from a Rapid Market Assessment BOMA conducted in April, at the onset of the pandemic in Kenya. Findings from the market assessment highlighted the following trends in Isiolo, Marsabit and Samburu counties:



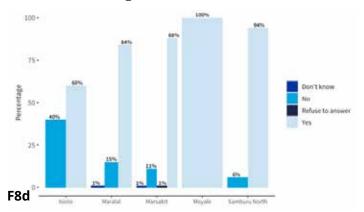
- Physical access to markets restricted and many markets temporarily closed.
- 2. Decrease in purchasing power due to limited income.
- 3. Increase and fluctuations in prices of staple goods (maize flour, cooking oil, sugar, soap.)
- 4. Supply chain disruption due to movement restrictions.

It is evident that the coronavirus pandemic and government prevention measures have affected the larger market ecosystem, and by association the individuals who rely on those markets for food and goods.

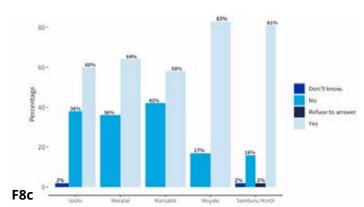
In the past 7 days, have you or any household member experienced difficulties in buying food due to most markets being closed?



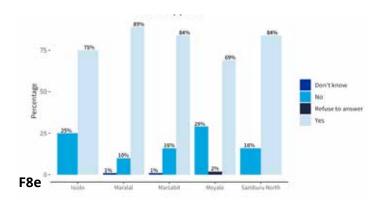
In the past 7 days, have you or any household member experienced difficulties in buying the amount of food you usually buy becuase the price of food was too high?



In the past 7 days, have you or any household member been unable to buy the amount of food you usually buy because of shorteges in the markets you buy from?



In the past 7 days, have you or any household member experienced difficulties in buying the amount of food you usually buy because the household income has dropped?

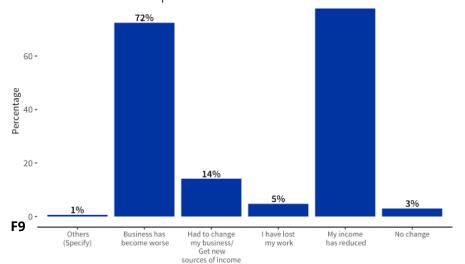


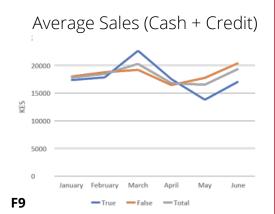
General Impacts

CHANGES IN INCOME & EXPENDITURE

Almost all respondents (97%) indicated there was some change to their personal income due to the coronavirus pandemic. Specifically, 79% reported a reduced income, 72% reported business becoming worse, 14% reported

What changes have you had in your income due to the Coronavirus pandemic?



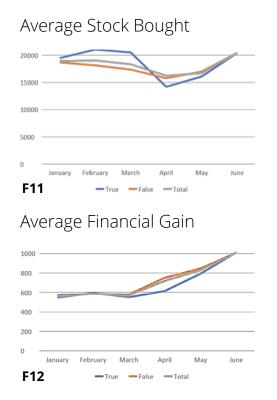




needing to change/diversify businesses and 5% reported losing their work. (See figure 9.)

When asked directly if they lost work due to the pandemic, 31% of respondents indicated "True." Those who responded "True" cited a decrease in customers and a general worsening of their business as contributing factors. This question was asked broadly — encompassing formal/casual labor and self-employment/ business— and thus not all changes are related directly to the REAP businesses. That said, REAP businesses are a key source of income for participants. Trends in BOMA's monthly monitoring data reflect that business sales and stock purchases spiked in March most likely due to panic buying at the onset of the pandemic shrunk between April and May when the government imposed its COVID-19 prevention measures, before registering a rebound in June. The drop in sales and stock purchases is more severe for those who responded "True" to losing work due to the pandemic. (See

Figures 10 & 11.)



Despite these drops in sales and stock purchases, the participants continued to access financial gains from their businesses in the form of cash and food/goods. Even if the businesses are not actively growing, they are still providing a critical source of income and support. (See Figure 12)

For participants citing a reduced expenditure on food, the reasons were primarily due to having less money to spend (29%), eating more sparingly (18%) and market closures (14%).

Participants were also asked about changes to their household expenditures as a result of the pandemic. The majority of participants responded that they saw an increased expenditure on food due to an increase in food prices (72%) and more people in the household to feed (61%).

