Combatting COVID-19 in Mozambique：Round 2

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Abstract

We conducted three rounds of phone interviews across 76 communities in Sofala, Manica, and Zambezia provinces of central Mozambique between July 10th and November 18th, 2020. We find gradual improvements in COVID-19 knowledge, persistence of some hazardous behaviors, further declines in income, and continued high levels of food insecurity.

Combatting COVID-19 in Mozambique

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We compare how COVID-19 knowledge and behavior as well as economic conditions have changed over time in Mozambique.

We conducted three rounds of phone interviews across 76 communities in Sofala, Manica, and Zambezia provinces of central Mozambique between July 10th and November 18th, 2020. We find gradual improvements in COVID-19 knowledge, persistence of some hazardous behaviors, further declines in income, and continued high levels of food insecurity.

*Sample size is about 2000 observations for July/August data in Figures 1-4, 5, and 6, and about 600 for Figures 7 and 8. For September data, sample size is about 2000 for Figures 1, 3, 4, 5 and 6 and about 1000 observations in Figures 7 and 8. All October data is for non-treated groups only (a sample size of 333 observations). For additional details and summary statistics, please see the online appendix on our website: www.fordschool.umich.edu/mozambique-research.

KEY FINDINGS

- **Household income has dropped more than 50%** from February 2020, before the onset of the pandemic, to September 2020. **71% of households remain food insecure.**

- Respondents' perception of their community's support for social distancing **has improved over time, but still underestimates** their community's true support for social distancing.

- Respondents' **knowledge about COVID-19 has improved over time,** especially with regard to the government's pandemic response, and preventative knowledge.

- **TV and radio are the two most common sources of COVID-19 information.** Over time, respondents report hearing about COVID-19 more from religious leaders and NGOs, and less from WhatsApp and ATM messages.

Economic changes

Household income has dropped significantly since the onset of the pandemic, dropping even further since Round 1 of our survey. **Figure 1** shows that the average income fell by 38% from a typical week in February 2020—before Mozambique reported any COVID-19 cases—to the week prior to the first survey round (in July or August 2020). Then, reported income fell an additional 24% between Round 1 and Round 2 of the survey (July or August to September).

FIGURE 1: AVERAGE HOUSEHOLD INCOME
*(1,000 Meticais = 14 USD)*
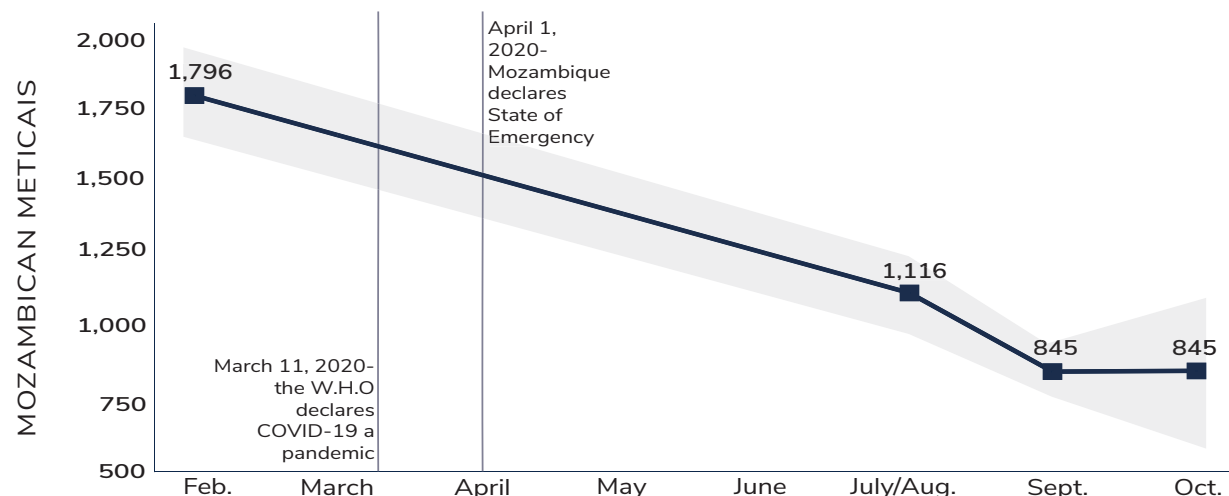
Income reported as "total weekly income" from "a typical week in February 2020" , "a typical week in July/August" , "a typical week in September" and "a typical week in October," reflecting the time periods in which our three survey rounds were conducted. Household income is presented either as a specific amount (if given) or as the average of an income range self-reported by respondents. Additional analyses, available in our appendix, reveal that post-Covid income levels in 2020 are also lower than corresponding incomes reported by the same households in the same months in 2019, prior to Covid.

