

# Monitoring COVID-19 Impacts on Households in Ethiopia



## Results from a High-Frequency Phone Survey of Households

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### INTRODUCTION





The COVID-19 pandemic and its economic and social effects on households have created an urgent need for timely data to help monitor and mitigate the social and economic impacts of the crisis and protect the welfare of the least well-off Ethiopians. To track how the pandemic is affecting Ethiopia's economy and people and to inform interventions and policy responses, the World Bank is conducting a customized high-frequency phone survey of households (HFPS-HH).


The HFPS-HH builds on the national longitudinal Ethiopia Socioeconomic Survey (ESS) that the Central Statistical Agency (CSA) carried out in 2019 in collaboration with the World Bank. The HFPS-HH subsample of the ESS sample is representative of households with a working phone. The same households are tracked for six months, with selected respondents, typically household heads, completing phone-based interviews every three to four weeks. To support new responses to the pandemic as they become necessary, this high-frequency follow-up allows for a better understanding of its effects on households and their responses to it in what is almost real time.


This brief is based on a sample of 3,058 households in both urban and rural areas in all regions of Ethiopia. The original sample consisted of 3,249 households, of which 3,058 responded to round 3 (R3) calls.<sup>1</sup> The 15-minute questionnaire covers such topics as access to basic needs, child educational activities during school closures, employment dynamics, household income and livelihood, income loss and coping strategies, food security and assistance received.


### HIGHLIGHTS - ROUND 3

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At baseline (R1), nearly all respondents had heard about the coronavirus and were aware of the actions necessary to reduce the spread. Four months into the pandemic, R3 respondents reported changes in behavior. Almost everyone washed their hands, though at varying degrees of frequency with handwashing more frequent in urban areas. Similarly, about 61 percent of urban and 32 percent of rural respondents reported always wearing a face mask.
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The majority of the respondents are concerned about the impact of the coronavirus on their health and livelihoods. About 71 percent are very or somewhat worried that they or a family member will fall ill with COVID-19. Similarly, about 81 percent made it clear that pandemic is a substantial or a moderate threat to their finances.
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Nationwide, in households with children who had been in school before the outbreak, about 29 percent of primary school students and 39 percent of secondary school students were engaged in distance learning activities. This means that during school closures 7 of every 10 primary students and 6 of every 10 secondary students have no opportunity to learn.
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Employment rates, which in Ethiopia plunged in the early days of the pandemic but then rebounded, seem to have stabilized at about 86 percent, a level similar to that reported in R2. Employment rates, however, are still much lower than they were pre-pandemic.
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About half of R3 respondents surveyed in June 2020 reported having experienced moderate or severe food insecurity, with the prevalence similar in both rural and urban areas. However, there are significant differences by consumption quintile: about 6 in 10 Ethiopians from the poorest quintile had suffered such food insecurity compared to 3 in 10 from the richest quintile.

### BEHAVIOR IN RESPONSE TO COVID-19



To prevent the spread of COVID-19 and to ensure that measures to slow it, such as mobility restrictions, are effective, it is essential that people be aware of the need to change their behavior. In R1 virtually every household (99.7 percent) had heard about the coronavirus or COVID-19, with respondents reporting being well-informed about actions to reduce the spread. In R3, we checked whether people's changes in behavior were still in place four months into the pandemic. Almost all were still washing their hands, though at varying degrees of frequency and with handwashing more frequent in urban areas (Table 1). In general, there is adherence to wearing face masks: As Table 2 shows, about 85 percent in urban and 61 percent in rural areas indicated they wear face masks at least some of the time. About 61 percent of urban respondents wear a face mask all the time, almost twice as

<sup>1</sup> The data were collected by Laterite (Ethiopia) Ltd. When R3 began on June 4, 2020, Ethiopia had 1,636 confirmed COVID-19 cases. By June 26, when R3 ended, confirmed cases had soared to 5,425.

many as the 32 percent in rural areas. However, these results should be interpreted with care: there seems to be a tendency to over-report positive behavior changes.

