

# Monitoring COVID-19 Impacts on Households in Ethiopia

REPORT NO. 2

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## 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 monitor how the pandemic is affecting Ethiopia's economy and people and to inform interventions and policy responses, the World Bank designed and conducted a 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 drew a subsample of the ESS sample that was representative of households with a working phone. The same households will be tracked over six months, with selected respondents, typically the household head, completing phone-based interviews every three to four weeks. To support new responses as they become necessary, this high-frequency follow-up allows for a better understanding of the effects of and household responses to the COVID-19 pandemic in near real time.

This survey brief summarizes the results of round 2 (R2) of the HFPS-HH conducted between May 14 and June 3, 2020.<sup>1</sup> The brief is based on a sample of 3,107 households in both urban and rural areas in all regions of Ethiopia. The original sample consisted of 3,249 households, but only 3,107 of them responded to the R2 calls. The information presented here is thus based on the sample of 3,107 households that responded to both rounds 1 (R1) and round 2 (R2) surveys. 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, and assistance received.

### HIGHLIGHTS – ROUND 2

- ! Though in general the ability of households to buy enough of the medicine and food staples they needed is high, their ability to buy enough wheat deteriorated in the three weeks in rural areas after R1, which measured access since the outbreak began.
- ! 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, we found an encouraging increase of distance learning activities since the school closures, particularly in rural areas—yet two-thirds of school-aged Ethiopian children are not engaged in any learning activity.
- ! Though fewer households reported further deterioration of incomes than earlier in the pandemic, apparently income losses have not yet bottomed out: 46 percent of households indicated less income in the last three weeks.
- ! Employment rates decreased substantially between the pandemic outbreak and late April–early May. The latest survey round found that employment rates have begun to rebound but not enough to reach pre-COVID-19 levels.
- ! Though few households received outside assistance, between R1 and R2 the incomes of households receiving government support went up 25 percent and those receiving support from nongovernmental organizations (NGOs) went up 62 percent.

### ACCESS TO NECESSITIES



How COVID-19 has affected the availability and prices of medicine and food staples is not yet fully understood. The survey asked respondents whether their household was 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 for the reason.

<sup>1</sup> The data collection was undertaken by Laterite (Ethiopia) Ltd. At the beginning of R2 on May 14 the country's total confirmed COVID-19 cases were 272. By the end of R2, on June, the confirmed cases had increased to 1,486.

<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, flour, or cooked.

## MEDICINE AND FOOD STAPLES



In R2, about 75 percent of households that needed to buy medicine were able to do so. Of those that could not, 92 percent cited lower regular income. While most households were able to buy enough food staples—teff (64 percent), wheat (72 percent), maize (83 percent), and edible oil (77 percent)—in rural areas the ability to buy enough wheat deteriorated between R1 and R2 (Table 1). Of those that could not buy enough food, higher prices or less regular income, was the biggest problem, with about 90 percent of households citing affordability as a concern. While R1 survey results indicated that for some items, local markets were not operating, there was limited or no transportation to markets, or the restrictions on leaving home, in R2, these reasons largely disappeared. When combining reasons related to all medicine and food staples, aside from affordability—a challenge in both urban and rural areas—rural areas are more affected by shops running out of stock (7 percent).

**Table 1: Ability of Households to Buy Certain Items, R2, Percent**

	Rural	Urban	National
Medicine	70.1 <sup>^</sup>	83.7 <sup>^</sup>	75.0 <sup>^</sup>
Teff	52.5 <sup>^</sup>	78.8 <sup>^</sup>	63.6 <sup>^</sup>
Wheat	59.9	86.5 <sup>^</sup>	72.2
Maize	81.3 <sup>^</sup>	86.6 <sup>^</sup>	82.9
Edible oil	72.9 <sup>^</sup>	87.0 <sup>^</sup>	77.3

Note: The values indicated with <sup>^</sup> are not statistically different for R2 and R1 at the 90 percent confidence interval based on a paired t-test.