For participants citing a reduced expenditure on food, the reasons were primarily due to having less money to spend (29%), eating more sparingly (18%) and market closures (14%). Table 2 (below) illustrates a full breakdown of expenditure-related changes.

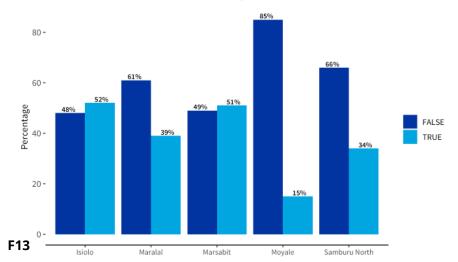
Expenditure Changes	TOTAL COUNT	PERCENTAGE
Increased expenditure on food due to increase in food prices	334	72.45
Increased expenditure on food because there are more people to feed (husband & children at home)	282	61.17
Reduced school expenses because children are at home	201	43.60
Reduced expenditure on food because I have less money to spend	135	29.28
Reduced expenditure on transportation because I have limited movements	107	23.21
Reduced expenditure on non-essential commodities/services	87	18.87
Reduced expenditure on food because we are eating sparingly (skipping some meals)	82	17.79
Reduced expenditure on on transportation because I have less money to spend	68	14.75
Reduced expenditure on food because markets are closed (nowhere to buy)	66	14.32
increased expenditure on medicine because household members are getting sick	46	9.98
Reduced expenditure on on food because we are receiving food aid/rations from well-wishers	19	4.12
No change in expenditure	2	0.43
Reduced expenditure on transportation because I have limited movements	1	0.22



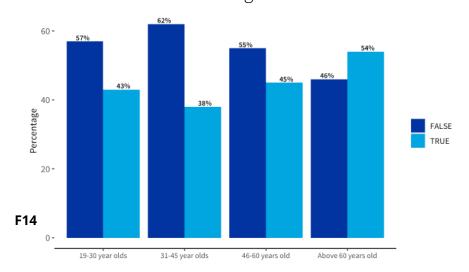
AWARENESS OF GOVERNMENT BENEFITS

To support citizens during the pandemic, the government is providing aid in the form of food, masks, sanitizers and cash transfers in some regions. Of the participants surveyed, 58% indicated that they were not aware of the government benefits available to them. Though the question was intended to probe knowledge of government support programs, the responses were likely influenced by whether or not a participant is benefiting from these programs. When broken down by location, the gap between knowledge and a lack

Is this statement true or false? I am aware of government benefits available to me during this time.



Is this statement true or false? I am aware of government benefits avialable to me during this time.



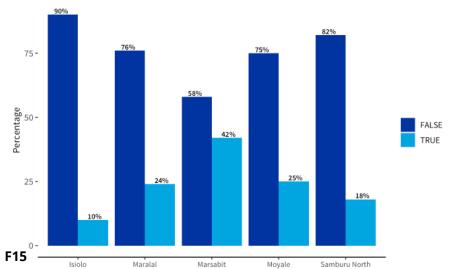
thereof is particularly pronounced in Moyale and Samburu North. In Moyale and Samburu North, many of the interventions were starting around the same time the survey was being completed, which may account for the low levels of awareness. It is important to close this knowledge gap to ensure that all participants who are eligible for aid know that they are able to receive support. (See Figure 13.)

Interestingly, when these responses are disaggregated by age group, people 60 years and above are the only group where a larger proportion responded "True" to knowledge of government benefits than "False". This can likely be explained by their receipt of Inua Jamii, the government's flagship social protection program benefitting, amongst others, elderly persons. (See Figure 14.)

OUTSTANDING LOAN REPAYMENT

As part of BOMA's REAP program, at the 6-month mark, participants form savings groups comprised of 12-24 women. These women meet monthly.

I have an outstanding loan that I am unable to pay due to the Coronavirus pandemic.



