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Losing Livelihoods

The Labor Market Impacts of COVID-19 in Bangladesh

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Abstract

This paper provides early insights into the labor market impacts of the ongoing COVID-19 crisis in Bangladesh, with a special focus on three especially vulnerable areas: poor areas in Dhaka and Chittagong City Corporations and Cox's Bazar district. We build on household surveys collected before the crisis and phone monitoring surveys collected after the start of the crisis to shed light on the implications of COVID-19 for employment and earnings. The findings presented here indicate substantial labor market impacts both at the extensive and intensive margin, with important variation across areas and gender, largely due to the nature of occupations affected by the crisis. The findings also point to substantial uncertainty about job prospects.

Keywords: COVID-19, coronavirus, Dhaka, Chittagong, Cox's Bazar, labor market, poverty
JEL codes: D1, I15, I31, J2 J46

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Introduction

The ongoing COVID-19 pandemic has created an unprecedented crisis in Bangladesh that risks erasing the substantial progress in household incomes and poverty reduction achieved during the past decades. The sharp decline in demand for manufactured goods, particularly from the export-oriented Ready-Made Garments sector, is expected to affect employment creation in urban areas, an important driver of poverty reduction in the past (Hill and Genoni, 2019). In addition, large labor-income losses are expected for households engaged in informal services and labor-intensive sectors like construction, due to slower demand and social-distancing measures. Moreover, the domestic coronavirus outbreak and the consequent healthcare burden, together with related disruptions, will exacerbate the negative impacts on access to services and poverty.

This article combines recent panel surveys and existing household surveys collected before and after the advent of COVID-19 to shed light on the impacts of the pandemic on households' economic wellbeing. In particular, the focus is on the labor market. High-density slum and urban areas, as well as areas of high localized density in Cox's Bazar, may be particularly vulnerable to this crisis, as lockdowns and social-distancing measures overlap with elevated risks of disease spread. Thus, we zoom in on these three areas to better understand the implications of COVID-19 for these labor markets.

The analysis is motivated by the fact that impacts of the pandemic on households' economic well-being and poverty will largely depend on how labor markets respond to the crisis, as labor income has been the main source of poverty reduction in the past (Hill and Genoni, 2019). Pre-existing vulnerabilities are therefore a source of concern, particularly for the urban poor. First, even before the COVID-19 crisis, a large share of the population – 8 in 10 Bangladeshis – were poor or vulnerable to falling into poverty, suggesting that income losses related to COVID-19 are likely to push a large share of the population into poverty. Second, a substantial part of this vulnerability, particularly in urban areas, arises from the fact that incomes among a large share of Bangladeshi workers and their households depend on activities that are being directly affected by the crisis. Third, the absence of formal safety nets is expected to exacerbate impacts, as income shocks tend to be largely managed with households' own resources.

Information from the recently collected representative phone surveys in poor and slum areas of Dhaka and Chittagong and in Cox's Bazar highlight the substantial labor market impacts due to COVID-19. Job losses and temporary absence are widely reported in all three areas, with Dhaka reporting the largest job losses, whereas in Cox's Bazar, respondents tended to report being employed, but temporarily absent from work. Given the largely informal nature of the jobs held by the majority of active and temporarily absent workers who report themselves as being employed, it is difficult to predict how fully this currently reported employment will translate into active jobs post-lockdown. Job and monetary losses are accompanied by widespread uncertainty about whether people will be able to keep their jobs or keep their businesses running.

In addition, given the low rates of female labor force participation, women appear to be disproportionately affected by the COVID-19 crisis and have experienced relatively higher job losses. In Dhaka and Chittagong, these have translated into women leaving the labor force, while in Cox's Bazar, women have been more likely to look for work. In addition, in Dhaka and Chittagong, women who remained actively working experienced larger declines in earnings and more uncertainty about their job prospects.

The analysis indicates that the differential impacts across areas and gender are linked to workers' occupations before the crisis. The COVID-19 pandemic has disrupted activities to varying degrees, and workers in certain vulnerable activities have been more affected. The differential impacts for women are also related to their engagement in highly impacted sectors, such as garments and housemaid services.

The next section describes the panel surveys and household surveys used for the analysis. Subsequently, the main findings are presented. The final section provides some reflections.

Data sources

National-level analysis before the COVID-19 crisis relies on the Household Income and Expenditure Survey (HIES) collected between April 2016 and March 2017 by the Bangladesh Bureau of Statistics. This is the latest official source of household income, consumption, and poverty data for Bangladesh (Ahmed et al, 2017, 2020). The findings post COVID-19 draw on two rapid panel phone surveys described below.

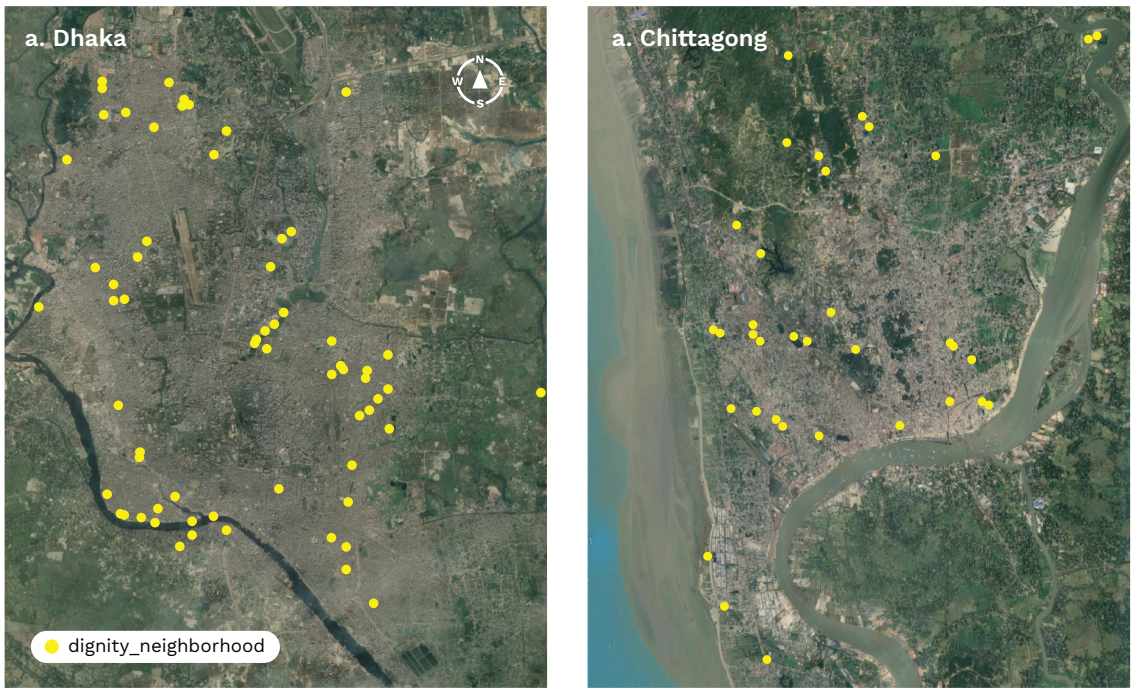
Monitoring surveys in poor and slum areas of Dhaka and Chittagong City Corporations