Table 2 shows differences between the bottom 40 percent of the consumption distribution and the top 60 percent in terms of reasons for household inability to buy certain items. In R1<sup>3</sup>, poorer households were disproportionately affected by higher prices; in R2, price increases seem less of a problem for the poor, although between R1 and R2 less regular income as a reason for household inability to buy certain food items shot up from 32 to 57 percent.

**Table 2: Reason for Household Inability to Buy Certain Items, R1 and R2, by Bottom 40%, Percent**

	Round 1		Round 2	
	Bottom 40%	Top 60%	Bottom 40%	Top 60%
Shops have run out of stock	6.3	8.0	8.0 <sup>^</sup>	5.2 <sup>^</sup>
Local markets not operating	9.4	6.5	2.1	1.8
Limited or no transportation or restrictions on leaving home	2.0	6.9	2.4 <sup>^</sup>	1.2
Higher prices	46.1	36.0	29.4	38.1 <sup>^</sup>
Less regular income	31.5	42.1	57.0	53.7
Other	3.6	0.3	1.1 <sup>^</sup>	0.1 <sup>^</sup>

Note: The values indicated with <sup>^</sup> are not statistically different for R2 and R1 at the 90 percent confidence interval based on a paired t-test.

## 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 children of poor families 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 nutrition will be particularly severe for children in poor families because it jeopardizes their ability to build human capital and thus their earning potential.

The survey asked households how many children had been in school before the outbreak began and whether they are now engaged in any learning activities. In households with children who had been in school, in R2, 33 percent were engaged in distance learning. While still modest in magnitude, between the two survey rounds there was thus an encouraging doubling of participation in distance learning in rural areas (Figure 1). Yet nationwide it means that during the school closures two-thirds of children have no opportunity to learn.

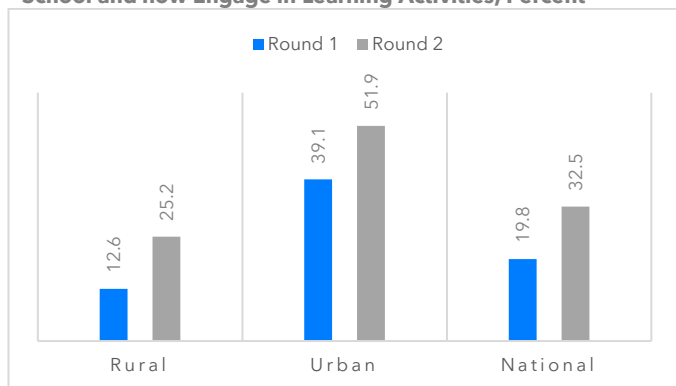
While between the two survey rounds rural children still lagged behind urban children in participating in distance learning activities the share of households with children participating in learning activities rose from 13 to 25 percent; and in urban areas, distance learning activities went up from 30 to 52 percent. This large increase in both rural and urban areas seems to be the result of more regions joining the government schooling mobilization campaign by starting or expanding radio and TV broadcasts. In many regions this campaign started only after R1 was fielded and results are thus available for R2 only. There may also have been a behavioral shift of parents paying more attention to remote learning the longer school closures last.

For rural children, by far the most widespread activity is listening to educational radio programs, as was done in half of the households with such learners (Table 3). About 24 percent of rural children complete assignments

<sup>3</sup> Results from R1 can be found at <https://www.worldbank.org/en/country/ethiopia/brief/phone-survey-data-monitoring-covid-19-impact-on-firms-and-households-in-ethiopia>.

provided by the teacher, and 22 percent have meetings with teachers. However, in urban areas the most common activity is to complete assignments provided by the teacher (46 percent), followed by watching educational TV (28 percent), and sessions with lesson tutors (26 percent); perhaps surprisingly, few urban children use mobile learning apps (19 percent) and listen to educational radio programs (14 percent).

