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THE GENDERED IMPACTS OF THE COVID-19 PANDEMIC IN KENYA, NIGER, RWANDA, AND UGANDA

EVIDENCE FROM PHONE SURVEYS

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ELIZABETH BRYAN, International Food Policy Research Institute (IFPRI)
HARRIET MAWIA, International Food Policy Research Institute (IFPRI)
CLAUDIA RINGLER, International Food Policy Research Institute (IFPRI)
ERDGIN MANE, Food and Agriculture Organization of the United Nations (FAO)
VALENTINA COSTA, Food and Agriculture Organization of the United Nations (FAO)
RUMBIDZAI NDORO, Food and Agriculture Organization of the United Nations (FAO)

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EXECUTIVE SUMMARY

The COVID-19 pandemic has had far-reaching impacts in every part of the world, including on vulnerable populations in rural areas of low- and middle-income countries. This report explores the ways in which men and women in rural areas of four countries in sub-Saharan Africa (SSA)—Kenya, Niger, Rwanda, and Uganda—experienced the COVID-19 pandemic and associated income losses, as well as their responses to the crisis. To identify and monitor the differential effects of the COVID-19 pandemic on women and men in rural households, IFPRI conducted phone surveys in selected regions of the four focal countries, with financial and technical support from the Food and Agriculture Organization of the United Nations (FAO). The surveys traced gender differences in responses to the pandemic and associated restrictions, such as choice of coping strategies, access to public assistance, and changes in the care burden for men and women.

The results showed that the COVID-19 pandemic has had sweeping impacts on people living in rural areas of Kenya, Niger, Rwanda, and Uganda, including losses in income, depletion of savings and assets, and reduced access to food. While most of the households surveyed were engaged primarily in farming—not one of the most directly-affected sectors—the perceived impacts of the pandemic on income losses were notable. While both men and women experienced income shocks corresponding with the evolution of the pandemic, the ways in which they experienced and responded to these shocks varied across countries. Coping strategies followed a similar pattern across countries, whereby households tended to rely on savings at the start of the pandemic and later shifted to selling assets and borrowing as, presumably, savings became depleted. The exception was in Niger, where people relied on selling assets and reducing consumption in the earlier survey rounds, suggesting a general lower level of resilience to income shocks in the study areas. Both men and women contributed to coping responses, but there were considerable differences in the strategies employed across countries and rounds. In some cases, men were more likely to use savings and sell assets—likely because of women's relatively lower level of these resources. Women in Uganda and Kenya, for instance, were more likely to borrow money, relying in particular on rotating savings schemes.

The data also revealed food insecurity challenges in the study countries during the pandemic. The incidence of moderate or severe food insecurity was especially high in Rwanda, followed by Kenya, Niger, and Uganda. Women were more likely to experience moderate or severe food insecurity in Rwanda and severe food insecurity in Niger, while there were no statistically significant differences in the food insecurity experiences of men and women in Kenya and Uganda. Diet adequacy for women was particularly low in Rwanda and Uganda, and in the first round in Niger. Changes in food access due to the pandemic are particularly worrisome in these contexts, where food security challenges existed even before the start of the pandemic.

Governments in SSA responded to the pandemic by enacting lockdowns, shelter-in-place orders, physical distancing measures, school closures, and restrictions on domestic and foreign travel, among other measures. Governments also responded by committing to social and economic measures to protect people from the pandemic's impacts. However, policy responses were largely inadequate to address the challenges faced by women and girls (and men and boys) in rural areas, and very few of these measures were gender sensitive. Most of the gender-sensitive responses focused on addressing the increased incidence of gender-based violence, and far fewer aimed to help women rebound from pandemic-related income losses by securing their livelihoods.

Several policy recommendations emerge from the findings. These involve a mix of short-, medium-, and long-term strategies aimed at helping women and girls respond to immediate shocks related to the pandemic and other overlapping crises, and at developing resilience to future disturbances. The strategies include extending social protection programs targeted to women and girls in rural areas, strengthening women's access to financial services, bolstering women's groups as an important source of resilience, expanding economic opportunities for women, ensuring girls' access to education (especially for adolescent girls), and continuing to monitor the gendered impacts of shocks and stressors. Policy responses should be tailored to local needs in consultation with a range of stakeholders engaged in providing humanitarian and development assistance, including women's organizations.

CONTENTS

1. INTRODUCTION AND MOTIVATION

The COVID-19 pandemic has had far-reaching impacts in every part of the world, including significant impacts on economic growth, supply chains, health systems, and service industries. Vulnerable populations in low- and middle-income countries (LMICs) with more limited social safety nets have been particularly affected by periodic lockdowns and other public health measures aimed at controlling the spread of the virus. Growing evidence shows that men and women are differently exposed to shocks and stressors like the COVID-19 pandemic, and that they have different preferences for and capacities to respond (Bryan, Ringler, and Meinzen-Dick 2023; Jordan 2019; Smyth and Sweetman 2015; Theis, Bryan, and Ringler 2019). There is evidence that during times of crisis, low-income households adopt coping strategies such as buying less food, switching to less nutritious food, and reducing the number of meals eaten in response to reduced available income (Asesefa et al. 2018; Sani and Kemaw 2019). Given the sociocultural values and practices that underpin gender inequalities within households, women and girls tend to experience a larger reduction in the quality and quantity of their food intake in this type of situation as compared to men (NINGO, WEGE, and TWG 2020).

Gender inequalities in access to and control over productive resources, assets, services, and economic opportunities already shaped the lives of rural women and girls prior to the pandemic. COVID-19 has further exacerbated these inequalities—the World Economic Forum (2021) estimates that the time needed to close global gender gaps in economic opportunity, education, health, and political participation increased from 99.5 years to 135.6 years as a result of the pandemic. COVID-19 has also contributed to the growing gender gap in food insecurity across all regions of the globe (FAO et al. 2022; FAO 2023). In 2021, the gap between men and women who were moderately or severely food insecure was more than 4 percentage points, as compared to 3 percentage points in 2020 and 1.6 percentage points in 2019 (FAO et al. 2022). In rural areas of developing countries, COVID-19 containment measures have posed new challenges for rural women to maintain household food security in their roles as agricultural producers, farm managers, processors, traders, wage workers, and entrepreneurs. The restrictions undermined women's ability to access resources for productive activities, find financing to keep their businesses afloat, and earn incomes in rural markets (CARE and IRC 2020). According to the World Bank (2022), the employment-to-population ratio for LMICs fell from 57 percent in 2019 to 54 percent in 2020. Moreover, the International Labour Organization (2021) noted that in low-income countries, the employment-to-population ratio fell more for women than men in 2020 (2.6 percent compared to 1.8 percent). Estimates from the onset of the pandemic, when economic restrictions were most severe, show that women-owned businesses in sub-Saharan Africa (SSA) were more likely to close (Goldstein et al. 2020; UN Women, Impact Her, and AfDB 2020) or stop generating income (Fin Mark Trust 2020), compared to businesses owned by men.

Evidence shows that rural women and girls are at increased risk of gender-based violence (GBV) compared to rural men (Hidrobo et al. 2021; Decker et al. 2022), driven by tensions in the household related to isolation, food and financial insecurity, and school closures (CARE and IRC 2020). Rural women and girls have fewer opportunities to access support services and essential healthcare than their urban counterparts because of the reduced availability of legal, social, and policing structures in rural areas (FAO 2020a). Food scarcity, restricted movement, and economic shocks may also force women and girls into transactional sex and other forms of sexual exploitation (FAO 2020a; Jones and Gong 2021). Intersecting factors, such as age, socioeconomic status, disability,

and ethnicity, are likely to have increased the risk of GBV during the COVID-19 emergency (FAO 2020a; UN 2020).

Moreover, the COVID-19 pandemic has further increased women's work burden because of the higher number of people staying home during quarantine and/or greater demands of caring for sick family members (UN Women et al. 2020). Many women are expected to work longer hours, juggling domestic responsibilities with productive work. School closures have a disproportionate impact on women who are responsible for out-of-school children. Rural girls will also likely work longer hours than boys because they need to take on part of their mothers' domestic housework and caregiving chores (IFAD 2019; FAO 2020a).

2. POLICY RESPONSES TO THE PANDEMIC

Governments all over the world, and also in SSA, responded to the pandemic by enacting lockdowns, travel restrictions, shelter-in-place orders, physical distancing measures, and various hygienic procedures to control the spread of the virus and protect their health infrastructures (Durizzo et al. 2021). Other control measures implemented at the onset of COVID-19 included school closures, cancellation of public events, curfews, and restrictions on domestic and foreign travel. Governments also responded by committing to social and economic measures to cushion people from the pandemic's impacts, but only high-income countries implemented large support programs whereas low-income countries provided little assistance. Importantly, few of these support measures were gender sensitive.

The United Nations Development Program (UNDP) and UN Women COVID-19 Global Gender Response Tracker identified 4,968 COVID-19 policy response measures by June 2022. Of these, 1,605 measures (or 32 percent) either addressed specific risks faced by women and girls or were targeted to women and girls (UNDP and UN Women 2022). Policy measures were categorized as: 1) economic and fiscal, 2) labor market, 3) social protection, and 4) violence against women. Among the measures designed to be gender-sensitive, 53 percent were intended to address violence against women, 28 percent were targeted social protection measures, and the remainder supported women's labor market participation or were related to other types of fiscal and economic support. The tracker's data reflect only policy commitments and do not cover actual implementation of policy measures (O'Donnell et al. 2021a). The data also do not reflect whether policy measures announced by governments are sufficient in amount or duration, or are being implemented effectively. For example, the tracker does not reflect gaps between individuals' eligibility for a particular program and their ultimate receipt of benefits (O'Donnell et al. 2021b). In Kenya, Niger, Rwanda, and Uganda, most gender-sensitive measures addressed women's unpaid care burden and GBV, but very few measures targeted women's economic in-

TABLE 1 NUMBER AND SHARE OF GENDER-SENSITIVE POLICIES IN RESPONSE TO COVID-19, BY POLICY TYPE AND COUNTRY

Policy type		Country			
		Kenya	Niger	Rwanda	Uganda
Economic and fiscal	Gender-sensitive policies	2	2	0	4
	Total number of policies	7	4	5	8
	Percent	28.6	50.0	0.0	50.0
Labor market	Gender-sensitive policies	0	0	0	0
	Total number of policies	6	0	0	0
	Percent	0.0	N/A	N/A	N/A
Social protection	Gender-sensitive policies	4	2	3	4
	Total number of policies	12	6	5	6
	Percent	33.3	33.3	60.0	66.7
Violence against women	Gender-sensitive policies	4	1	3	8
	Total number of policies	4	1	3	8
	Percent	100	100	100	100

Source: UNDP and UN Women, 2020

security, and none supported women's labor market participation (Table 1).

2.1. KENYA

In March 2020, the Kenyan government declared a nationwide dusk-to-dawn curfew in response to the COVID-19 pandemic. This was lifted later in the year, but was followed by intermittent reinstatements of curfews and limitations on mobility, largely for the capital region. During this initial period, the government also banned religious and other public gatherings, and encouraged people to work from home and practice social distancing. The first wave of COVID-19 cases occurred between June and August 2020, with a second wave occurring between October and December 2020. By the end of December 2020, there were 92,459 COVID-19 cases. After a third rise in cases occurred between January and March 2021, partial lockdowns, including mobility restrictions and curfews, were reimposed in the most highly affected counties. The pandemic and associated lockdowns caused the Kenyan economy to contract in 2020 by 0.1 percent, compared to a growth rate of 5.4 percent in 2019 (IMF 2020).

In addition to direct measures to curb the spread of COVID-19, the government of Kenya also instituted several policy measures to address the social and economic impacts of the pandemic and associated restrictions. To address rising violence against women, pending court protection orders for victims of GBV were extended, and the President of Kenya ordered an investigation into reports that lockdown restrictions had led to rising violence against women and girls, including rape, domestic violence, female genital mutilation, and child marriage. In May 2020, the Ministry of Health released guidelines deeming healthcare required by victims of GBV to be an essential service. Kenya's State Department for Gender worked with other stakeholders to map new and existing GBV shelters, and they shared information with GBV actors. Makueni County, for example, established a fully resourced GBV shelter. By September 2020, a Cabinet memo was approved to create an interagency program to prevent and respond to GBV in the context of COVID-19. Under this memo, the Cabinet authorized the establishment of toll-free hotlines and online and mobile applications to enable anonymous reporting of GBV and child abuse.

At the start of the pandemic, several social protection programs were expanded, including Kazi Mtaani (Jobs in the Neighborhood)—a public works program aimed at unemployed youth—and the National Hygiene Program (President Kenyatta 2020). Most of these programs, including cash transfer and nutrition support programs, were targeted to vulnerable populations in urban areas, including women and girls in slums and single mothers to help with pandemic-related childcare costs.

Although several measures, mainly tax relief measures, were enacted to provide relief to businesses and entrepreneurs, none were specifically tailored to women, who, in rural areas, largely operate in the informal sector. The government of Kenya also introduced several interventions meant to increase food security during the first lockdown between March and July 2020 (AGRA 2020). These included actions to maintain the supply of produce and ensure minimal disruption to markets, lessen price spikes of key commodities, maintain sufficient food stocks, and support farm input vouchers, extension programs, and processing operations. Digital credit was provided to many farmers to help them maintain consumption.

2.2 NIGER

Unlike in many other countries, the spread of COVID-19 was limited in Niger. In response to the first case of COVID-19 on March 19, 2020, the government announced a state of emergency. Restrictions were gradually lifted starting in May 2020. The largest spike in cases occurred in December 2020 and January 2021, but case numbers plateaued throughout the rest of 2021. Case numbers were low compared to other African countries, and most cases were reported in urban areas. According to the World Health Organization (WHO), Niger had

reported 6,511 cases and 221 deaths by November 8, 2021.

Niger enacted few policy responses to address GBV during the COVID-19 pandemic. With the support of UN Women and the United Nations Fund for Population Activities (UNFPA), the Federal Ministry of Women's Affairs produced radio jingles that promoted COVID-19 safety and hygiene directives, and provided information on ways for victims of sexual and gender-based violence to access resources (AUC-WGDD et al. 2020). The government of Niger also developed a National Preparedness and Response Plan that included measures to address immediate health risks and provide broader economic and social support (Government of Niger 2020). This was estimated to cost the equivalent of 18.4 percent of gross domestic product (GDP). The government implemented key elements of the plan, including temporary tax relief for hard-hit sectors, like hospitality and food service, two months of free utilities for vulnerable households, and distribution of food from the country's strategic reserves. Measures that were not implemented included cash transfers, food-for-work programs, and school feeding programs in emergency zones.

While some social protection elements of the COVID-19 response plan were not implemented, Niger already had policies in place to address the challenges of malnutrition, including the 2020 Support Plan enacted in February 2020. The Plan involved the provision of food rations to groups identified as vulnerable (including children under five and women of child-bearing age), food and cash transfers around the lean season, pricing controls on cereals, cash-for-work programs, and sensitization on good feeding and health practices. In December 2020, efforts were expanded to reach children suffering from severe, acute, and moderate malnutrition (WFP Niger 2020).

The African Development Bank also provided support, including social protection measures for internally displaced persons and refugees. To mitigate the impact of the pandemic and strengthen the resilience of the educational system, The Global Partnership for Education provided US$11 million for the most vulnerable children, including those living in rural areas, girls, and refugee and internally displaced children.

Few policies targeted those working in the agriculture sector, but the African Development Bank provided seeds to thousands of Nigerien agricultural producers ahead of the June/July 2020 planting season.

2.3 RWANDA

Rwanda's first COVID-19 case was reported on March 14, 2020. After the first infections were reported in the country, a lockdown was established that lasted for six weeks. During this period, restrictions included closure of businesses and commercial activities, limits on travel and mobility, and enforcement of guidelines for hygiene and social distancing. Restrictions were gradually eased, but public health guidelines remained in place and lockdowns were reimposed in localities where outbreaks occurred. Unsurprisingly, the pandemic and associated lockdowns caused a decline in the country's GDP in 2020, with significant implications for the incomes and livelihoods of many people. However, expanding the social safety net program and distributing public resources to critical sectors under the National Economic Recovery Plan played a role in mitigating the downturn (Diao et al. 2021). Although case counts remained low throughout 2020, the country experienced two waves of COVID-19 infections in 2021. Infections and deaths first increased in January and February 2021, and then another wave occurred between June and August 2021. According to the WHO, as of November 5, 2021, there were 99,854 reported cases and 1,332 deaths in the country.

The government of Rwanda implemented several support measures to respond to the adverse impacts of the pandemic, including addressing GBV, expanding social protection, and providing agricultural support, but only some of these were gender sensitive. To address issues of GBV, the Isange One Stop Centers (IOSCs)—national police-led centers where

victims of GBV can receive treatment and protection—were kept open, even during the lockdown period. Helplines were made available by a range of institutions, including the Gender Monitoring Office, Ministry of Gender and Family Promotion, Rwanda National Police, Rwanda Investigation Bureau, IOSCs, and the National Public Prosecution Authority. The Rwandan government, in collaboration with other stakeholders such as One UN and civil society organizations (CSOs), also used radio and television programs to raise awareness of GBV.

The government of Rwanda capitalized on its well-established decentralized structures to implement its social protection response, which included distributing food and other essential items to 20,000 families, with a particular focus on female-headed households. To supplement these efforts, local communities with available resources were mobilized to voluntarily donate money, food, and essential items through a community leader. Work requirements for public works beneficiaries were also waived in order to ensure continuity of cash transfers amid social distancing. Other social protection programs providing cash transfers and nutritional support were expanded to more vulnerable families, and Rwanda's community-based health insurance was streamlined to facilitate easy access to health services.

To ensure the supply of food during the pandemic, agriculture and agribusiness activities received a broad exemption from the six-week lockdown, with farming, processing, and marketing of agricultural commodities, inputs, and related services all permitted (Aragie et al. 2021). The Ministry of Agriculture and Animal Resources (MINAGRI) and the Rwanda Fertilizer Company (RFC) provided smallholder farmers with a comprehensive package to help them cope with the impacts of COVID-19. In addition to providing short-term relief, the RFC implemented agricultural development programs, including training on soil- and crop-specific fertilizer application, aimed to help Rwandan farmers become more resilient to future crises. The government also took steps to prevent disruptions to the supply chains for animal feed and the animal feed industry by classifying it as an essential service. It ensured the availability of fertilizer and seeds by requesting that retail shops, distributors, and importers continue operations, while MINAGRI facilitated the issuing of permits to trucks for moving seeds, fertilizers, and other agrochemicals. Additional measures were implemented to support the harvesting and postharvest handling of farm produce to avoid shortages of food in the market, and to facilitate the movement of agricultural workers to participate in producing, processing, and distributing food.

2.4 UGANDA

The first case of COVID-19 in Uganda was reported on March 22, 2020. The number of COVID-19 cases remained low during the first three quarters of 2020, before a first spike toward the end of the year. In 2021, COVID-19 cases were low through mid-May, when the country experienced a second wave that peaked in early September before declining again. A lockdown was imposed in mid-March 2020 and continued until June, after which restrictions began to be lifted gradually. The government reimposed a six-week lockdown in June 2021 as cases began to surge. According to the WHO, as of November 4, 2021, Uganda had reported 126,348 cases and 3,221 deaths.

In response to the pandemic, the Ugandan Ministry of Gender, Labour and Social Development (MGLSD) scaled up the provision of psychosocial support services to GBV survivors and rolled out an assessment of the effects of COVID-19 on women and girls and on GBV services. A national taskforce composed of critical agencies, such as the Ministry of Health and the police force, was established and tasked with overseeing, guiding, and mobilizing resources to fight COVID-19, including a subcommittee to address GBV. The MGLSD and CSOs, in partnership with the UN, developed combined GBV and COVID-19 messages and disseminated them through various channels, including toll-free lines for reporting cases of GBV. The Ugandan President also issued warnings against domestic violence during

the lockdown. Online legal aid services were scaled up; these were mostly managed by CSOs, the police, and the MGLSD. The Uganda Bureau of Statistics conducted a panel survey on COVID-19, which included questions related to violence against women and girls.

The government of Uganda used radio and television programs to raise awareness of measures to protect against the spread of COVID-19. Food parcels were delivered to 1.5 million vulnerable people in the Kampala and Wasiko Districts. Lactating mothers and the sick were prioritized to receive additional rations of powdered milk and sugar. According to the Ugandan Ministry of Relief and Disaster Preparedness and Refugees, beneficiaries included the elderly, the sick, lactating mothers, and commuter taxi drivers in Kampala and the neighboring central district of Wakiso. A child-sensitive social protection program in Uganda provided one-off emergency cash transfers to women and children (citizens as well as refugees) who were impacted by COVID-19 in the West Nile region. Adolescent girls in urban areas were also targeted to receive a cash transfer and mentoring program called Girls Empowering Girls, which was implemented virtually during the pandemic.

Very few policy interventions specifically addressed women's economic and financial needs during the pandemic. The Uganda Development Bank offered low-interest financing to manufacturing, agribusinesses, and other private sector firms, and farmers were provided with e-vouchers to help them access high-quality agricultural inputs, seeds, and fertilizers (FAO 2020b), but these were not targeted specifically to women, and unlikely to reach them. The government authorized existing food markets to continue operations, with conditions related to distancing and designated places of sale. The Ugandan government also supported the distribution of oranges and sweet potatoes to vulnerable communities during COVID-19 (Magezi 2020), allowed the transport of planting materials, and permitted meetings of 5 to 10 farmers with special permission. HarvestPlus Uganda and its partners took advantage of these exemptions to rapidly organize and support farmers' access to planting materials.

3. STUDY BACKGROUND

To identify and monitor the differential effects of the COVID-19 pandemic on women and men in rural households, IFPRI conducted phone surveys in Kenya, Niger, Rwanda, and Uganda. The survey received financial and technical support from FAO, and built on a previous IFPRI study supported by the Feed the Future Initiative of USAID (Alvi et al. 2022a). The purpose of the survey was to measure the impact of the pandemic and lockdown measures on men, women, and their families, including income losses and food insecurity. The surveys also aimed to trace gender differences in responses to the pandemic and associated restrictions, such as the choice of coping strategies, access to public assistance, and changes in the care burden of men and women. Results from the survey may be used to inform a variety of actor groups (such as state and central governments and civil society) on how to design more effective relief strategies that address the specific needs of men and women.

The conceptual framework used to design the survey comes from the Gender, Climate Change and Nutrition Integration Initiative (GCAN). The framework highlights the gender dimensions of climate shocks and stressors, but can also be applied to consider the gendered impacts of other types of shocks and stressors (Bryan et al. 2017; Theis et al. 2019; Bryan, Ringler, and Meinzen-Dick 2023). The impacts of shocks and stressors on people are not only direct; they also follow different pathways and are influenced by various factors including exposure and sensitivity, resilience capacities, decision-making context, and choice of response. Access to savings and assets, for example, supports resilience to the negative impacts of COVID-19, as well as to other shocks and stressors.

The study's questionnaire aimed to capture the extent to which health and economic shocks from COVID-19 led to gender-differentiated outcomes and responses (see Appendix B for an example questionnaire for the first round in Rwanda, which was designed for the FAO-supported survey rounds). The survey focused on monitoring key impacts and outcomes, including food insecurity, dietary diversity, migration and remittances, income disruption, and coping responses over the short and medium term. The questionnaire for the FAO rounds was modified from the original USAID-funded survey to include additional questions on decision-making related to coping responses, social protection, food security, and schooling, among other changes. The study design was reviewed by IFPRI's Institutional Review Board and Rwanda's ethical review committee. This report focuses on the following specific modules in the FAO questionnaire:

- Loss of income and changes in control over income
- Migration of household members and remittances
- Coping measures such as selling assets, using savings, borrowing, and receiving direct transfers
- Changes in employment, labor allocation, and care burden
- Changes in mobility to buy food and seek medical care
- Food insecurity and dietary diversity

In order to assess the gendered impacts of the pandemic on food security, the questionnaire included a modified version of the Food Insecurity Experience Scale survey module (FIES SM). In addition to the standard eight questions, the extended FIES SM included follow-up questions to determine whether the respondent mainly attributed the reported food insecurity experience to the COVID-19 crisis (FAO 2020a). The eight questions were asked in reference to the two weeks

preceding the survey, given that the survey rounds were originally intended to be spaced one month apart. Advanced statistical techniques based on the Rasch measurement model, developed by the FAO's Voices of the Hungry project, were used to validate the data for internal consistency and to convert data into a quantitative measure along a scale of severity, ranging from low to high (Cafiero 2019). Each respondent was assigned two probabilities: 1) the probability of being moderately or severely food insecure and 2) the probability of being severely food insecure, as defined by the two thresholds in the FIES global reference scale.[1]

Each interview lasted between 20 and 30 minutes. The study was implemented using a computer-assisted telephone interviewing system, supported by the SurveyCTO platform. In all countries, respondents received incentives in the form of phone credits for completing each survey round. Care was taken to ensure that survey calls occurred when women were not engaged in other duties. Multiple attempts were made to reach women, since they were often unavailable to take the call or were unreachable on the first try, especially when the phone belonged to other family members, typically the husband, or to neighbors.

3.1 DATA AND SAMPLING

This study relies on phone survey data collected from men and women in rural areas of Kenya, Niger, Rwanda, and Uganda. The sampling frame for the phone surveys was drawn from previous face-to-face surveys, which were conducted with rural households prior to the pandemic. Cell phone numbers were collected during these previous surveys. The phone surveys drew a subsample of 500 households per country from the original face-to-face surveys. Women from half of these households were asked to participate in the interview, while men were invited from the other half, giving a sample of roughly 250 men and 250 women in each country. All respondents were over 18 years of age. Although the study focused on the impacts of COVID-19 on rural women, both men and women were selected for the telephone survey so that their experiences could be compared.

