

Impact of COVID-19 shutdown on economic resilience of low-income households and its implications for livelihood interventions: the case of Bangladesh

Md. Rubaiyath Sarwar

Abstract: *COVID-19 shutdown provides a unique opportunity to assess how the low-income households engaged in urban and rural formal and informal economies coped with the shock and how it affected their capacity to cope with such shocks in the near future. Insights on the income and expenditure, savings and borrowing patterns of the low-income households can help us to understand how the coping mechanism and coping capacity varies across different types of low-income households. In turn, it can help us understand the weaknesses in their coping capacity which should be addressed for these households to become more resilient against such external shocks. This paper examines the coping mechanism and the coping capacity of the low-income households based on rapid surveys that were undertaken during the COVID-19 shutdown period in Bangladesh by the author and other agencies in Bangladesh.*

Keywords: COVID-19, poverty, resilience, livelihood, enterprise development

Introduction

As of 31 January 2021, Bangladesh had 534,770 reported COVID-19 cases and 8,111 COVID-19 deaths (Dong et al., 2020). It stood third in South Asia in terms of COVID-19 positive cases. India was first with 10,746,174 reported cases and 154,274 deaths while Pakistan was in the second position with 544,833 reported cases and 11,657 deaths (JHU CSSE COVID-19 Data). While Bangladesh does not take centre stage in the world in terms of COVID-19 cases and deaths, it very much sits in the hotspot in terms of understanding the impact of COVID-19 on world poverty, for reasons that include its unique exposure to climate change which, according to the World Bank, converged with COVID-19 to ‘unleash a worldwide economic disaster whose shock waves continue to spread’ (World Bank, 2020).

The biennial *Poverty and Shared Prosperity* report estimated that an additional 88 million to 115 million people will be pushed into extreme poverty because of COVID-19 and this will take the total to between 703 and 729 million. It warned that the new poor are likely to be more urban than the chronic poor, be more engaged in informal services and manufacturing and less in agriculture, live in congested urban settings, and work in the sectors most affected by lockdowns and mobility restrictions (World Bank, 2020).

Md. Rubaiyath Sarwar (rubaiyath.sarwar@innovision-bd.com), Innovision Consulting
Private Limited, Dhaka, Bangladesh

© Practical Action Publishing, 2021, www.practicalactionpublishing.com, ISSN: 1755-1978/1755-1986

Based on data from the International Monetary Fund, Kharas (2020) identified Bangladesh as one of the top 10 countries with the largest likely increases in extreme income-poverty headcounts compared to baseline (Kharas, 2020). BRAC Institute of Governance and Development (BIGD), part of BRAC University, Bangladesh, reported in June 2020 that the country has 21 per cent new poor because of the COVID-19 shutdown (Rahman et al., 2020). They defined new poor as households that previously were vulnerable poor living above the upper poverty line but below the median income before February 2020 but slipped below the poverty line due to the impact of the COVID-19 crisis. The Planning Commission under the Ministry of Planning, Government of Bangladesh reported that the rate of ultra-poor might have gone up from 10.5 per cent of the population to 20.5 per cent as of June 2020 (Parvez, 2020). It would be relevant to note that Bangladesh reduced extreme poverty from 17.6 per cent in 2010 to 12.9 per cent by 2016 (BBS, 2016) and the estimate was updated to 10.5 per cent in 2019 (BBS, 2019). The upward movement of poverty is thus a big concern for Bangladesh as it threatens to reverse the progress it has achieved against the key Sustainable Development Goals relating to extreme poverty.

In this context, this paper, through empirical evidence from research undertaken by the author and by other institutions, presents an analysis of the degree to which COVID-19 impacted low-income households in Bangladesh. It also explains the economic resilience of the households through a review of the data that shows the economic recovery pathway of the selected categories of low-income households in Bangladesh. This paper identifies COVID-19 as a disaster and focuses on micro-economic resilience which:

depends on the distribution of losses; on households' vulnerability, such as their pre-disaster income and ability to smooth shocks over time with savings, borrowing, and insurance, and on the social protection system, or the mechanisms for sharing risks across the population (Hallegate, 2014).