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



**Table 3: Educational Activities Students Engage in During School Closures, R2, Percent**

	Rural	Urban	National
Session/meeting with lesson teacher (tutor)	22.3	26.0	23.9
Used mobile learning apps	2.3	18.8	9.5
Watched educational TV programs	7.2	27.6	16.1
Completed assignments provided by the teacher	24.3	46.3	33.9
Listened to educational programs on radio	51.2	14.2	35.1

In Ethiopia protracted school closures are affecting both public and private schools and thus all income segments. However, because the better-off segments (e.g., those with parents who themselves are educated and can pay for private tutors) are better able to provide learning opportunities for their children, the already wide learning gaps between children in poor vs. better-off households and rural vs. urban households may widen, depending on how many poorer children are exposed to distance learning activities. Encouragingly, between the survey rounds the participation of children from the lower quintiles in distance learning activities increased from 15 to 22 percent. However, their participation is still far less than their better-off counterparts (Table 4). In rural as well as urban areas children from households in the richer quintiles have much more exposure to distance learning activities but the differences are particularly stark in urban areas, where only 26 percent of children in the poorest 20 percent are engaged in distance learning but 65 percent of the richest 20 percent are.

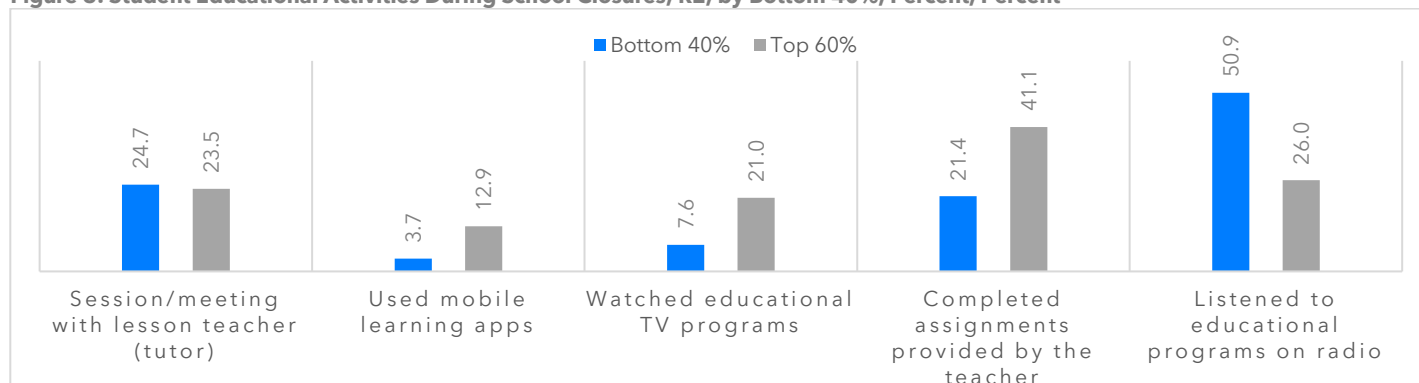
**Table 4: Any Learning Activity, R1 and R2, by Consumption Quintile, Percent**

	Round 1					Round 2				
	Q1 (poorest)	Q2	Q3	Q4	Q5 (richest)	Q1 (poorest)	Q2	Q3	Q4	Q5 (richest)
Rural	12.1	10.2	13.9	15.1	15.2	21.7	23.3	26.4	30.5	36.7
Urban	38.4	34.4	30.7	37.4	50.8	26.3	49.2	43.3	56.1	64.5
National	14.6	14.2	18.1	25.7	37.1	22.2	27.5	30.6	42.7	53.9

*Note:* Q stands for quintile based on household per capita consumption. Q1 refers to the poorest 20 percent of the population and Q5 to the richest 20 percent.

The type of distance learning activity varies substantially by welfare quintile. During school closures, listening to educational programs on radio is by far the most important source of educational activity for children from poorer households. Over half of children from the poorest 40 percent of the population listen to educational radio programs compared to 26 percent of the richest 60 percent (Figure 3), whose children are more likely to complete assignments provided by the teacher, watch educational TV (probably because richer households are more likely to own a TV), and use mobile learning apps.

**Figure 3: Student Educational Activities During School Closures, R2, by Bottom 40%, Percent, Percent**



## HOUSEHOLD INCOME SOURCES



## LABOR INCOME



One of the channels through which households suffer economically from the pandemic and its associated restrictions of 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 R2, we asked about income sources between rounds and whether income from a particular source rose or fell.