**Table 1: Frequency of Handwashing, R3, Percent**

	All the time	Most of the time	About half the time	Some of the time	None of the time
Rural	69.2	18.1	5.7	5.6	1.4
Urban	83.1	10.7	2.4	3.7	0.2
National	73.8	15.7	4.6	5.0	1.0

**Table 2: Frequency of Wearing Face Masks, R3, Percent**

	All the time	Most of the time	About half the time	Some of the time	None of the time
Rural	31.5	13.2	5.7	10.4	39.2
Urban	60.8	10.6	5.7	8.1	14.8
National	41.1	12.3	5.7	9.6	31.2

Respondents are quite concerned that they or a family member will fall ill with COVID-19: about 71 percent reported being very or somewhat worried (Table 3). Notably, they are even more concerned about the effect of the pandemic on their finances: 81 percent consider it either a substantial or a moderate financial threat to the household (Table 4). Urban and rural differences are small.

**Table 3: Respondent Concerns about Falling ill with COVID-19, R3, Percent**

	Very worried	Somewhat worried	Not too worried	Not worried at all
Rural	54.5	14.0	12.9	18.7
Urban	56.6	18.7	8.2	16.5
National	55.2	15.5	11.3	17.9

**Table 4: Respondents Perceiving COVID-19 as a Financial Threat, R3, Percent**

	Substantial threat	Moderate threat	Not much of a threat	Not a threat at all
Rural	53.5	25.1	7.0	14.4
Urban	72.4	12.2	5.2	10.2
National	59.7	20.9	6.4	13.0

## ACCESS TO MEDICINE AND FOOD STAPLES



The survey asked respondents whether their household had been able to buy enough medicine and enough of the most important food items during the week preceding the interview.<sup>2</sup> When they were not, we asked why. In R3, 85 percent of households that needed to buy medicine were able to do so (Table 5). Of those that could not, 74 percent cited lower regular income. Most households were able to buy enough food staples—teff (61 percent), wheat (78 percent), maize (81 percent), and edible oil (74 percent)—and changes to the previous survey round were either small or not significant. Of those that could not buy enough food, the biggest problems were higher prices or less regular income—affordability was a concern for over 90 percent of households.

**Table 5: Ability of Households to Buy Certain Items, R3, Percent**

	Rural	Urban	National
Medicine	81.5	90.1	84.7
Teff	46.9	76.4	61.2
Wheat	70.3	86.4	78.0
Maize	79.4	84.1	80.7
Edible oil	68.9	83.2	73.4

## SCHOOLS



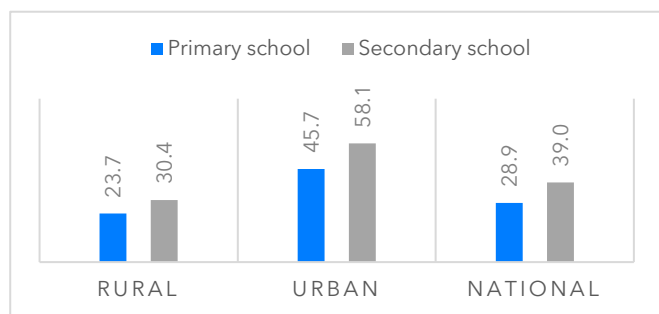
On March 16, 2020, Ethiopia closed all primary and secondary schools. In addition to students losing valuable months of schooling, school closures deprive many poor children of food because they often rely on school feeding programs; for example, all children in Addis Ababa public schools participate in a twice-daily school feeding program. Temporary school closures may also lead to children from vulnerable households dropping out permanently, especially in rural areas, where even in ordinary circumstances early drop-out is rife. The long-term impacts of lost months of schooling and the lack of good nutrition will be particularly severe for children in poor families because it jeopardizes their ability to build human capital and thus their earning potential.