To track the impacts of the COVID-19 crisis on labor markets and household coping strategies, a rapid phone survey was implemented on a representative sample of households living in poor and slum areas of Dhaka and Chittagong City Corporations (CCs). The analysis presented here summarizes results from the first round of the rapid phone survey conducted from June 10 to July 10, 2020.

The monitoring survey built on baseline surveys conducted before the COVID-19 crisis. The sample for Dhaka is a follow-up of the DIGNITY (Dhaka low Income area GeNder, Inclusion, and poverTY) survey which was representative of low-income areas and slums of the Dhaka City Corporations and an additional low-income site from the Greater Dhaka Statistical Metropolitan Area, following a two-stage stratification design. The enumeration areas were selected during the first stage using probability proportional to size, stratified by the poverty headcount ratio estimated using small-area techniques. All households in the selected enumeration areas were listed during the second stage, from which 20 households were selected for interviewing based on a demographic stratification. This second level of stratification was defined as follows: (i) households with both working-age male and female members; (ii) households with only a working-age female; (iii) households with only a working-age male. Households were randomly selected from each stratum with the predetermined ratio of 16:3:1 (Kotikula et al, 2019). The DIGNITY survey, administered between July and September 2018, collected information from 2,376 individuals across 1,302 households.

The monitoring survey in Chittagong is a follow-up of the CITY (Chittagong low income area Inclusion, and PoverTY) survey carried out in Chittagong City Corporation following the same sampling strategy as the DIGNITY survey. Data was collected from 1,289 individuals across 805 households between September and October 2019. Figure 1 presents the location of the sampled areas in Dhaka and Chittagong.

Figure 1. Location of sampled areas in Dhaka and Chittagong



Source: Authors' rendition, based on the DIGNITY and CITY data.

For the monitoring survey, a representative sub-sample of 1,500 households out of a total 2,107 baseline households was targeted. The recontact rate was 1,483 households (99.5 percent). In this first tracking survey 1,483 out of the 3,665 adults surveyed in baseline were covered. It is important to note that at the time of the follow-up, 2.3 percent of adults had moved residence from their baseline location. The analysis includes those adults even though they are currently located outside the City Corporations. Given the small share of the sample that moved, the results are not affected by their inclusion.

Table 1 presents some descriptive characteristics by area and gender. The adults interviewed in 2020 were 35 years old on average, and 45 percent of them were female. Approximately 57 percent of the adults interviewed were the main breadwinner of households with an average household size of 4 people. On average, 1.4 household members generate income. Respondents from Dhaka are more likely to be living in slum areas than those located in Chittagong (70 versus 52 percent, respectively). Chittagong households are larger (0.4 members more on average) and therefore show higher dependency ratios. About 49 percent of slum residents are women, on average, contrasting with a lower percentage in other areas (39 percent).

Bangladesh's local economy started experiencing impacts of the COVID-19 crisis in early to mid-March 2020, with the country's first case being reported on March 7. A full countrywide lockdown was in place from March 26 to May 28, 2020. The monitoring survey measured outcomes across three periods: (i) During the survey period (7 days prior to survey period between June 10 and July 10; (ii) from March 25 to the time of the interview for individuals who reported being unemployed in the week preceding the interview; and (iii) from January to March 25, 2020, for individuals who reported being unemployed from 25 March onwards (immediately before the lockdown started).

Cox's Bazar rapid phone survey

A rapid phone survey was implemented in April-May 2020 on a representative sample of recently displaced Rohingya households and their host communities in the Cox's Bazar district of Bangladesh, to track the impacts of the

COVID-19 crisis on labor markets, wages, and household coping strategies. This survey built on the 2019 Cox's Bazar Panel Survey (CBPS), which is a multi-topic survey that focused on socio-economic outcomes and access to health services.

Table 1. Descriptive characteristics of adults living in poor and slum areas of Dhaka and Chittagong

	All	Dhaka	Chittagong	Slum	Non-Slum	Male	Female
Female (%)	44.8	45.3	44.2	48.7	39.4		
Age (mean)	35.0	35.1	34.8	34.7	35.6	37.1	32.5
Breadwinner (%)	57.4	58.7	56.2	56.9	57.6	92.1	14.7
Household members (#)	4.3	4.1	4.5	4.2	4.4	4.2	4.3
Members who contribute to HH earnings (#)	1.41	1.43	1.38	1.44	1.36	1.43	1.39
Slum (%)	61.1	70.4	52.0			57.0	65.9
Dependency ratio (Members 15-64/Members <15 and 65+)	0.59	0.57	0.61	0.60	0.57	0.55	0.63
Observations	1483	836	647	951	493	770	713

Note: Information from Round 1 collected between June 10 and July 10, 2020. Figures are weighted.

The CBPS was designed to be representative of recently arrived Rohingya (displaced after August 2017) and Bangladeshi households residing in host communities in Cox's Bazar, and the baseline for this survey was completed in August 2019. The CBPS survey was representative of two types of hosts: those with low and high exposure to the Rohingya influx. To distinguish between host communities that are more or less affected by the arrival of the Rohingya, the survey's sampling strategy uses a threshold of 3-hours walking time from a campsite to define two strata for hosts: (i) host communities with potentially high exposure to the displaced Rohingya, and (ii) host communities with potentially low exposure. Table 2 summarizes key characteristics of the CBPS baseline respondents in host communities (both high and low exposure).