Three phone survey rounds were carried out in Kenya, Niger, and Uganda in 2020 and early 2021 with support from USAID (for a report on these earlier rounds and additional countries, see Alvi et al. 2022a). In these three countries, FAO supported one additional round of data collection in mid-2021 (Table 2). In Rwanda, where no previous phone survey rounds had been conducted for USAID, FAO supported two phone survey rounds in July and September 2021.

Because the samples for the phone surveys were drawn from previous face-to-face survey samples, sampling frames for each country are different and based on the aims of the original studies. The original surveys in Niger and Uganda were household-level surveys. In Kenya and Rwanda, however, the original surveys were designed as

TABLE 2 TIMING OF SURVEY ROUNDS

Countries	Round 1	Round 2	Round 3	Round 4
Kenya	September 2020	October 2020	November 2020	April 2021
Niger	October 2020	December 2020	March 2021	June 2021
Rwanda	July 2021	September 2021		
Uganda	October 2020	December 2020	February 2021	July 2021

Note: Green highlighted cells indicate rounds implemented with FAO support.

1 FAO established a global reference scale based on FIES data collected over three years from 2014 to 2016. This is used as the global standard to set the two reference thresholds of severity for experience-based food insecurity measures—moderate and severe. The SDG Indicator 2.1.2, moderate or severe food insecurity (FImod+sev), is obtained as the cumulated probability of being in the two classes of moderate and severe food insecurity.

TABLE 3 NUMBER OF RESPONDENTS BY SURVEY ROUND, COUNTRY

Countries	Round 1		Round 2		Round 3		Round 4	
	Men	Women	Men	Women	Men	Women	Men	Women
Kenya	261	286	240	263	230	251	243	264
Panel obs.			240	263	230	251	214	239
Niger	307	51	290	113	279	120	350	158
Panel obs.			105	93	113	52	147	17
Rwanda	322	178	278	223				
Panel obs.			199	104				
Uganda	608	483	823	840	510	592	249	306
Panel obs.			547	498	299	319	173	149

Note: In Kenya, households that could not be reached in subsequent rounds were dropped from the sample and not replaced. In Niger, new households were added in each survey round given difficulty reaching respondents, especially women. In Rwanda, households were drawn from a sample of 900 households. In round 2, respondents that could not be reached from the first round were replaced by another household from the sample of 900. In Uganda, there were 664 additional households that were surveyed in round 2 and not in 1. These cases have been removed from round 2. In both Niger and Uganda, in round 2, respondents for some households switched from the husband to the wife to increase the number of women respondents, but we still consider these part of the panel (hence the increased number of women in the panel in this round). The results presented in this report are based on the full sample for each round, not the panel households.

intrahousehold studies, which means that data were previously collected from both the principal male and female in the household. For the phone surveys, each household had only one respondent (man or woman) who was selected randomly. The goal was to follow the same individual across survey rounds. However, given difficulties in reaching the target number of women in some countries and attrition between rounds, households were replaced over time, particularly in Niger, where reaching rural women was especially difficult. Table 3 shows the number of women and men reached in each survey round.

Kenya: The Kenya phone survey builds on a baseline intrahousehold survey completed in person in early 2020, which includes the Abbreviated Women's Empowerment in Agriculture Index. The underlying survey includes questions on agricultural production, perceptions of climate change, adaptation practices, and sources of climate and agricultural information. The survey covers three counties in Kenya (Busia, Laikipia, and Nakuru) where GROOTS Kenya, a grassroots women's organization, operates and an intervention was implemented to deliver video-based information on climate-smart agriculture. The final sample includes members and non-members in the GROOTS area of operation (treatment and control communities). The baseline sample has 719 households, including 714 women and 444 men respondents in the intrahousehold module. Of these 719 households, phone numbers were available for 635 households. From this larger sample, a sub-sample of approximately 600 households was drawn for the COVID-19 phone survey, with approximately half women and half men respondents.

The first round of the phone survey was completed in September 2020, when COVID-19 cases were declining and the government had eased restrictions throughout the country. The second and third rounds were conducted in October and November 2020, respectively, when the caseloads were high in Nairobi but low in rural areas. The last round was conducted in February 2021, when the COVID-19 case rate jumped from 2 percent to 22 percent across the country. A detailed description of the COVID-19 situation and study timeline is provided in Figure 1 of Appendix A.

Niger: The sample for the Niger phone survey draws on a combination of three surveys that cover eight regions: Agadez, Diffa, Dosso, Maradi, Niamey,

Tahoua, Tillaberi, and Zinder. The first survey, Local Economy Effects of Migration, was conducted in 2019 with 600 households in 30 villages in Maradi and Tillaberi. Data were used to assess the impact of migration and remittances on the village economy. Villages were selected purposively to target areas that were more affected by migration, based on the National Survey on Migration that had been conducted by the National Institute of Statistics in 2011. These villages were given more weight in the sample allocation. The dataset contains information about households' socioeconomic characteristics, agricultural production, livelihood and income-generating activities, and food consumption. Because the data were used to build a village-level general equilibrium model, the dataset also includes information on trade (that is, what households sold and bought and from where). Only the head of household was interviewed face-to-face in 2019. About a fifth of the households were female headed. The second survey, Social Network Analysis, was conducted in 2020 with 340 households in 20 villages around Lake Chad in the Diffa region of Niger. For this survey, a two-stage stratified survey was used. Strata consisted of all the villages located in the selected region. In the first stage, the villages were drawn randomly, considering accessibility and security conditions. Larger villages were then segmented, and only certain quarters were selected. Following village selection, a household listing exercise was carried out. In the second stage, 17 households were selected systematically from each village. Surveys were administered to the head of household. For the phone survey, we were able to identify 517 valid phone numbers: 237 from the migration survey (2019) and 280 from the social network survey (2020). To increase the proportion of women respondents, the later rounds included a subset of spouses of the household heads who were interviewed during the first round. For the final phone survey round, respondents from a third survey were added to the sample, given difficulties in reaching rural women in earlier rounds. This survey was composed of participants who took part in the Joint UN Programme Accelerating Progress towards the Economic Empowerment of Rural Women between 2016 and 2021. Given significant attrition across rounds and the addition of new households in each round, few respondents were tracked across rounds.

Data were collected over four phone survey rounds conducted in October 2020, December 2020, February 2021, and April 2021—just before and after the largest COVID-19 wave to hit the country. While 500 households were targeted for interviews in each round, fewer households participated in the first three survey rounds (between 350 and 400 households). Although the survey aimed to reach 50 percent of women respondents, the target was not achieved, given difficulties in reaching women over the phone. The sample was adjusted several times to increase the number of respondents, as well as the share of women respondents. As such, rather than a panel, the data provide individual snapshots during different stages of the pandemic. Figure 2 in Appendix A provides a detailed description of the COVID-19 situation and study timeline.

Rwanda: The sampling frame for this phone survey includes all households with valid phone numbers that were surveyed by the 2019 intrahousehold Women's Empowerment in Agriculture Index (WEAI) baseline survey, which measured the level of women's empowerment across several domains. The survey was conducted by Social Economic Studies, Surveys, Monitoring and Evaluation Consult, Limited (SESMEC Ltd). The 2019 WEAI baseline sample consisted of 10,804 households, of which 5,355 had valid phone numbers. Having access to a cell phone was the criterion for inclusion in the phone survey, and a subsample of 500 households was randomly drawn from an adjusted subsample of 900 households from the original survey. Given the anticipated low response rate for phone surveys in Rwanda, replacement households were selected randomly from the set of 900 households with valid phone numbers. Respondents from the first survey round who were not reached in the second round

were replaced from the subset of 900 households. Approximately 300 households were reached in both rounds, and 200 were replaced in round two. Thus, only the 300 households that participated in both rounds could be used for panel analysis. Although the WEAI baseline survey was nationally representative, the subsample for the COVID-19 survey was not, as it relied only on households with valid phone numbers from rural areas. This limitation is not expected to result in significant bias, since mobile phone penetration in Rwanda is high. Household lists were previously collected by SESMEC and approved for reuse for this study by MINAGRI.

Phone survey data were collected in August 2021, when COVID-19 cases had risen considerably, and again in October 2021, as the rise in caseloads was slowing. The final sample for the phone survey includes households in Kigali City (13.2 percent), Southern Province (25.7 percent), Western Province (15.2 percent), Northern Province (19.8 percent), and Eastern Province (26.1 percent). Figure 3 in Appendix A provides a detailed description of the COVID-19 situation and study timeline.

Uganda: The phone surveys in Uganda leveraged data from an experimental impact evaluation study, which was conducted as part of the Feed the Future AgInputs activity in eight districts: Iganga, Kasese, Kiboga, Luwero, Masaka, Masindi, Mbale, and Mubende. The study evaluated the impact of the e-verification program, which used input package labeling to reduce the prevalence of input counterfeiting. The sample included 240 villages proximate to 120 markets. IFPRI collected three rounds of household survey data targeting farm households in maize-growing districts, with the most recent data collection in September 2017. The project collected detailed information on agricultural livelihoods, use of productivity-enhancing inputs, and shocks. The first three rounds of the COVID-19 phone survey targeted 1,000 households from the original project. The last round, funded by FAO, targeted 500 households from the original subsample of 1,000. In addition to the core COVID-19 phone survey modules, additional questions were added on experiences and coping mechanisms used during the COVID-19 pandemic. These include questions on access to markets, availability and use of agricultural inputs, and decisions on children's schooling as additional coping mechanisms that households may have used. Some rounds also collected data on how the pandemic affected adolescent girls in terms of schooling, labor, and marriage and fertility.

Four rounds of phone surveys were conducted in October 2020, February 2021, April 2021, and June 2021. The first round corresponded with a low number of cases, the second and third rounds followed the first wave of COVID-19 cases, and the last round was conducted during the second surge of cases (Appendix A Figure 4).

3.2 IMPLEMENTATION CHALLENGES AND DATA LIMITATIONS

The phone surveys were not nationally representative, because the samples were linked to previous research projects with distinct objectives. Thus, we cannot make inferences from these data for the countries of study. They may be more accurately viewed as a set of case studies on the impacts of the pandemic within the study countries. Moreover, given that the original face-to-face surveys in all countries did not include phone numbers for every household, and some participants refused to participate in the COVID-19 study, the phone survey samples are not representative of the original study design. In particular, there are potential systematic biases that may be introduced by targeting only households with phone numbers. Households without phones are likely to be poorer, older, and potentially more vulnerable to the negative impacts of COVID-19. In addition, the response rate is lower for phone surveys than in-person interviews, and phone surveys miss the visual cues of face-to-face surveys that enumerators could use to advance the conversation. Thus, it is important to acknowledge

that these challenges introduce selection bias in the results, given that fewer poor and vulnerable households can be reached by phone compared to face-to-face interviews.

As a result of the gendered digital divide, it was particularly challenging to reach rural women over the phone. In SSA, the gender gap in mobile phone ownership is estimated to be 13 percent (GSMA 2021). Even when households have access to a phone, the male head of household is more likely to control it, making it difficult to reach women. In addition, women's phones were more likely to be switched off given COVID-19 related income shocks, some rural areas experienced cell network interruptions or low bandwidth, language challenges occurred with respondents in remote villages where only local dialects are used, and it was difficult to engage elderly women in some of the questions.

In Niger, the most significant challenge was reaching women respondents by phone in rural areas. This problem occurred because the phone did not ring or the respondent did not answer, the person who answered was not the intended respondent, and, above all, telephone numbers for women were lacking. Anecdotal evidence from one of the projects suggests that in parts of rural Niger, phones are often shared by several households. Even when the phone belonged to someone in a household, it was usually controlled by the household head and not the women. Thus, even after drawing from multiple underlying surveys, it took twice as long to reach the same number of respondents as in the other countries, and the target number of women respondents was not reached in any round.

Another implementation challenge was the potentially sensitive nature of some survey questions, such as those related to household conflict, and the difficulty of taking the call in private for some women respondents. Speakerphone usage was high in some countries, and in those cases, sensitive questions were omitted. All questions were carefully framed, and women were asked about their ability to take the call in private, so that the interview would not pose any risks to them. To address women's greater vulnerabilities, care was taken through survey questions to ensure that the phone was not on speaker, based on experiences in early phone surveys in South Asia (Alvi et al. 2022b). Despite the difficulty in reaching vulnerable households and women respondents—and the biases introduced by these challenges—
important lessons can be learned on the gendered impacts of COVID-19, which can strengthen policy responses that support both men and women in rural settings.

Lastly, the data obtained from the phone surveys reflected respondents' perceptions of their experience with the pandemic, not direct measures of income losses and food security. Previous studies have shown that subjective questions about income losses, consumption changes, and food security may not appropriately reflect the actual impact of shocks such as the COVID-19 pandemic (Hirvonen, de Brauw, and Abate 2021). In many cases, respondents may overestimate the role of the pandemic on changes in welfare outcomes.

4. GENDERED IMPACTS OF THE COVID-19 PANDEMIC ON RURAL MEN AND WOMEN BY COUNTRY

4.1 KENYA

4.1.1 BACKGROUND ON RESPONDENTS' CHARACTERISTICS

Women represented 52 percent of the study sample across all rounds in Kenya. Men respondents were far more likely to report being married (98 percent) and heads of household (91 percent) compared to women (Appendix A Table 1). Among women respondents, 60 percent reported being married and 47 percent reported being household head. Women were more likely than men to report not having any formal schooling (16 percent compared to 3 percent of men, statistically significant) and men also reported higher levels of educational achievement (17 percent of men and 8 percent of women had completed a secondary level of education).

Respondents were asked about their occupation in the first and last survey rounds. The majority of men and women respondents in both rounds reported that their main occupation was farming, including producing crops and raising livestock on their own farms. In the first round, 78 percent of men and 79 percent of women reported this activity as their main source of livelihood, and in the fourth round, 76 percent of men and 72 percent of women reported this. The differences in participation in agricultural occupations between men and women were statistically significant in both rounds, suggesting that women's involvement in own farming declined more throughout the pandemic relative to men. Women were more likely to report engaging in casual labor in both rounds (8 percent of women compared to 4 percent of men in round one, and 15 percent compared to 6 percent in round four), while men were more likely to report engaging in off-farm activities in round four (14 percent compared to 3 percent). Women were more likely to report being unemployed (4 percent and 5 percent in rounds one and four, respectively), compared to 1 percent of men in both rounds.

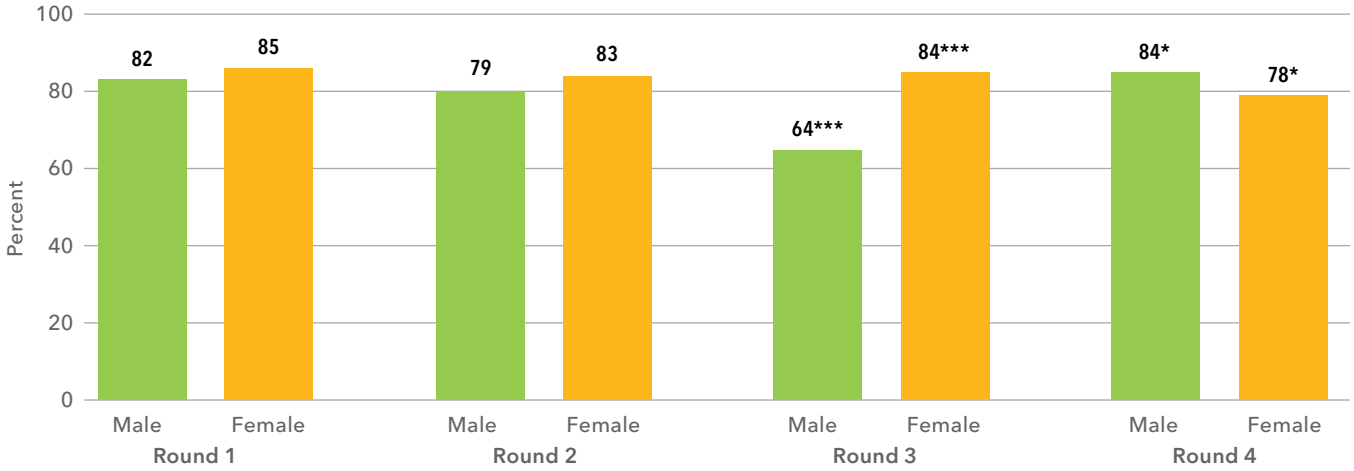
4.1.2 INCOME LOSS, EMPLOYMENT, TIME BURDEN, AND COPING STRATEGIES (BY LIVELIHOOD TYPE)

A high proportion of households experienced income losses due to the COVID-19 pandemic (Figure 1). Women were slightly more likely to report pandemic-related income losses in the first three rounds (and especially in round three, November 2020), while men were more likely to report income losses in round four (February 2021) when COVID-19 cases were spiking during the second wave. However, gender differences in reported income loss were only statistically significant in rounds three and four (Figure 1).

The smaller share of men and women respondents who were primarily engaged in other livelihood activities (such as casual labor; processing, marketing, or trading activities; and off-farm businesses) were more likely to report experiencing income losses compared to those who reported farming as their main occupation in both rounds one and four (when these data were collected). This suggests that these livelihood activities were more vulnerable to income shocks from the pandemic (results statistically significant in both rounds) (Figure 2).

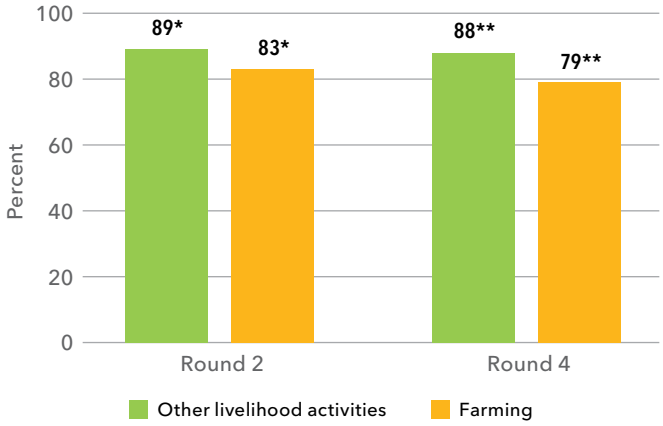
In later survey rounds, fewer respondents reported being engaged in productive work in the week preceding the survey. A significantly smaller share of women reported working for income across all survey rounds (Figure 3, results statistically significant in all rounds). This could be linked to the spike in COVID-19 cases during rounds two and three (October–November 2020) and to seasonal trends. At that time, people may have chosen to stay home

FIGURE 1 SHARE OF HOUSEHOLDS THAT EXPERIENCED INCOME LOSS DUE TO COVID-19, BY SEX OF RESPONDENT, KENYA



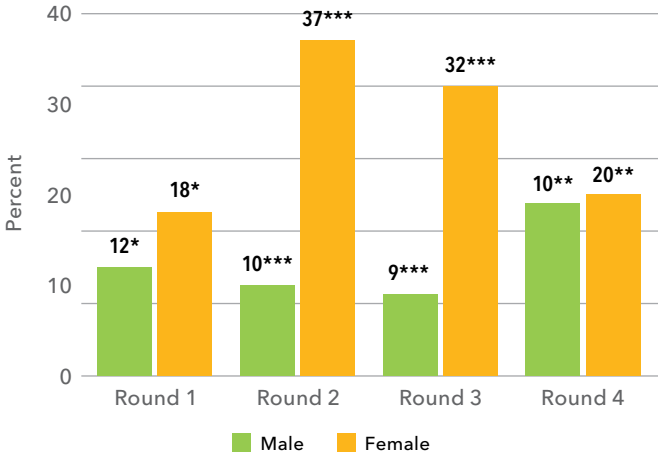
Note: *** p<0.01, ** p<0.05, * p<0.1.

FIGURE 2 SHARE OF HOUSEHOLDS THAT EXPERIENCED INCOME LOSS DUE TO COVID-19, BY PRIMARY OCCUPATION, KENYA



Note: *** p<0.01, ** p<0.05, * p<0.1. Other livelihood activities refer to off-farm activities, such as casual labor and trading.

FIGURE 3 SHARE OF RESPONDENTS THAT REPORTED NOT WORKING FOR INCOME DURING THE WEEK BEFORE THE SURVEY, BY SEX, KENYA



Note: *** p<0.01, ** p<0.05, * p<0.1.

despite the relaxed restrictions. By round four, the share of respondents reporting that they worked in the last week had risen to almost the same level as in round one. However, large shares of men and women reported in round four that their work had changed due to COVID-19 (73 percent of men compared to 62 percent of women, statistically significant difference). For both men and women, the greater difficulty in finding work due to the pandemic was the most common reason for the change (Appendix A Table 8).

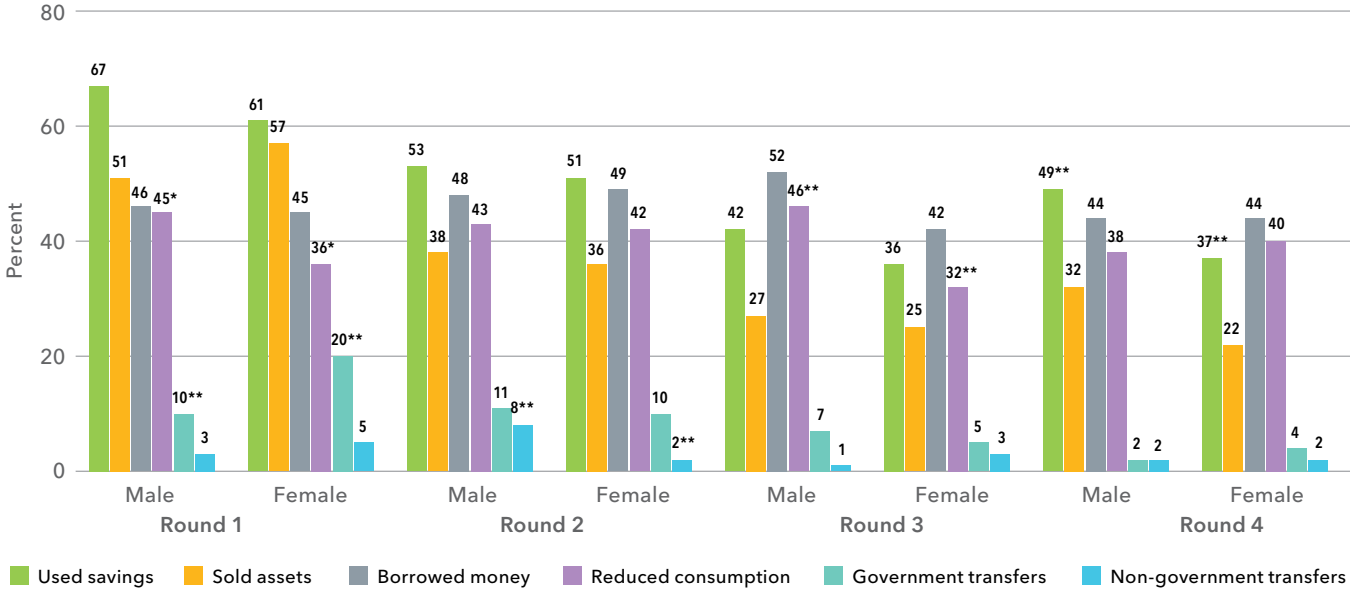
Respondents were also asked to compare the amount they currently work with the amount of time they worked before the pandemic (more, less, or the same as before). In rounds one through three, respondents were more likely to report working about the same or less than before the pandemic. By round four, however, more respondents reported an

increase in time spent working compared to pre-COVID times, presumably to recover income losses experienced during the crisis. Across rounds, women were more likely to report working less than before the pandemic, with the exception of round three, when a slightly larger share of men reported working less than before (results statistically significant) (Appendix A Table 8).

When asked about how the time spent caring for other household members compared to pre-pandemic times, roughly half of respondents reported that the care burden had increased. About 30 percent reported that it had not changed substantially. While women were less likely to work for income compared to men, they reported spending more time caring for others in their household in the last 24 hours across survey rounds (statistically significant difference). Men reported spending between three and four hours per day caring for others, while women reported spending an average of four to five hours per day across survey rounds. Respondents were also asked to compare the amount of time they spent providing care during the pandemic with the pre-pandemic period. Results showed women were more likely than men to report spending more time caring for others in rounds one and three, while the results were not statistically significant in rounds two and four.

The use of savings was the most important coping strategy to deal with pandemic-related income losses in rounds one and two. In round one, 67 percent of men and 61 percent of women reported using savings, while in round two, 53 percent of men and 51 percent women did so (Figure 4). This strategy declined in rounds three and four, particularly for women, as work activities increased and savings were depleted. The share of men and women reporting the use of savings was not statistically different during the first three rounds. However, by the fourth round, men were more likely to report using savings as a coping strategy (49 percent compared to 37 percent, statistically significant), suggesting that savings were more quickly depleted for women. Men were more likely to report using their own savings in rounds two and three (Appendix A Table 7). Men were also more likely to report joint decision-making on the use of savings, while women were more likely to report that they decided to use savings on their

FIGURE 4 COPING STRATEGIES USED BY HOUSEHOLDS TO DEAL WITH INCOME LOSS, BY SEX OF RESPONDENT, KENYA



Note: *** p<0.01, ** p<0.05, * p<0.1.

own, when this question was asked in round four (Appendix A Table 6).

Selling assets was another important strategy for both men and women in round one, with 51 percent of men and 57 percent of women reporting the sale of assets to deal with income losses. The share of men and women respondents that reported asset sales declined in later rounds. As with savings, assets may have been depleted later in the pandemic. The difference between the share of men and women reporting sales of assets was not statistically significant in the first three rounds and was only marginally significant in round four (at slightly more than 10 percent). Men were more likely to report that their own assets were sold across the first three rounds, while more women reported that their own assets were sold in round four (Appendix A Table 7). However, the differences were not statistically significant. As with savings, men were more likely to report deciding to sell assets jointly with their spouse, while women were more likely to report making the decision to sell assets on their own in round four (Appendix A Table 6).