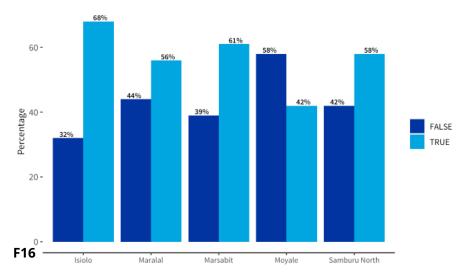
Each member contributes roughly KES 400 a month to her group. These savings groups provide women with access to credit they may not have had otherwise. Many women take loans from their groups either in emergencies or to grow their businesses. Participants were asked if they currently have any outstanding loans that they are unable to repay due to the pandemic. This question referred to loans broadly, encompassing loans from REAP

Savings Groups, business groups, as well as other sources. Three-fourths of the respondents (75%) have an outstanding loan. Of these respondents, 28% said they are currently unable to repay their loan. The proportion of respondents unable to repay their loans is relatively consistent across locations, except for Marsabit, where just under half of the participants (42%) with an outstanding loan are currently unable to repay. It should be noted that in Isiolo and Samburu, many participants were given waivers to extend loan repayments as a result of the pandemic, which may be why so few are concerned about repayment. Extensions have not yet been granted in Marsabit. (See Figure 15.)

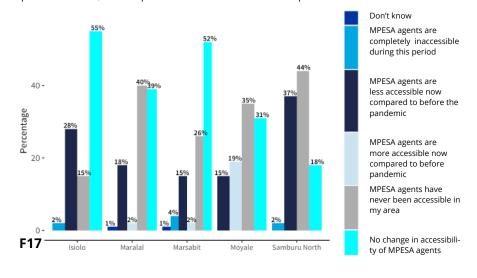
M-PESA ACCESSIBILITY

Participants were asked a series of questions about their comfort level using M-PESA, as well as their ability to access M-PESA services during this period. This is of relevance due to the promotion of M-PESA as a means to safely distribute funds and complete socially distant, cashless transactions. In order to encourage M-PESA usage, Safaricom has waived fees for transactions under KES 1,000. Slightly over half of the respondents (58%) indicated that they are comfortable using M-PESA or other mobile money services. The proportion of respondents comfortable with digital currency is highest in Isiolo (68%), and lowest in Moyale, where less 42% of respondents indicated

Is this statement true or false? I am aware of government benefits available to me during this time.



How would you comment on the accessibility of MPESA agents in your area in this period (during the Coronavirus pandemic) compared to before the pandemic.



being comfortable using mobile money services. There is no notable difference in level of comfort between age groups.

(See Figure 16.)

Participants were asked about the accessibility of M-PESA agents in their area as compared to before the pandemic. The highest proportion of respondents (42%) said that there was no change in the accessibility of M-PESA agents, 32% indicated that M-PESA agents have never been easily accessible in their area, and 20% indicated that M-PESA agents are less accessible as compared to before the pandemic. These results are broken down by location in Figure 17. The reported accessibility of agents is critical to the use of digital financial services. Of those respondents who are not comfortable making transactions using M-PESA, 50% say that agents have never been accessible in their area. Of those who are comfortable

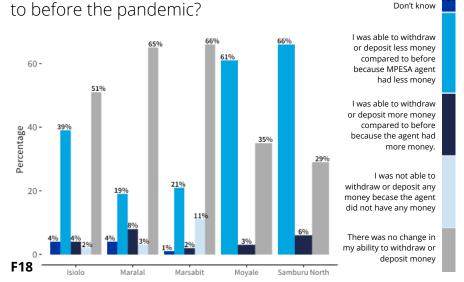
using M-PESA, only 19% say agents have never been accessible in their area. (See Figure 17.)

Respondents who indicated having some level of access to M-PESA agents in their area were asked a follow-up question about their ability to withdraw and deposit all the money compared to before the pandemic. 56% of participants did not experience any change in their ability to withdraw or deposit cash and 32% reported being able to withdraw or deposit less money compared to before the pandemic due to the fact that the M-PESA agent had less money. A few participants (5%) indicated they were not able to withdraw any money

because the M-PESA agent did not have any money, 4% indicated being able to withdraw or deposit more money than before and 2% were unsure.

Given that most participants (88%) said that they were able to withdraw and deposit either the same amount or less money than before the

When you were able to access MPESA agents in your area, would you comment on your ability to withdraw and deposit all the money you wanted compared to before the pandomic?



pandemic, the breakdown by location reflects a split between these two responses In Maralal, Marsabit and Isiolo, the majority of participants -- 65%, 66% & 51% respectively-- indicated that there was no change in their ability to withdraw or deposit money compared to before the pandemic. In Samburu North and Moyale though, the results were flipped, and the majority of respondents -- 66% & 61% respectively-- indicated that they were able to withdraw or deposit lower amounts

compared to before the pandemic

due to the M-PESA agent having less money. (See Figure 18.)