This first round of the rapid phone survey, one of a series of high frequency follow-up surveys to track the evolution of the COVID-19 crisis, was conducted from 21 April-20 May 2020 (a month into the two-month-long COVID-19 lockdown). A sub-sample of 3,176 out of the 5,020 households surveyed at baseline were covered by this survey. The baseline CBPS survey was designed to be administered to two randomly selected adults in each household. In this first tracking survey, 3,009 out of the 9,045 adults surveyed in baseline were covered.[2]

Similarly to the Dhaka and Chittagong surveys, the labor module for the Cox's Bazar survey measured outcomes across three periods: (i) During the survey period (7 days prior to survey period in late April to mid-May); (ii) from March 1 to early April 2020 for individuals who report being unemployed during the survey period (when a potential lockdown was under discussion and gradually came into effect); and (iii) from January to early March 2020 for individuals who report being unemployed from March 1 onwards (when the first known cases of COVID-19 were identified in Bangladesh).

The findings from the follow-up are presented as a panel update on baseline Bangladeshi adults. Employment is defined as the share of the labor force reporting having worked at least one hour in the past seven days or being temporarily absent from work. The labor force is defined as adults over the age of 15 who are either currently employed or not employed but actively seeking work over the past seven days. Similarly, unemployment rates are reported as a percentage of the labor force that has not worked in the past seven days or been temporarily absent from a job but has actively looked for work in the stated recall period.

Table 2: Descriptive statistics for host communities, Cox's Bazar Panel Survey

Households							Adult Respondents	
% women	Household size	Ages 0-6	Ages 7-14	Ages 15-64	Ages 65+	Female- headed households	% women	Age (average)
50.7%	5.1	16.6%	21.6%	58.0%	3.7%	17.7%	57.4%	33

Findings

Pre-crisis vulnerabilities

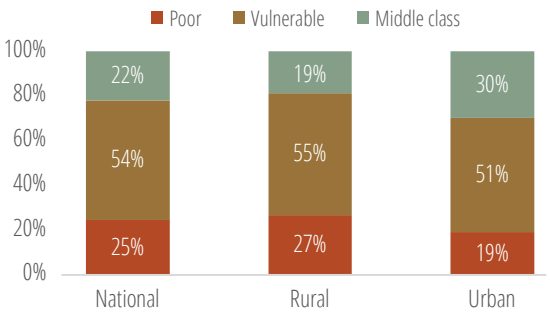
The impacts of COVID-19 on households' economic well-being and poverty will largely depend on how labor markets respond to the crisis, as labor income has been the main source of Bangladesh's poverty reduction in the past and, on average, comprises more than 80 percent of total household income for the poorest 40 percent of households (Hill and Genoni, 2019). Pre-existing vulnerabilities are therefore a source of concern, particularly for the urban poor who rely on the informal sector for work and incomes.

Even before the COVID-19 crisis, a large share of the population – 8 in 10 Bangladeshis –

[2] The results are weighted using adjusted baseline weights that account for non-response and selection into the interview based on characteristics measured at baseline.

were poor or vulnerable to falling into poverty. According to the HIES 2016/17 about 25 percent of the population were living in poverty and another 54 percent could be considered vulnerable, as they had consumption levels very close to the poverty line (between the official upper poverty line and twice the line).[3] Poverty and vulnerability were high in both urban and rural areas (Figure 2), suggesting that income losses related to COVID-19 are likely to push a large share of the population into poverty.

Figure 2. Poverty and vulnerability by area (% of the population)



Source: Authors' calculations using HIES 2016/17.
Note: Poverty defined using the official upper poverty rate. Vulnerable households are households with per capita consumption between the official upper poverty line and twice the upper poverty line. Middle class households are those with per capita consumption above twice the upper poverty line.

A micro-simulation using the HIES 2016/17 was conducted to assess the potential impacts of the COVID-19 crisis on household per capita consumption and poverty rates in 2020, compared to a non-COVID situation.[4] The simulation focuses on short-term labor-income impacts due to slower GDP growth in the fiscal year 2020. The analysis considers the slowdown in growth in agriculture, industry, and services, along with changes in inflation.[5] It uses a full pass-through rate to model a slowdown in household real incomes and increases in the cost of living. Moreover, as an important share of household incomes are informal and not well captured in macro-growth projections, the simulation separately models additional reductions in labor incomes for daily and informal workers, as well as for self-employed workers in services and other affected sectors such as manufacturing, construction and transport. An international remittance income shock is also added. In the main scenario, incomes of informal workers and in affected sectors are assumed to decline by 50 percent (about six months of no income), and international remittances are also assumed to fall by half. A less severe scenario is also estimated, assuming that incomes and remittances decline by only 25 percent (one quarter of the year without income).

The results from this simulation suggest substantial reductions in per capita household consumption and poverty associated with the crisis. Comparing with a scenario without COVID-19, in 2020, average household per capita consumption would decline by an estimated 13 percent, with an estimated loss in annual consumption of about US$ 10.7 billion (Table 3). The national upper poverty rate is estimated to rise from 23 percent to 35 percent (Figure 3), with around 3 percentage points coming from the reduction in international remittances. This represents approximately 21 million additional people falling into poverty in 2020. In a more moderate scenario where informal and self-employed workers experience an income loss of three months and remittances fall by 25 percent, poverty is estimated at 31 percent nationally.

[3] Poverty is defined based on the official upper poverty line from the Bangladesh Bureau of Statistics (Ahmed et al, 2019).

[4] This microsimulation follows a similar approach to that used by Habib et al. (2010) to assess the ex-ante distributional impact of the global financial crisis on Bangladesh. Essentially, the simulation combines COVID-19-adjusted macroeconomic growth projections for 2020, inflation projections for 2020, and the income shocks described above with pre-crisis microdata on household consumption income and expenditure to simulate poverty headcounts and consumption distributions for 2020 under different scenarios. Note that this microsimulation is a short-term exercise with important limitations in the context of a high level of uncertainty about the extent and complexity of the pandemic in Bangladesh. The microsimulation assumes that there will be no new mitigation measures, such as cash-transfers/assistance or adjustments in households' labor market/consumption decisions. It does not model the health impacts on households affected by COVID-19. Welfare analysis only assesses changes to income and consumption. Other non-monetary effects, such as the impact of COVID-19 on human capital, are not assessed.