Borrowing remained a relatively stable coping strategy for men and women across rounds, with between 41 percent and 49 percent of men and women reporting the use of this strategy in each round. There were no statistically significant differences in the share of men and women who reported borrowing as a coping strategy in any round. Only a small share of respondents borrowed from banks, money lenders, or cooperative banks. The primary sources of lending were friends and family, followed by self-help and village savings groups. Some respondents reported receiving funds through lending apps, with men more likely to report using apps to borrow money in rounds two through four (Appendix A Table 5). Very few respondents borrowed from commercial banks or money lenders. A small share of households reported receiving government transfers, especially during earlier survey rounds. The majority of the women sampled—88 percent—reported that they made the decision to borrow on their own, compared to 42 percent of men (statistically significant difference) in round four (Appendix A Table 6). Men were more likely than women (57 percent compared to 12 percent) to report that they made the decision to borrow jointly with their spouse.

Women were more likely to report receiving government transfers in round one, when 20 percent reported receiving this support, as compared to 10 percent of men (statistically significant, Figure 4). The share of men and women reporting that they received government transfers declined over time, to as low as 2 percent of men and 4 percent of women in round four.[2] The share of both men and women respondents who reported reducing food consumption remained relatively high, at between 33 percent and 46 percent of respondents across survey rounds. Men were more likely to report reducing consumption than women in rounds one and three (statistically significant).

In round four, men and women were asked who decided to employ certain coping strategies in response to pandemic-related income losses. Men were more likely to report that they made the decision jointly with their wives to use savings, sell assets, or borrow money, while women respondents were more likely to report deciding by themselves (statistically significant) (Appendix A Table 6).

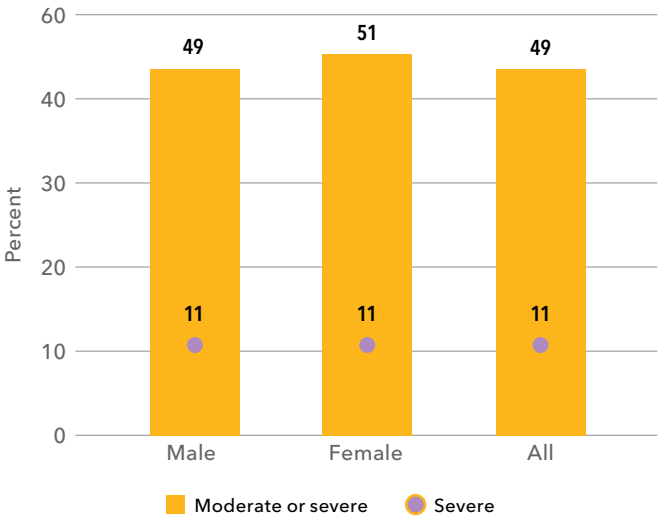
4.1.3 FOOD SECURITY AND DIETARY DIVERSITY

The pandemic and associated lockdowns also had an impact on food security. We report only on the results from round four, where the full survey module for the FIES was included, along with questions related to whether respondents attributed food security impacts directly to COVID-19.

2 The questions on receiving government and NGO transfers were framed to the individual respondent: "Did **you** receive a transfer, as cash or in-kind, from the government to deal with the loss of income?" However, respondents may have understood the question to refer to the household. Thus, we present the sex-disaggregated results with this caveat.

The results showed that the prevalence of moderate or severe food insecurity was 49 percent, while the prevalence of severe food insecurity was 11 percent. Figure 5 displays the prevalence of moderate or severe food insecurity and of severe food insecurity in Kenya overall and by sex. Data suggest that women were slightly more likely to experience moderate or severe food insecurity (51.24 percent of women as compared to 48.51 percent of men), but this difference is not statistically significant. This implies that there may be little gender-based discrimination in accessing adequate food between the sexes.

FIGURE 5 PREVALENCE OF MODERATE OR SEVERE FOOD INSECURITY AND OF SEVERE FOOD INSECURITY, OVERALL AND BY SEX, KENYA



Note: These data were collected in round four.

For each of the eight standard questions in the FIES SM, follow-up questions were asked to gauge how various experiences of food insecurity related specifically to the pandemic. Overall, 62 percent of respondents attributed their experiences of food insecurity to the COVID-19 pandemic. A marginally higher share of rural women considered COVID-19 to be the main driver of their food insecurity experience, compared to rural men (66 percent and 61 percent, respectively), but this difference is not statistically significant.

While there were no differences between men and women in food insecurity experiences, there were differences in diet quality. Minimum dietary diversity for women (MDD-W) was calculated for men and women respondents based on a 24-hour recall period to assess impacts on diet adequacy. In the early rounds, men were more likely to report achieving diet adequacy (66 percent in round one and 65 percent in round two), that is, having consumed at least five food groups in the previous 24 hours (results statistically significant). The share of women with adequate diets was 47 percent in rounds one and two, 59 percent in round three, and 43 percent in round four. The most common food groups consumed were grains, dark leafy vegetables, and dairy products. Around half of respondents reported consuming roots and tubers, pulses, and other vegetables across rounds. Around one-third reported consuming vitamin A–rich fruits and vegetables and less than one-quarter consumed meat, poultry, fish, or eggs; or other fruits.

4.1.4 CHILDREN'S EDUCATION

On March 15, 2020, the Kenyan government ordered all schools and higher education institutes closed as a precautionary measure to contain the spread of COVID-19. Although the surveys in Kenya commenced after the partial reopening of schools in September and October 2020, findings suggest that children's education continued to suffer. Around 98 percent of boys and 99 percent of girls ages 5 to 18 were attending school before the lockdown. The proportion of students in school fell to 33 percent of boys and 29 percent of girls in November 2020. Lower attendance in November and other months is attributable to the surge in COVID-19 cases. Parents reported that it was unsafe to send their children to school during this time. Only a very small proportion of students (4–5 percent) were attending online classes during the November 2020 survey round. In the fourth survey round (February 2021), more than 75 percent of respondents reported that the schools were open. Among those who reported that schools

were not open, 98 percent said they would send their children back to school once they opened.

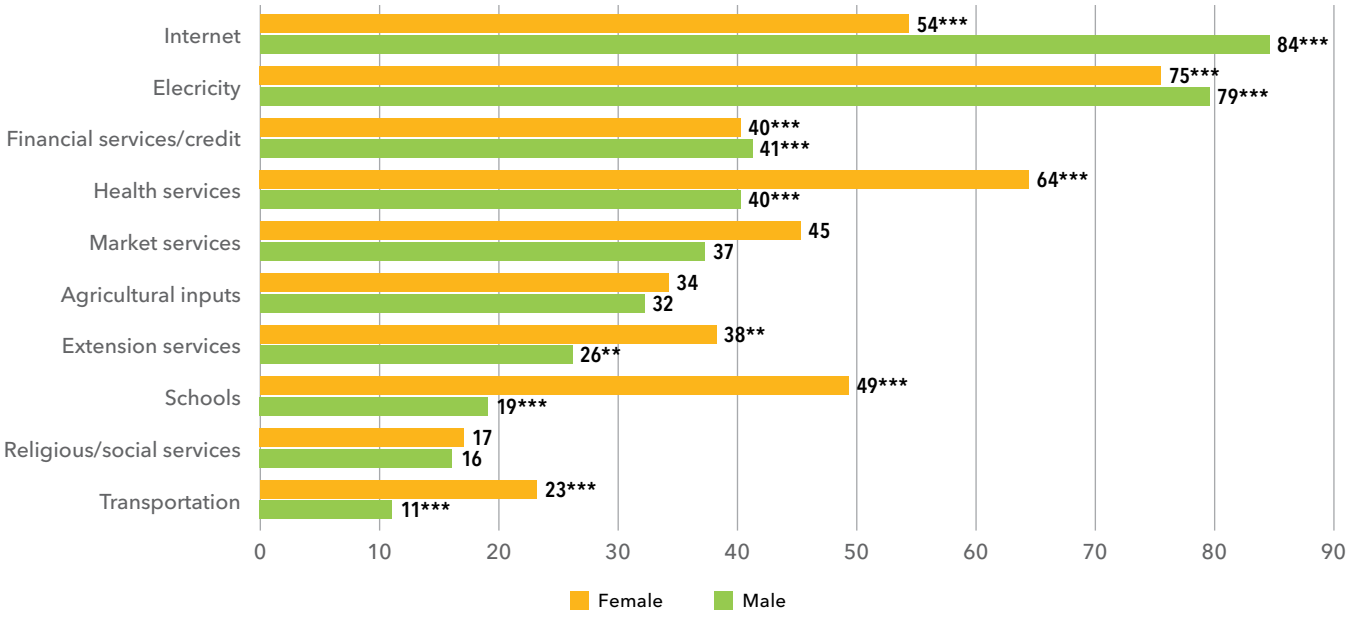
4.1.5 MIGRATION AND REMITTANCES

In round one, respondents were asked whether any household members who had previously migrated for work had returned home due to the pandemic. Follow-up questions on migration were asked in rounds two and four. In round one, roughly 25 percent of households reported having at least one family member who had migrated and lived away from the homestead during the previous calendar year. Among those households, 78 percent reported having at least one male household member who had migrated, while 38 percent reported having at least one female household member who had migrated. Respondents further reported that 23 percent of male migrants and 14 percent of female migrants returned home due to the pandemic. The return of family members affected the level of remittances received by the household in rounds one and four, with 76 percent and 79 percent of affected households reporting a decline in the level of remittances compared to pre-pandemic times (Appendix A Table 11).

4.1.6 MOBILITY AND ACCESS TO SERVICES

Respondents were asked about their mobility during rounds one through three of the survey[3] and about their access to services in round four. The vast majority of men and women respondents reported more limited mobility due to the pandemic, with between 87 and 92 percent reporting mobility challenges across rounds. Men were slightly more likely to report overall mobility challenges in accessing goods and services in round two (88 percent compared to 87 percent) while women were more likely to report limited mobility during the fourth survey round (92

FIGURE 6 SHARE OF RESPONDENTS THAT WERE NOT ABLE TO ACCESS SELECT SERVICES DURING THE PANDEMIC, BY SEX, KENYA



Note: *** p<0.01, ** p<0.05, * p<0.1. Data from round four only.

3 To understand respondents' perceptions of their overall mobility changes due to the pandemic, they were asked, "Are you able to get around more, less, or about the same as before due to COVID-19" in each survey round. See Appendix A Table 12

percent compared to 87 percent, results statistically significant; Appendix A Table 12).

Men and women also reported having more limited access to specific services during the pandemic, as shown in Figure 6. Women were more likely to report not having access to most types of services; their reduced access to health, extension, and transportation services during the pandemic is notable compared to men (results statistically significant).

4.2 NIGER

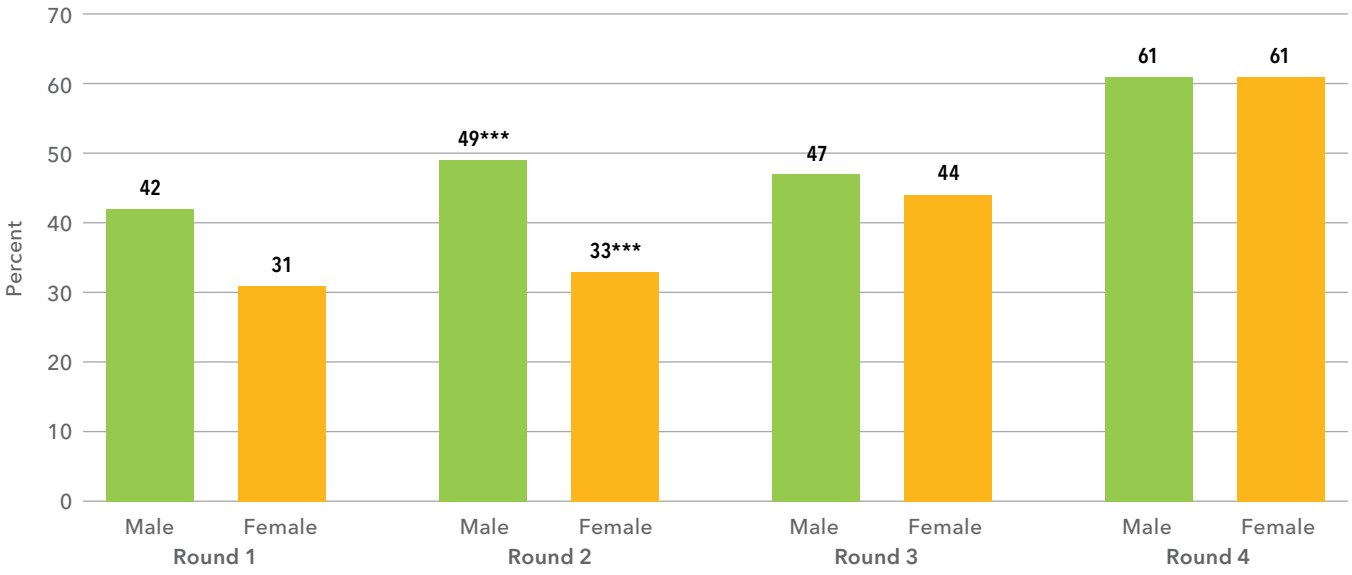
4.2.1 BACKGROUND ON RESPONDENTS' CHARACTERISTICS

While the majority of households were involved in farming, there were differences in the primary occupation reported by men and women (Appendix A Table 13). Across survey rounds, between 60 percent and 80 percent of men reported farming (crop and/or livestock production) as their main livelihood activity, while only 33 to 57 percent of women reported the same. A significant share of men and women (between 12 percent and 25 percent) also reported engaging in self-employment activities across rounds, and between 5 percent and 10 percent of men and women engaged in casual labor as a primary occupation. Women were much more likely than men to report being unemployed; the share of women who reported being unemployed was 14 percent, 35 percent, 37 percent, and 22 percent in rounds one through four, respectively, while the share of men reporting unemployment was 1 percent or less across all rounds.

4.2.2 INCOME LOSS, EMPLOYMENT, TIME BURDEN, AND COPING STRATEGIES (BY LIVELIHOOD TYPE)

Fewer households reported income losses in Niger compared to the other countries in this study, given that the pandemic did not surge as it did in other parts of the region and the world, and there was no lockdown affecting income generation. In round one, only 42 percent of men and 31 percent of women respondents reported income losses due to COVID-19 (Figure 7). The shares of men and women experiencing an income shock rose to 61 percent for both in round four, following the December 2020–January 2021 surge in cases. Men were more likely than women to report income losses during rounds one

FIGURE 7 SHARE OF HOUSEHOLDS THAT EXPERIENCED INCOME LOSS DUE TO COVID-19, BY SEX OF RESPONDENT, NIGER



Note: *** p<0.01, ** p<0.05, * p<0.1.

through three, but the difference was only statistically significant in round two. In round four, equal shares of men and women respondents reported experiencing income losses due to the pandemic.

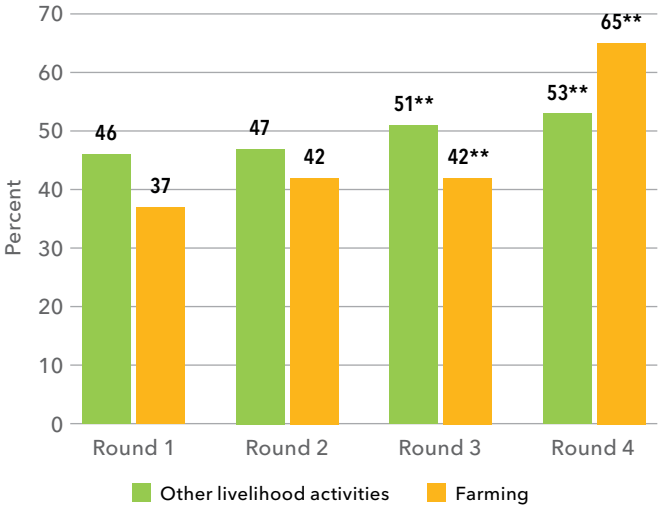
There were significant differences in income losses by occupation (Figure 8). Men and women who were primarily engaged in agriculture were less likely to report income losses compared to the smaller share of respondents who reported casual labor, self-employment, or salaried work as their primary occupation during rounds one through three. However, the difference was only statistically significant in round three. In round four, households engaged in farming as their primary occupation were more likely to experience income losses compared to other occupations, and the results were statistically significant. While the supply of agricultural goods was not directly affected by the pandemic, lockdowns and income losses among farming households likely reduced consumer demand, triggering the closure of restaurants and hotels, and other supply chain disruptions (Andam et al. 2020). Among respondents who reported farming as their main occupation, men were more likely than women to report income losses across all survey rounds, but the difference was not statistically significant.

The data show that most men and women reported working the same amount or less than before the pandemic (Appendix A Table 20). Following the December–January wave of cases (coinciding with round three), 65 percent of men and 73 percent of women reported working the same as before the pandemic, while only 26 percent of men and 21 percent of women reported working less. Respondents noted increased workloads during COVID-19 in round four, when 22 percent of men and 12 percent of women reported working more hours in the previous week than before the pandemic. Still another 33 percent of men and women reported working less, and 45 percent of men and 51 percent of women reported working the same as before in this round (Appendix A Table 20).

The share of men that were not working increased from 8 percent in round one to 23 percent in round two, but then declined to 12 percent in round four. The share of women that were not working increased from 18 percent in round one to 58 percent in round two before dropping to 30 percent in round four, with significant differences across the groups (Figure 9).

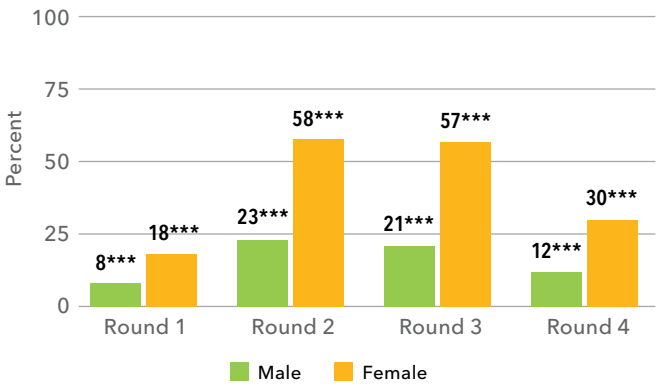
When asked about how the time spent caring for other household members compared to pre-

FIGURE 8 SHARE OF HOUSEHOLDS THAT EXPERIENCED INCOME LOSS DUE TO COVID-19, BY PRIMARY OCCUPATION, NIGER



Note: *** p<0.01, ** p<0.05, * p<0.1. Other livelihood activities refer to off-farm activities, such as casual labor, trading and other activities.

FIGURE 9 SHARE OF RESPONDENTS THAT REPORTED NOT WORKING DURING THE WEEK BEFORE THE SURVEY, BY SEX, NIGER



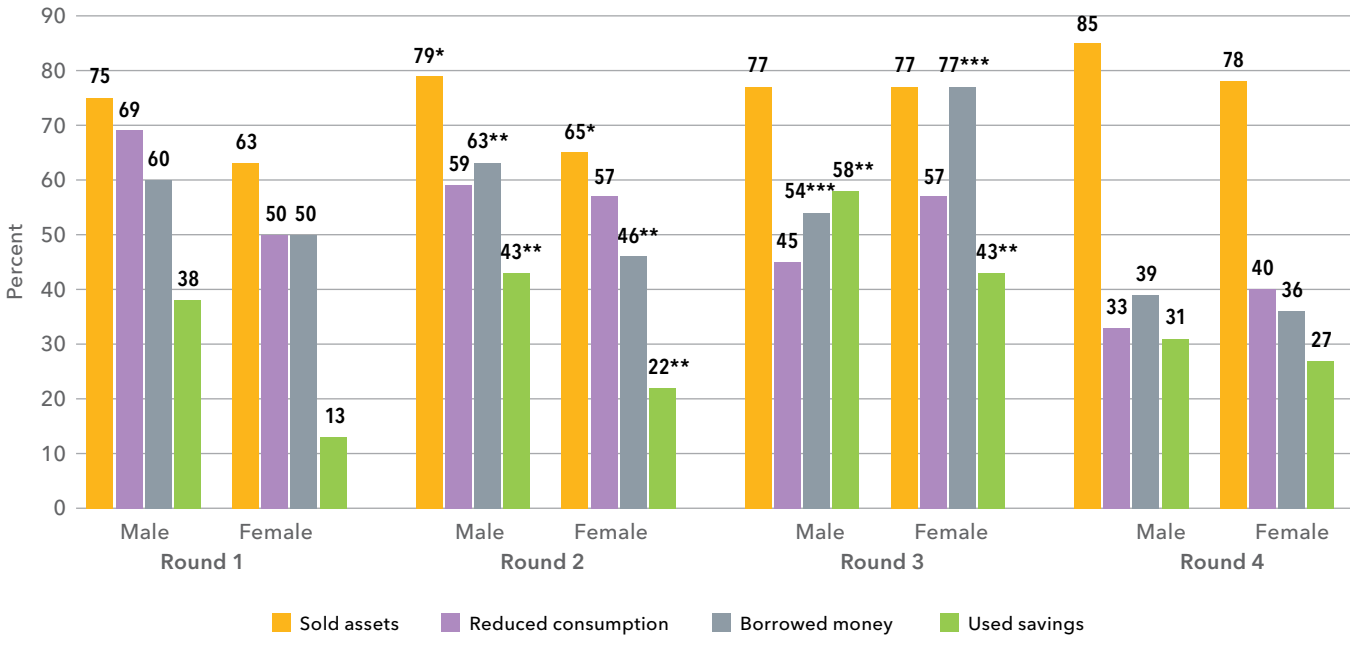
Note: *** p<0.01, ** p<0.05, * p<0.1.

pandemic times, between 10 and 20 percent of respondents reported that the care burden had increased across survey rounds. While women were less likely to work for income compared to men, they reported spending more time caring for others in their household in the last 24 hours across all survey rounds (statistically significant difference). Men reported spending between four and six hours per day caring for others, while women reported spending an average of 7 to 12 hours per day across survey rounds (Appendix A Table 21).

Among men and women who reported income losses, coping strategies varied across rounds and by sex (Figure 10). Selling assets was the most commonly reported strategy to deal with income loss across all survey rounds, followed by reducing consumption and borrowing money. In rounds one and two, more men than women reported reducing consumption, although the difference was not statistically significant. Borrowing money remained an important strategy for men and women throughout the pandemic, especially during the first three survey rounds. Men were generally more likely to report selling assets and using savings. In round three, after the spike in COVID-19 cases (February 2021), women reported larger reductions in food consumption and borrowing compared to men. The difference in the share of men and women reporting borrowing was statistically significant in rounds two and three. The most common sources of borrowing were relatives and friends, and traders or shopkeepers for both men and women (Appendix A Table 18). Few respondents had access to microcredit, and none reported borrowing from other formal sources of credit, such as banks.

The reliance on selling assets as the most important coping strategy differs from other countries sampled in this study, where households first used their savings. In Niger, the use of savings was generally higher among men, and the difference was statistically significant in rounds two and three. The use of savings increased as a coping strategy in round three after the largest COVID-19 wave and probably after assets were sold, especially among women in round three, compared to earlier rounds. Only a small number of respondents reported

FIGURE 10 COPING STRATEGIES USED BY HOUSEHOLDS TO DEAL WITH INCOME LOSS, BY SEX OF RESPONDENT, NIGER



Note: *** p<0.01, ** p<0.05, * p<0.1.

receiving cash transfers from the government or NGOs, and these ended with round two, before COVID-19 case numbers increased.

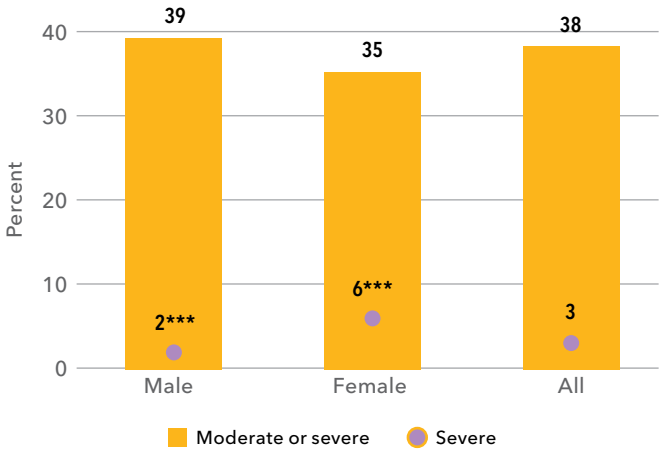
Men were more likely to report selling their own assets and savings across all survey rounds, while women were more likely to report the use of savings and assets owned jointly or by their husbands (Appendix A Table 17). Men respondents were also more likely than women to report independently making the decision to borrow money, sell assets, or use savings across rounds, while women were more likely to report making joint decisions on coping strategies (Appendix A Table 19).

4.2.3 FOOD SECURITY AND DIETARY DIVERSITY

While the pandemic had more limited impacts on income and employment in Niger, large shares of men and women reported experiencing food insecurity. In round four, when the full set of FIES questions was asked, the incidence of moderate or severe food insecurity was 38 percent in Niger, while the prevalence of severe food insecurity was 3 percent (full sample including both men and women respondents). The results show statistically significant differences (at the 1 percent level) in the share of men and women reporting severe food insecurity in round four (6 percent of women compared to 2 percent of men). While men were more likely to report moderate or severe food insecurity, the difference was not statistically significant (Figure 11). The results suggest that a small share of rural women are less able to secure sustainable strategies to address poor access to nutritious food and are more likely to experience severe food insecurity as a result.

Among all respondents in Niger, 46 percent credited their recent experiences of food insecurity to the COVID-19 pandemic. Slightly more rural men cited the pandemic as the cause of their food insecurity compared to rural women (48 percent and 43 percent, respectively). However, this difference is not statistically significant.