Not surprisingly, in R2, farming was for 66 percent of rural households a means of livelihood (Table 5), followed by wage employment (12 percent) and nonfarm business (10 percent). While rural households largely depend on farming, urban households tended to have a variety of income sources in R2. For 41 percent of urban households, wage employment was a means of livelihood, followed by nonfarm business (26 percent), and farming (14 percent).

Table 5: Household Income Sources, R2, Percent

	Rural	Urban	National
Farming, livestock, or fishing	65.7	13.7	48.5
Nonfarm business	10.4	26.3	15.7
Wage employment	11.9	40.9	21.5
Remittances from within Ethiopia	2.6	6.9	4.0
Remittances from abroad	1.0	1.2	1.0
Income from properties, investments, and savings	12.0	10.6	5.8
Pension	0.1	4.0	1.4
Government assistance	5.4	3.1	4.6
Assistance from an NGO or charitable organization	1.7	0.6	1.3

In R1, we observed that, for all labor income sources, household income had gone down since COVID-19 broke out. In R2, the percentage of households that indicated a further decrease in income in the three weeks since R1 is lower for all income sources (Table 6). Yet for many households, labor incomes had fallen further between rounds. About 67 percent of households for which nonfarm business was a means of livelihood reported less income from that source in the previous three weeks. Income from farming, which usually is already low at this time of year due to seasonality, had gone down further for 30 percent of households; and 25 percent of households with income from wages had in the interim lost some or all of their income.

Table 6: Change of Total Household Income, by Source, Percent

	Round 1 (Since the Outbreak)			Round 2 (Since Round 1)		
	Increased	Stayed the same	Reduced or total loss	Increased	Stayed the same	Reduced or total loss
Farming, livestock, fishing	1.8	56.9	41.3	3.6	66.9	29.5
Nonfarm business	1.3	13.8	84.9	10.0	23.2	66.7
Wage employment	0.6	64.4	35.0	5.2	70.1	24.7
Remittances from within Ethiopia	3.1	53.1	43.9	8.1	49.5	42.4
Remittances from abroad	1.0	35.7	63.3	14.0	45.8	40.2
Income from properties, investments, and savings	2.4	56.1	41.4	14.2	54.3	31.4
Pension	0.6	95.1	4.3	0.0	98.7	1.3
Government assistance	11.7	59.7	28.6	24.5	73.4	2.1
Assistance from NGO or charitable organization	15.3	43.5	41.2	61.6	34.5	3.9

## REMITTANCES



R1 found that both domestic and international remittances had plunged since the outbreak. In R2, not only had fewer households received remittances between rounds, but the amounts were lower (Table 6). About 40 percent of households receiving domestic and international remittances as a recent means of livelihood have seen a reduction in or total loss of this income source.

## ASSISTANCE FROM GOVERNMENT



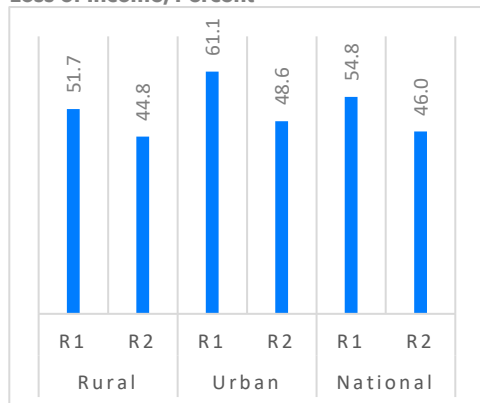
Households reporting in R2 government assistance or assistance from an NGO or other charitable organization as a source of income were relatively few. Only 5 percent of households reported that government assistance had been a means of livelihood in the three weeks preceding the interview. Yet between the two rounds incomes of the relatively few households receiving assistance from government went up 25 percent and for those receiving income from NGOs went up 62 percent.