Food insecurity

Food insecurity remains pervasive throughout our third survey round in October. **Figure 2** shows that the major driver of food insecurity was again a drop in household income and an increase in food prices. The share of respondents reporting market shortages as a reason for food insecurity declined. Nearly three-fourths of households reported experienced food insecurity for any reason in July/August and in October.

FIGURE 2: FOOD INSECURITY
*Unable to buy usual amount of food because...*
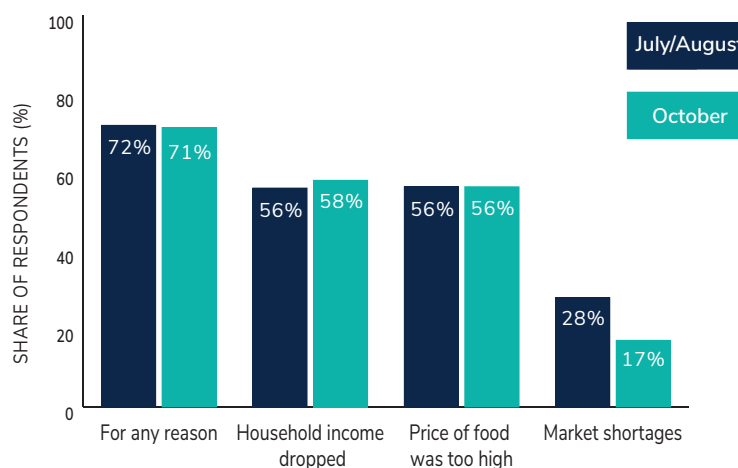
Food insecurity is the share of respondents who experienced being unable to buy their usual amount of food in the past 7 days for the reasons provided.

Support for social distancing

Respondents' perception of community support for social distancing has improved over time, while their own support for social distancing has remained high and steady. **Figure 3** shows that 98% or more of respondents personally support social distancing in all survey rounds. Moreover, respondent perceptions of community support for social distancing has increased from 69% in Round 1 (July/August) to 80% in Round 3 (October) – a belief that is closer to, but still significantly lower than each community's average support for social distancing.

**FIGURE 3:** SUPPORT FOR SOCIAL DISTANCING
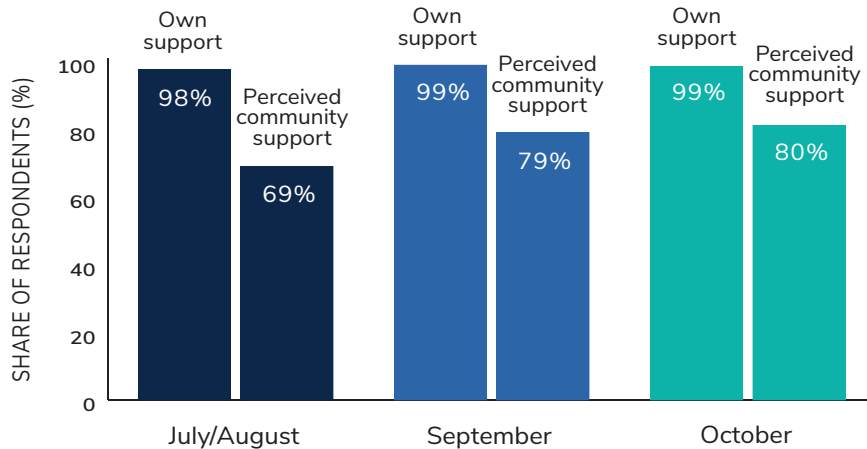
Perceived community support is calculated from the questions "for every 10 households in your community, how many do you think support the practice of social distancing to prevent the spread of coronavirus?" Individual support for social distancing is calculated from the question "Do you support the practice of social distancing to prevent the spread of coronavirus?"