FIGURE 11 PREVALENCE OF MODERATE OR SEVERE FOOD INSECURITY AND OF SEVERE FOOD INSECURITY, OVERALL AND BY SEX, NIGER



Note: *** p<0.01, ** p<0.05, * p<0.1. These data were collected in round four.

MDD-W was calculated for men and women respondents to assess impacts on diet adequacy based on a 24-hour recall period. Across rounds, 22 percent, 43 percent, 47 percent, and 42 percent of women, respectively, met the minimum requirement to achieve diet adequacy of five food groups consumed in the previous 24 hours (Appendix A Table 22). On the other hand, 42 percent, 47 percent, 42 percent, and 37 percent of men across rounds one through four, respectively, met the minimum standard for diet adequacy of five food groups consumed. The difference in the share of men and women reporting diet adequacy was only statistically significant in round one, where men were 20 percentage points more likely to achieve diet adequacy. The most common food groups consumed were cereals, leafy vegetables, and other vegetables. Legumes were also heavily consumed in some survey rounds. Between one-quarter and one-third of respondents reported consuming dairy and nuts and seeds, while less than one-quarter consumed meat, fish, or poultry across survey rounds. Eggs were not consumed. Most men and women respondents reported having access to fruits and vegetables during all survey rounds.

4.2.4 CHILDREN'S EDUCATION

Schools closed nationwide during the beginning of the pandemic, but reopened in October 2020 without any further disruptions. Thus, the phone survey rounds did not coincide with periods of school closures in the country. Questions related to child schooling were asked in rounds two and four of the phone survey. The data show that 27 percent of boys and 21 percent of girls were not attending school in the fourth round. The main reasons for lack of attendance were that children had started to work, the family needed help at home and in their businesses, and households did not have enough funds to afford school fees. While these reasons are not directly related to COVID-19, pandemic-related income losses may have played a role in households' decisions to keep children out of school.

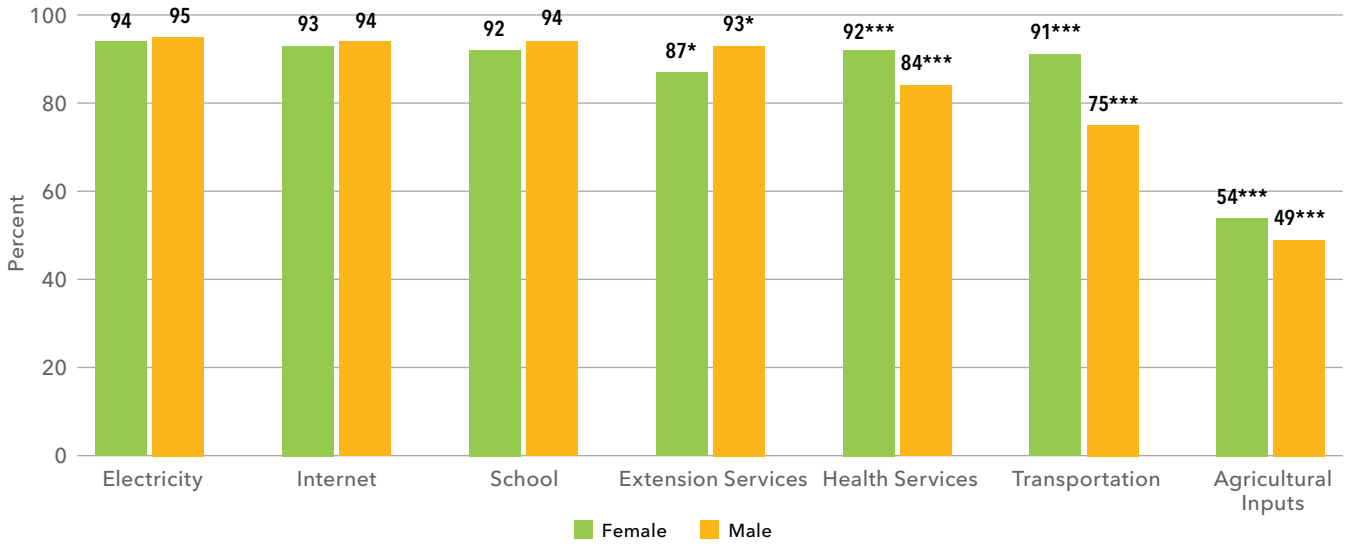
4.2.5 MIGRATION AND REMITTANCES

In all survey rounds, respondents were asked whether any household members who had previously migrated for work had returned home due to the pandemic. In every round, almost all households reported having at least one male family member who migrated and lived away from the homestead during the previous calendar year (Appendix A Table 23). The share of households reporting that migrants had returned home due to the pandemic was highest in round one at 70 percent of respondents. This share declined to 40 percent in round two and 26 percent in round three, but rose to 35 percent in round four. Very few households reported having female migrants during the previous calendar year—less than 5 percent of households across survey rounds—illustrating that migrating for work is not common among women in Niger. The few female migrants largely returned in rounds one and two due to the pandemic, while none returned in rounds three and four. The return of migrants due to the pandemic resulted in a loss of remittances, with 30 percent, 36 percent, 36 percent, and 7 percent of households across rounds one through four, respectively, reporting a decline in the level of remittances compared to pre-COVID times.

4.2.6 MOBILITY AND ACCESS TO SERVICES

In all the rounds, respondents were asked about their ability to undertake a number of activities and access

FIGURE 12 SHARE OF RESPONDENTS THAT REPORTED NOT BEING ABLE TO CARRY OUT ACTIVITIES OR ACCESS SERVICES DURING THE PANDEMIC, BY SEX, NIGER



Note: *** p<0.01. ** p<0.05. * p<0.1. Data from round four only.

key services during the pandemic. Across all rounds, men were more likely to report engaging in buying and selling food, working outside the home, and attending meetings (almost all differences are statistically significant). The only activity women were more likely to engage in than men was collecting water (Appendix A Table 24). When asked about how mobility to perform these activities compared to pre-pandemic times, men were more likely than women to report mobility restrictions due to COVID-19 in rounds one, two, and four. These results suggest that while women were less likely to carry out daily tasks in public, these mobility restrictions are not attributable to the pandemic but are more likely due to social norms that limit women's movement in the study communities. Similarly, women reported having less access to goods and services, such as health, transportation, and agricultural inputs during the pandemic compared to men (Figure 12). However, women's limited access is not likely attributable to pandemic-related restrictions but rather related to gender inequalities driven by social norms.

4.3 RWANDA

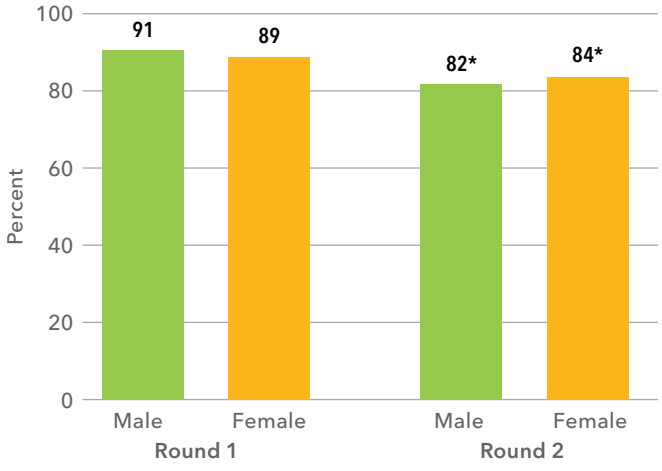
4.3.1 BACKGROUND ON RESPONDENTS' CHARACTERISTICS

Approximately 40 percent of respondents were women. The average age was 43 years for both men and women interviewed (Appendix A Figure 3). Among both men and women, more than 80 percent were married, and, in the first round, 64 percent of households were headed by men. A small proportion of respondents—9 percent of men and 7 percent of women—had no formal education, while 36 percent of men and 37 percent of women reported completing primary school. The majority of households were involved in crop production and/or livestock raising (79 percent in round one and 81 percent in round two). Across the two rounds, roughly equal shares of men and women reported farming as their main occupation. A smaller share of households were primarily wage laborers (9 percent and 6 percent in rounds one and two, respectively) or self-employed (5 percent in round one and 4 percent in round two). Few respondents relied primarily on processing, marketing, and trading activities or salaried work for their livelihoods. In rounds one and two, 3 percent and 5 percent of respondents, respectively, did not work for income in the week prior to the interview. Women were slightly more likely to report not working for income in both rounds.

4.3.2 INCOME LOSS, EMPLOYMENT, AND COPING STRATEGIES (BY SEX)

While the most stringent economic lockdowns were enacted at the start of the pandemic, the majority of women and men respondents still reported income losses in August and October 2021, coinciding with the rise and subsequent slowdown of the pandemic's second large wave. Approximately 90 percent of both men and women respondents reported experiencing income losses during the first survey round (Figure 13), with no statistically significant gender differences. The share of households experiencing income losses declined slightly as the second wave subsided, with more than 80 percent of men and women respondents reporting losses during the second survey round. Respondents across all occupations reported income losses, and there were no

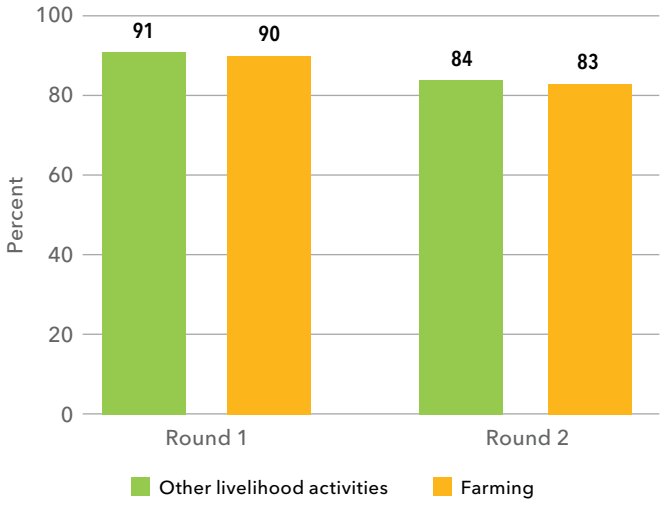
FIGURE 13 INCOME LOSS BY SEX, RWANDA



Note: *** p<0.01, ** p<0.05, * p<0.1.

statistically significant differences between respondents primarily engaged in own farming versus other livelihood activities (Figure 14). In round two, 83 percent of households engaged in farming reported income losses. Women were slightly more likely than men to report income losses from farming activities, but the difference was not statistically significant.

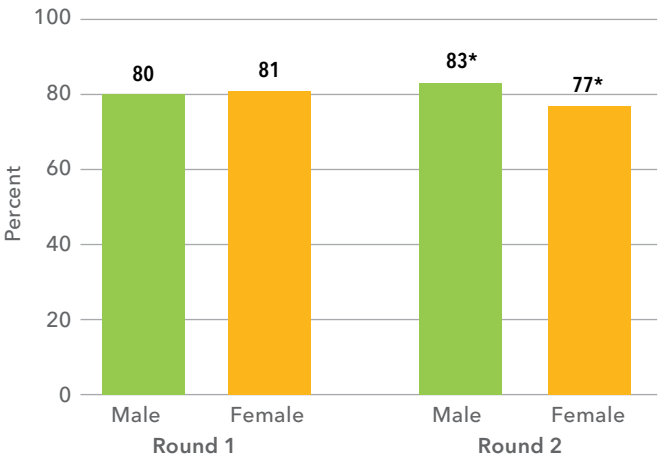
FIGURE 14 INCOME LOSS BY TYPE OF LIVELIHOOD, RWANDA



In both rounds, more than 75 percent of men and women reported that their work had changed due to the pandemic (Figure 15). Major reasons for the change included staying home to avoid illness and difficulty finding work. Despite these difficulties, both men and women reported working more than they did before the pandemic, presumably to make up for income losses. During rounds one and two, 87 percent and 79 percent of men, respectively, reported working more in the last week, compared to 69 percent and 78 percent of women (gender difference not statistically significant; Appendix A Table 32). When asked about how the time spent caring for other household members had changed compared to pre-pandemic times, more than 75 percent of rural women and men in all the rounds reported spending more time on care.

To cope with income losses, men and women respondents in Rwanda used savings, sold assets, borrowed money, and sought alternative jobs (Figure 16). There were no statistically significant differences between the share of men and women who used savings as a coping strategy in either round. While the share of both men and women respondents who reported using savings declined from round one to round two, this remained the most important coping strategy. In both survey rounds, between 66 percent and 73 percent of men and women, respectively, also reported consuming less food due to income losses, and there were no significant gender differences. Thirty-four percent and 38 percent of men reported reducing expenditures in rounds one and two, respectively, compared to 20 percent and 28 percent of women in these rounds, respectively (statistically significant gender differences). Men were more likely to sell assets and seek alternative or additional employment in both rounds, while women were more likely to report borrowing money in round one (statistically significant differences).

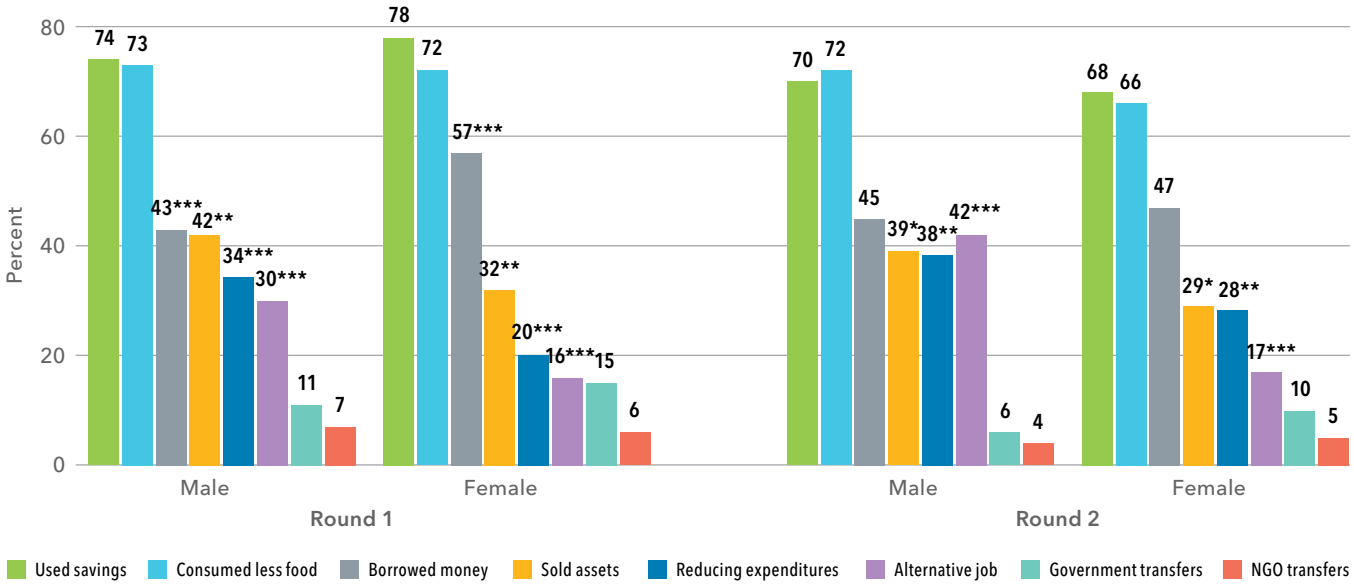
FIGURE 15 SHARE OF RESPONDENTS THAT REPORTED THEIR WORK CHANGED BECAUSE OF THE PANDEMIC, BY SEX, RWANDA



Note: *** p<0.01, ** p<0.05, * p<0.1.

The most important sources of credit for both men and women were group savings schemes (50 percent and 58 percent, respectively, in round one; 66 percent and 68 percent, respectively, in round two), followed by family members, friends, or neighbors (24 percent and 23 percent, respectively, in

FIGURE 16 INCOME LOSS COPING STRATEGIES BY SEX, RWANDA



Note: *** p<0.01, ** p<0.05, * p<0.1.

round one; 24 percent and 22 percent, respectively, in round two), and, lastly, formal banks (26 percent and 14 percent, respectively, in round one; 8 percent and 3 percent, respectively, in round two) (Appendix A Table 31). While a larger share of women relied on group savings schemes as a source of credit, the difference was not statistically significant. Men were more likely to access loans from formal credit sources in round one (statistically significant). Women were more likely to report using borrowed funds to pay medical bills (16 percent, as compared to 10 percent of men), while men were more likely to use credit to purchase agricultural inputs (22 percent, as compared to 14 percent of women), although the differences were not statistically significant.

Few respondents reported receiving transfers from the government or NGOs, but among those that did, women were more likely to report receiving government transfers in both rounds than men. The differences were not statistically significant, however.

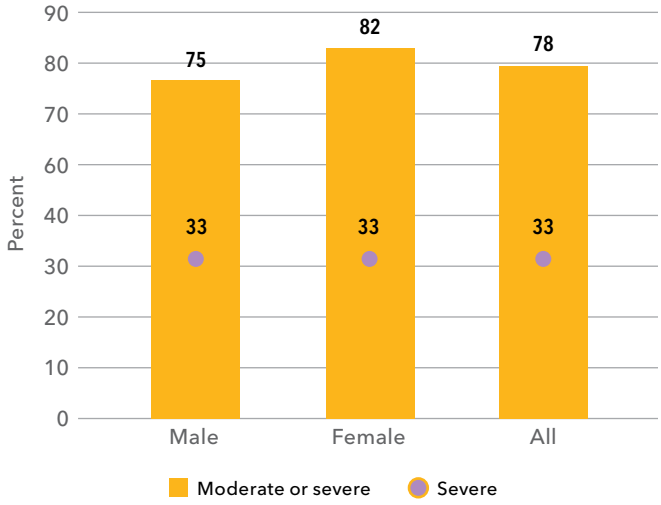
Both men and women respondents were more likely to report that joint savings and jointly owned assets were used, and that they made the decision to use savings, sell assets, or borrow money together with their spouse, rather than on their own. However, among those who did report making decisions about coping strategies on their own, women respondents were more likely than men to report making decisions autonomously (statistically significant difference) (Appendix A Table 29).

4.3.3 FOOD SECURITY AND DIETARY DIVERSITY

The pandemic disrupted rural men's and women's food security. The FIES was used to track changes in food security across survey rounds. Figure 17 presents results from round two. During this round, moderate or severe food insecurity was 78 percent in Rwanda, while the prevalence of severe food insecurity was 33 percent. The difference in the share of men and women respondents experiencing moderate or severe food insecurity was statistically significant at the 5 percent level, suggesting that women were more likely to experience moderate or severe food insecurity compared to men (82 percent as compared to 75 percent, respectively). There were no differences between women and men in the incidence of severe food insecurity during round one.

Overall, 85 percent of respondents in Rwanda attributed their experience of food insecurity to the

FIGURE 17 PREVALENCE OF MODERATE OR SEVERE FOOD INSECURITY AND OF SEVERE FOOD INSECURITY, OVERALL AND BY SEX, RWANDA



COVID-19 pandemic; this includes 86 percent of men and 84 percent of women respondents (difference not statistically significant).

The pandemic's impact on food security is partly attributed to changes in food access. During round one, 39 percent of men and 48 percent of women, respectively, reported that they could not obtain vegetables, and during round two, 19 percent of men and 25 percent of women reported the same. Few households reported consuming vegetables (less than 21 percent) or fruits (less than 13 percent). MDD-W was calculated for both men and women respondents, based on a 24-hour recall period to assess impacts on diet adequacy (Appendix A Table 34). The results show that 33 percent of households reported consuming foods from at least five food groups in the preceding 24 hours. Women were less likely than men to have adequate diets—only 24 percent of women consumed at least five food groups compared to 38 percent of men in round one. In round two, this gap between women's and men's diet adequacy increased to 23 percent of women and 44 percent of men. In both rounds, the differences in dietary diversity between men and women were statistically significant at the 1 percent level. Diets consisted largely of grains, pulses, and nuts, with 37 percent of households reporting consumption of dairy and 28 percent reporting consumption of meat, poultry, or fish in the previous 24 hours.

4.3.4 CHILDREN'S EDUCATION

Schools were closed nationwide during the lockdown period at the start of the pandemic. After this period, schools generally reopened apart from local closures around Kigali during the first COVID-19 wave in January 2021. Thus, the phone survey rounds did not coincide with a period of school closures in the country. Despite this, results show that in the first round, 9 percent of both boys and girls of school age were not attending school. The share of children not in school increased in the second round to 16 percent of boys and 13 percent of girls. The major reasons that children were not sent to school were localized closures of schools and the inability to afford school fees. Among the small number of households that reported that schools were closed during round one, the majority (98 percent) stated that they would send their children back to school once they reopened.

4.3.5 MIGRATION AND REMITTANCES

In round one, about 11 percent of households reported that some family members typically worked away from home during the year. Respondents were then asked whether any household members who had previously migrated for work had returned home due to the pandemic (Appendix A Table 35). About 57 percent of the respondents reported having at least one male family member who migrated and lived away from the homestead during the previous calendar year, with 28 percent having at least one male migrant returning due to COVID-19. In addition, 38 percent of households had at least one female migrant, with 21 percent reported returning home due to COVID-19. Approximately 3 percent of households reported that they had some family members who migrated in the past year despite the pandemic and continued to send remittances.

4.3.6 MOBILITY AND ACCESS TO SERVICES

Respondents were asked about their mobility during round one of the survey and about access to services in rounds one and two. Large shares of men and women respondents reported more limited mobility due to the pandemic: 73 percent of men and 81 percent of women reported mobility challenges in selling food and other items, 69 percent of men and 76 percent of women had challenges attending group meetings, and 86 percent of men and 83 percent of women had challenges visiting friends and family (Appendix A Table 36). Women were slightly more likely to report mobility challenges in buying and selling food or other items, while men were more likely to report difficulties meeting with friends or family.

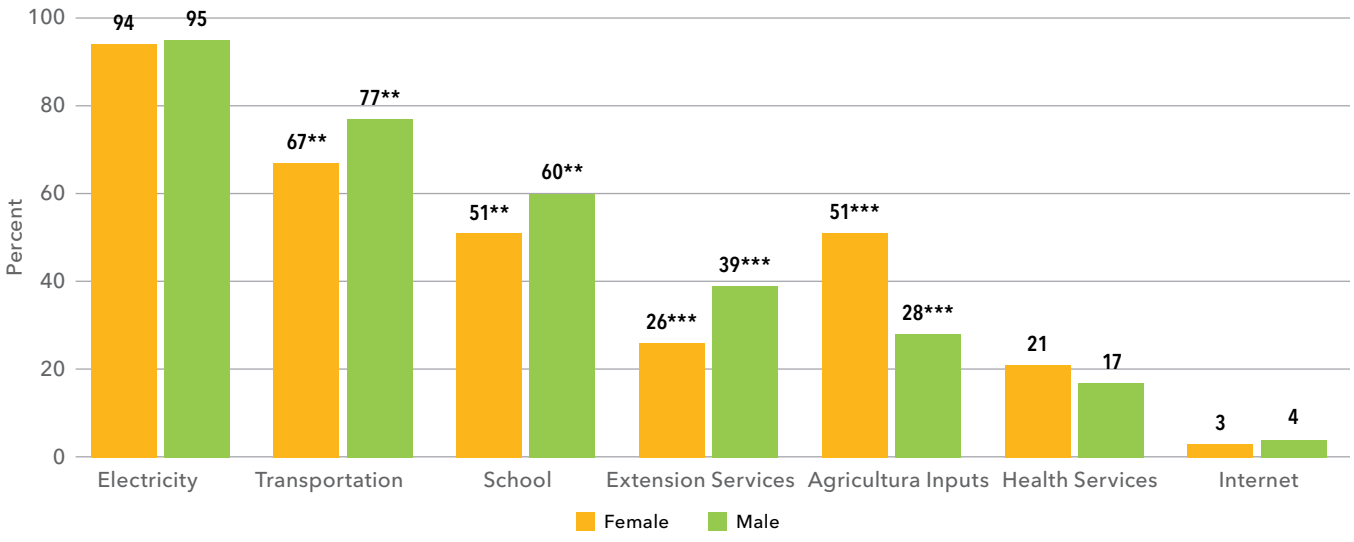
Men and women also reported having limited access to key services during the pandemic, as shown in Figure 18. In round one, both women and men reported that they could not access several services, such as transportation, schools, and extension services due to the pandemic. The pandemic also affected access to agricultural inputs with challenges declining in the second survey round. There was also limited access to transportation, extension services, and schools in round two, as reported by 77 percent, 39 percent, and 60 percent of men, and 67 percent, 26 percent, and 51 percent of women respondents, respective to type of service (results are statistically significant for extension services).

4.4 UGANDA

4.4.1 BACKGROUND ON RESPONDENTS' CHARACTERISTICS

Across survey rounds in Uganda, approximately 50 percent of respondents were women. The average age of respondents was 47 years for both men and women interviewed. Approximately 74 percent of households in the sample were headed by men (Appendix A Table 37). In the Uganda sample, nearly half of men and women respondents had some primary education, while more men than women had some secondary schooling or had completed secondary education across the rounds. Most respondents were involved in farming—more than 80 percent of men and women respondents reported crop or livestock farming as their primary occupation. Across all survey rounds, women were generally more likely to report farming as their main occupation compared to men (statistically significant difference). A smaller share of households reported

FIGURE 18 SHARE OF RESPONDENTS THAT WERE NOT ABLE TO ACCESS KEY SERVICES DURING THE PANDEMIC, BY SEX, RWANDA



Note: *** p<0.01, ** p<0.05, * p<0.1. Data from round two only.

self-employment or salaried jobs as their primary occupation, with men somewhat more likely to report self-employment or salaried jobs. Very few men and women respondents reported engaging in wage labor as their primary occupation. In rounds one through three, 7 to 13 percent of men and 4 to 6 percent of women reported not working for income during the lockdown. In round four, 41 percent of men and 26 percent of women reported that their work had changed because of COVID-19 (statistically significant difference) (Appendix A Table 44).