PRIMARY EFFECTS ON CHILDREN

The vast majority of women enrolled in BOMA's program support children in their households. To be able to best aid the women and their families, it is important for BOMA to also understand the effects that the coronavirus pandemic might be having on children in the household, especially in light of the government directives on school closures and limitations on movement and gatherings.

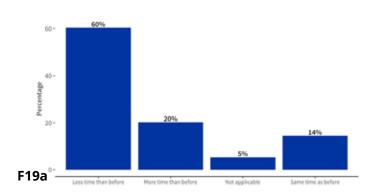
93% of respondents indicated that children are missing out on schoolwork as a result of the coronavirus pandemic. Additionally, 82% responded that children are not able to play or interact freely with their friends, 47% reported children feeling increased levels of anxiety and stress, 30% responded that children are lacking access to nutritious foods and 20% reported a lack of access to standard health care as a result of the pandemic and associated government prevention measures. The definition of "nutritious foods" here is

subjective, and the decreased access is most likely a result of the general food security challenges currently being experienced by participants, as discussed earlier in the document. This includes a reduced availability of fruits and vegetables due to market closures. Moreover, the reported lack of access to standard health care is potentially a result of increased fear around visiting health centers due to stigma and concerns about catching the virus. Stay at home orders and messaging around COVID-19 have globally kept people from seeking routine, and even urgent, care.

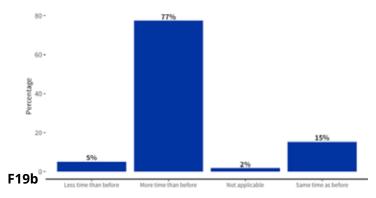
TIME SPENT ON REGULAR ACTIVITIES

A series of six questions were asked to assess if and how a participant's time spent on her common responsibilities have shifted as a result of the pandemic. As has become apparent from BOMA's monitoring data, participants' normal routines have been disrupted, specifically due to the strict government prevention measures, such as social distancing, limitations on large gatherings and closure of schools. Compared to before the spread of coronavirus, respondents spent less time on paid work or business activities, more time on childcare and taking care of the elderly, more time on household chores, and more time on fetching water and firewood. Responses to the amount of time spent on self-care and leisure were mixed, with 44% of respondents indicating they spent less time than before, 28% spent more time, and 17% spent the same time as before. Additionally, 43% of respondents spent more time tending to livestock and 43% spent the same time as before tending to livestock. This shift is most likely a reflection of the fact that since markets are closed, women with livestock businesses are using this time to fatten their stock. (See figures 19a-19g)

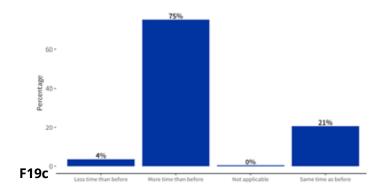
Paid work or business



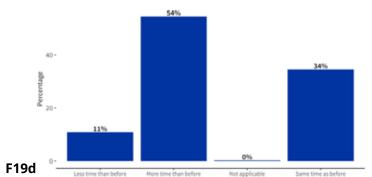
Childcare and taking care of the elderly



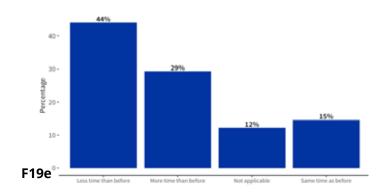
Household chores



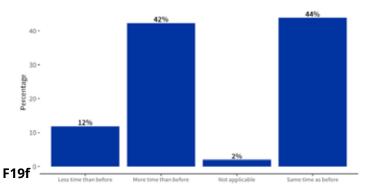
Gathering firewood, fetching water



Selfcare/leisure



Tending livestock

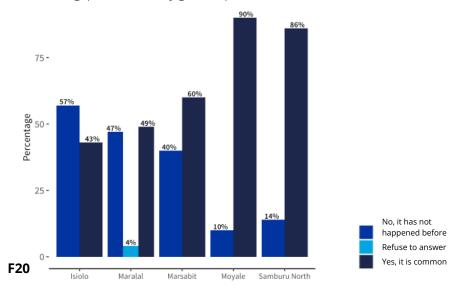


RESOURCE ACCESS AND CONSTRAINTS

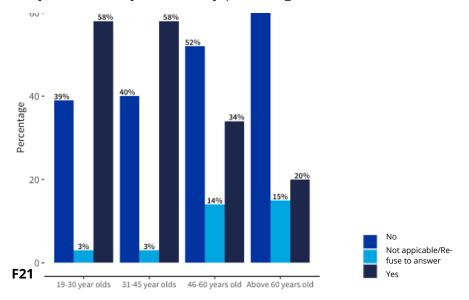
The survey also assessed if there are any challenges related to women's abilities to access menstrual hygiene and family planning products as a result of the coronavirus pandemic. Given the sensitivity around these topics, participants were given the option to either skip these questions or end the survey if they did not feel comfortable responding. Consent was obtained for those who chose to proceed.