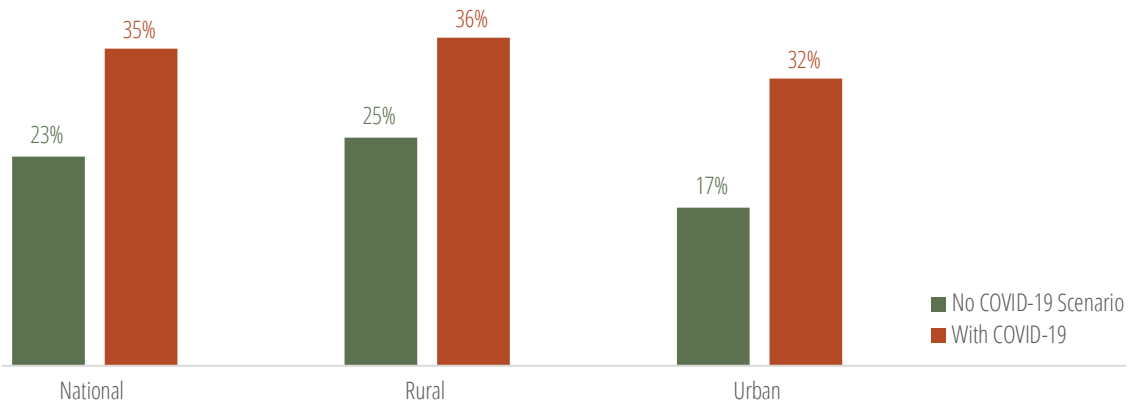
[5] The microsimulation considers a non-COVID GDP growth rate of 6.7 percent and a COVID GDP growth rate of 1.6 percent for FY20 and 1 percent for FY21 based on projections from the World Bank Global Economic Prospects.

Table 3. **Average household consumption per capita**

Location	Baseline 2019	No COVID-19 Scenario in 2020	With COVID-19 Scenario in 2020	Change (%)
National	4,845	5,114	4,532	-13%
Rural	4,276	4,502	4,011	-12%
Urban	6,299	6,677	5,860	-15%

Source: Authors' calculations using HIES 2016/17. Figures in monthly Takas of 2020.

Figure 3. **Estimated poverty rates for 2020 COVID-19 and non-COVID-19 scenarios**



Source: Authors' calculations using HIES 2016/17.

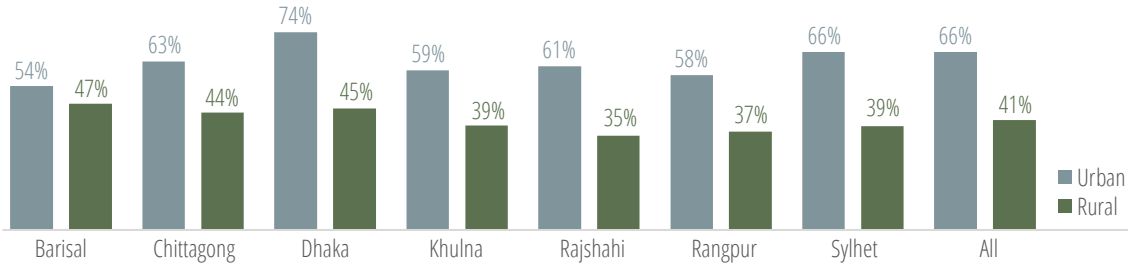
When comparing urban and rural areas, the simulation indicates that urban areas would be more severely affected. Average household per capita consumption in urban areas is estimated to be 15 percent lower and poverty 82 percent higher with COVID-19, relative to a scenario without COVID. In contrast, average household per capita consumption in rural areas is estimated to be 12 percent lower and poverty 44 percent higher.

These severe impacts arise in large part because, particularly in urban areas, the incomes of a large share of workers and their households depend on activities directly affected by the crisis. These include daily and self-employed workers in non-agriculture and salaried workers in manufacturing.[6] In 2016, 2 in 3 urban workers were engaged in activities directly impacted by the crisis, compared to 41 percent of workers in rural areas (Figure 4). In urban areas of Dhaka, 3 in 4 workers are expected to have been directly affected, in Chittagong this is true for 63 percent of workers. Dhaka and Chittagong divisions comprise 68 percent of all directly affected workers.

The absence of formal safety nets is expected to exacerbate impacts, as income shocks tend to be largely managed with households' own resources. According to HIES 2016/17, coping responses to income shocks are varied, but few households rely on formal response mechanisms. A large share of poor and vulnerable households that reported an income shock in the past year reduced food consumption as a response, and this proportion is larger in urban areas (Figure 5). The widespread reliance on food consumption as a way to cope with shocks suggest potential negative impacts on food security. Depletion of own savings and assets can also compromise households' future earning potential, particularly in a protracted period of decreased incomes and work.

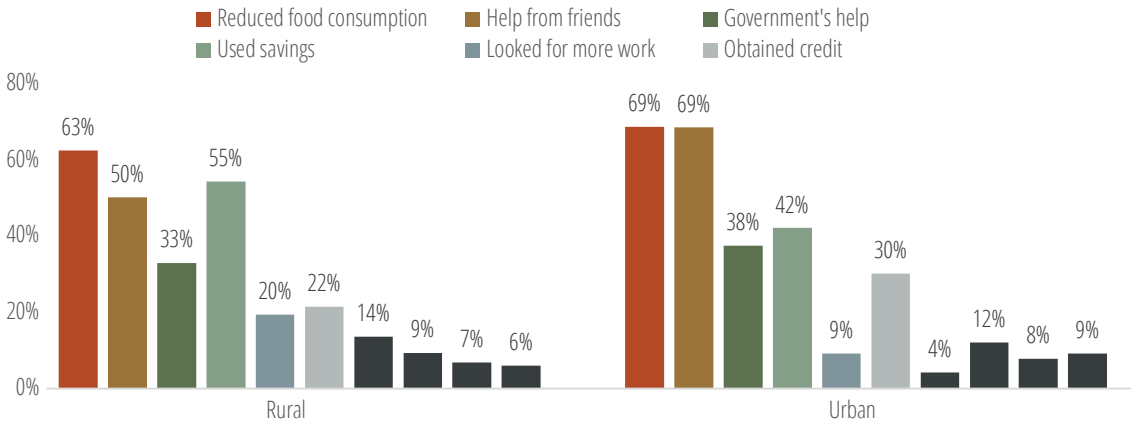
[6] This does not imply that workers in agriculture or salaried workers in non-garment sectors have not been affected. However, such workers are not directly impacted by the slowdown in exports or social-distancing measures in highly dense economic areas, or they may have relatively secure sources of employment.