Correctly identifying misinformation

Respondents' COVID-19 knowledge has gradually improved over time. **Figure 4** compares changes in COVID-19 knowledge indices on government actions, preventative knowledge and general knowledge. Respondents are increasingly knowledgeable about the actions the government of Mozambique has taken to prevent the spread of COVID-19, preventative actions their household can take to stop the spread of COVID-19 and COVID-19 transmission and risks (general knowledge).

FIGURE 4: KNOWLEDGE INDICES
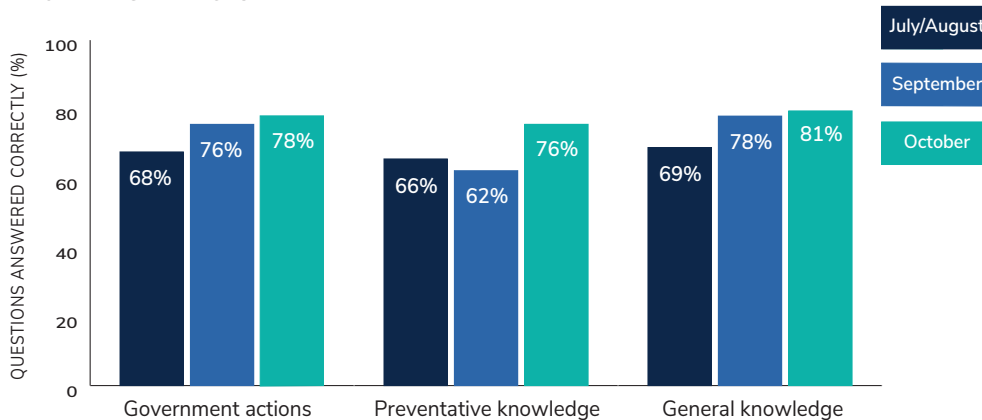
In Round 3, respondents were asked 12 general knowledge questions, 16 preventive action questions, and 12 government action questions. In Rounds 1 & 2, respondents were asked a randomly selected half of similar knowledge questions in each subcategory. General knowledge questions include "who is more likely to die from coronavirus?" "how is coronavirus spread?" and "what are the main symptoms of coronavirus?". The Preventative Knowledge index includes a series of questions on the best actions to take to stop the spread of COVID-19. A full list of the questions asked is provided in the appendix.