R2 of the survey indicated that about one-third of the children who had attended school before the COVID-19 outbreak had engaged in learning activities during the three weeks before the interview. While still modest in terms of magnitude, in that round we found an encouraging increase in distance learning activities since the school closures, particularly in rural areas—yet two-thirds of school-aged Ethiopian children were still not engaged in any learning activity. In R3, we changed the structure of the questions to better understand whether distance learning activities are more common among primary or secondary school students. The survey asked households how many children had been in primary and secondary school before the outbreak began and whether they are now engaged in any learning activities. In R3, households with children who had been in *primary* school (67 percent), 29 percent were engaged in distance learning. In households with children who had been in *secondary* school (24 percent), in R3, 39 percent were so engaged. Yet nationwide that means that during the school closures 7 out of 10 primary school children and 6 out of 10 secondary school children have had no opportunity to learn.

<sup>2</sup> According to the 2018–19 ESS, the four most important food items are edible oil and teff, wheat, and maize as grain or flour or cooked.

Rural children still trailed urban children in benefitting from distance learning. Almost twice as many urban children who had previously attended primary or secondary school are now engaged in learning activities (Figure 1). For rural children, by far the most widespread activity is listening to educational radio programs, as occurred in 50.6 percent of the households with primary school learners and 40 percent of those with secondary school learners (Table 3). About 31 percent of rural primary school children and 25 percent of rural secondary school children complete assignments provided by the teacher; among rural children, 28.7 percent of secondary students meet with teachers—almost double the 16.2 percent of those in primary school. However, in urban areas the most common activity is to complete assignments provided by the teacher—59 percent of primary learners and 43 percent of secondary learners—followed by using mobile learning apps, which at 27.0 percent is a particularly important option for secondary learners.

**Figure 1: Households with Children who Previously Attended School and now Engage in Learning Activities, R3, Percent**



**Table 6: Educational Activities Students Engage in During School Closures, R3, Percent**

Activity	Primary		Secondary	
	Rural	Urban	Rural	Urban
Session/meeting with lesson teacher (tutor)	16.2	15.4	28.7	15.8
Used mobile learning apps	4.6	17.9	16.2	27.0
Watched educational TV programs	9.5	24.6	11.7	28.8
Completed assignments provided by the teacher	30.7	59.0	24.7	43.2
Listened to educational programs on radio	50.6	14.8	40.3	17.1

## HOUSEHOLD INCOME SOURCES



One of the channels through which households suffer economically from the pandemic and its associated restrictions on movement and assembly is through reduced income. In R1, we asked households about their income sources over the last 12 months and followed up by asking whether the income from a particular source had risen or fallen since COVID-19 broke out. In R3, we asked about income sources between rounds and whether income from a particular source rose or fell.

**Table 7: Household Income Sources, R3, Percent**

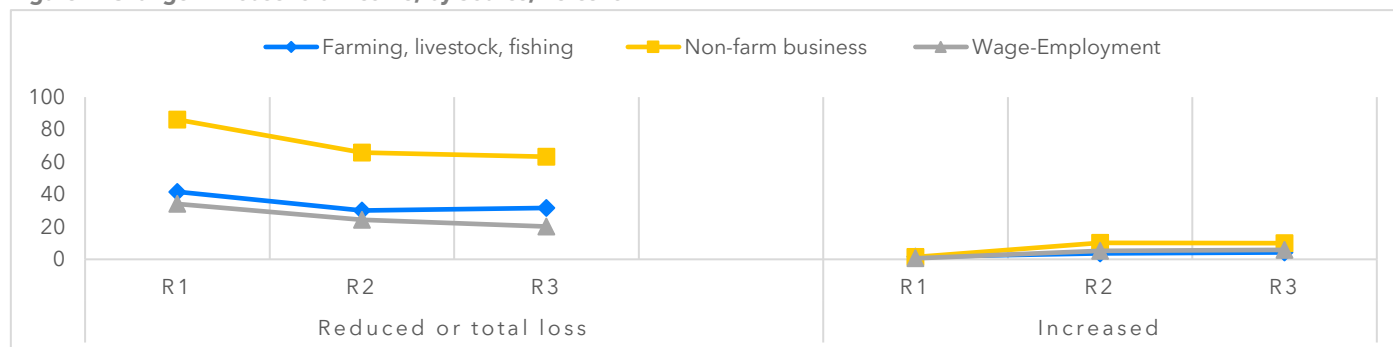
Income Source	Rural	Urban	National
Farming, livestock, or fishing	56.5	13.7	42.4
Nonfarm business	6.1	22.8	11.6
Wage employment	10.6	43.6	21.5
Remittances from within Ethiopia	1.8	5.5	3.0
Remittances from abroad	0.0	1.2	0.4
Income from properties, investments, and savings	5.5	10.5	7.1
Pension	0.1	4.2	1.5
Government assistance	2.3	1.8	2.1
Assistance from an NGO or charitable organization	1.1	0.5	0.9