Figure 4. Percentage of workers in directly affected sectors, by division and area



Source: Authors' calculations using HIES 2016/17.

Figure 5. Ways to cope with income shocks among poor and vulnerable households, by area
(% of households that experienced an income shock in the past year)



Source: Authors' calculations using HIES 2016/17.
Note: Poor and vulnerable households only.

COVID-19 labor-market impacts from the monitoring surveys

Employment impacts so far are large in terms of jobs losses, absenteeism, and reduced earnings, in a context of high uncertainty about jobs prospects

Information from the recently collected phone surveys in poor and slum areas of Dhaka and Chittagong and in Cox's Bazar highlight substantial labor-market impacts due to COVID-19. Job and monetary losses are accompanied by widespread uncertainty about keeping jobs and businesses running.

Job losses and temporary absence are widely reported in all three study areas, with Dhaka reporting the largest job losses, whereas in Cox's Bazar, respondents tended to report being employed, but temporarily absent from work. In poor and slum areas of Dhaka and Chittagong CCs, 23 percent of adults had stopped work between March 25, when the official COVID-19 lockdown was announced, and the time of the interview. In Dhaka, 1 in 4 respondents reported not actively working in the week preceding the interview but having worked before March 25, 2020. In Chittagong this figure was 22 percent. Slum areas showed a higher share of people stopping work (26 percent) compared to non-slum poor areas (19 percent).[7] When asked why they had stopped working, 9 out of 10 respondents attributed the change to COVID-19-related disruptions.

The group of Dhaka and Chittagong respondents that stopped actively working is composed of people expecting to resume work, searching for a new job, or exiting the labor force (Figure 6). About 32 percent of adults who had stopped working after March 25 were not searching for jobs, as they expected to resume their previous activity. However,

[7] This is observed both in Dhaka and Chittagong slums.

Figure 6. Dhaka and Chittagong - Employment status among respondents who stopped active work after March 25 (% of adults)

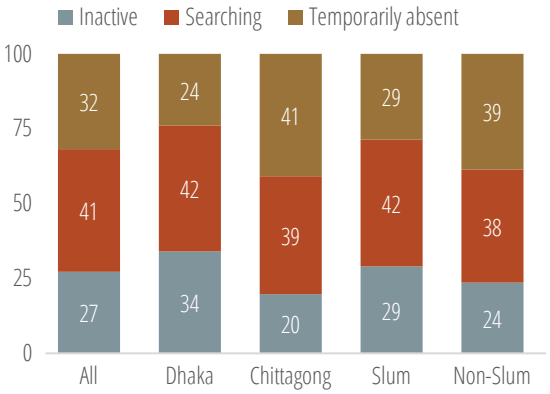
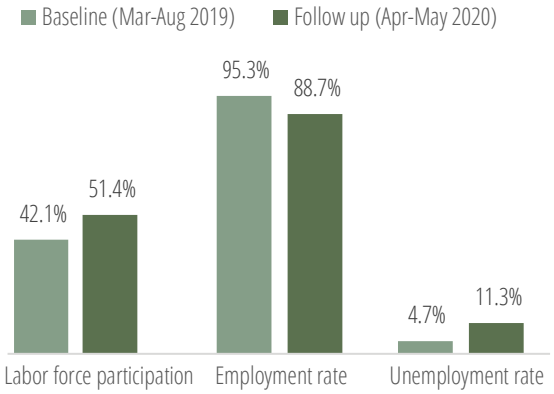


Figure 7. Cox's Bazar district - Labor force indicators between baseline and follow up



the remaining 68 percent seem to have experienced a job loss, as they report exiting the labor force or currently searching for jobs. Job losses were higher in Dhaka (76 percent) than Chittagong (59 percent). Slum areas also show higher job losses (71 percent) than non-slum areas (61 percent). It is also important to note that some of the respondents expecting to resume their previous jobs may not be able to, thus actual job losses may have been higher than these results initially suggest.

In Cox's Bazar district, economic lockdowns were imposed early, due to the risks associated with disease spread in the densely populated Rohingya camps. However, compared to Dhaka and Chittagong, Cox's Bazar district is less urbanized, with its urban areas being located relatively far from concentrations of recently displaced Rohingya. Although close to 90 percent of the Bangladeshi living in Cox's Bazar reported being employed during the lockdown (Figure 7), these employment rates mask high rates of temporary absence from work. Reported employment, even within the lockdown period, remained high (89 percent). However, a large share of the labor force reported being employed but temporarily absent from work, i.e. not actively working. Almost 2 out of 3 adults who reported being employed were in fact not actively working in the 7 days before the survey. In contrast, during the baseline period (March to August 2019), temporary absence from work among the employed was less than 1 percent. Rates of temporary absence from work increased from 3 percent to 56 percent, with the majority of these absences being recorded after COVID-19. Unsurprisingly, an overwhelming majority of temporarily absent workers attributed the situation to COVID-related restrictions on work.

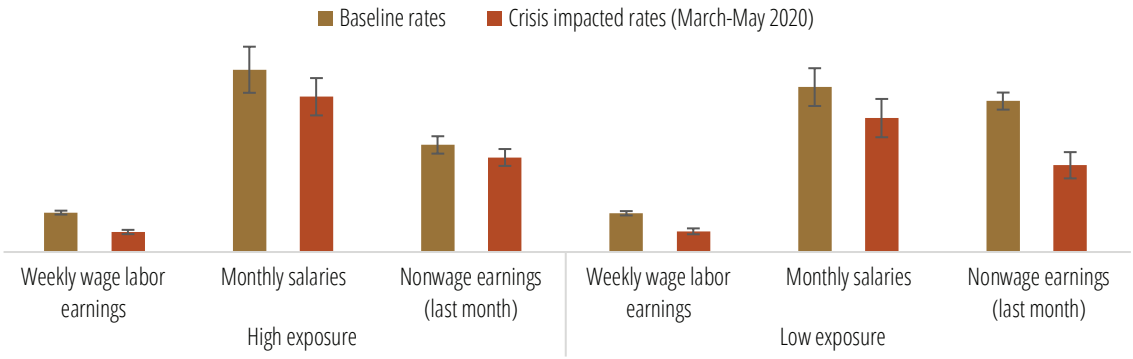
Reported income losses were widespread across all three areas. In Dhaka and Chittagong, about 80 percent of wage workers and 94 percent of business owners said that their earnings were lower than usual. Median wages for salaried and daily workers declined by about 37 percent compared to usual earnings immediately before COVID-19.[8] The decline was higher in Dhaka (42 percent) than Chittagong (33 percent) and in slum areas compared to non-slum poor areas (43 and 33 percent, respectively).[9] Dhaka showed wage declines larger than Chittagong's for both genders.