For the section on menstrual hygiene, 78% of respondents agreed to participate. Of those respondents, 81% reported normally using menstrual hygiene products bought from a shop, clinic, or distributed through an organization. Most women (67%) reported that in the two months since the pandemic started, they have had regular access to their chosen products. That said, 64% indicated that they have had some difficulties due to lack of money (42%), limited availability of supplies (39%), inability to access shops (26%) and lack of family support (14%). When asked if they face these difficulties often, 59% responded "Yes" and 40% responded "No". This suggests that most participants face regular difficulties in accessing personal hygiene products, but there is indication that

Do you experience these difficulties in accessing personal hygiene products often?



Do you normally use family planning methods?



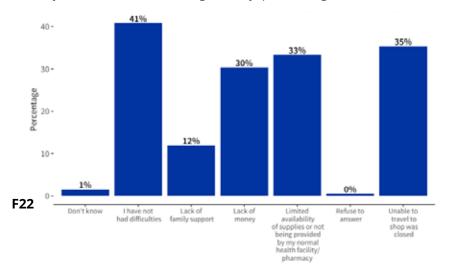
the pandemic might be making matters even more challenging for women. The breakdown by location, illustrated in Figure 20, shows that for Isiolo, Maralal and Marsabit, respondents are more closely divided on whether these accessibility challenges are common or novel. In contrast, respondents from Moyale and Samburu North overwhelmingly responded that these difficulties are commonplace. (See figure 20)

The same line of questioning administered for personal hygiene was followed for family planning. Consent was once again obtained to proceed, and 83% of the remaining participants agreed to continue with the family planning section of the survey. Of those participants, 53% indicated regular usage of family planning methods (example pills, condoms, injections). Unsurprisingly, family planning usage varies by age group, with a greater proportion of those

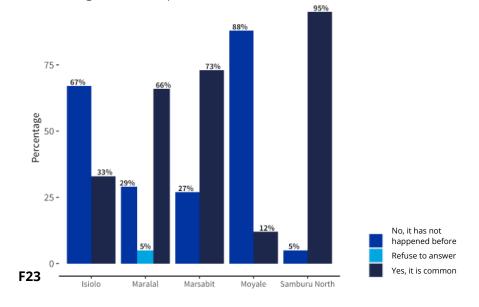
45 and under indicating usage of family planning as compared to those who are older than 45. (See figure 21)

Of those respondents who use family planning products, 67% reported that in the two months since the pandemic started, they have had regular access to their chosen products. Still, 51% reported having some form of difficulty in obtaining them. 35% reported being unable to travel or the shop being closed, 33% reported a limited availability of supplies, 30% reported a lack of money and 12% reported a lack of family support. (See figure 22, next page.)

Thinking about the past two months, what difficulties have you faced accessing family planning?



Do you experience these difficulties in accessing contraceptives often?

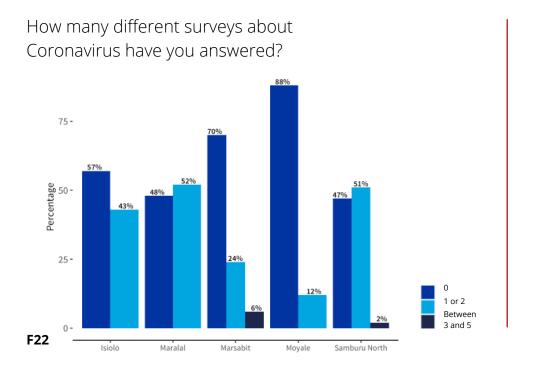


Of those who reported these difficulties in accessing family planning products, the majority (66%) reported facing them often and 32% reported these challenges as being new. Similar to menstrual hygiene, this suggests that most participants face regular difficulties in accessing family planning products, but the pandemic may be exacerbating these challenges for some women. Isiolo and Moyale report the highest proportion of participants indicating that these accessibility challenges are new, and the figures from Samburu North suggest that accessibility is a common, near universal challenge. (See figure 23)