COVID-19 information sources

Sources of information for COVID-19 have remained steady over time, with respondents reporting hearing about coronavirus mainly from TV and radio. **Figure 5** shows how TV and radio – reported as an information source by three-quarters or more of respondents – compare to other major information sources like friends, family, and health workers (which are each reported as an information source by less than 30% of respondents). **Figure 6** shows how respondents' minor sources of information for COVID-19 are shifting. More respondents report hearing about COVID-19 from community non-profits/NGOs and religious leaders, while less respondents report hearing about COVID-19 over WhatsApp or ATM screen messaging.
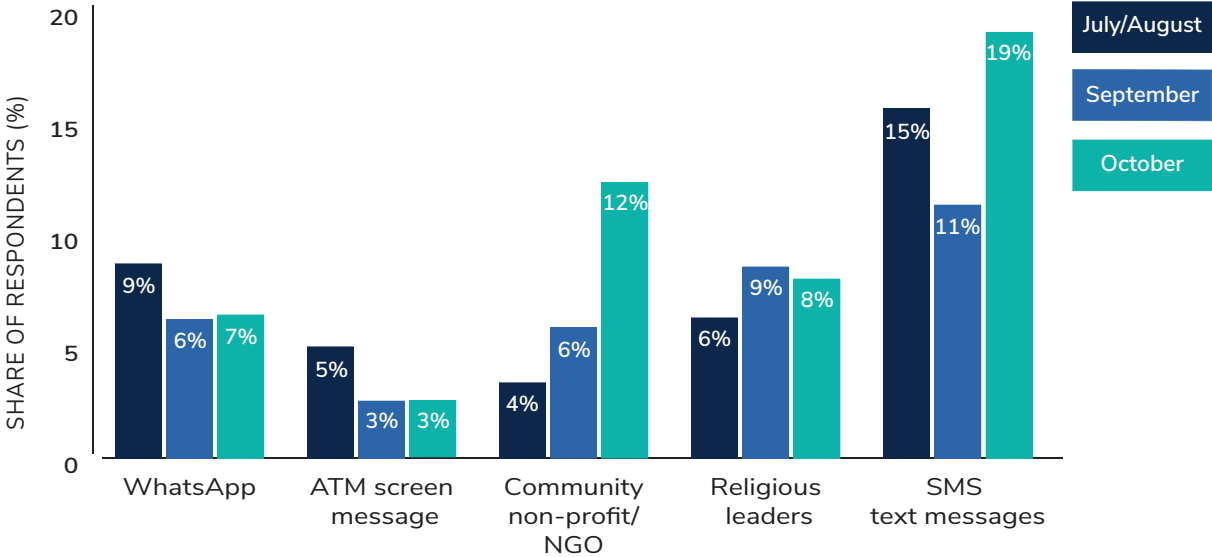
FIGURE 5: MAJOR INFORMATION SOURCES
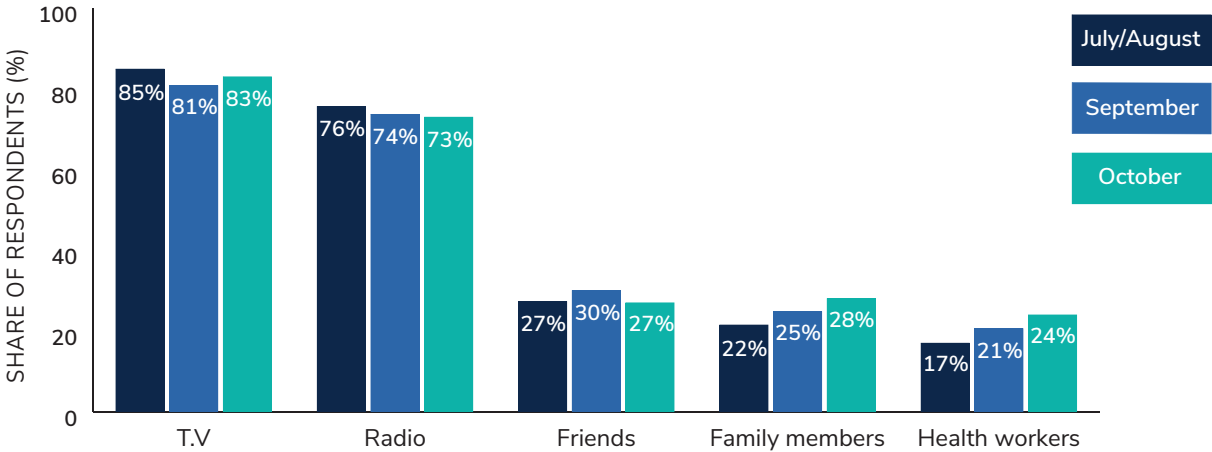
FIGURE 6: MINOR INFORMATION SOURCES

Percent of respondents answering "Where did you hear about the new coronavirus from?" For each source, respondents answer "YES" if they heard about the new coronavirus from the source, and "NO" if not. Respondents may select multiple sources.