## LABOR INCOME



In R1, we observed that, for all labor income sources, household income had gone down since COVID-19 broke out. In R2 and R3, the percentage of households that suffered a further decrease in income in the three weeks since the last previous survey round is lower for all income sources but there is a slight increase in households reporting higher income from labor sources (Figure 2).

**Figure 2: Change in Household Income, by Source, Percent**



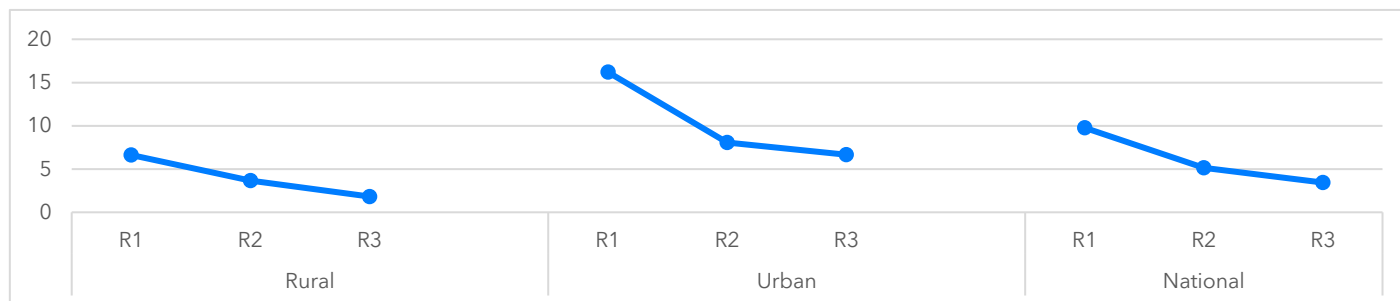
Note: Only income sources from which more than 10 percent of households generate income are included in the figure.

## REMITTANCES



R1 found that both domestic and international remittances had plunged since the outbreak. In R3, fewer households received remittances between rounds (Table 7), but remittance losses seem to have bottomed out. Although about 15 percent of households receiving remittances saw a further reduction, for about 20 percent remittances had gone up in the previous three weeks.

Figure 3: Households Receiving Remittances, Percent



## ASSISTANCE FROM GOVERNMENT



Relatively few households in R3 reported government assistance or assistance from an NGO or other charitable organization as a source of income (Table 7). Only 2 percent of households reported that government assistance had been a means of livelihood in the three weeks preceding the interview. For 46 percent of the relatively few households receiving assistance, incomes from government had increased.

## TOTAL HOUSEHOLD INCOME



R1 found that 55 percent of households had experienced either a reduction or a total loss of income since the viral outbreak. Though in R2 and R3 fewer households reported further income erosion, apparently income losses have not yet bottomed out: 40 percent of households reported a drop in income in the three weeks between R2 and R3 (Figure 4). R3 households suffering from less or no income were then asked what, if any, coping strategies they had used to manage the lower income. We found that almost half had not yet applied a strategy to compensate for the lost income (Table 8). The most common coping strategy was to draw on savings, which was the choice of 26 percent of those households—42 percent in urban and 15 percent in rural areas. The second and third most prevalent strategies were to reduce food consumption (23 percent of households) and reduce nonfood consumption (18 percent). Coping strategies changed very little from one survey round to the next.