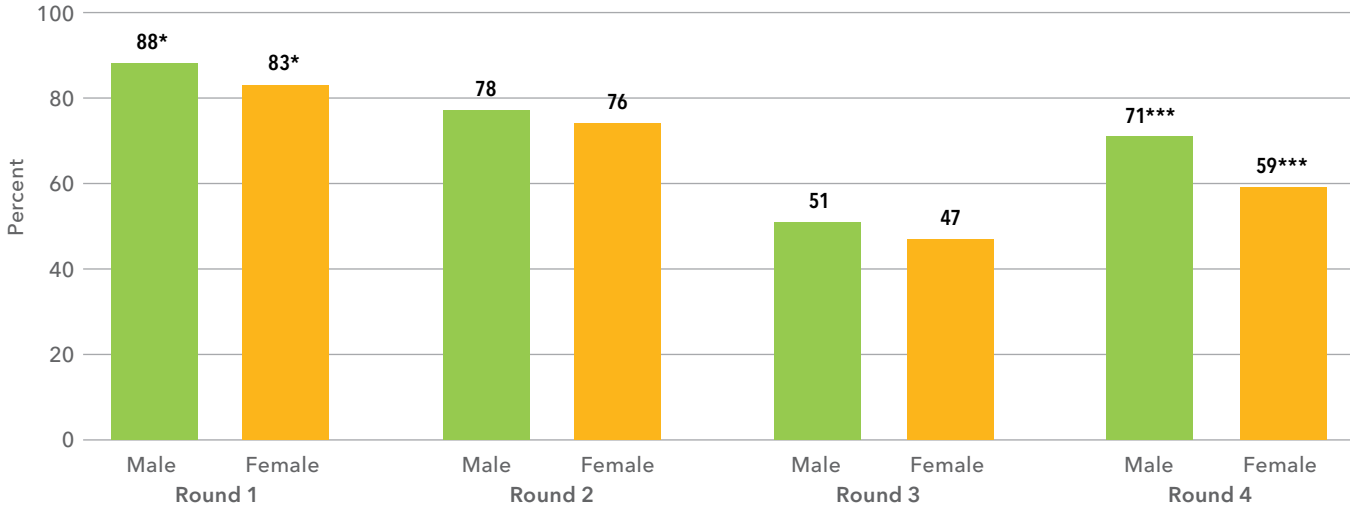
4.4.2 INCOME LOSS, EMPLOYMENT, AND COPING STRATEGIES (BY SEX)

Both men and women experienced significant income losses because of the pandemic, across all rounds of data collection (Figure 19). Rounds one and two reported the highest share of income losses (more than 75 percent). However, as mobility restrictions from the lockdown were relaxed in round three, only half of households interviewed reported income losses (April 2021). However, income losses increased again in round four, corresponding with the rise in COVID-19 cases in late May 2021 and the associated lockdown in June 2021. Men were more likely to report income losses across all survey rounds, but the difference was only statistically significant in rounds one and four.

Respondents across all occupations reported income losses; however, the small number of men and women respondents who were self-employed or employed in a salaried position were slightly more likely to report income losses in round one and round four (statistically significant difference in round four), while those engaged primarily in farming were more likely to report income losses in rounds two and three (statistically significant difference in round two) (Figure 20). Among those engaged in farming, men were more likely than women to report income losses across rounds.

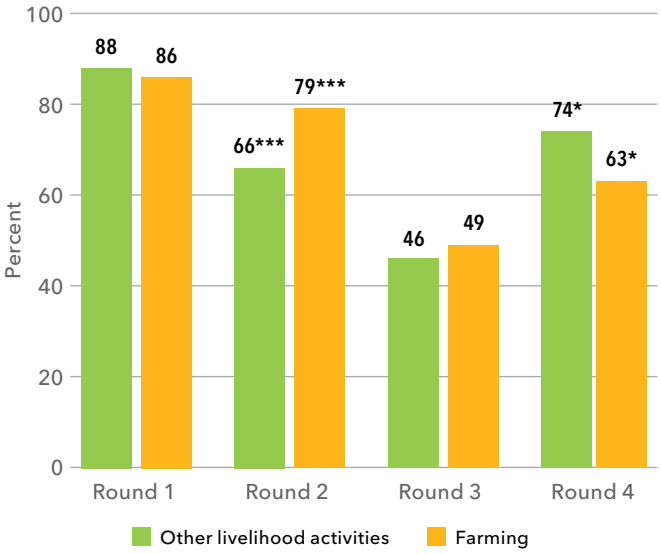
Data from the first survey round show that 57 percent of men and 48 percent of women reported working more than they did before the start of the pandemic (Appendix A Table 44). However, the number of men and women who reported working more declined over the survey rounds. By round four, only 23 percent of men and 11 percent of women reported working more than they did before the pandemic, while 36 percent of men and 39 percent of women reported working less. As this round coincided with a rise in COVID-19 cases in the country, men and

FIGURE 19 INCOME LOSS BY SEX, UGANDA



Note: *** p<0.01, ** p<0.05, * p<0.1.

FIGURE 20 INCOME LOSS BY TYPE OF LIVELIHOOD, UGANDA



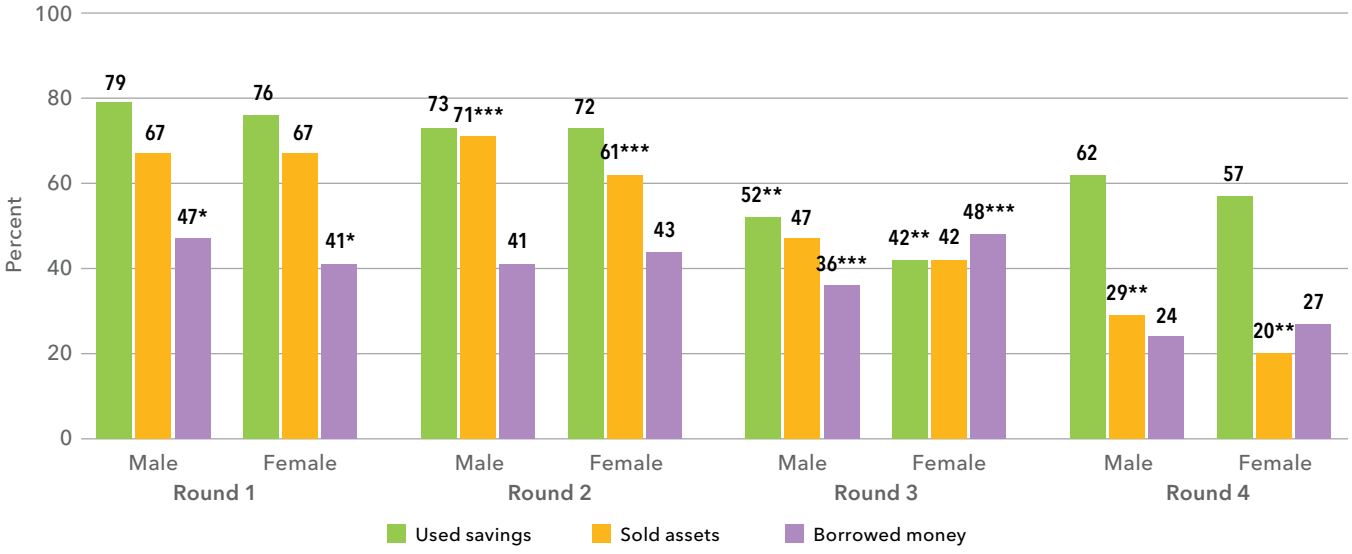
Note: Other livelihood activities refer to off-farm activities, such as casual labor or trading.
*** p<0.01, ** p<0.05, * p<0.1.

women may have worked less to avoid contracting the virus or in response to the new lockdown.

Drawing down savings was the most common coping strategy to address income losses for both men and women respondents across most survey rounds (Figure 21). Use of savings was especially high during the first two survey rounds when economic lockdowns were in place. Households again relied on savings when COVID-19 cases spiked in June 2021. Selling assets was the second most important coping strategy across survey rounds and was especially high during the first two rounds. Men were more likely to report selling assets to cope with the pandemic during survey rounds two and four (statistically significant differences).

Borrowing was another important coping strategy across rounds, with between 24 percent and 48 percent of men and women respondents, respectively, reporting borrowing due to COVID-19-related income losses. Men were more likely to report borrowing as a coping response in round one, while women were more likely to report borrowing in the other rounds (statistically significant difference in round three). In rounds three and four, borrowing was a more important coping strategy for women than selling assets. The most important sources of borrowing for most rural men and women were informal sources, such as rotating savings schemes and friends and neighbors. Very few respondents borrowed from formal sources of credit, such as banks and microfinance organizations. Men were more likely to borrow funds from these sources (Appendix A Table 43). Across all rounds,

FIGURE 21 COPING STRATEGIES TO DEAL WITH INCOME LOSS, BY SEX OF RESPONDENT, UGANDA



Note: *** p<0.01, ** p<0.05, * p<0.1.

women were more likely than men to borrow from rotating savings schemes (statistically significant difference). Women's reliance on rotating savings schemes during the pandemic highlights the importance of these schemes in increasing women's resilience to shocks and stresses. Both men and women respondents (71 percent and 72 percent, respectively) reported that they made the decision to borrow on their own in round four.

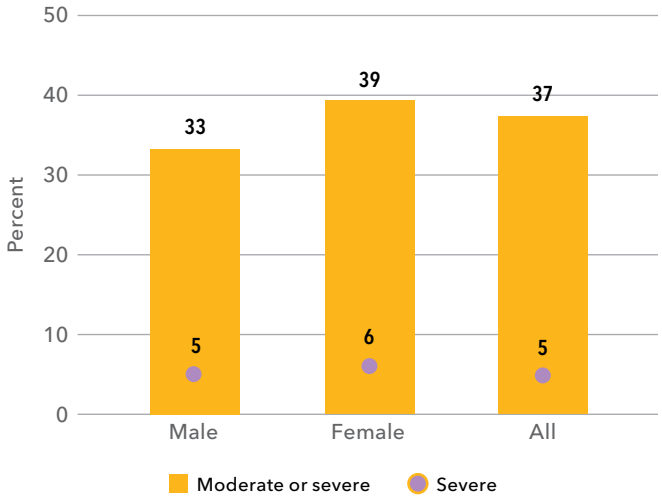
Very few households reported receiving transfers from government or non-governmental institutions. Among those that did, transfers were only reported at the onset of the pandemic in Uganda. In round four, respondents were asked about other coping strategies. The results from this round showed men and women also consumed less food (20 percent and 22 percent, respectively) and reduced expenditures (25 percent and 19 percent, respectively). These differences between men and women were not statistically significant.

4.4.3 FOOD SECURITY AND DIETARY DIVERSITY

Access to food was hampered by the lockdown, especially in the early stages of the pandemic when strict lockdowns were in place. More than 60 percent of men and women respondents reported that limited mobility prevented them from buying food in round one, but these challenges eased during later rounds. Figure 22 shows the prevalence of moderate or severe food insecurity and of severe food insecurity in Uganda for the full sample and by gender for round four. The prevalence of moderate or severe food insecurity was 37 percent, while the overall prevalence of severe food insecurity was 5 percent. While a larger share of women reported experiencing moderate or severe food insecurity (39 percent as compared to 33 percent, respectively) and severe food insecurity (6 percent compared to 5 percent), the differences between men and women were not statistically significant.

Forty-one percent of all men and women respondents attributed their recent experiences of food insecurity to the COVID-19 pandemic. While slightly more rural men cited the pandemic as the cause of their food insecurity compared to rural women (43 percent and 40 percent, respectively), this difference is not statistically significant.

FIGURE 22 PREVALENCE OF MODERATE OR SEVERE FOOD INSECURITY AND OF SEVERE FOOD INSECURITY, OVERALL AND BY SEX, UGANDA



Note: These data were collected in round four.

MDD-W was calculated for women respondents in rounds two through four, based on a 24-hour recall period to assess impacts on diet adequacy. The results show diet adequacy was quite low in round one, with only 32 percent of women reporting that they consumed at least five food groups in the preceding day. Diet quality improved during round three when income losses due to the pandemic declined—45 percent of women reported having adequate diets during this survey round. However, diet quality declined again in round four, with only 34 percent of women consuming five or more food groups, which coincided with the increase in COVID-19 cases and associated income losses. The most consumed food groups were grains, pulses, other vitamin A–rich foods, and nuts and seeds. Slightly fewer than half of women across survey rounds consumed leafy greens and other vegetables, and less than one-third consumed meat, fish, or

poultry. Very few women consumed fruit, dairy, or eggs.

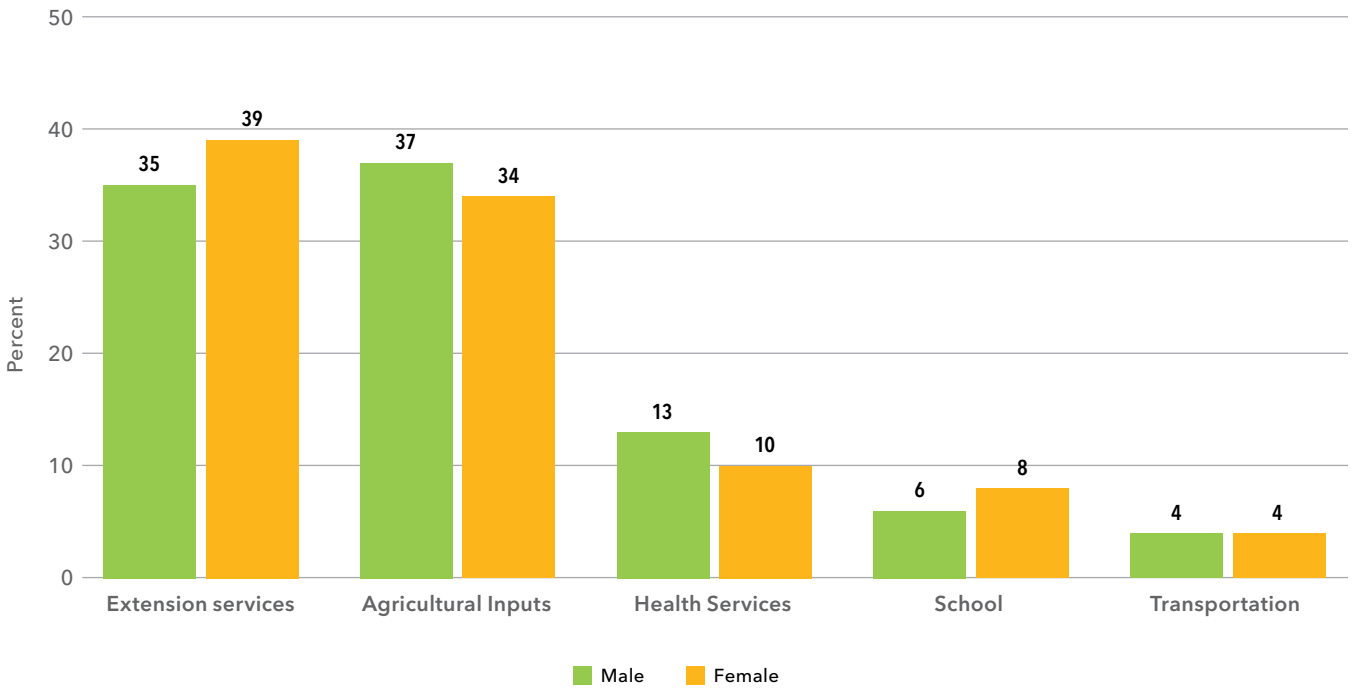
4.4.4 CHILDREN'S EDUCATION

Most surveyed households—more than 70 percent of respondents—reported having children between the ages of 6 and 18 who were enrolled in school before the start of the pandemic. School closures occurred on and off during various lockdown periods throughout the pandemic, with detrimental effects on school-age children, especially girls. Of particular concern is that 17 percent of respondents reported that they had heard of or seen underage girls in their communities getting married because of uncertainty about the health and economic situation and sudden loss of income by the bride's family due to the pandemic.

4.4.5 MIGRATION AND REMITTANCES

In rounds one through three, respondents were asked about the number of household members, both men and women, who had migrated for work and whether they had returned home due to the pandemic. In round one, roughly 60 percent of households reported having at least one male family member who migrated and lived away from the homestead during the previous calendar year. In rounds two and three, 67 percent and 35 percent of households, respectively, reported having at least one male family member who migrated and lived away from the homestead (Appendix A Table 47). Fewer households reported having at least one female migrant in the last year in rounds one and two (46 percent and 42 percent, respectively) but the number of reported female migrants was higher (71 percent) in round three. The return of migrating family members due to the pandemic resulted in a decline in remittances compared to pre-pandemic times, by 64 percent, 39 percent, and 40 percent of households with migrants in rounds one, two, and three, respectively.

FIGURE 23 SHARE OF RESPONDENTS THAT REPORTED NOT BEING ABLE TO ACCESS SERVICES DURING THE PANDEMIC, BY SEX, UGANDA



4.4.6 MOBILITY AND ACCESS TO SERVICES

In round one, respondents were asked about how their mobility before the pandemic compared to the lockdown period. The majority of men and women respondents reported that the pandemic limited their mobility in carrying out everyday activities compared to pre-pandemic times. In round one, the majority of men and women respondents reported that they had less mobility in buying and selling food and other items, seeking employment and medical care, attending group meetings, and meeting friends (Appendix A Table 48). Men were more likely than women to report pandemic-related mobility restrictions in selling food or other items, seeking employment, and attending meetings (statistically significant differences).

In round four, respondents were asked about whether their access to key services was affected by the COVID-19 pandemic. More than a third of men and women respondents reported having less access to key services, such as agricultural inputs and extension services, while about 10 percent of men and women respondents were not able to access health services, as shown in Figure 23. Response patterns were similar across men and women respondents, and none of the differences were statistically significant.

5. DISCUSSION AND CONCLUSIONS

The COVID-19 pandemic has had far-reaching impacts on people living in rural areas of Kenya, Niger, Rwanda, and Uganda, including losses in income, depletion of savings and assets, and reduced access to food. The majority of households surveyed were engaged primarily in farming, which was not one of the most directly affected sectors, but the perceived impacts of the pandemic were notable.

The timing of pandemic-related surges and economic lockdowns varied across countries—as did the timing of the survey rounds. Moreover, not all countries were equally affected by the pandemic—in Niger, cases never surged, and lockdowns were never as severe as in the other countries in the study.

Some of these impacts on farm households stemmed from household members who had migrated to urban areas or abroad and who had lost their sources of income and returned to rural areas. This resulted in a loss of remittance income by farm households and additional mouths to feed.

While both men and women were affected by the pandemic, the ways in which they experienced and responded to COVID-19 varied. Both men and women experienced income shocks, but there were no obvious trends across countries in terms of who was affected more. In Kenya, women were more likely to report COVID-19-related income losses during the third survey round, while more men reported losses in the last round, during the most severe surge in cases. Compared to other countries in the region, Niger experienced lower COVID-19 case numbers, and economic and mobility restrictions were limited. There, less than half of men and women respondents reported COVID-19-related income losses across survey rounds, except in round four, when income losses were highest (61 percent). In Rwanda, men and women equally experienced income losses, while in Uganda, men were more likely than women to report income losses in the last survey round.

Coping strategies followed a similar pattern across countries; households tended to rely on savings at the start of the pandemic and later shifted to selling assets and borrowing as, presumably, savings became depleted. Again, the exception was in Niger, where people relied on selling assets and reducing consumption in the earlier survey rounds, suggesting a general lower level of resilience to income shocks in the study areas. Both men and women contributed to coping responses, but there were many differences in the strategies used across countries and rounds. In some cases, men were more likely to rely on income-smoothing strategies through use of savings, sale of assets, and borrowing—likely given women's relatively lower level of savings and assets. For instance, women in Uganda and Kenya were more likely to borrow money during some survey rounds, and they relied more heavily on rotating savings schemes. These schemes are thus an important source of resilience for rural women experiencing income shocks, and these programs should be supported and expanded to areas where they do not already exist. Furthermore, there were many nuances across the sampled countries—and in the survey rounds within these countries—in terms of whose savings and assets were used and how decisions on coping strategies were made, with country-specific patterns that did not hold across countries.

The depletion of savings and assets in response to income losses limits the capacity of households to withstand future shocks and stresses. More research is needed on the long-term impacts of the loss of savings, assets, and indebtedness because of the pandemic. Greater efforts are needed to ensure that rural households can rebuild their financial capital to withstand future shocks and stressors. Women especially need support to build assets, given that

the long-term effects of savings and asset depletion may be more detrimental to them.

The data also revealed food security challenges in the study countries. The incidence of moderate or severe food insecurity was especially high in Rwanda (78 percent), while the incidence of severe food insecurity was 33 percent. Moderate or severe food insecurity in Kenya was 49 percent, while it was 38 percent in Niger and 37 percent in Uganda.[4] Women were more likely to experience moderate or severe food insecurity in Rwanda and severe food insecurity in Niger, while there were no statistically significant differences in food insecurity experiences of men and women in Kenya and Uganda.

Diet adequacy for women was particularly low in Rwanda and Uganda, and in the first round in Niger. Changes in food access due to COVID-19 are particularly worrisome in these contexts where food security challenges existed even before the start of the pandemic. Although diet questions were not specifically linked to COVID-19 impacts, and other factors like seasonality may also affect diets, the data suggest that the pandemic likely impacted access to diverse foods, especially during COVID-19 waves and when lockdowns were in place.

Finally, the pandemic also severely affected access to services, with potentially long-term negative impacts on education and health outcomes, as well as agricultural productivity due to reduced access to agricultural inputs and extension services.

4 These results are reported for the sake of providing a transparent summary. However, they are not comparable across countries and with official statistics, as these surveys are not nationally representative, and the target population varies in each country, as reported in the sampling section.

6. POLICY RECOMMENDATIONS

The results of this study show that rural men and women need relief to address the income shocks and food insecurity challenges that they experienced throughout the COVID-19 pandemic. The pandemic's impacts and associated policy responses varied significantly in breadth and scope in the SSA region, depending on country-specific circumstances. Policy responses were largely inadequate to address the challenges faced by women and girls (and men and boys) in rural areas. Most gender-sensitive measures focused on addressing increased incidence of GBV, and far fewer aimed to secure women's livelihoods to help them rebound from pandemic-related income losses. Several policy recommendations emerge from the findings. These include a mix of short-, medium-, and long-term strategies aimed at helping women and girls respond to immediate shocks related to the pandemic and other overlapping crises, and at building resilience to future disturbances.

Extend social protection programs in rural areas, targeted to women and girls. While all of the countries in the study extended relief and social protection measures to protect vulnerable households, few social protection measures were targeted to women and girls. Very few respondents in the phone survey reported having benefited from these transfers, and those who did only benefited in earlier stages of the pandemic. This outcome is likely because social protection programs largely targeted women, girls, and other vulnerable groups living in or near urban centers, and few transfers reached rural areas. This finding suggests further scope for expanding social safety nets to cope with the ongoing pandemic and other disturbances, such as the worsening global food and agricultural input price crisis resulting from Russia's aggression in Ukraine. Reaching women with food and cash transfers is essential to ensure that they have the resources to meet basic needs, especially providing healthy diets and adequate nutrition for their families, and avoiding severe food insecurity. While immediate humanitarian interventions, such as cash and food transfers, are needed during times of crisis, social protection measures should also aim to build women's resilience capacities, such as their savings, assets, and livelihood opportunities, so that they are better able to weather future disturbances.

Strengthen women's financial inclusion. Borrowing was an important coping strategy for both men and women in the study areas, but the results showed somewhat different borrowing sources for men and women. Few of the respondents had access to loans from formal institutions, such as banks, but among those that did, men were more likely than women to access these sources.

Support women's groups and organizations at multiple scales. Grassroots women's organizations are well aware of the challenges facing rural women during times of crisis, and they provide an important social safety net. For instance, the survey results in Kenya and Uganda showed that women relied on village savings and loan associations as a source of credit during the pandemic. These groups also provide an important opportunity for knowledge sharing and collective agency. Thus, interventions aimed at increasing women's resilience capacities, including those that disseminate information, offer training or skill building, and provide humanitarian interventions, can scale out more effectively by working through women's groups, thus benefiting more women.

Expand economic opportunities to women. The increase in the amount of time spent caring for others during the pandemic is especially problematic for rural women, given that they already shoulder a heavy care and work burden. In some cases, such as Uganda, women reported spending more time on care for the household during the pandemic

in comparison to pre-pandemic times. Data also suggest that women's economic opportunities were more affected, with more women than men likely to report working less for income than they did before the pandemic (such as in Kenya) or not working at all at times during the pandemic (such as in Niger). In addition, very few of the other economic measures, such as tax relief measures, were designed to target economic activities in which women are heavily engaged. Moreover, agricultural support and support using digital means were less likely to reach women as compared to men.

Thus, efforts to relieve women's care burden and increase employment opportunities are needed to help women rebound from the pandemic and build resilience to shocks over the long run. Targeted support to micro and small businesses, which women tend to engage in, can help secure their livelihoods during times of crisis.

Ensure continued educational opportunities, especially for at-risk adolescent girls. Other notable results from Uganda suggest that COVID-19 will have serious impacts on future generations, especially for girls who were more affected by long school closures, leading to reported increased incidence of teenage pregnancy and early marriage. Reducing school fees, providing cash transfers conditional on school enrollment, or providing other incentives to keep children in school can minimize the effects of such shocks, particularly on girls' educational outcomes.

Collect sex-disaggregated data to monitor gendered impacts of crises. While gender-sensitive policies are tracked through the UNDP's policy tracker (UNDP and UN Women 2022), the available data only reflect commitments and not actual policy implementation. More data are needed to track the extent to which these programs meet their targets and achieve outcomes for women and girls. More research is also needed to evaluate the effectiveness of different strategies for helping households rebound from the current crisis, as well as the potential for alternate interventions to reduce gender gaps in impacts and resilience capacities. Additionally, more nationally representative data collection is needed to provide a full picture of the impacts of COVID-19 and future shocks at the country level.