The paper examines the impact on rickshaw-pullers in Dhaka, the capital of Bangladesh, as cases of the urban informal service sector; the ready-made garment (RMG) workers (both male and female) as cases of the urban formal sector; and the third gender population as cases of urban marginalized households. From the rural economy, extremely poor households (households living below the lower poverty line of \$1.90 per day per capita) from both farm and non-farm occupations are drawn as cases. Informal occupation in this paper refers to self-employment or paid employment in vocations that are not incorporated or registered as formal entities. Coping capacity in this paper refers to the degree to which the households are able to continue their regular food and non-food expenses and the degree to which they can reduce their exposure.

Impact of the shutdown on household resilience

Urban and rural low-income informal occupational groups

COVID-19 shutdown was in effect in Bangladesh from 26 March to 31 May 2020. The shutdown was declared on 22 March. The next few days saw a mass exodus from

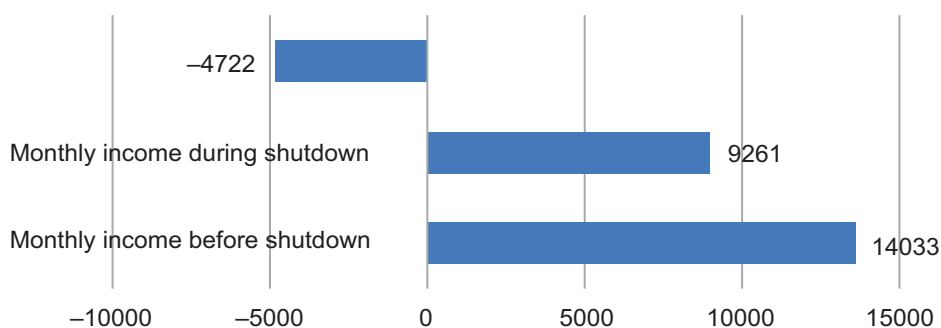


Figure 1 Immediate impact of shutdown on income of rickshaw-pullers in Dhaka (in TK)

cities to villages before the shutdown started. A survey by Innovision Consulting (Sarwar, 2020b) on 30 randomly sampled rickshaw-pullers from different parts of Dhaka, on the first day of the start of the official lockdown on 26 March, provides a first glimpse of the economic impact of the shutdown. The data showed that 77 per cent of the rickshaw-pullers were the sole income earner of their family. Of the surveyed rickshaw-pullers, 70 per cent reported that their income has declined since the declaration of the shutdown. The survey found that the income per day of the rickshaw-pullers dropped by 34 per cent from an average of TK 513 (US\$6) to TK 369 (\$4) the day before the survey. The average pre-shutdown monthly income was reported to be TK 14,033 or \$165. As such, if the decline in income per day remained constant, the average monthly income of the rickshaw-pullers would have come down to TK 9,261 or \$109 (Figure 1). The average household size of the rickshaw-pullers was found to be 4.8 (the national average is 4.06 according to the Household Income and Expenditure Survey; BBS, 2016). Therefore, the average income per capita per day would have declined from \$1.14 to \$0.75 per day for rickshaw-pullers who were the sole income earner of the family.

To understand the impact of the decline in income on household resilience, the survey looked at the savings and loan exposure of the rickshaw-pullers and their plans for adjustment in household expenditure and food and non-food consumptions. The survey revealed that 23 per cent of the rickshaw-pullers had savings and 60 per cent had outstanding loans. The average accumulated savings of the rickshaw-pullers who had savings was TK 16,457 (\$194) and the average outstanding loan (for those who had loan exposure) was TK 49,833 (\$588). The savings per capita of the sampled respondents was only TK 3811 (\$45) and the loan exposure per capita was TK 29,901 (\$353) (Figure 2).