## 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 fewer households reported a further erosion of incomes, apparently income losses have not yet bottomed out: 46 percent of households indicated a reduction of income in the three weeks between R1 and R2 (Figure 4). Of all R1 households that had seen their incomes drop since the outbreak, in R2, 63 percent had experienced a further slide. R2 households suffering from less or no income were then asked what, if any, coping strategies they had applied to better manage the lower income. We found that about half had not yet applied a strategy to compensate for the lost income (Table 7). The most common coping strategy was to rely on savings: 20 percent of the households coping with less income—36 percent in urban and 14 percent in rural areas. The second and third most prevalent responses to less income were to reduce food consumption (20 percent of households) and reduce nonfood consumption (16 percent). Thus, reducing consumption, food and nonfood, went up between R1 and R2. That is troubling because it could affect the long-term health of household members.

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



**Table 7: Coping Strategies Used, Percent**

	Round 1			Round 2		
	Rural	Urban	All	Rural	Urban	All
Sold assets, agricultural and nonagricultural	5.5	0.5	3.7	0.9	1.5^	1.1
Engaged in additional income-generating activities	3.0	2.8	2.9	2.9^	2.6^	2.8^
Received assistance from friends and family	0.9	7.3	3.3	2.1^	11.3	5.3
Borrowed from friends and family	3.9	3.7	3.8	6.1^	5.2^	5.8^
Reduced food consumption	11.5	16.4	13.3	16.0^	26.0	19.5
Reduced nonfood consumption	9.2	11.2	10.0	14.6	19.6	16.3
Relied on savings	11.7	33.7	19.8	13.8^	35.7^	21.4^
Did nothing	58.5	48.9	55.0	58.2^	35.5	50.3^
All others	6.1	2.0	4.6	2.8	4.8	3.5^

Note: Values indicated with ^ indicate that results in R2 are not statistically different between R2 and R1 at the 90 percent confidence interval based on a paired t-test.

## EMPLOYMENT



The COVID-19 pandemic is affecting economic activity in Ethiopia, with R1 showing 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 working as casual labor or who were self-employed.

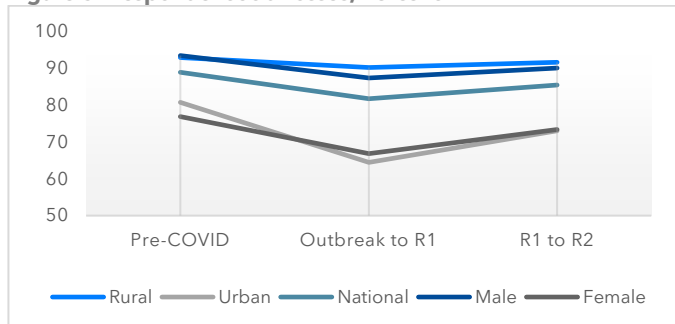
## EMPLOYMENT STATUS AND SECTOR



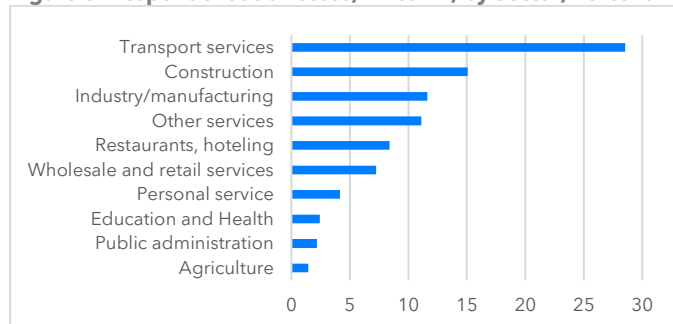
R1 of the HFPS-HH found that the pandemic outbreak substantially decreased employment rates but R2 found that the share of respondents who worked at least one hour in the seven days before the interview had begun to rebound, though still lower than before COVID-19. Employment rates<sup>4</sup> dropped from 89 percent of respondents before the outbreak of COVID-19 to 82 percent in R1 and then in R2 recovered to 85 percent (Figure 5). Though urban workers and women experienced the largest drops in employment rates, between R1 and R2 recovery was strong for both groups.

Of respondents who were employed in R1, 3 percent had lost jobs by R2. Of those, 38 percent attributed the job loss to the outbreak and 19 percent to seasonal or casual work. Job losses were much higher in urban (8 percent) than in rural (1 percent) areas, confirming that the COVID-19 pandemic has hit employment in urban areas harder. Between R1 and R2, job losses were highest for respondents working in transportation services, followed by construction and manufacturing (Figure 6).