The challenge lies in adapting policy responses to the needs of women and girls in local contexts. The data in this report suggest that this may not be an easy task, given nuances in how the pathways of impact and coping responses play out differently for men and women, and boys and girls. The above recommendations are a set of "no regrets" responses that would support women's resilience and economic empowerment. These policies should be further tailored to local needs in consultation with a range of actor groups that are engaged in providing humanitarian and development assistance, including women's organizations. Donors and implementing partners also have a role to play in supporting governments to overcome resource constraints, while ensuring prioritization and targeting of relief and social-economic protection measures for the most vulnerable and needy populations.

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APPENDIXES

Supplementary Material

APPENDIX A: RESULTS TABLES

Results Tables for Kenya

Figure 1 Kenya COVID-19 and study timeline

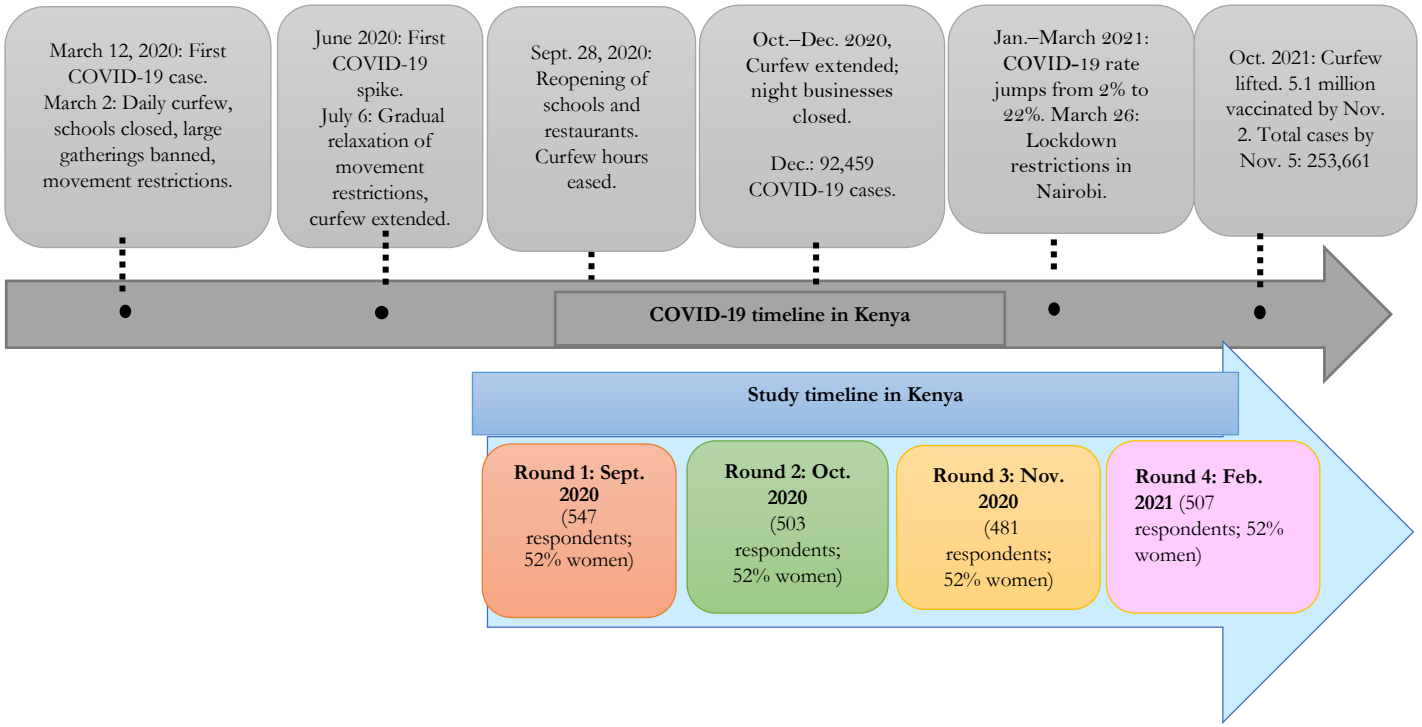

Table 1 Background on respondents' characteristics, by sex, Kenya

	Round 1				Round 4			
Variable	Total	Male	Female	P-value	Total	Male	Female	P-value
Age (years)	51.28	52.66	50.02	0.041				
Marital status (married %)	78.24	98.47	59.79	0.000	77.32	99.17	57.36	0.000
Respondents that were household heads (%)		91.19	46.50	0.000		99.17	44.15	0.000
No formal schooling (%)	10.05	3.07	16.43	0.000				
Some primary level (%)	29.62	30.65	28.67					
Completed primary level (%)	30.35	28.35	32.17					
Some secondary level (%)	12.98	14.18	11.89					
Completed secondary level (%)	12.43	16.86	8.39					
Greater than secondary level (%)	4.39	6.90	2.10					
Household size (number)	5.15	5.68	4.68	0.000	5.48	5.95	5.06	0.000
Households with children under 5 years (%)	49.18	53.26	45.45	0.068	51.08	54.92	47.53	0.096
Households with adults older than 60 (%)	34.37	34.10	34.62	0.899	36.69	34.43	38.78	0.309
Engaged in own farming—crop and livestock (%)	78.61	78.16	79.02	0.000	74.16	75.21	73.21	0.000
Agricultural land (acres)	1.56	2.39	0.75	0.026				

Note: Data on age of respondent are from round 2, the only round with that question.

Table 2 Income loss and coping strategies, by sex of respondent, Kenya

	Round 1			Round 2			Round 3			Round 4		
Variable	Male	Female	P-value	Male	Female	P-value	Male	Female	P-value	Male	Female	P-value
Experienced income loss (%)	82.38	85.31	0.3500	78.75	82.51	0.2858	65.02	83.52	0.000	84.71	77.74	0.0453

Table 3 Income loss and coping strategies, by livelihood type (farming or other), Kenya

	Round 1			Round 4		
Variable	Other livelihood activities	Farming	P-value	Other livelihood activities	Farming	P-value
Experienced income loss (%)	88.89	82.56	0.0984	87.79	78.72	0.0226

Note**:** Other livelihood activities include casual labor, service providers, street vendors, homebased workers, salaried workers, business owners, drivers, and mechanics.

Table 4 Type of coping strategy, by sex, Kenya

	Round 1			Round 2			Round 3			Round 4		
Coping strategies (%)	Male	Female	P-value	Male	Female	P-value	Male	Female	P-value	Male	Female	P-value
Used savings	67.44	60.66	0.1311	53.44	50.69	0.5804	42.41	35.78	0.3108	49.27	36.89	0.0375
Sold assets	50.70	56.56	0.2089	37.57	36.41	0.8090	29.11	24.77	0.4576	31.71	22.33	0.1007
Borrowed	45.58	45.49	0.9847	48.15	48.85	0.8881	49.37	41.28	0.2197	44.39	43.69	0.8862
Government transfer	10.23	19.67	0.0050	10.58	10.14	0.8836	6.33	5.05	0.5928	1.95	3.88	0.3056
Nongovernment transfer	3.26	4.92	0.4284	8.47	1.84	0.0021	0.63	2.75	0.1334	1.46	1.46	0.6073
Consumed less food	45.33	36.07	0.0439	43.39	41.94	0.7689	45.57	33.03	0.0135	37.56	40.78	0.5043
Found an alternative job/worked extra				42.33	18.89	0.0000	20.89	17.89	0.4661	23.41	20.87	0.5350
Reduced expenditures				51.85	33.18	0.0001	53.16	34.40	0.0003	43.41	54.37	0.0263

Table 5 Borrowing sources, by sex, Kenya

	Round 1			Round 2			Round 3			Round 4		
Source of borrowing (%)	Male	Female	P-value	Male	Female	P-value	Male	Female	P-value	Male	Female	P-value
Informal (family, neighbors, friends)	53	51	0.805	63	66	0.619	65	73	0.263	54	66	0.095
Group savings	35	40	0.460	22	21	0.834	22	22	0.946	27	22	0.406
Formal (banks, money lenders, cooperative bank)	19	11	0.081	10	5	0.158	5	4	0.835	4	1	0.194
NGOs, microfinance, lending apps	10	13	0.585	20	10	0.063	17	2	0.001	19	14	0.301

Table 6 Who decided on coping strategies, by sex, Kenya

	Round 4		
Variable	Male	Female	P-value
Who decided to use savings? (%)			
Self/respondent	39.60	65.79	0.000
Partner/spouse	9.90	7.89	0.645
Self and partner/spouse jointly	63.37	26.32	0.000
Who decided to sell assets (%):			
Self/respondent	29.23	58.70	0.001
Partner/spouse	9.23	0.00	0.034
Self and partner/spouse jointly	67.69	43.48	0.011
Who decided to borrow (%):			
Self/respondent	41.76	87.78	0.000
Partner/spouse	2.20	0.00	0.000
Self and partner/spouse jointly	57.14	12.22	0.000

Table 7 Whose savings and assets were used, by sex, Kenya

Variables	Round 1			Round 2			Round 3			Round 4		
	Male	Female	P-value	Male	Female	P-value	Male	Female	P-value	Male	Female	P-value
Whose savings were used? (%)												
Respondent's saving	68.97	68.24	0.894	74.26	52.73	0.001	77.61	57.69	0.011	60.40	67.11	0.359
Spouse's savings	24.14	10.81	0.003	16.83	19.09	0.670	8.96	14.10	0.337	14.85	15.79	0.864
Respondent and spouse jointly	32.41	23.65	0.095	29.70	31.82	0.740	26.87	28.21	0.857	39.60	19.74	0.005
Whose assets were sold (%)												
Respondent’s assets	65.14	57.97	0.251	66.20	56.96	0.246	66.20	56.96	0.242	36.92	56.52	0.123
Spouse’s assets	5.50	3.62	0.477	9.86	7.59	0.623	9.86	7.59	0.655	4.62	0.00	0.350
Respondent and spouse jointly	31.19	39.13	0.196	39.44	36.71	0.731	39.44	36.71	0.966	60.00	43.48	0.211

Table 8 Work changes during the pandemic, by sex, Kenya

	Round 1		Round 2		Round 3		Round 4	
Variable	Male	Female	Male	Female	Male	Female	Male	Female
Time spent on work compared to pre-COVID times (%)								
More than before	21.43	24.64	18.89	32.53	16.89	29.78	37.56	32.06
Less than before	25.51	41.71	35.94	36.75	34.70	33.15	24.43	37.80
About the same as before	53.06	33.65	45.16	30.72	48.40	37.08	38.01	29.67
Work changed because of COVID-19 (%)							72.92	62.06
Changes in work due to COVID-19 (among those who reported that their work changed)								
Hard to find jobs							40.57	40.76
Switched occupations or jobs							8.57	3.18
Working more from home							5.14	11.46

Table 9 Time spent caring for others, by sex, Kenya

Variable	Round 1			Round 2			Round 3			Round 4		
	Male	Female	P-value	Male	Female	P-value	Male	Female	P-value	Male	Female	P-value
Time spent caring for other (hours)	4.14	4.381	0.094	3.413	4.365	0.041	2.218	4.086	0.000	4.63	5.44	0.027
More time spent on care than before COVID (%)	24.14	32.17	0.037	33.75	28.52	0.205	20.99	30.65	0.013	40.16	35.36	0.265

Table 10 MDD-W, by sex, Kenya

Variable	Round 1			Round 2			Round 3 (Women alone)			Round 4 (Women alone)		
	Male	Female	P-value	Male	Female	P-value	Male	Female	P-value	Male	Female	P-value
MDD (%)	66.28	46.50	0.0000	64.58	46.77	0.0001	-	59.77	-	-	45.28	-

Table 11 Migrants who returned due to the pandemic, Kenya

Variable (%)	Round 1	Round 4
People in the household who migrated for work or lived as a migrant	25.17	
Households with at least one male migrant	78.29	67.08
Households with at least one male migrant returning	36.63	
Households with at least one male migrant returning due to COVID	22.77	15.09
Households with at least one female migrant	37.98	41.77
Households with at least one female migrant returning	24.49	15.15
Households with at least one female migrant returning due to COVID	14.29	
Remittances are lower than before COVID	76.19	79.41

Table 12 Mobility and access impacts during the pandemic, by sex, Kenya

	Round 1			Round 2			Round 3			Round 4		
Can get around (%):	Male	Female	P-value	Male	Female	P-value	Male	Female	P-value	Male	Female	P-value
To buy food or other items	84.29	84.27	0.993	72.92	83.65	0.003	71.60	82.38	0.004			
To sell food or other items	19.16	21.33	0.528	27.92	16.35	0.001	18.52	17.24	0.708			
For employment	22.99	23.78	0.827	41.67	32.32	0.029	44.44	32.95	0.020			
To seek medical care	30.65	37.06	0.113	37.08	36.88	0.962	33.74	36.78	0.476			
To attend group meetings	31.42	24.48	0.106	56.25	30.80	0.000	50.21	28.35	0.000			
To attend religious meetings/forums				78.46	83.64	0.268	75.31	78.54	0.388			
To meet friends or family	46.36	28.67	0.000	57.08	27.76	0.000	52.67	27.59	0.000			
To collect water or fuelwood	34.48	60.49	0.000	30.83	60.08	0.000	27.57	60.54	0.000			
To obtain vegetables and fruits	88.51	78.67	0.003	85.83	84.03	0.572	86.01	83.52	0.438	84.71	84.91	0.624
Able to get around less than before because of COVID-19 (%)	87.74	86.36	0.807	88.33	87.45	0.023	89.66	88.89	0.320	86.64	91.77	0.002

Results Tables for Niger

Figure 2 Niger COVID-19 and study timeline

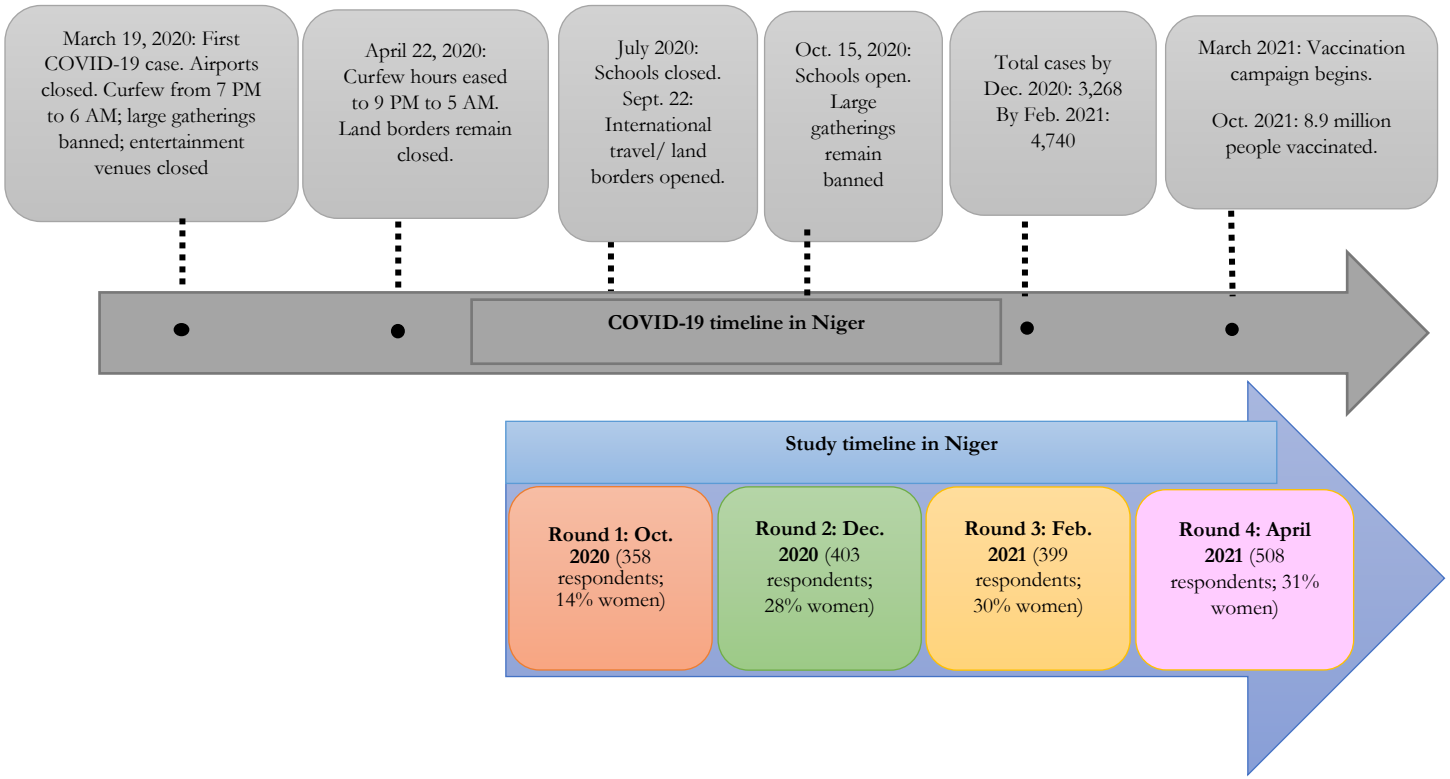

Table 13 Background on respondents' characteristics, by sex, Niger

Variable	Round 1			Round 2			Round 3			Round 4		
	Male	Female	P-value	Male	Female	P-value	Male	Female	P-value	Male	Female	P-value
Age (years)	42.12	32.35	0.000	44.43	34.59	0.000	36.82	45.18	0.000	38.2	45.77	0.000
Respondents that were household heads (%)	94.14	76.47	0.000	97.59	36.28	0.000	97.49	22.5	0.000	99.14	58.86	0.000
Household size (number)	9.14	7.55	0.029	9.52	8.46	0.050	10.46	9.78	0.243	9.46	8.63	0.058
Occupation— farming/agriculture (%)	66.12	56.86	0.000	63.79	34.51	0.000	59.5	33.33	0.000	80.00	38.61	0.000
Marital status (married and monogamous) (%)	63.52	54.90	0.00	60.00	61.95	0.000	54.84	55	0.002	57.14	48.1	0.000
Education												
No schooling (%)	25.41	29.41	0.201	25.17	52.21	0.000	24.37	43.33	0.000	19.14	40.51	0.000
Primary or less (%)	13.35	25.49		13.79	15.04		11.83	18.34		22.86	18.98	
Secondary or less (%)	10.75	11.76		12.41	5.30		11.11	4.17		14.28	14.56	
Koranic school (%)	50.49	33.33		48.62	27.43		52.69	34.17		43.71	25.95	

Table 14 Income loss and coping strategies, by sex, Niger

Variable	Round 1			Round 2			Round 3			Round 4		
	Male	Female	P-value	Male	Female	P-value	Male	Female	P-value	Male	Female	P-value
Experienced income loss (%)	41.69	31.37	0.2651	48.97	32.74	0.0000	47.31	44.17	0.6842	61.14	60.76	0.7919

Table 15 Income loss, by livelihood type (farming and other), Niger

Variable	Round 1			Round 2			Round 3			Round 4		
	Other livelihood activities	Farming	P-value	Other livelihood activities	Farming	P-value	Other livelihood activities	Farming	P-value	Other livelihood activities	Farming	P-value
Experienced income loss (%)	46.03	37.07	0.1304	47.49	41.96	0.335	51.30	41.75	0.0045	52.69	65.10	0.012

Note: Other livelihood activities include casual labor, service providers, street vendors, homebased workers, salaried workers, business owners, drivers, and mechanics.

Table 16 Coping strategies, by sex, Niger

	Round 1			Round 2			Round 3			Round 4		
Coping strategy (%)	Male	Female	P-value	Male	Female	P-value	Male	Female	P-value	Male	Female	P-value
Used savings	37.50	12.50	0.1371	42.96	21.62	0.0292	57.58	43.4	0.0242	30.37	30.21	0.9401
Sold assets	75.00	62.50	0.2848	78.87	64.86	0.0757	76.52	77.36	0.9023	85.05	78.13	0.1345
Borrow money	60.16	50.00	0.4361	63.38	45.95	0.0312	53.79	77.36	0.0030	38.79	36.46	0.6965
Cash transfers from government	4.69	6.25	0.7841	5.63	10.81	0.2621	7.58	5.66	0.7305	21.03	13.54	0.1181
Cash transfers from NGO	4.69	0.00	0.3763	7.75	0.00	0.0805	10.61	7.55	0.6615	27.10	18.75	0.1140

Table 17 Whose savings were used, by sex, Niger

Variable	Round 1			Round 2			Round 3			Round 4		
	Male	Female	P-value	Male	Female	P-value	Male	Female	P-value	Male	Female	P-value
Whose savings were used (%):												
Self	87.50	50.00	0.003	85.25	25.00	0.000	67.11	21.74	0.000	76.92	24.14	0.00
Partner/spouse	2.08	50.00		0.00	50.00		1.32	39.13		3.08	27.59	
Self and partner/spouse jointly	10.42	0.00		13.11	25.00		31.58	39.13		16.92	44.83	
Whose assets were sold (%):												
Self	51.04	30.00	0.005	64.29	29.17	0.000	55.45	24.39	0.000	64.84	37.33	0.000
Partner/spouse	3.13	30.00		2.68	20.83		3.96	29.27		2.20	16.00	
Self and partner/spouse jointly	43.75	40.00		31.25	50.00		38.61	43.90		27.47	41.33	

Table 18 Sources of borrowing, by sex, Niger

	Round 1			Round 2			Round 3			Round 4		
Source of borrowing (%)	Male	Female	P-value	Male	Female	P-value	Male	Female	P-value	Male	Female	P-value
Informal: family, neighbors, friends	100	100	0.569	98	94	0.401	99	98	0.691	94	83	0.057
Group savings										0	11	0.001
Formal banks, money lenders, cooperative bank							5	1	0.273	1	3	0.525
NGOs, microfinance, lending apps				2	20	0.535	2	0	0.186	2	3	0.887

Table 19 Decision on coping strategies, by sex, Niger

Variable	Round 4		
	Male	Female	P-value
Who decided to use savings (%):			
Self	83.08	27.50	0.000
Partner/spouse	0.00	10.34	
Self and partner/spouse jointly	15.38	58.62	
Who decided to sell assets (%)			
Self	76.92	32.00	0.000
Partner/spouse	0.55	18.67	
Self and partner/spouse jointly	18.13	45.33	
Who decided to borrow (%):			
Self	97.59	57.14	0.000
Partner/spouse	0.00	14.29	
Self and partner/spouse jointly	2.41	20.00	

Note: These data were only collected in round four.

Table 20 Work changes during the pandemic, by sex, Niger

	Round 1		Round 2		Round 3		Round 4	
	Male	Female	Male	Female	Male	Female	Male	Female
Time spent on work compared to pre-COVID times								
More than before	25.98	21.62	9.87	0.00	3.18	0.00	22.15	12.61
Less than before	13.17	10.81	41.26	44.68	26.36	21.15	32.57	33.33
About the same as before	60.14	59.46	47.98	55.32	65.00	73.08	44.63	51.35

Table 21 Care burden during the pandemic, by sex, Niger

Variable	Round 1			Round 2			Round 3			Round 4		
	Male	Female	P-value	Male	Female	P-value	Male	Female	P-value	Male	Female	P-value
Time spent caring for other (hours)	4.10	6.90	0.000	4.46	7.16	0.000	4.87	10.38	0.000	6.24	12.37	0.000
More time spent caring for household members during lockdown, as compared to pre-covid (%) times	19.22	11.76	0.201	11.38	10.62	0.828	10.39	8.33	0.525	21.14	13.92	0.054

Table 22 MDD-W, by sex, Niger

Variable	Round 1			Round 2			Round 3			Round 4		
	Male	Female	P-value	Male	Female	P-value	Male	Female	P-value	Male	Female	P-value
MDD (%)	42.02	21.57	0.0056	47.24	43.36	0.4829	41.94	46.67	0.3818	37.43	41.77	0.3523

Table 23 Migrants who returned due to the pandemic, Niger

Variable (%)	Round 1	Round 2	Round 3	Round 4
At least one male migrant	99.25	99.09	99.28	98.58
At least one male migrant returned due to COVID	69.70	36.70	26.09	34.78
At least one female migrant	2.26	4.55	1.44	3.57
At least one female migrant returned due to COVID	100.00	60.00	0.00	0.00
Remittances are lower than before COVID	29.63	36.36	36.36	6.90

Note: There were very few female migrants in all rounds. Only 3 women had migrated in Niger before the pandemic and all of them returned home in round 1.