As in Dhaka and Chittagong, those who remained active during the lockdown in Cox's Bazar reported reduced earnings, with urbanized, low-exposure areas being more affected across all employment types (Figure 8). Among wage workers, daily and weekly wage laborers faced much higher losses in income (49 percent) compared to salaried workers.

[8] The labor market questions for daily workers in the follow-up questionnaire were simplified due to time constraints. To estimate daily wage changes for daily workers, reported weekly hours were converted to daily hours assuming 8 hours of work per day and allowing a work week to be up to 7 days.

[9] Comparisons are statistically significant conditional on the different slum/non-slum composition of the cities.

Figure 8. Cox's Bazar district - Comparison of pre-crisis and lockdown earning levels for different employment types



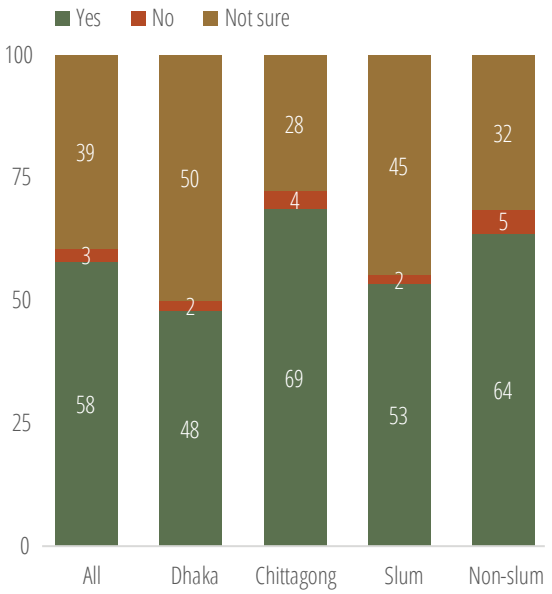
Monthly salaried wage workers in Cox's Bazar have been relatively protected in terms of income losses, reporting 15-19 percent reductions across high- and low-exposure hosts.

Given the largely informal nature of the jobs held by the majority of active and temporarily absent workers who report themselves as being employed, it is difficult to predict how fully this employment will translate into active jobs post-lockdown. This is reflected in the widespread uncertainty that respondents from Dhaka and Chittagong reported about keeping jobs and businesses running (Figure 9). Only 58 percent of active workers thought they would be able to keep their job or activity running in the month following the survey. In Chittagong, 69 percent of workers expected to continue working. Compared to Chittagong, Dhaka shows a much higher degree of uncertainty about employment prospects, with only 48 percent of workers thinking they would keep their income-generating activity. Slum residents show higher levels of uncertainty: 53 percent of workers in slums expected to remain at their jobs, compared to 64 percent in non-slum areas.

Females have been disproportionately affected due to their overall lower participation in the labor market and their occupations

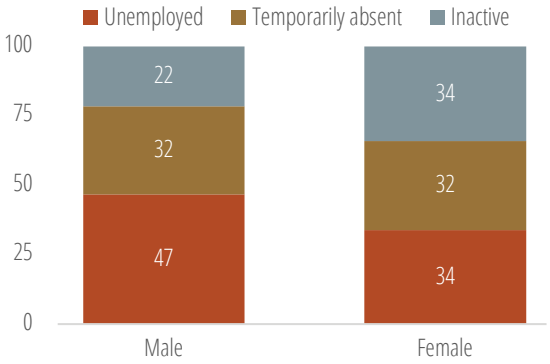
Given the low rates of female labor force participation, women appear to be disproportionately affected by the COVID-19 crisis and have experienced relatively higher job losses. In Dhaka and Chittagong, these have translated into women leaving the labor force, while in Cox's Bazar, women have been more likely to look for work.

Figure 9. Dhaka and Chittagong - Expectations about keeping current employment next month
(% of adults who worked in the past week)



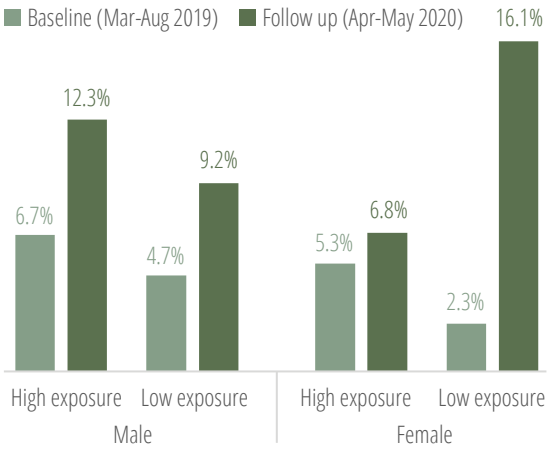
In Dhaka and Chittagong, the percentage of males and females stopping work between March 25 and the interview date was 23 and 24 percent, respectively. However, given their low participation in the labor force, women's employment experienced a larger reduction. The share of actual job losses among those stopping work was not very different by gender, but men were more likely to actively look for another job while women were more likely to exit the labor market. Only 2 in 10 men stopping active work exited the labor force, compared to more than 1 in 3 women in Dhaka and Chittagong (Figure 10).

Figure 10. Dhaka and Chittagong - Employment status for those who stopped active work after March 25, by gender (% of adults)



Note: Inactive are those respondents who left the labor force. Unemployed are those who are actively searching for jobs. Temporarily absent are those who are not looking for jobs because they expect to go back to their original employment.