**Figure 5: Respondent Job Losses, Percent**



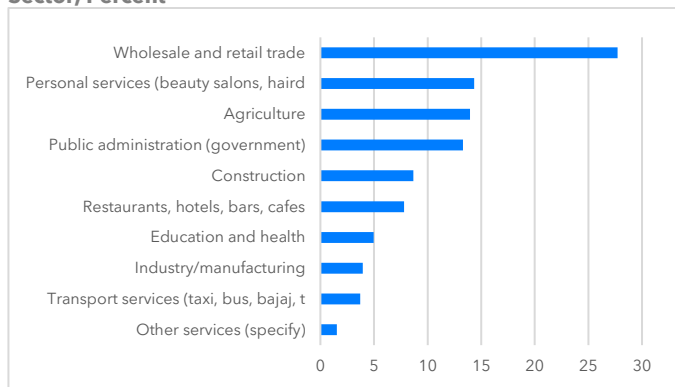
**Figure 6: Respondent Job Losses, R1 to R2, by Sector, Percent**



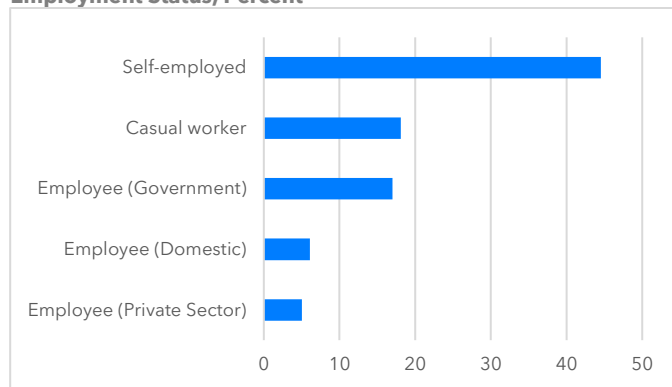
<sup>4</sup> In R1, certain enumerators mistakenly coded subsistence farming as being not in employment, which resulted in a low rural employment rate in R1 (62.9 percent in Table 10 of the R1 Survey Brief). This has now been corrected for both R1 and R2. When correctly considering subsistence farming as employment (people are employed if they worked at least 1 hour in the seven days preceding the interview), the employment rate in rural areas in R1 amounted to 90 percent. This correction also has implications for the share of respondents who lost their job between the COVID-19 outbreak in Ethiopia and the R1 survey. In the R1 survey brief, we reported that 13 percent of respondents had lost jobs since the outbreak began. This was biased upward by not considering subsistence farmers as employed. After the corrections, we find for R1 that 8 percent of respondents had lost jobs since the outbreak began.

Although some Ethiopians lost jobs between R1 and R2, many more gained employment, bringing a rebound in employment rates. About half of the respondents who had lost jobs between the start of the outbreak and R1 had transitioned back into work by R2. Respondents who found employment between R1 and R2 did so in the sectors most severely affected by social distancing, such as retail trade and personal services (Figure 7). Respondents who changed their employment status between R1 and R2 mainly did so by taking up self-employment or casual work (Figure 8). Hiring by private businesses remains subdued, with only 5 percent of respondents gaining wage employment in the private sector between R1 and R2. According to a statistical probability model, between rounds women; people with only secondary education, complete or incomplete; and older respondents were significantly less likely to have transitioned back into employment.