Figure 4: Households with Reduced or Total Loss of Income, Percent

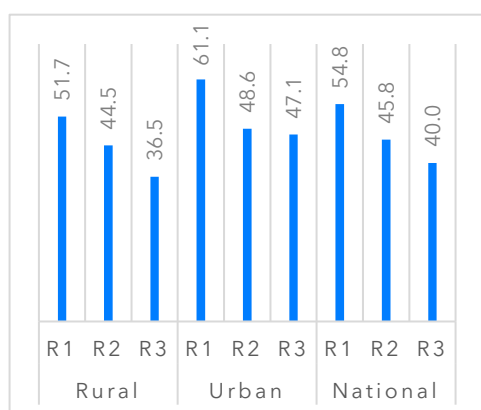


Table 8: Coping Strategies Used, R3, Percent

	Rural	Urban	All
Sold assets, agricultural or nonagricultural	1.4	3.0	2.0
Engaged in additional income-generating activities	3.8	3.0	3.5
Received assistance from friends and family	1.0	9.4	4.3
Borrowed from friends and family	3.4	4.7	3.9
Reduced food consumption	19.0	28.6	22.7
Reduced nonfood consumption	17.0	19.2	17.8
Relied on savings	15.4	41.6	25.6
Did nothing	55.4	31.9	46.2
All others	7.1	2.9	5.5

## EMPLOYMENT



The COVID-19 pandemic is clearly affecting economic activity in Ethiopia: R1 had already found that households had less work. Though the State of Emergency declaration prohibits firms from laying off workers, R1 showed a sizable negative impact on employment, particularly for Ethiopians who were self-employed or working as casual labor. R2, however, found a strong rebound in employment rates<sup>3</sup>: the share of respondents who worked at least one hour in the seven days before the interview jumped between R1 and R2—though it was still lower than before the pandemic. In R3, employment rates had stabilized at their R2 level of about 86 percent (Figure 5); there had been no statistically significant changes between the rounds. However, in the latest round employment rates were

<sup>3</sup> The employment rate refers here to the share of phone survey respondents who worked at least one hour in the seven days preceding the interview.

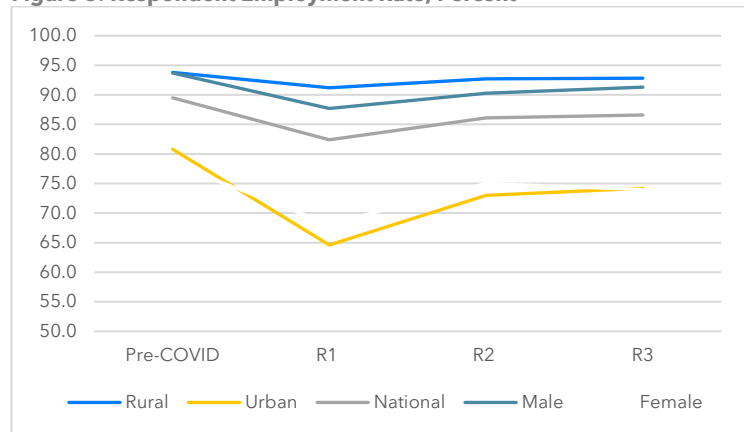
still significantly lower (86.6 percent) than they had been pre-COVID (89.5 percent). It appears that so far COVID-19 has had a small yet persistent effect on jobs volume in Ethiopia.

## NONFARM FAMILY BUSINESSES



Of respondents who were employed in R2, just over 3 percent had lost their job by R3. Of these, one-third attributed the job loss to the COVID-19 outbreak. Job losses between R2 and R3 were highest for respondents in the hospitality sector. At the same time, by R3 24 percent of respondents who were not employed in R2 had found work. The net effect is a small and statistically insignificant increase in the employment rate between R2 and R3.

Figure 5: Respondent Employment Rate, Percent



In R2, about 20 percent of households ran a nonfarm household enterprise. By R3 one month later, 67 percent of these enterprises were still operational; the other 33 percent had closed, some temporarily, some permanently. In most cases closures were a consequence of the COVID-19 outbreak: “Usual place of business closed because of Coronavirus” (53 percent) and “no customers” (13 percent).

Of those R3 households still operating a nonfarm family business, almost two-thirds indicated that income from the business was less than it had been at R2 (Figure 6). The reasons most often stated were that (1) there were no customers, (2) the place of business is closed because of coronavirus, and (3) they are unable to sell their products (Figure 7).