To assess the impact of the shutdown on household expenditure and consumption, three different time periods were considered: shutdown for 5 days, 15 days, and 30 days. The findings showed that shutdown for 30 days would force 1 out of 3 rickshaw-pullers to take a loan while it was 1 out of 5 for 15 days and 1.5 out of every 10 rickshaw-pullers if the shutdown was continued for 5 days. Of the sampled respondents two out of three reported that they could withstand declining income for 30 days. However, the percentage of rickshaw-pullers who said they would reduce their food expenses increased from 14 per cent to 33 per cent and 64 per cent

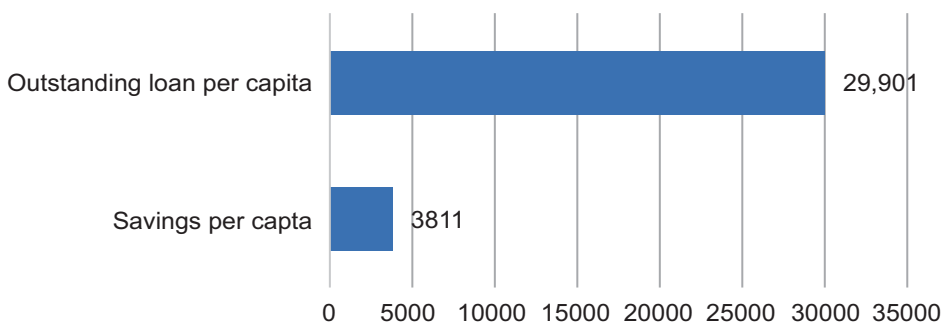


Figure 2 Savings and loan per capita of the rickshaw-pullers in Dhaka (in TK)

respectively for the 5 days, 15 days, and 30 days' shutdown period. The percentage of rickshaw-pullers who said they would reduce their protein increased from 7 per cent for shutdown of 5 days to 50 per cent for shutdown of 15 days (Figure 3). On the other hand, the percentage who would reduce their non-food expenses, for example mobile phone airtime increased from 7 per cent to 10 per cent between 5 days and 15 days shutdown period.

A subsequent survey on 52 randomly sampled third gender people in Dhaka showed that their average monthly income is TK 12,490 (\$147). They were mostly dependent on informal service for their income which includes collection of tolls (59 per cent) and prostitution (20 per cent). Around 82 per cent did not have any income at the time of the survey in April 2020 and 86 per cent already had reduced expenditure on food at the time the survey was undertaken. Only 14 per cent of the surveyed respondents had savings. Average savings of those who had savings was TK 5,214 (\$62). Savings per capita of all the surveyed respondents was only TK 762 (\$9). Forty-three per cent had outstanding loans and the average outstanding loan amount of these respondents was TK 13,777 (\$162). The outstanding loan per capita for all the surveyed respondents was TK 5928 (\$70) (Figure 4). From the day of the survey, the respondents said they could bear their minimal expenses for the next nine days (Sarwar, 2020c).

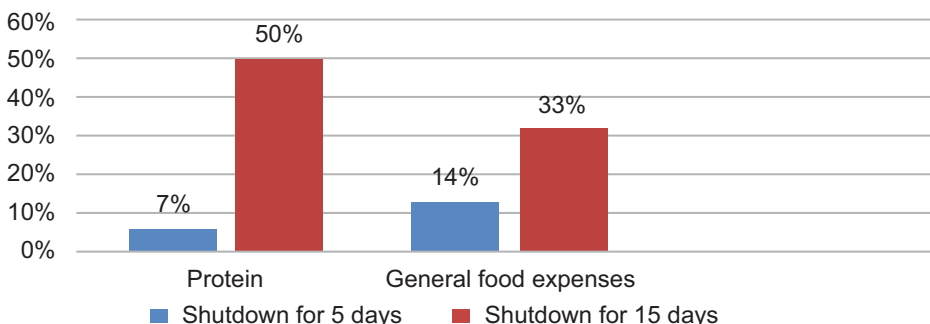


Figure 3 Percentage of rickshaw-pullers in urban areas who would reduce their food expenses due to shutdown