Table 24 Mobility and access impacts due to the pandemic, by sex, Niger

	Round 1			Round 2			Round 3			Round 4		
Can get around (%)	Male	Female	P-value	Male	Female	P-value	Male	Female	P-value	Male	Female	P-value
To buy food and other items	71.99	50.98	0.00	80.34	61.06	0.00	86.02	72.50	0.001	92.00	76.58	0.000
To sell food and other items	41.04	21.57	0.01	53.45	29.20	0.00	42.29	29.17	0.013	48.86	45.57	0.492
To work	78.50	50.98	0.00	76.90	31.86	0.00	72.04	46.67	0.000	87.43	55.70	0.000
To seek medical care	68.08	56.86	0.12	44.48	46.90	0.66	40.14	43.33	0.553	26.00	28.48	0.559
To attend group meetings	17.26	17.65	0.95	63.45	44.25	0.00	24.37	11.67	0.004	27.14	36.08	0.042
To meet friends or family	71.01	66.67	0.53	76.21	68.14	0.10	79.57	73.33	0.170	88.57	82.28	0.054
To collect water or fuelwood	41.37	82.35	0.00	49.31	75.22	0.00	48.03	80.00	0.000	44.29	79.75	0.000
To obtain vegetables and fruits	70.36	58.82	0.15	63.10	54.87	0.05	73.84	85.00	0.030	82.00	79.11	0.440
Access to food changed (%)	37.46	31.37	0.66	41.03	28.32	0.00	37.99	39.17	0.070			
Less mobility compared to pre-COVID times (%)	39.41	19.61	0.01	34.48	32.74	0.00	15.05	13.33	0.360	45.71	39.87	0.00

Results Tables for Rwanda

Figure 3 Rwanda COVID-19 trajectory and study timeline

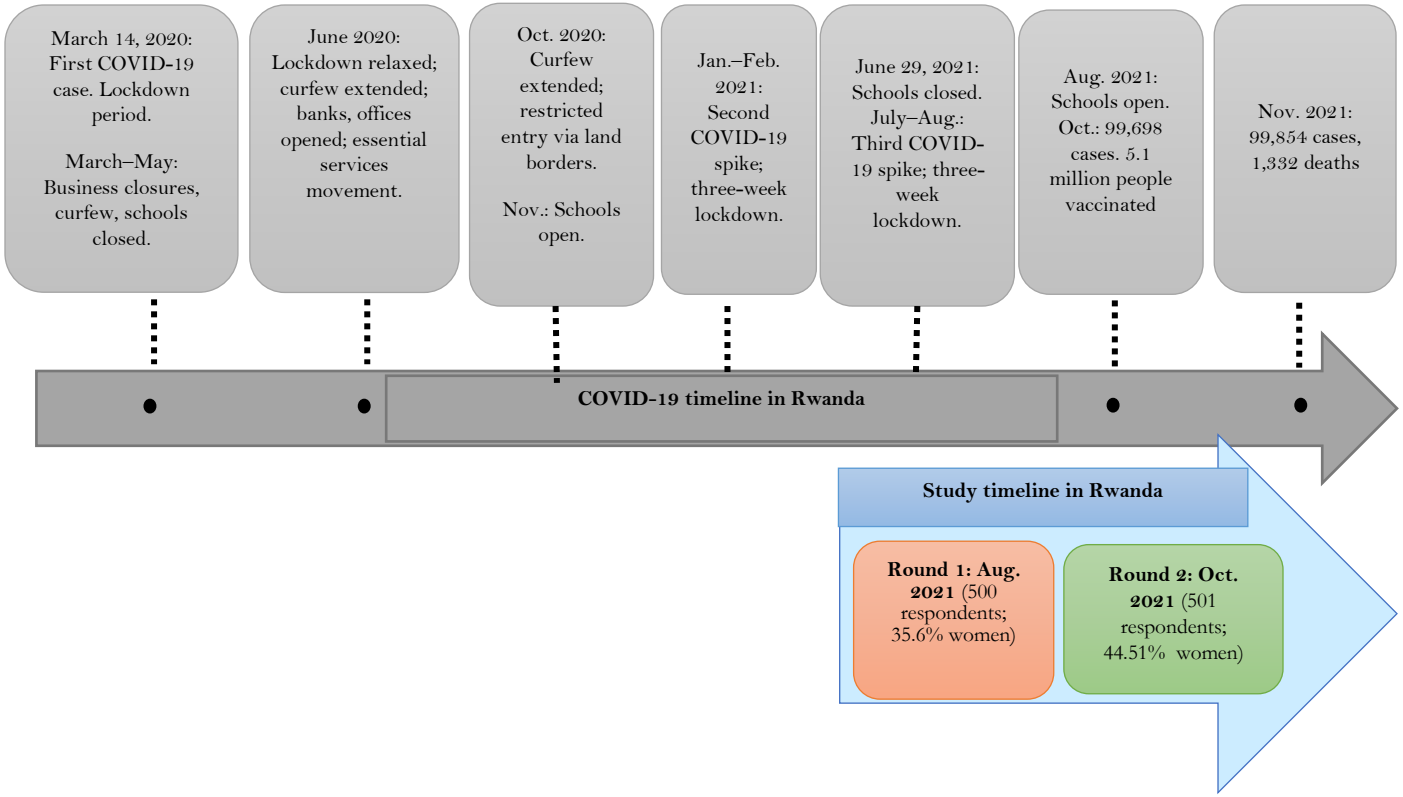

Table 25 Background on respondents' characteristics, by sex, Rwanda

Variable	Round 1			Round 2		
	Male	Female	P-value	Male	Female	P-value
Age (years)	43.07	42.41	0.540			
Marital Status (married, %)	95.03	80.34	0.000			
Respondents that were household heads (%)	98.76	23.60	0.000	99.28	24.66	0.000
No formal schooling (%)	9.09	6.51	0.733			
Some primary level (%)	36.36	36.09				
Completed primary level (%)	35.74	36.69				
Some secondary level (%)	11.91	11.24				
Completed secondary level (%)	4.70	7.69				
Greater than secondary level (%)	2.19	1.78				
Household size (number)	5.38	5.165	0.246	6.125	6.266	0.852
Households with at least one child under 5 (%)	62.11	52.81	0.043	4.68	9.42	0.036
Households with at least one adult over 60 (%)	12.42	18.54	0.004	0.36	2.24	0.054
Occupation—farming/agriculture (%)	78.37	79.29	0.323	80.22	82.96	0.247
Agricultural land (acres)	0.673	0.503	0.022			

Table 26 Income loss, by sex, Rwanda

Variable	Round 1			Round 2		
	Male	Female	P-value	Male	Female	P-value
Experienced income loss (%)	90.99	88.76	0.3617	82.01	84.3	0.4317

Table 27 Income loss, by livelihood type, Rwanda

Variable	Round 1			Round 2		
	Other livelihood activities	Farming	P-value	Other livelihood activities	Farming	P-value
Experienced income loss (%)	91.38	89.84	0.788	83.7	82.80	0.865

Note: Other livelihood activities include casual labor, service providers, street vendors, home-based workers, salaried workers, business owners, drivers, and mechanics.

Table 28 Coping strategies, by sex, Rwanda

	Round 1			Round 2		
Coping strategies (%)	Male	Female	P-value	Male	Female	P-value
Used savings	74.40	78.48	0.2784	70.18	67.91	0.6197
Used assets	41.98	32.28	0.0435	38.60	28.88	0.0716
Borrowed	42.66	56.96	0.0037	44.74	46.52	0.7160
Government transfer	10.92	14.56	0.2603	6.14	10.16	0.1320
Nongovernment transfer	7.17	5.70	0.5498	3.95	5.35	0.4971
Consumed less food	73.38	72.15	0.7796	71.93	66.31	0.2165
Found an alternative job/worked extra hours	30.03	16.46	0.0015	41.67	17.11	0.0000
Reduced expenditures	34.47	19.62	0.0009	38.16	28.34	0.0354

Table 29 Decisions on coping strategies, by sex, Rwanda

Variable	Round 1			Round 2		
	Male	Female	P-value	Male	Female	P-value
Who decided to use savings (%):						
Self	14.22	22.58	0.053	10.00	22.05	0.0022
Partner/spouse	2.75	6.45		0.63	3.94	
Self and partner/spouse jointly	81.19	70.16		89.38	72.44	
Who decided to sell assets (%):						
Self	13.01	25.49	0.025	11.36	16.67	0.592
Partner/spouse	1.63	7.84		0.00	0.00	
Self and partner/spouse jointly	84.55	66.67		85.23	81.48	
Who decided to borrow (%):						
Self	15.20	30.00	0.067	15.69	34.48	0.026
Partner/spouse	4.00	4.44		1.96	2.30	
Self and partner/spouse jointly	80.00	64.44		78.43	60.92	

Table 30 Whose savings assets and assets were used, by sex, Rwanda

Variable	Round 1			Round 2		
	Male	Female	P-value	Male	Female	P-value
Whose savings were used (%)						
Self	22.02	25.81	0.666	10.00	22.05	0.002
Partner/spouse	3.21	4.84		0.63	3.94	
Self and partner/spouse jointly	72.94	66.94		89.38	72.44	
Who owned the assets sold (%)						
Self	16.26	27.45	0.120	11.36	16.67	0.592
Partner/spouse	0.00	1.96		0.00	0.00	
Self and partner/spouse jointly	82.93	70.59		85.23	81.48	

Table 31 Sources of borrowing, by sex, Rwanda

	Round 1			Round 2		
Source of borrowing (%)	Male	Female	P-value	Male	Female	P-value
Informal: family, neighbors, friends	24	23	0.9097	24	22	0.7823
Group savings	50	58	0.2359	66	68	0.7569
Formal banks, money lenders, cooperative bank	26	14	0.0473	8	3	0.1984
NGOs, microfinance, lending apps	2	4	0.4047	3	7	0.2031

Table 32 Work changes during the pandemic, by sex, Rwanda

	Round 1		Round 2	
	Male	Female	Male	Female
Time spent on work compared to pre-COVID times				
More than before	86.89	69.23	79.05	78.45
Less than before	4.10	10.58	7.51	4.42
About the same as before	9.02	19.23	13.04	17.13
Work changed because of COVID-19	79.94	81.07	83.15	76.92
Changes in work due to COVID-19 (among those who reported that their work changed)				
Switched occupations	2.35	2.19	6.31	11.88
Harder to find work	32.55	32.12	28.38	18.75
Working more from home	19.61	3.65	8.11	16.25
Staying home to avoid illness	43.53	58.39	56.31	47.50
Staying home to care for children and/or other family members	0.78	0.00	0.45	5.63

Table 33 Time spent on care during the pandemic, by sex, Rwanda

Variable	Round 1			Round 2		
	Male	Female	P-value	Male	Female	P-value
Time spent caring others (hours)	6.88	8.24	0.004	7.63	9.28	0.000
More time spent on care compared to pre-COVID (%)	79.19	74.16	0.197	82.01	84.30	0.497

Table 34 MDD-W, by sex, Rwanda

Variable	Round 1			Round 2		
	Male	Female	P-value	Male	Female	P-value
MDD (%)	37.58	24.16	0.0022	43.88	23.32	0.0000

Table 35 Migrants who returned due to COVID-19, Rwanda

Variable (%)	Round 1
Households with at least one male migrant	56.60
Households with at least one male migrant who returned due to COVID	28.30
Households with at least one female migrant	37.74
Households with at least one female migrant who returned due to COVID	20.75

Table 36 Mobility and access to services, by sex, Rwanda

Variable	Round 1			Round 2		
Can get around (%):	Male	Female	P-value	Male	Female	P-value
To buy food or other items	87.58	76.97	0.0086			
To sell food or other items	27.33	18.54	0.0891			
For employment	54.97	57.87	0.4933			
To attend group meetings	31.06	24.16	0.2158			
To meet friends or family	14.29	17.42	0.0283			
To collect water or fuelwood/firewood	79.81	73.60	0.1103			
To obtain vegetables and fruits	61.18	51.69	0.0770	80.58	74.89	0.3109
Less mobility compared to pre-COVID times	1.86	5.06	0.2492			

Results Tables for Uganda

Figure 4 Uganda COVID-19 and study timeline

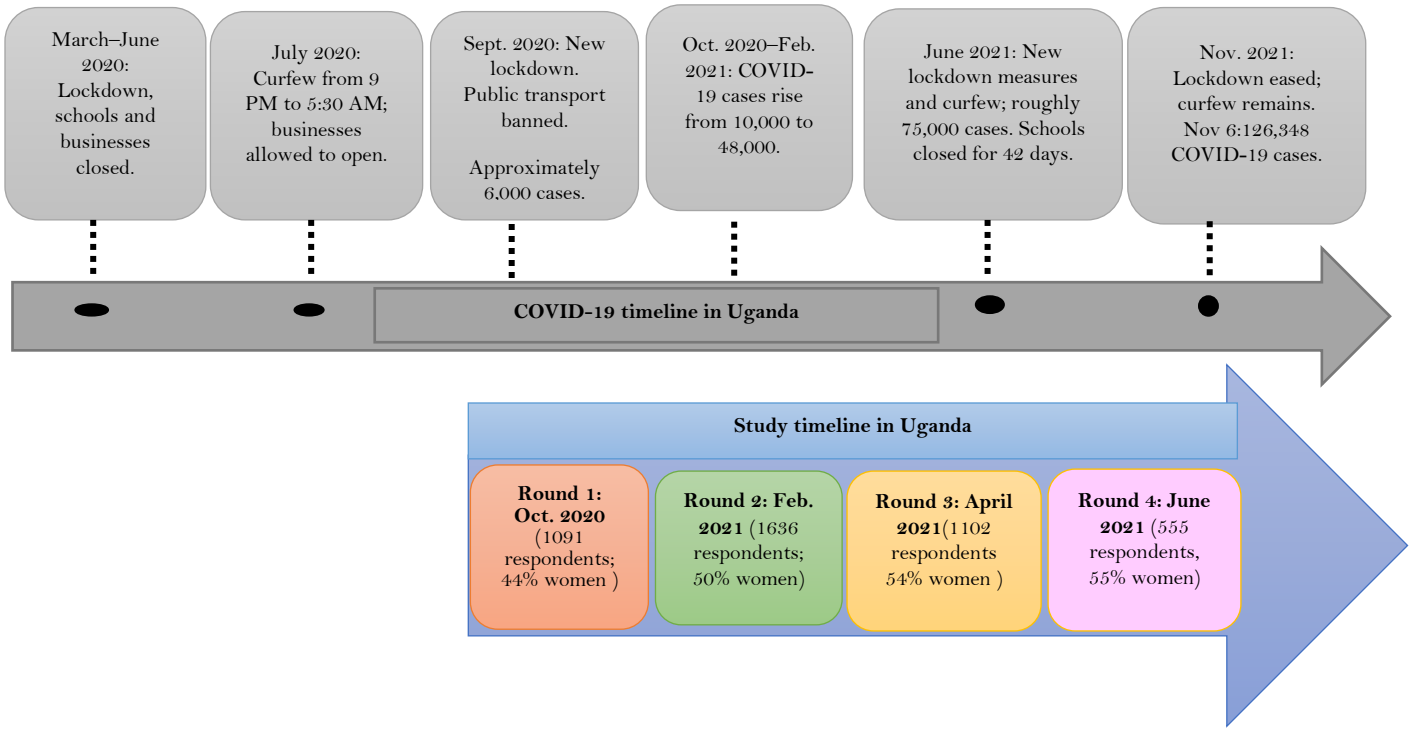

Table 37 Background on respondents' characteristics, by sex, Uganda

	Round 1			Round 2			Round 3			Round 4		
Variable	Male	Female	P-value	Male	Female	P-value	Male	Female	P-value	Male	Female	P-value
Age (years)	46.08	47.76	0.062	47.30	48.83	0.048	47.66	49.56	0.053	48.44	48.04	0.774
Respondents that were household heads (%)	96.88	45.96	0.000	97.78	47.88	0.000	97.06	53.55	0.000	97.99	53.27	0.000
Household size (number)	7.22	7.16	0.823	6.75	6.74	0.974	6.29	6.69	0.131	6.34	6.37	0.904
Occupation—farming/agriculture (%)	81.74	85.92	0.064	82.37	86.06	0.040	85.29	90.20	0.012	83.53	88.56	0.086
Marital status (married %)	88.82	56.94	0.000	86.93	54.67	0.000	86.27	55.24	0.000	86.35	56.86	0.000
No formal schooling (%)	5.43	15.32	0.000	6.17	19.98	0.000	8.04	20.61	0.000	5.62	19.93	0.000
Some primary level (%)	42.43	52.38		46.17	49.70		50.20	50.51		43.37	50.98	
Completed primary level (%)	19.57	15.94		19.14	15.83		16.47	14.19		18.88	10.78	
Some secondary level (%)	23.36	13.87		20.12	12.42		19.22	12.84		22.09	15.69	
Completed secondary level (%)	5.26	1.86		4.81	1.58		3.53	1.52		4.82	2.29	
Greater than secondary level (%)	3.95	0.62		3.58	0.37		2.55	0.34		5.22	0.33	

Table 38 Income loss, by sex of respondent, Uganda

Variable	Round 1			Round 2			Round 3			Round 4		
	Male	Female	P-value	Male	Female	P-value	Male	Female	P-value	Male	Female	P-value
Experienced income loss (%)	87.66	83.61	0.0563	78.05	76.48	0.4496	50.98	47.38	0.2331	71.08	58.82	0.0027

Table 39 Income loss, by livelihood type, Uganda

Variable	Round 1			Round 2			Round 3			Round 4		
	Other livelihood activities	Farming	P-value	Other livelihood activities	Farming	P-value	Other livelihood activities	Farming	P-value	Other livelihood activities	Farming	P-value
Experienced income loss (%)	87.64	85.53	0.4589	65.53	79.49	0.0000	46.21	49.43	0.4875	73.68	62.84	0.0667

Note: Other livelihood activities include casual labor, service providers, street vendors, home-based workers, salaried workers, business owners, drivers, and mechanics.

Table 40 Coping strategies, by sex, Uganda

Coping strategy	Round 1			Round 2			Round 3			Round 4		
(%)	Male	Female	P-value	Male	Female	P-value	Male	Female	P-value	Male	Female	P-value
Used savings	79.17	75.68	0.2040	73.14	71.79	0.5903	51.54	42.14	0.0288	62.15	57.22	0.3430
Sold assets	66.98	66.50	0.8778	71.25	60.86	0.0001	47.49	41.79	0.1831	29.38	20.00	0.0398
Borrowed cash	47.37	41.04	0.0542	40.92	43.11	0.4163	36.15	48.21	0.0046	24.29	26.67	0.6070

Table 41 Decision-making on coping strategies, by sex, Uganda

Variable	Round 4		
	Male	Female	P-value
Who decided to use savings? (%):			
Respondent	66.36	68.93	0.6890
Partner/spouse	3.64	1.94	0.4551
Self and partner/spouse jointly	35.45	26.21	0.1450
Who decided to sell assets? (%):			
Respondent	50.00	50.00	1.0000
Partner/spouse	3.85	0.00	
Self and partner/spouse jointly	50.00	50.00	1.0000
Who decided to borrow (%):			
Respondent	72.09	72.92	0.9300
Partner/spouse	0.00	2.08	0.3412
Self and partner/spouse jointly	30.23	16.67	0.1252

Table 42 Whose savings and assets were used, by sex, Uganda

	Round 1			Round 2			Round 3			Round 4		
Variable	Male	Female	P-value	Male	Female	P-value	Male	Female	P-value	Male	Female	P-value
Whose savings were used (%)												
Self/respondent	68.01	69.51	0.6673	60.91	71.74	0.001	78.36	86.44	0.094	67.27	69.90	0.6795
Household head (if respondent was not head)	1.66	17.70	0.0000	0.43	15.45	0.000	0.75	27.12	0.000	0.00	29.13	0.0000
Partner/spouse	13.74	6.23	0.0012	7.56	1.99	0.000	21.64	1.69	0.000	3.64	0.97	0.1991
Self and partner/spouse jointly	33.18	23.61	0.0051	40.17	28.26	0.000	15.67	9.32	0.131	33.64	22.33	0.0668
Whose assets were sold (%)												
Self/respondent	60.50	70.90	0.0070	49.00	61.46	0.0003	69.11	73.50	0.452	53.85	50.00	0.7225
Household head (if respondent was not head)	1.40	15.67	0.0000	0.00	11.46	0.0000	2.44	22.22	0.000	0.00	0.00	
Partner/spouse	13.73	4.85	0.0002	9.09	3.65	0.0016	16.26	1.71	0.000	1.92	0.00	0.4027
Self and partner/spouse jointly	38.66	25.75	0.0007	50.78	37.76	0.0002	23.58	21.37	0.682	46.15	50.00	0.7225

Table 43 Sources of borrowing, by sex, Uganda

Sources of borrowing	Round 1			Round 2			Round 3			Round 4		
	Male	Female	P-value	Male	Female	P-value	Male	Female	P-value	Male	Female	P-value
Informal: family, neighbors, friends	48	36	0.013	36	32	0.388	36	22	0.014	56	46	0.3418
Group savings	47	59	0.015	55	68	0.001	55	79	0.000	30	50	0.0553
Formal banks, money lenders, cooperative bank	8	2	0.018	14	6	0.001	12	6	0.119	5	4	0.9104
NGOs, microfinance, lending apps	5	6	0.561	8	7	0.624	9	2	0.028	12	6	0.3657

Table 44 Work changes due to the pandemic, by sex, Uganda

	Round 1		Round 2		Round 3		Round 4	
	Male	Female	Male	Female	Male	Female	Male	Female
Time spent on work compared to pre-COVID times								
More than before	57.10	48.40	38.52	36.96	32.31	28.26	22.54	11.30
Less than before	21.54	16.42	19.26	14.91	15.38	14.13	36.07	39.04
About the same as before	21.37	35.18	42.22	48.14	50.77	57.61	41.39	49.32
Work changed because of COVID-19							40.57	26.03
Changes in work due to COVID-19 (among those who reported that their work changed)								
Switched occupations or jobs							7.07	5.26
Harder to find work							39.39	25.00
Working more from home							15.15	13.16
Staying home to avoid illness							35.35	44.74
Staying home to care for children and/or other family members							1.01	11.84

Table 45 Time spent caring for others, by sex, Uganda

Variable (%)	Round 1			Round 2			Round 3			Round 4		
	Male	Female	P-value	Male	Female	P-value	Male	Female	P-value	Male	Female	P-value
More time spent caring for household members during lockdown, compared to pre-COVID	68.59	61.90	0.021	18.50	21.82	0.094	10.78	14.02	0.106	37.75	27.45	0.010
More time spent caring for household members during lockdown, compared to now	24.67	20.08	0.072	48.19	39.18	0.025	25.76	26.73	0.889			

Table 46 MDD-W of women, Uganda

Variable	Round 2	Round 3	Round 4
MDD %	32.24	45.44	33.99

Table 47 Migrants who returned due to the pandemic, Uganda

Variable (%)	Round 1	Round 2	Round 3
Household has at least one male migrant	60.09	67.44	35.29
Household has at least one male migrant returning due to COVID	37.14	27.59	16.67
Household has at least one female migrant	46.35	41.86	70.59
Household has at least one female migrant returning due to COVID	27.78	30.56	41.67
Remittances are lower than before COVID	63.64	39.39	40.00

Table 48 Mobility and access to services, by sex, Uganda

	Round 1		
Mobility and access	Male	Female	P-value
Compared to pre-COVID times, it was harder to get around during lockdown (%)			
To buy food or other items	62.66	63.77	0.280
To sell food or other items	78.78	67.70	0.000
For employment	66.12	55.07	0.000
To seek medical care	80.76	82.61	0.261
To attend group meetings	94.90	92.96	0.051
To meet friends or family	90.95	90.68	0.895
To collect water or fuelwood	9.05	12.63	0.130
To obtain vegetables and fruits	20.89	21.53	0.455

APPENDIX B: QUESTIONNAIRE

Example: Rwanda Round 1

Colour codes:
Blue= Scripting instructions
Green: Enumerator Notes

A. Call information

Outcomes and time code (HH:MM) should be recorded for each attempted call. Follow-up attempts should be made at different times of day than previous attempts. Enumerator's name and code should be recorded for each attempt.