Figure 6: Nonfarm Family Businesses: Changes in Income between R2 and R3, Percent

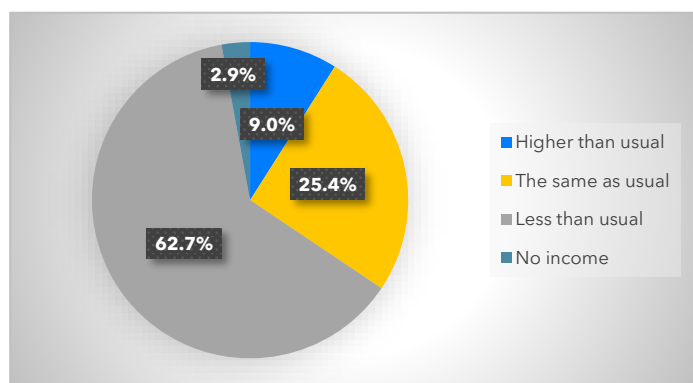
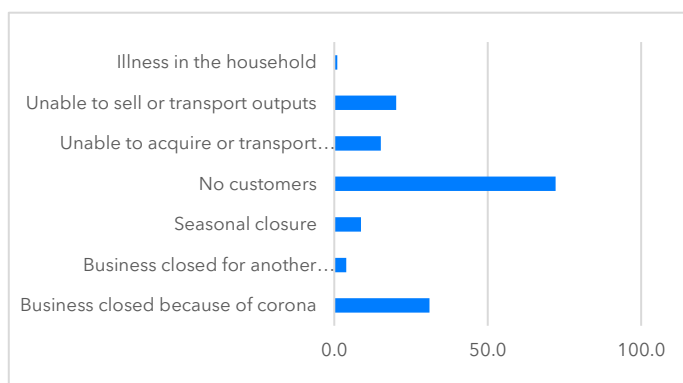


Figure 7: Reasons for Lower Business Income since the Pandemic Began, Percent



## JOB LOSS OF OTHER HOUSEHOLD MEMBERS



One drawback of the phone survey is the necessary restrictions on questionnaire length and complexity, which prevents us from asking in detail about other household members. However, given our concern about employment, we did ask about the employment status of other household members. R2 had found that about 10 percent of households had members other than the respondent who were wage-employed. Of those, slightly over 4 percent had since lost their jobs, and 87 percent of these related the job loss directly to the pandemic.

## FOOD SECURITY



Food security is a major concern in Ethiopia, particularly for rural residents, and is at the heart of the country’s social protection system. To monitor how Ethiopians were faring on food security indicators during the pandemic, the survey applied the Food Insecurity Experience Scale (FIES).<sup>4</sup> FIES was fielded in both R2 and R3. Nearly half of the population (about 48 percent in R2 and 45 percent in R3) had experienced moderate or severe food insecurity (Figure 8). The prevalence rates are similar in urban and rural areas.<sup>5</sup> However, differences by consumption quintile are significant (Table 9): about 6 in 10 of the poorest individuals experienced moderate or severe food insecurity compared to 3 in 10 of the richest.

<sup>4</sup> In this survey FIES consists of eight questions (<http://www.fao.org/policy-support/tools-and-publications/resources-details/en/c/1236494/>). The questions are household referenced and the recall period is 30 days preceding the survey. Prevalence rates are calculated by population.

<sup>5</sup> There are slight differences in prevalence rates of rural and urban populations as well as between R2 and R3 surveys. However, in both cases the differences are within the margin of error.