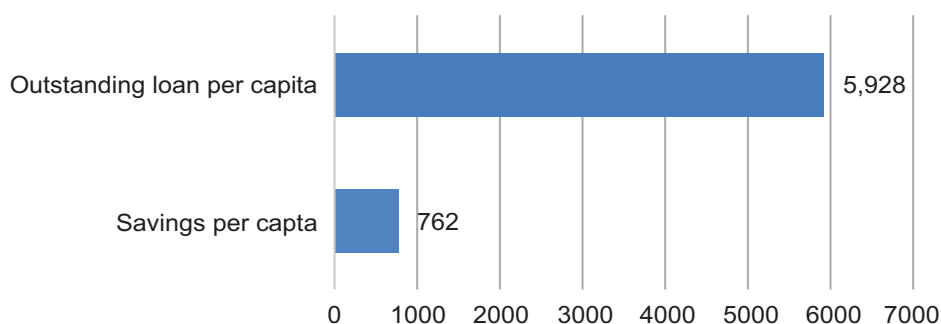


Figure 4 Outstanding loan and savings per capita of the third gender community in Dhaka (in TK)

Several conditions were found to be common in these two surveys. Firstly, the surveys showed that the loan exposure per capita was almost eight times the savings per capita for both the occupational groups. Also, reduction in food expenses was found to be a dominant trait in household response to coping with decline in income.

To understand whether these conditions hold for rural samples Innovision undertook a survey of eight informal sector occupational groups: 1) bus and truck drivers and helpers; 2) carpenters; 3) construction workers; 4) house maids; 5) owners of small restaurants; 6) rickshaw-pullers; 7) three-wheeler drivers; and 8) agricultural labourers. Data was collected through a rapid phone survey from 244 random samples from rural areas from five districts in Bangladesh. This survey was undertaken in May 2020, nearly one-and-a-half months since the shutdown was put in effect. The survey showed that the average household income before the shutdown was TK 11,924 (\$140). By the month of May, it declined by around 83 per cent or TK 9,922 on average (Figure 5). The impact was lower among the house maids (68 per cent) and wage earner/agricultural labourers (76 per cent) compared with the rest (Figure 6) (Innovision Consulting, 2020).

As the data from the urban and the rural areas are from two different time periods and the rural households were sampled around one-and-a-half months after the shutdown was imposed, we cannot make a comparative analysis of the relative decline in income between urban and rural. However, the rural samples provide further insights on the impact of the decline in income on household's food and non-food expenditure. At the time of the survey, 94 per cent of the respondents reported reducing their expenditure on protein-content food items and they almost halved their protein food expense. The respondents reported that they had cash to meet their essential household expenses for eight days. Besides, they had 11 days of food grains in stock.

Of the sampled respondents, 73 per cent reported that they have some form of savings and the average savings per capita was found to be TK 6,009 or \$70. Savings was also found to be the major source of coping with the income shock among the rural households. Of the respondents, 65 per cent reported to have used savings to cope with the decline in income and 40 per cent reported to have used loans from relatives. Other major sources include social safety net

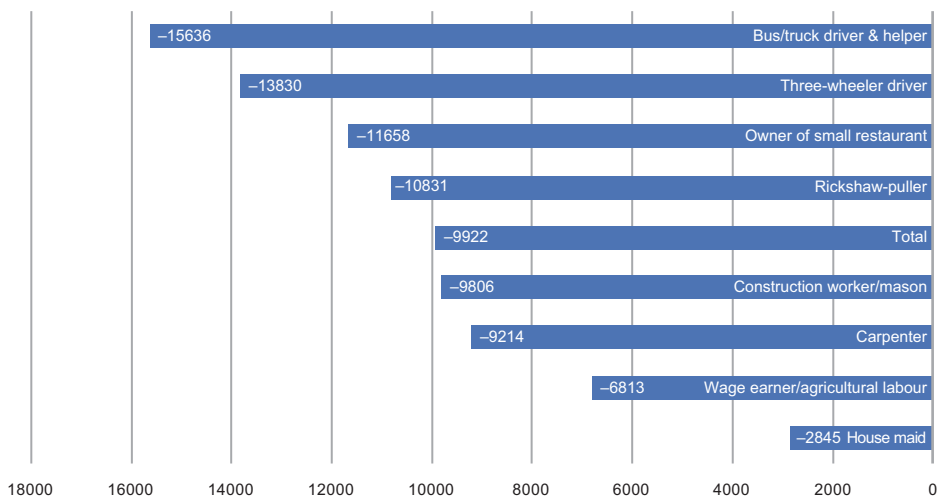


Figure 5 Decline in monthly income by rural informal occupational group (in TK) during the shutdown