A.01 Phone number	
A.02 Enumerator name and code	Name=
	Code=
A.03 1st Attempt: Is the respondent able to talk?	1=Yes **(Allow to capture call information and Continue to Informed consent)** 2=No answer **(Allow to capture call information and Terminate)** 3=Wrong number **(Allow to capture call information and Terminate)** 4=Respondent not available **(Allow to capture call information and Terminate)** 5=Respondent declined to participate **(Allow to capture call information and Terminate)** 6=Someone else declined to participate for respondent **(Allow to capture call information and Terminate)** 6 =Other (Specify) **(Allow to capture call information and Terminate)**
(AUTOMATED) A.04 1st attempt: Time of day	(HH:MM)
(AUTOMATED) A.05 Preferred time and date to call for follow-on interview	(DD/MM/YYY) (HH:MM)
A.06 2nd Attempt: Is the respondent able to talk?	1=Yes **(Allow to capture call information and Continue to Informed consent)** 2=No answer **(Allow to capture call information and Terminate)** 3=Wrong number **(Allow to capture call information and Terminate)** 4=Respondent not available **(Allow to capture call information and Terminate)** 5=Respondent declined to participate **(Allow to capture call information and Terminate)** 6=Someone else declined to participate for respondent **(Allow to capture call information and Terminate)** 6 =Other (Specify) **(Allow to capture call information and Terminate)**
(AUTOMATED) A.07 2ndattempt: Time of day	(HH:MM)

(AUTOMATED) A.08 Preferred time and date to call for follow-on interview	(DD/MM/YYY) (HH:MM)
A.09 3rd Attempt: Is the respondent able to talk?	1=Yes **(Allow to capture call information and Continue to Informed consent)** 2=No answer **(Allow to capture call information and Terminate)** 3=Wrong number **(Allow to capture call information and Terminate)** 4=Respondent not available **(Allow to capture call information and Terminate)** 5=Respondent declined to participate **(Allow to capture call information and Terminate)** 6=Someone else declined to participate for respondent **(Allow to capture call information and Terminate)** 6 =Other (Specify) **(Allow to capture call information and Terminate)**
(AUTOMATED) A.10 3rd attempt: Time of day	(HH:MM)
(AUTOMATED) A.11 Preferred time and date to call for follow-on interview	(DD/MM/YYY) (HH:MM)
A.12 4th Attempt: Is the respondent able to talk?	1=Yes **(Allow to capture call information and Continue to Informed consent)** 2=No answer **(Allow to capture call information and Terminate)** 3=Wrong number **(Allow to capture call information and Terminate)** 4=Respondent not available **(Allow to capture call information and Terminate)** 5=Respondent declined to participate **(Allow to capture call information and Terminate)** 6=Someone else declined to participate for respondent **(Allow to capture call information and Terminate)** 6 =Other (Specify) **(Allow to capture call information and Terminate)**
(AUTOMATED) A.13 4th attempt: Time of day	(HH:MM)
(AUTOMATED) A.14 Preferred time and date to call for follow-on interview	(DD/MM/YYY) (HH:MM)
A.15 5th Attempt: Is the respondent able to talk?	1=Yes **(Allow to capture call information and Continue to Informed consent)** 2=No answer **(Allow to capture call information and Terminate)** 3=Wrong number **(Allow to capture call information and Terminate)** 4=Respondent not available **(Allow to capture call information and Terminate)** 5=Respondent declined to participate **(Allow to capture call information and Terminate)**

	6=Someone else declined to participate for respondent **(Allow to capture call information and Terminate)** 6 =Other (Specify) **(Allow to capture call information and Terminate)**
AUTOMATED) A.16 5th attempt: Time of day	(HH:MM)
(AUTOMATED) A.17 Preferred time and date to call for follow-on interview	(DD/MM/YYY) (HH:MM)
A.18 6th Attempt: Is the respondent able to talk?	1=Yes **(Allow to capture call information and Continue to Informed consent)** 2=No answer **(Allow to capture call information and Terminate)** 3=Wrong number **(Allow to capture call information and Terminate)** 4=Respondent not available **(Allow to capture call information and Terminate)** 5=Respondent declined to participate **(Allow to capture call information and Terminate)** 6=Someone else declined to participate for respondent **(Allow to capture call information and Terminate)** 6 =Other (Specify) **(Allow to capture call information and Terminate)**
(AUTOMATED) A.19 6th attempt: Time of day	(HH:MM)
(AUTOMATED) A.20 Preferred time and date to call for follow-on interview	(DD/MM/YYY) (HH:MM)
A.21 7th Attempt: Is the respondent able to talk?	1=Yes **(Allow to capture call information and Continue to Informed consent)** 2=No answer **(Allow to capture call information and Terminate)** 3=Wrong number **(Allow to capture call information and Terminate)** 4=Respondent not available **(Allow to capture call information and Terminate)** 5=Respondent declined to participate **(Allow to capture call information and Terminate)** 6=Someone else declined to participate for respondent **(Allow to capture call information and Terminate)** 6 =Other (Specify) **(Allow to capture call information and Terminate)**
(AUTOMATED) A.22 7th attempt: Time of day	(HH:MM)
(AUTOMATED) A.23 Preferred time and date to call for follow-on interview	(DD/MM/YYY) (HH:MM)

Informed consent

Hello. I am _____, from Social Economic Studies, Surveys, Monitoring and Evaluation Consult limited (SESMEC Ltd). We are contacting you as a follow on to your participation in our previous survey to find out how the COVID-19 pandemic and resulting policies are affecting you and your family. This study is being done with International Food Policy Research Institute (IFPRI) with support from FAO. I would like to ask you some general questions about your household, sources of income, food and water over the last 2 weeks. We expect the call to take approximately 20 minutes to complete. If you agree to participate, the information you provide will be used for research purposes. We will reward you with an airtime voucher for completing the interview. Aside from this reward, your answers will not affect any benefits or subsidies you may receive now or in the future.

Your responses to these questions will be anonymous and remain strictly confidential. Your name and address will not appear in any data that is made publicly available. However, we would like to write down your contact information to call you back in about one month's time to understand if the situation by then has improved or worsened. Do you consent to provide information for this study? You may withdraw from the study at any time and if there are questions that you would prefer not to answer then we respect your right not to answer them.

If you have questions about the research in general or about your role in the study, please feel free to contact [redacted]. If you have questions about your rights as a participant in this study, you may contact the IFPRI Institutional Review Board (att. Olivette Burton - IRB coordinator) that protects the rights of study participants. You can contact the IRB at Tel: +001 202-862-5600 or ifpriirb@cgiar.org. Do you have any questions about this interview/research?

I'm having a bit of trouble hearing you. Is the phone on speaker on your side? (if yes) Is it possible to switch off speaker phone? If not, no problem.

DNR0

- The respondent is on speaker phone {Skip section H: changes in conflict
- The respondent is NOT on speaker phone {Do not skip section H: changes in conflict**}**

B. Basic household details

B.01 Gender of respondent	1=Male 2=Female 3=Other
B.02 What is your name?	(name of respondent)
B.03 What is your age?	(completed years)
B.04a What is your current marital status? **OMO**	1=Single/Never married 2=Married or informal union 3=Separated 4=Divorced 5=Widowed 98=Don't know 99=Refused
B.04b What is your relationship to the head of household? Are you the… **OMO**	1=Household head 2=Spouse of the household head 3=Son/Daughter **{Terminate}**

	4=Son-in-law/Daughter-in-law **{Terminate}** 5=Brother/Sister **{Terminate}** 6=Brother-in-law/Sister-in-law **{Terminate}** 7=Father/Mother **{Terminate}** 8=Father-in-law/Mother-in-law **{Terminate}** 9=Grandfather/Grandmother 10=Grandchild **{Terminate}** 11=Other relation (specify) **{Terminate}** 12=Unrelated **{Terminate}**
B.04c. Who is the primary male decision-maker in your home?	1=Household head/self 2=Spouse 3=Uncle 4=Son 5=Son in-law 6=Father 7=Father-in-law 8=Brother 9=Brother-in-law 10=Grandfather 11=Grandfather-in-law 12=Unrelated 13=No male decision maker 95=Other relation, specify
B.05.a What is your highest level of schooling? Do you have… **OMO**	1=No formal schooling 2=Some primary level 3=Completed primary level 4=Some secondary level 5=Completed secondary level 6=Greater than secondary level 98=Don't know
B.05.b Can you read and write in any language?	1=yes, easily 2=yes, but with difficulty 3=not at all 98=don't know
B.06 How many people currently live in your household?	(number)
B.06a. How many adults aged 18–59 are present in the household?	(number)
B.06b. How many of these adults are male?	(number)
B.06c. How many of these adults are female?	(number)
B.07 How many children aged 5 years or younger live in your household?	(number)
B.07a. How many of these children are male?	(number)
B.07b. How many of these children are female?	(number)
B.08 How many people aged 60 years or older live in your household?	(number)

B.08a. How many of these adults are male?	(number)
B.08b. How many of these adults are female?	(number)
B.09 What is your main occupation? That is, what kind of work do you mainly do? Is it… **OMO**	1=Farming or raising livestock *(if 1, answer also B.09d)* 2=Casual labor 3= processing, marketing and trading agricultural products 4=Working for yourself/off-farm business 5=Salaried job 6=Other 7=You do not work (if 7, skip B.09a and B.09b and ask B.09.c) 98=Don't know
B09a. Is your main occupation performed on a regular, seasonal, casual or informal basis?	1=regular basis 2=seasonal basis 3=casual or informal basis 4=other 98-don't know
B.09b. What is your secondary occupation?	1=Farming or raising livestock *(if 1, answer also B.09d)* 2=Casual labor 3=Processing, marketing and trading agricultural products 4=Working for yourself/off-farm business 5=Salaried job 6=Other 7=No secondary activity 98=Don't know
B.09c. Why do you not work?	1=Unable to find a job 2=Disability or illness 3=Caring for children or other family members 4=Don't want to work 5=Other 98=Don't know
B.09d [if 1, Farming or raising livestock]: What kind of farming or livestock? Is it… (check all that apply) **MMP**	1= Staple crops such as rice, maize, sorghum, cassava, wheat, millet, pulses 2= Horticulture such as fruits and vegetables 3= Other cash crops for example spices or castor 4= Dairy 5= Sheep, goat, and pig rearing 6= Poultry 7=Other
B.09.e Has the work that you do changed because of the COVID-19 pandemic?	1=yes >> ask B.09.f 2=no 98=don't know
B.o9.f How has the work that you do changed?	1=Switched occupations or jobs 2=Harder to find work 3=Working more from home

	4=Staying home to avoid illness 5=Staying home to care for children and/or other family members 98=Don't know
[Ask if B.04a = 2, Married or informal union] B.10 What is your spouse or partner's occupation? That is, what kind of work do they mainly do? Is it… **OMO**	1=Farming or raising livestock (if 1, answer also B.10d) 2=Casual labor 3=Work for self/off-farm business 4=Salaried job 5=Other 6=Does not work 98=Don't know
B.10a. Is your spouse's main occupation performed on a regular, seasonal, casual or informal basis?	1=regular basis 2=seasonal basis 3=casual or informal basis 4=other 98-don't know
B.10b. What is your spouse's secondary occupation?	1=Farming or raising livestock *(if 1, answer B.10d)* 2=Casual labor 3= processing, marketing and trading agricultural products 4=Working for yourself/off-farm business 5=Salaried job 6=Other 7=No secondary activity 98=Don't know
B.10c. Why does your spouse not work?	1=Unable to find a job 2=Disability or illness 3=Caring for children or other family members 4=Doesn't want to work 5=Other 98=Don't know
B.10d **[if 1, Farming or raising livestock]**: What kind of farming or livestock? Is it… (check all that apply) **MMP**	1= Staple crops such as rice, wheat, maize, sorghum, cassava, millet, pulses 2= Horticulture such as fruits and vegetables 3= Other cash crops for example spices, castor 4= Dairy 5= Sheep, goat, and pig rearing 6= Poultry 7=Other
B.10.e Has the work that your spouse does changed because of the COVID-19 pandemic?	1=yes >> ask B.10.f 2=no 98=don't know
B.10.f How has your spouse's work changed?	1=Switched occupations or jobs 2=Harder to find work 3=Working more from home 4=Staying home to avoid illness

	5=Staying home to care for children and/or other family members 98=don't know
B.11 Who usually decides how the money you personally earn will be used? Is it…**OMO**	1=You 2=Your spouse or partner 3=You and your spouse jointly 4=Other household members 5=You and other household members 6=Your spouse and other household members 7=You don't personally earn 8=Other
[Ask B.12 and B.13 if B.04a = 2, Married or informal union] B.12 Would you say that the money you personally earn is more than what your (spouse/partner) personally earns, less than what (spouse/partner) personally earns, or about the same?	 1=More than spouse/partner 2=Less than (spouse/partner) 3=About the same as (spouse/partner) 4=Spouse/partner has no earnings 98=Don't know
B.**13 (Skip if "4" to B.12)** Who usually decides how your spouse's or partner's personal earnings will be used? Is it...	1=You 2=Your spouse 3=You and your spouse jointly 4=Other household members 5=You and other household members 6=Spouse and other household members 7=Spouse has no earnings 8=Other
B.14 Does any member of your household own or control any agricultural land?	1=Yes 2=No 98=Don't know
B.15 How many hectares of agricultural land do members of your household own?	(number)
B.15.a Do you own any of the land owned or cultivated by your household?	1=Yes, solely 2=Yes, jointly 3=Yes, solely and jointly 4=No
B.16 How many of the following animals does your household own?	
A) Milk cows or bulls?	(number)
B) Other cattle?	(number)
C) Horses, donkeys, or mules?	(number)
D) Goats?	(number)
E) Sheep?	(number)
F) Chickens or other poultry?	(number)
G) Pig?	
H) Others	

B.17 What would you say is the main source of drinking water for members of your household? Is it… **OMO**	1=Piped water 2=Dug well 3=Water from spring 4=Rainwater collection 5=Delivered water 6=Water kiosk 7=Surface water (river, lake, canal) 99=Refused

C. Labor and time use

C.01-C.03 should only be asked during the initial/recruitment interview.	
C.01 Has your household experienced a loss of income due to the COVID-19 epidemic?	1=No **>> Skip to C.03** 2=Yes **>>answer questions C.02a** 98=Don't know **>> Skip to C.03** 99=Refused **>> Skip to C.03**
C.02a. Whose income is less than before? **MMP**	1=Yours 2=Your spouse or partner's 3=Another household members
C.02b. Did you use savings to deal with the loss of income?	1=No **>> skip to C.02d** 2=Yes 98=Don't know 99=Refused
C.02c. **(If "2" to C.02b)** Whose savings were used? Was it…**MMP**	1=Your savings 2=Your spouse's savings 3=Joint savings of yourself and your spouse 4=Other household members' savings
C.02d. Who decided to use savings?	1=Self 2=Partner/Spouse 3=Self and partner/spouse jointly 4=Other household member(s)
C.02e. Did you sell assets to deal with the loss of income?	1=No **>>Skip to C.02h** 2=Yes 98=Don't know **>>Skip to C.02h** 99=Refused **>>Skip to C.02h**
C.02f Who decided to sell assets?	1=Self 2=Partner/Spouse 3=Self and partner/spouse jointly 4=Other household member(s)
C.02g **(If "2" to C.02d)** Who owned the assets that were sold? Was it…**MMP**	1=You 2=Your spouse 3=You and your spouse jointly 4=Other household members
C.02h. Did you borrow to deal with the loss of income?	1=No **>> Skip to C.02h** 2=Yes

	98=Don't know **>> Skip to C.02h** 99=Refused **>> Skip to C.02h**
C.02i. How did you use borrowed funds?	1=Purchased food for consumption 2=Purchased agricultural inputs 3=Made business investment 4=Paid medical bills 5=Paid school fees 6=Made payment towards loan 7=other, specify
C.02j. Who did you borrow from? Was it a… **OMO**	1=Family member in the village 2=Family member not in the village 3=Neighbor or friend 4=Acquaintance 5=Rotating savings scheme 6=Bank 7=Micro-credit 8=NGO 9=Informal lender 11=mobile app borrowing 10=Other, specify
C.02k. Who decided to borrow?	1=Self 2=Partner/Spouse 3=Self and partner/spouse jointly 4=Other household member(s)
C.02l What is your repayment plan for this loan?	1=Once off repayment 2=Weekly repayments 3=Fortnightly repayments 4=Monthly repayments 888=Other 98=Don't know
C.02m. How long do you think it will take to repay all the debts incurred due to COVID-19?	Months
C.02n. Who in your household is responsible for repaying the loan?	1=Self 2=Partner/Spouse 3=Self and partner/spouse jointly 4=Other household member(s)
C.02o. Did you receive transfer as cash or goods, such as food parcels from the government, to deal with the loss of income?	1=No 2=Yes 98=Don't know 99=Refused
C.02p. Did you receive transfer as cash or goods, such as food parcels from a nongovernment organization, to deal with the loss of income?	1=No 2=Yes 98=Don't know 99=Refused
C.02q. Did you participate in any relief program in the last 12 months?	1=No 2=Yes

	98=Don't know 99=Refused
If yes, what is the name of the program?	
C.02r. Did you do anything else to deal with the loss of income? (multiple responses)	1= Consumed less food (fewer meals or lesser quantity for all or some members) 2= Found an alternative job/worked extra hours to support family income 3= Reduced expenditure 4= No action taken 95= Others, specify 98= Don't know
C.02s (if C.02s=3) On which of the items did you reduce your expenditure?	1= Food items 2= Medical expenses 3= Children's education 4= Transportation 5= Agriculture inputs 6= Utilities (electricity/water/newspaper/television) 7= Livestock needs 8= Clothing 9= Mobile phone recharge 10= Festival/wedding/social functions 95= Others, specify 98= Don't know
C.03 Has anyone in your household been sick in the last seven days?	1=No 2=Yes 98=Don't know 99=Refused
C.04 Over the past 24 hours, how many hours did you spend caring for other members of your household? *Caring includes taking care of children, of the elderly and of sick people in the household, cleaning, cooking, shopping for the family, fetching water and fuel for the family.*	(number)
C.05. How does this compare to a "typical" day before the COVID-19 epidemic? Is it… **OMO**	1=More than before 2=Less than before 3=About the same as before 98=Don't know
[Ask C.06 and C.07 if B.04a = 2, Married or informal union]	(number)

C.06. Over the past 24 hours, how many hours did your (spouse/partner) spend caring for other members of your household? *Caring includes taking care of children, of the elderly and of sick people in the household, cleaning, cooking, shopping for the family, fetching water and fuel for the family.*	
C.07. How does this compare to a "typical" day before the COVID-19 epidemic? Is it… **OMO**	1=More than before 2=Less than before 3=About the same as before 98=Don't know
C.08-C.11 should be asked during the initial/recruitment interview and subsequent tracking interviews.	
C.08 Have you done any (INSERT TYPE OF WORK BASED ON B.09) work in the last seven days?	1=No 2=Yes 98=Don't know 99=Refused
C.09 How does the number of hours you spent working in the last seven days compare to before the COVID-19 epidemic? Is it…	1=More than before 2=Less than before 3=About the same as before 98=Don't know
[Ask C.10 and C.11 if B.04a = 2, Married or informal union] C.10 Has your spouse or partner done any (INSERT TYPE OF WORK BASED ON B.10) work in the last seven days?	 1=No 2=Yes 98=Don't know 99=Refused
C.11 How does the number of hours your spouse or partner spent working in the last seven days compare to before the COVID-19 epidemic? Is it… **OMO**	1=More than before 2=Less than before 3=About the same as before 98=Don't know
C.12-C.14 should only be asked during the tracking interviews.	
C.12. In the past seven days, who usually decided how the money you personally earned was used: was it ...	1=You 2=Your spouse or partner 3=You and your spouse jointly 4=Someone else 5=You did not earn money
[Ask C.13 and C.14 if B.04a = 2, Married or informal union] C.13 **(Skip if "5" to C.12)** In the past seven days, would you say that the money you personally earn is ...	 1=More than your spouse or partner 2=Less than your spouse or partner 3=About the same as your spouse or partner 4=Spouse or partner has no earnings 98=Don't know
C.14 **(Skip if "4" to C.13)** In the past seven days, who usually decided how your spouse's or	1=You 2=Your spouse 3=You and your spouse jointly

partner's personal earnings were used? Was it…: **OMO**	4=Someone else
C.15a How many boys in your household between the ages of 5 and 18 were attending school before the COVID-19 pandemic?	[Number of boys]
C.15b How many girls in your household between the ages of 5 and 18 were attending school before the COVID-19 pandemic?	[Number of girls]
C. 15c Are schools that your children attend currently open?	1=No >> 2=Yes 3=Some schools >> 98=Don't know 99=Refused
C.15.d When schools reopen will you send your children back school?	1=No 2=Yes 98=Don't know 99=Refused
C.16a How many of your school-age boys are currently not attending school?	[Number of boys]
C.16b How many of your school-age girls are currently not attending school?	[Number of girls]
C.17a Why are these boys not attending school?	1=School is closed 2=Cannot afford school fees 3=Need children to work 4=Need help at home 5=Child wanted to drop out of school 6=Worry about Covid-19 7=Other, specify
C.17b Why are these girls not attending school?	1=School is closed 2=Cannot afford school fees 3=Need children to work 4=Need help at home 5=Child wanted to drop out of school 6=Worry about Covid-19 7=Other, specify

D. Mobility

READ: Now I would like to ask you some questions about your ability to move outside your home. In the past two weeks, have you gone outside your home:	
D.01 To buy food or other items	1=No 2=Yes 98=Don't know 99=Refused
D.02 To sell food or other items	1=No 2=Yes

	98=Don't know 99=Refused
D.03 For employment	1=No 2=Yes 98=Don't know 99=Refused
D.05 To seek medical care	1=No 2=Yes 98=Don't know 99=Refused
D.06 To attend group meetings	1=No 2=Yes 98=Don't know 99=Refused
D.07 To meet friends or family	1=No 2=Yes 98=Don't know 99=Refused
D.08 To collect water or fuelwood/firewood	1=No 2=Yes 98=Don't know 99=Refused
D.09 Are you able to get around more or less than before because of COVID-19?	1=More than before 2=Less than before 3=About the same as before 98=Don't know
D.10 Can you still obtain vegetables and fruits for your family?	1=No 2=Yes 98=Don't know 99=Refused
D.11. Are you able to access inputs to agricultural production during the COVID-19 pandemic	1=No 2=Yes 98=Don't know/not applicable 99=Refused
D.12 Has COVID-19 affected your access to services? Respond for each service below: Health services Extension services Transportation Schools Electricity Internet Other, specify	1=No 2=Yes 98=Don't know/not applicable 99=Refused

READ: Now I would like to ask you some questions about food	
E.01 During the last 12 months, was there a time when you were worried about not having enough food to eat because of lack of money or other resources?	1=No >> skip question E.01a 2=Yes >> answer question E.01a 98=Don't know 99=Refused
E.01a Was it specifically linked to COVID-19?	1=No 2=Yes 98=Don't know 99=Refused
E.02 During the last 12 months, was there a time when you were unable to eat healthy and nutritious food (provide examples) because of lack of money or other resources?	1=No >> skip question E.02a 2=Yes >> answer question E.02a 98=Don't know 99=Refused
E.02a Was it specifically linked to COVID-19?	1=No 2=Yes 98=Don't know 99=Refused
E.03 During the last 12 months, was there a time when you ate only a few kinds of foods because of lack of money or other resources?	1=No >> skip question E.03a 2=Yes >> answer question E.03a 98=Don't know 99=Refused
E.03a Was it specifically linked to COVID-19?	1=No 2=Yes 98=Don't know 99=Refused
E.04 During the last 12 months, was there a time when you had to skip a meal because of lack of money or other resources to get food?	1=No >> skip question E.04a 2=Yes >> answer question E.04a 98=Don't know 99=Refused
E.04a Was it specifically linked to COVID-19?	1=No 2=Yes 98=Don't know 99=Refused
E.05 During the last 12 months, was there a time when you ate less than you thought you should because of lack of money or other resources?	1=No >> skip question E.05a 2=Yes >> answer question E.05a 98=Don't know 99=Refused
E.05a Was it specifically linked to COVID-19?	1=No 2=Yes 98=Don't know 99=Refused
E.06 During last 12 months, was there a time when you ran out of food because of lack of money or other resources?	1=No >> skip question E.06a 2=Yes >> answer question E.06a 98=Don't know 99=Refused

E.06a Was it specifically linked to COVID-19?	1=No 2=Yes 98=Don't know 99=Refused
E.07 During the last 12 months, was there a time when you were hungry but did not eat because there was not enough money or other resources for food?	1=No >> skip question E.07a 2=Yes >> answer question E.07a 98=Don't know 99=Refused
E.07a Was it specifically linked to COVID-19?	1=No 2=Yes 98=Don't know 99=Refused
E.08 During the last 12 months, was there a time when you went without eating for a whole day because of lack of money or other resources?	1=No >> skip question E.08a 2=Yes >> answer question E.08a 98=Don't know 99=Refused

Dietary Diversity for Respondents

Have you in the last 24 hours consumed any of these food groups?

Food group	Answer (yes/no) **AUTOMATE**
1. Grains, roots and tubers	
2. Pulses/Beans/peas	
3. Nuts and seeds	
4. Dairy	
5. Meat, poultry and fish	
6. Eggs	
7. Dark leafy greens and vegetables	
8. Other Vitamin A-rich fruits and vegetables	
9. Other vegetables	
10. Other fruits	

G. Migration

G.00 Do any members of your family normally work away from home during the year.	**1=No → if No, skip section** **2=Yes** **98=Don't know → skip section** **99=Refused→ skip section**
G.01 How many men of your household usually migrate for work (either in another country or elsewhere in the same country)?	(number) **[go to G.03 if 0]**
G.02 How many of these men returned home because of the COVID-19 epidemic?	(number)

G.03 How many women of your household usually migrate for work (either in another country or elsewhere in the same country)?	(number)
G.04. How many of these women returned home because of the COVID-19 epidemic?	(number)
G.05 **(If response to G.01> G.02** or response to **G.03> G.04)** Did you have any household members who migrated during the last year despite the pandemic and continued sending money back to your household?	1=No 2=Yes 98=Don't know
G.06 **(If "2" to G.03)** How does this amount compare to before the COVID-19 epidemic began?	1=Less than before 2=Same as before 3=More than before 98=Don't know

H. Changes in conflict

H.00 Are you in a private space in the house where no one can listen to what you are saying?	1=No → **if No, skip section and end interview** 2=Yes 98=Don't know → **skip section** 99=Refused→ **skip section**
[Ask H section if B.04a = 2, Married or informal union] H.01 I first would like to remind you that we are not recording this call and that no responses will be attributed to you. All relationships involve some disagreements. Now I would like to ask some questions about how you and your partner work out the differences you face. In your relationship with your partner, how often would you say that you had a disagreement or fought in the last two weeks?	1= Often 2= Sometimes 3 = Rarely 4 = Never 98=Don't know 99=Refused
H.01a How does the level of disagreement or fighting compare to pre-COVID-19 times?	1=More than before 2=Less than before 3=Same as before 98=Don't know 99=Refused
H.02 In the last two weeks, how regularly have you and your partner worked out everyday problems together?	1= Often 2= Sometimes 3 = Rarely 4 = Never 98=Don't know 99=Refused
H.02a How does the level of cooperation compare to pre-COVID-19 times?	1=More than before 2=Less than before 3=Same as before

	98=Don't know 99=Refused
H.03 In the last two weeks, have you been afraid of your spouse or partner?	1= Often 2= Sometimes 3 = Rarely 4 = Never 98=Don't know 99=Refused
H.04 In the last two weeks have you been afraid of any other family members at the home?	1=Often 2=Sometimes 3=Rarely 4=Never 98=Don't know 99=Refused
H.04a How does the level of fear or your partner or other household members compare to pre-COVID-19 times?	1=More than before 2=Less than before 3=Same as before 98=Don't know 99=Refused
H.05 We would like to give you a reference number where you can seek help if you feel afraid and are looking for support.	Add number here
H.06 Is there an alternative number you would like to share with us in case we are unable to reach you on this one when we do the next interview?	(Number):

Thank you very much for participating. Would you be willing to be contacted again in the future?

INTERNATIONAL FOOD POLICY RESEARCH INSTITUTE
A world free of hunger and malnutrition

IFPRI is a CGIAR Research Center

1201 Eye Street, NW, Washington, DC 20005 USA
T. +1-202-862-5600 | F. +1-202-862-5606 | Email: ifpri@cgiar.org | www.ifpri.org

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