Figure 11. Cox's Bazar district - increasing unemployment rates by gender and exposure area



In Cox's Bazar, although unemployment rates increased across areas and gender, women in more urban, low-exposure areas were significantly more likely to become unemployed (Figure 11). However, this increase was not driven by job losses, but by new labor force entrants seeking jobs. Two-thirds of new labor force entrants in Cox's Bazar were women, largely driven from low-exposure regions (70 percent); and close to 60 percent of these entrants are secondary household members, i.e. the spouses or children of the household heads. These increases are likely driven by the high rates of temporary absence from work reported among men.

In addition, in Dhaka and Chittagong, women who continued actively working experienced larger declines in earnings and more uncertainty about their job prospects. This seems to be linked to their engagement in occupations hard hit by the crisis. Reductions in wages for salaried and daily workers were significantly higher for women, consistent with their high engagement in the garment sector and housemaid services, both of which have been severely impacted by COVID-19. The median wage decline for women was 43 percent, compared to 33 percent for men. Table 4 shows that active working women were mainly concentrated in the garment industry

Table 4. Percentage of workers across occupations by work status in 2020 and by gender

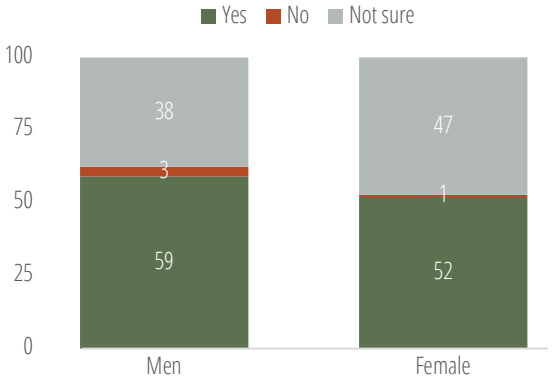
	Males			
Occupation	**Worked in 2020**	**Worked past week**	**Stopped active work since March 25**	**Lost job since March 25**
Drivers	13%	16%	5%	6%
Garments worker	6%	7%	6%	7%
Transport worker	7%	6%	10%	13%
Construction worker	8%	8%	10%	13%
Retail or sales worker	3%	3%	3%	5%
Porter	14%	14%	13%	13%
Cleaning or housemaid	1%	1%	0%	0%
Wage - other	8%	8%	8%	5%
Professional skilled	6%	5%	11%	7%
Own account - retail or trade	22%	24%	18%	15%
Own account - other	11%	9%	16%	16%
Total	100%	100%	100%	100%

	Females			
Occupation	**Worked in 2020**	**Worked past week**	**Stopped active work since March 25**	**Lost job since March 25**
Drivers	0%	0%	0%	0%
Garments worker	28%	42%	16%	19%
Transport worker	0%	0%	0%	0%
Construction worker	1%	0%	2%	3%
Retail or sales worker	0%	0%	1%	1%
Porter	1%	0%	1%	1%
Cleaning or housemaid	43%	28%	56%	54%
Wage - other	7%	9%	6%	4%
Professional skilled	4%	2%	5%	1%
Own account - retail or trade	11%	14%	9%	10%
Own account - other	5%	5%	5%	7%
Total	100%	100%	100%	100%

Note: "Wage - other" groups occupational categories of less than 2% for the total sample.

(42 percent) or working as a housemaid or cleaner (28 percent). Conditional on place of residence, age, and education, females were 13 percent more likely to report a wage loss than males and experienced a 14 percent larger wage loss than males. In addition, while 59 percent of men expected to remain at their job in the next month, this was true for 52 percent of women (Figure 12).

Figure 12. Dhaka and Chittagong - Expectations about keeping current employment next month by gender (% of adults who worked in the past week)



Occupation-specific vulnerabilities are an important factor shaping the impacts of the crisis

Across the world, including developed countries, the COVID-19 pandemic has constrained certain occupations more than others, and workers in more informal activities have been more affected (World Bank 2020a). In the case of Bangladesh, as in other developing economies where labor informality is high, a larger share of the population has been affected. The analysis for Dhaka, Chittagong, and Cox's Bazar indicates that the differential impacts across areas and gender are linked to workers' occupations before the crisis. The differential impacts for women are also related to their engagement in highly impacted sectors, such as garments and housemaid services.

In Dhaka and Chittagong, workers reporting job losses were engaged across different types of occupations (Table 3).[10] Among men, the composition of occupations for those who continue to work actively and those who lost work is fairly similar, though job losses are slightly more likely for transport and construction workers and less likely for drivers (rickshaw, private cars, etc.). For women, job losses are also observed across occupations, but 54 percent of the cases are housemaids or cleaners. Comparing to the share of women actively working or who had worked in this occupation in 2020 indicates that females in housemaid services have been more affected.

[10] Job losses are statistically significant different from zero across all occupation groups presented in Table 1 for both males and females. However, note that the sample for some occupations is small. Occupation percentages below 10 percent should be interpreted with care.

The more severe impact of the crisis in poor areas of Dhaka seems to be explained by the different occupational composition of workers. Dhaka has a larger share of respondents in occupations that have been strongly affected (in particular male transport workers and housemaid services). Table 5 shows a multivariate regression for the probability of reporting an income loss and the change in income for daily and wage workers. The results indicate that different occupations have experienced income losses and that, conditional on the occupation, the location of the worker (Dhaka or Chittagong) is not significantly correlated with wage declines. When comparing wage changes across sectors and cities, Chittagong appears to show larger income reductions (sample sizes are too small to confirm statistically significant differences in many cases). This indicates that Dhaka's poorer performance is probably related to the different distribution of workers across sectors, and the larger reliance on COVID-19-vulnerable occupations, rather than to larger wage drops within sectors.