Preventative actions related to COVID-19

Respondents report improvement in behaviors that prevent the spread of COVID-19 though some hazardous behaviors persist. **Figure 7** shows that the percentage of participants who said they wear a face covering when healthy has risen from 94% in Round 1 (July/August) to 99% in Rounds 2 and 3 (September and October). **Figure 8** shows that respondents continue to engage in hazardous actions that can spread coronavirus or otherwise harm the human body. Almost half of respondents said they have sprayed alcohol or chlorine over their body in the last 7 days to prevent the spread of COVID-19.
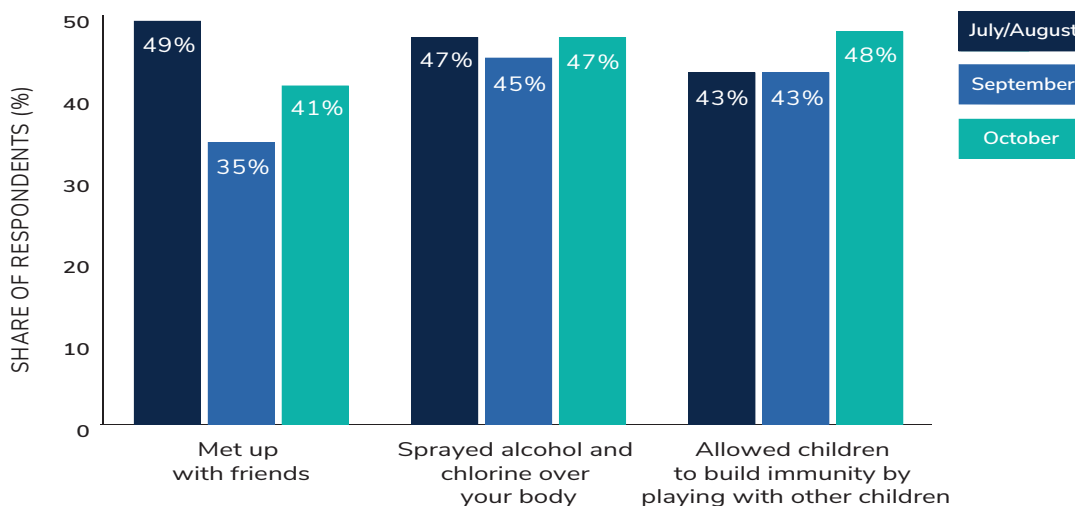
FIGURE 7: PREVENTATIVE ACTIONS
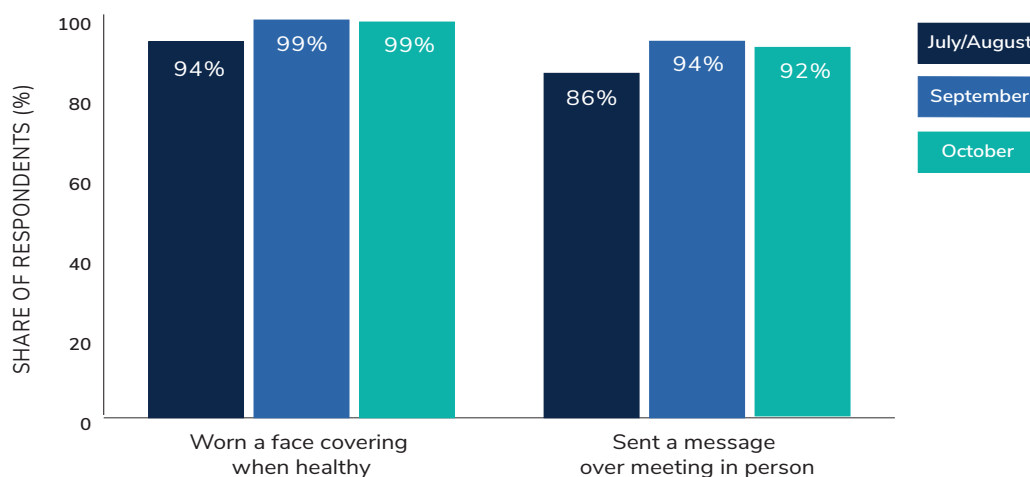
FIGURE 8: HAZARDOUS ACTIONS

Percent of respondents answering "Yes" to "Is this something your household has been doing for the last seven days?"

For survey instruments, summary statistics, additional analyses, and future updates please see our **website**: www.fordschool.umich.edu/mozambique-research

Questions? Comments?
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