Survey Feedback

Given the unique nature of the global pandemic, a number of organizations are conducting surveys to understand its effects. Of the participants included in this study, 36% reported that they

have already participated in one or two other coronavirus related surveys and 2% have participated in between 3-5 surveys. By location, it appears that a larger proportion of those in Samburu County (52%) have been contacted for surveys compared to Isiolo (43%) and Marsabit (26%) counties. (See figure 24, next page.) At the conclusion of the survey, participants were given the opportunity to ask questions and provide feedback to the interviewer. Many participants requested assistance from the program, with specific emphasis on food and business support. A number of women also sought further information about the coronavirus.



Conclusion

The results of this study illustrate that the COVID-19 pandemic is having profound effects on communities in Isiolo, Marsabit and Samburu Counties. Respondents are exhibiting signs of heightened stress due to the situation caused by the pandemic. The restrictions on movement, closure of markets, disruption of key supply chains, and social distancing guidelines put in place by the Kenyan government have had far-reaching consequences for the respondents on food security, income, time spent on regular activities and resource access.

In terms of food security, over 60% of respondents reported difficulties in obtaining their normal amounts of food due to market closures, supply shortages and price increases, contributing to many households having to limit portion size or the number of meals per day. Additionally, almost all respondents (97%) indicated there was some change to their personal income due to the coronavirus pandemic. Many cited challenges around buying/selling stock and a decrease in customers for their businesses. The results also indicate a clear shift in the time respondents spend on their daily activities. Compared to before the spread of coronavirus, in the past two weeks, respondents spent less time on paid work or business activities, more time on childcare and taking care of the elderly, more time on household

chores, and more time on fetching water and firewood. This suggests that with more people in the household for a prolonged period, women's household responsibilities have increased. Despite these challenges, the respondents are demonstrating remarkable resilience in continuing to keep their businesses operational and reaping financial gain in the form of cash and food/goods. It is encouraging to see that despite the magnitude of this shock, women are still able to rely on their businesses for resources.

Moreover, throughout the survey it becomes evident that those in Samburu North report consistently worse outcomes than those in the other locations. As discussed earlier on, even before the pandemic, Samburu North faced unique challenges due to its vast terrain, geographic isolation and limited access to markets, healthcare facilities, schools, and network. The survey findings suggest that the COVID-19 pandemic has only exacerbated these challenges and highlighted a need to provide additional support to participants in the region.

Insights from this survey are also important for informing discussions about the modalities for providing cash support in response to COVID-19. The results also show that existing barriers around uptake and usage of mobile money persist with agent access and usage comfort levels. If mobile banking platforms will continue to be considered a dominant lifeline of support delivery for populations in these areas, these challenges will need to be addressed.

Given the finding that a large number (80%) of participants cite BOMA mentors as a source of information about the coronavirus, it is critical for BOMA to ensure that mentors are equipped with accurate, up to date information—symptoms, prevention measures, access to healthcare, testing and treatment—to be able to continue to support participants. Additionally, with the challenges around food security being prevalent across all regions, BOMA will continue to work to link participants to functioning markets and distributors. Finally, given the negative economic effects, BOMA has worked to secure additional support stipends to cushion the impact of the COVID-19 pandemic on these already vulnerable households.

Appendix 1

The following details the process used for PHQ-9 calculations and analysis:

- 1. We assigned values to the different response categories (i.e. Not at all = 5, Several days = 10, More than half the days = 15 and most of the days = 20).
- 2. For all participants, we then scored the 4 questions under this section with the metric above. This gave us the average score for each individual.
- 3. Next, we came up with a scale that shows where one falls on the index (0-5: minimal to no depression, 6-10: mild depression, 11-15: moderate depression and 16-20: severe depression)
- 4. Finally, we assigned participants their results based on the calculations above
- a. As an example, let's say a participant selected not at all for question 1, several days for question 2, more than half the days for question 3 and most of the days for question 4. We would calculate it as below:
 - We first assigned the values: Not at all = 5, Several days = 10, More than half the days = 15 and most of the days = 20
 - Then did summation: 5+10+15+20 = 50 afterwards average = 50/4=12.5
 - In this case, based on our scale the participant would be termed as "Moderately Depressed."