Table 5. OLS regression for experiencing a wage decline

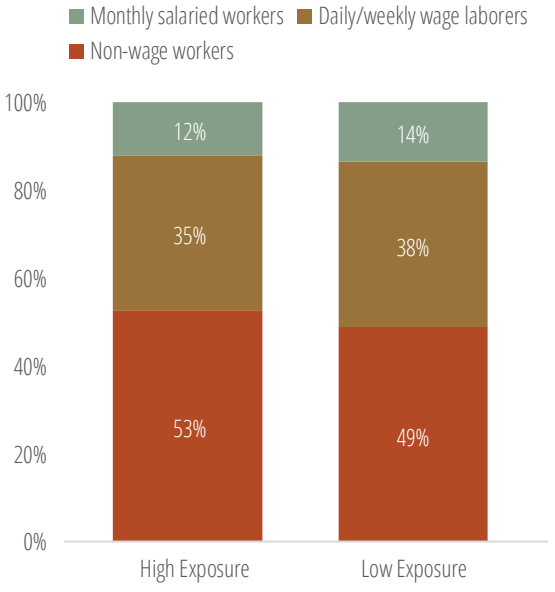
	Reported a wage drop (1)	Wage change (%) (2)
Drivers	0.788***	-0.260***
	(0.046)	(0.072)
Garments worker	0.912***	-0.481***
	(0.039)	(0.061)
Transport worker	0.853***	-0.450***
	(0.066)	(0.103)
Construction worker	0.486***	-0.162*
	(0.057)	(0.089)
Retail/sales worker	0.847***	-0.524***
	(0.086)	(0.134)
Porter/day laborer	0.597***	-0.0797
	(0.042)	(0.066)
Cleaning/housemaid	0.927***	-0.609***
	(0.065)	(0.101)
Wage other	0.874***	-0.548***
	(0.051)	(0.080)
Professional/skilled	0.818***	-0.347***
	(0.067)	(0.105)
Living in Dhaka	0.0359	-0.0301
	(0.035)	(0.055)
Observations	532	532
R-squared	0.826	0.332

Notes: Standard errors in parentheses. Estimates weighted. Regressions exclude the constant so coefficients can be interpreted as conditional means for each occupation category.
*** p<0.01, ** p<0.05, * p<0.1

In Cox's Bazar, wage workers were more likely to report temporary absence during the COVID-19 lockdown period, whereas non-wage workers were more likely to experience reduced incomes and operational activity. A higher proportion of employed enterprise owners report actively working during the lockdown as opposed to employed wage workers, who mostly report being temporarily absent from jobs (Figure 13). About 1 in 3 respondents who report being employed but temporarily absent from work report being daily or weekly wage laborers; half are non-wage own account workers. However, actively working enterprise owners are much more likely to report lower incomes than active wage workers. In other words, for those actively working during the lockdown, overall incomes have fallen due to reduced activity or reduced work hours, but wage rates have remained relatively inflexible downwards.

Rates of temporary absence in Cox's Bazar were higher for low-exposure hosts (67 percent) than for high-exposure hosts (53 percent), and higher for employed men. This could potentially be

Figure 13. Cox's Bazar district - Share of employment types among hosts describing themselves as temporarily absent from work



explained by the nature of jobs that these groups are typically engaged in: population segments which were more dependent on agricultural and home-based income-generating activities that are prevalent in high-exposure areas were able to participate in some kind of economic activity during the lockdown. This contrasted with the situation of respondents in service sector jobs. These jobs were less accessible during the period. Table 5 highlights how active income sources during the lockdown (April) are mostly agricultural, not only in the more rural high-exposure areas, but also among active jobs reported in the relatively more urbanized low-exposure regions.[11]

In addition, income losses during the lockdown for active non-wage own account workers and business owners vary across high- and low-exposure areas in Cox's Bazar. Among non-wage workers, high-exposure hosts faced much lower income losses (15 percent) than their counterparts in low-exposure areas (43 percent). With high-exposure hosts more dependent on agriculture and low-exposure hosts on industrial and service sector occupations (World Bank, 2020), this further highlights the differential impact that the lockdowns have had on economic sectors, with agricultural work facing more limited disruptions than other activities.

Table 6. Cox' Bazar district- Top 5 jobs reported by persons actively working

High-exposure hosts	%	Low-exposure hosts	%
Farmer (on own land)	14.87%	Self-run agricultural activities	15.91%
Agricultural day laborer	13.79%	Small businessman (tongs)	10.50%
Small businessman (tongs)	9.02%	Agricultural day laborer	10.19%
Self-run agricultural activities	8.55%	Private sector employee	7.51%
Rickshaw/van driver	5.47%	Hens/duck rearing	5.27%
Other	48%	Other	51%

Conclusions

This paper documents some early insights into labor-market impacts of the COVID-19 pandemic in Bangladesh, with a special focus on three vulnerable areas of the country. As the crisis develops, future rounds of representative monitoring data on the same respondents will help understand the evolving impacts and potential recovery. The findings presented here indicate substantial labor-market impacts both at the extensive and intensive margin, with important variation across areas and gender, largely due to the different nature of occupations affected by this crisis. This variation in occupational composition explains why workers in Dhaka appear to be more adversely affected than those in Chittagong, why those living in more urbanized parts of Cox's Bazar district have faced larger income and job losses, and why women have borne a disproportionate burden from the crisis.

The analysis shows high levels of job uncertainty, reflected by the high absenteeism rates and dim expectations of active workers. This makes it difficult to infer the extent to which this crisis will translate into permanent job losses with longer-term consequences for poverty, food-security, and future earnings. It is likely that reported rates of employment in these rapid phone surveys – which derive in large part from high rates of temporary absence - are underestimating the magnitude of job losses which may be realized once social-distancing measures lift and workers attempt to rejoin their jobs. Whether some people's positive expectations will translate into re-employment of these largely informal wage workers post-lockdown will depend on a host of factors, such as which sectors of the local economy are prioritized in the partial economic reopening, how localized quarantines of neighborhoods and areas impacts job accessibility and mobility, and the overall economic outlook for the major sectors of employment in the economy.

[11] According to baseline findings, 41 percent of hosts in high-exposure areas rely on agriculture for their livelihoods, compared to 30 percent for hosts in low-exposure areas (World Bank, 2020).

Currently, the consequences of the crisis for the continued operations of household enterprises and self-employed workers continue to play out, with considerable uncertainty as to how these activities will be sustained in a context of protracted decline in earnings.

High levels of uncertainly in the job market are also generating stress and anxiety that may further exacerbate health impacts associated with the pandemic, notably in mental health. This is an important part of the story but beyond the scope of this paper. In poor areas of Dhaka and Chittagong, 8 in 10 adults reported experiencing stress or anxiety that affected their ability to carry out their day-to-day activities in the month preceding the interview. The main reasons cited were fear of the effects of COVID-19 on self and family (56 percent of cases) and fear of a loss of income (41 percent of cases).

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