**Figure 7: Respondents who Gained Jobs between R1 and R2, by Sector, Percent**



**Figure 8: Respondents who Gained Jobs between R1 and R2, by Employment Status, Percent**



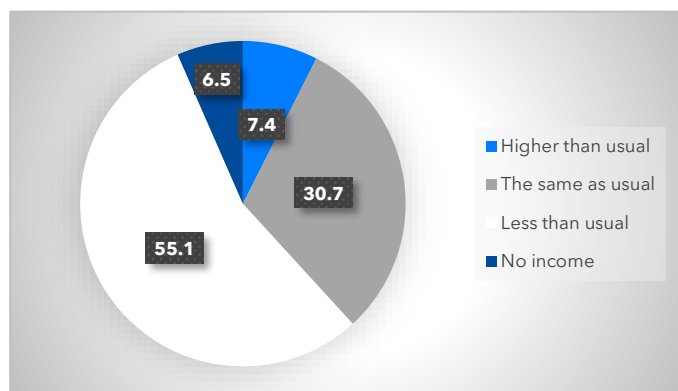
## NONFARM FAMILY BUSINESSES



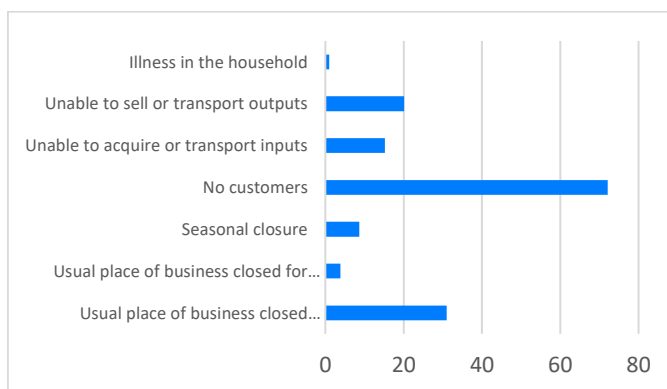
Of households with a nonfarm family business before the pandemic outbreak, in R2, 63 percent were still operating their businesses (70 percent in urban and 58 percent in rural areas). For households that had to close a nonfarm business, 40 percent stated that the closure was due to COVID-19, 12 percent were unable to sell their products, and 8 percent had no customers. Seasonality was the reason closed 22 percent of these businesses closed.

For those households still operating a nonfarm family business at the time of the R2 interview, over half indicated that income from the business was lower than it was at R2 (Figure 9). The reasons most often stated were that (1) there are no customers, (2) the place of business is closed because of coronavirus, and (3) they are unable to sell their products (Figure 10).

**Figure 9: Nonfarm Family Businesses: Changes in Income between R1 and R2, Percent**



**Figure 10: 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. R1 had found that about 11 percent of households had members who were then wage-employed. Of those, R2 found, 4 percent had since lost their jobs, with 99 percent relating the job loss directly to the pandemic.



## ASSISTANCE AND SUPPORT



Although households were hit hard by the COVID-19 pandemic, with about half reporting a reduction in total household income in the three weeks before R2, few households had received outside assistance. In rural areas, 6 percent of households and in urban, 4 percent received assistance from government, NGOs, or religious institutions (Table 8). The largest proportions of assistance were free food (39 percent) and direct cash transfers (40 percent). The government contributed 71 percent of assistance.

**Table 8: Assistance to Households since the COVID-19 Outbreak, by Type and Source, Percent**

	Rural	Urban	National
Household received assistance: Any source	6.4	4.4	5.7
Assistance type: Free food	39.4	39.1	39.3
Assistance type: Food or cash for work	19.1	10.3	16.8
Assistance type: Direct cash transfer	40.9	37.2	39.9
Assistance source: Government	77.8	50.9	70.9
Assistance source: NGO	20.5	6.4	16.9
Assistance source: Religious organization	0.1	22.2	5.7
Assistance source: Volunteer or youth organization	1.1	5.3	2.1

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

## COMING ACTIVITIES



This survey brief is the second in a series reporting on the findings of the HFPS-HH. It reports on results from rounds 1, for which households in Ethiopia were interviewed between April 22 and May 13, 2020, and round 2, conducted between May 14 and June 3, 2020, about the effects of and responses to the COVID-19 pandemic. Data collection will continue by following up with the same households every three to four weeks. For each round, the survey brief, table of indicators, and microdata will be available at .

### 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 3,200 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 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 2

- ❖ Data collection period: May 14 to June 3, 2020
- ❖ Completed interviews: 3,107 households (940 in rural areas, 2,167 in urban areas)
- ❖ Average duration of interview: 14 minutes