Figure 8: Food Insecurity Prevalence, Percent

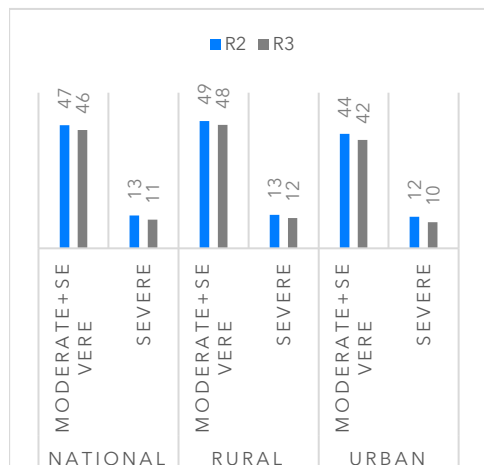


Table 9. Prevalence of Food Insecurity by Consumption Quintile, Percent

	R2		R3		R2		R3	
	Moderate & Severe	MoE	MoE	Moderate & Severe	MoE	Severe	MoE	
Poorest	61.4	13.4	19.2	9.5	58.4	13.5	19.7	10.5
Poorer	47.2	11.1	12.4	6.5	44.7	11.3	10.4	6.4
Middle	51.8	10	13.2	7.1	54.1	10	13.0	7.0
Richer	42.6	9.3	10.4	5.6	39.4	8.9	7.1	4.7
Richest	31.1	7.7	6.8	3.7	28.7	7.4	4.0	2.8

Note: Prevalence by population. MoE = margin of error.

## ASSISTANCE AND SUPPORT



Although households were hit hard by the COVID-19 pandemic, only 4 percent had received outside assistance from government, NGOs, or religious institutions (Table 10). For those receiving assistance, the main types were free food (67 percent) and direct cash transfers (32 percent). The government contributed 72 percent of assistance.

Table 10: Assistance to Households, Previous Three Weeks by Type and Source, R3, Percent

	Rural	Urban	National
Household received assistance: Any source	3.8	3.7	3.8
Assistance type: Free food	60.0	81.6	66.9
Assistance type: Food or cash for work	2.2	3.0	2.5
Assistance type: Direct cash transfer	37.8	19.1	31.8
Assistance source: Government	84.4	47.0	72.4
Assistance source: NGO	7.4	1.8	5.6
Assistance source: Religious organization	8.3	14.8	10.4
Assistance source: Volunteer or youth organization	0.0	10.7	3.4

Note: Assistance source and type conditional on household receiving assistance.

## COMING ACTIVITIES



This survey brief is the third in a series reporting on the findings of the HFPS-HH. It reports results from rounds 1, 2, and 3, related to the effects of and responses to the COVID-19 pandemic. Data collection will continue by following up with the same households every four weeks. For each round, the survey brief, table of indicators, and microdata will be available at <https://www.worldbank.org/en/country/ethiopia/brief/phone-survey-data-monitoring-covid-19-impact-on-firms-and-households-in-ethiopia>.

## BOX: SURVEY METHODOLOGY

The high-frequency phone survey monitors the economic and social impacts of the COVID-19 pandemic on households and their responses in terms of such topics as access to food staples, access of children to educational activities during school closures, employment dynamics, household incomes and livelihoods, income losses and coping strategies, and external assistance. The final dataset will cover a panel of about 3,000 households that are representative of households that can be reached by mobile phone nationally and also of urban and rural areas.

To the extent possible, the same households and respondents will be tracked for six months, with selected respondents completing phone-based interviews every three to four weeks. This high-frequency follow-up allows for a better understanding of the effects of and responses to the COVID-19 pandemic on households; the results can inform interventions and policy responses and monitor their effects. The respondent is typically the household head; where that person cannot be reached despite numerous call-backs, another knowledgeable household member is selected as the respondent.

The HFPS-HH sample consists of a subsample of those interviewed for the Ethiopia Socioeconomic Survey (ESS) in 2019—households with access to a phone—covering urban and rural areas in all regions of Ethiopia. The HFPS-HH called the 5,374 households that in the ESS had provided a valid phone number. Phone penetration in rural Ethiopia is low; about 40 percent of rural households have access to a phone compared to over 90 percent of urban households. This not only means that the rural sample is relatively small but there is also a systematic difference between households that own a phone and those that do not. Phone-owning households are better off in terms of total consumption, educational attainment, access to improved water and sanitation, access to assets, and access to electricity. The sample of the HFPS-HH is therefore representative only of households who have access to phones in urban and rural Ethiopia.

### Data collection parameters, round 3

- ❖ Data collection period: June 4–26, 2020
- ❖ Completed interviews: 3,058 households (934 in rural areas, 2,124 in urban areas)
- ❖ Average duration of interview: 14 minutes