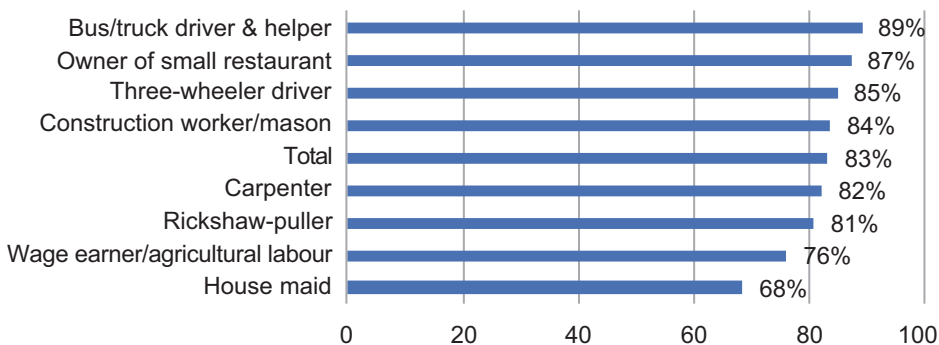


Figure 6 Percentage decline in monthly income of different rural informal occupational groups during the shutdown

(17 per cent) and credit with local micromerchant shops (11 per cent). The data also suggests that the savings might have protected the rural households engaged in informal occupations from selling their assets. Only 7 per cent reported selling livestock to cope with the decline in income. Of the respondents, 70 per cent reported having outstanding loans and the outstanding loan per capita for the rural low-income occupational groups was found to be TK 32,200 (\$380). The loan exposure per capita for the rural low-income occupational groups was thus around six times that of the urban informal occupational groups. Given that 40 per cent of the respondents reported taking loans from relatives, this exposure would have increased due to COVID-19-induced economic shock. Of the respondents, around 44 per cent reported to have other income earners in their family. The average monthly income during the lockdown period was

TK 1,707 (\$20) for the households who had single income earners. In contrast it was TK 5127 (\$60) for households with more than one income earner. A higher percentage of the single income earning households (96 per cent) reported reducing expenditure on protein intake compared to households with multiple income earners (91 per cent). However, the weekly reduction on expenditure on protein was almost the same for households with a single source of income (TK 423) and multiple sources of income (TK 421).

Formal sector occupational group (RMG workers)

Innovision undertook a rapid phone survey on the RMG workers, the largest group of formal sector wage workers in Bangladesh in April 2020. Average monthly income of the surveyed respondents was found to be TK 11,632 (\$137). The average monthly income of the male workers was found to be TK 12,475 (\$147) which is about 7 per cent higher than the monthly average household income of the female workers (TK 11,086 or \$137). Of the 84 random samples, 57 per cent had income from other household members. The average household income of these respondents was TK 22,634 (\$267). At the time of the survey, 79 per cent of the respondents reported that they were not paid their salary for the previous month while 21 per cent reported to have received partial salary. The survey showed that 85 per cent of the respondents had in cash in hand (average of TK 3,686 or \$43) which could support family expenses (food and non-food) for 16 days. Also, 92 per cent of the respondents who reported that they had other earning members in their family, reported that those members did not have income at the time of the survey. Only around 4.76 per cent of the surveyed workers reported that they had income from other sources at the time of the survey. In general, unlike the informal occupational workers in urban and rural areas who still had income from which they could meet their daily expenses, the income drop from the RMG workers was almost absolute and they had to resort to cash in hand almost immediately. The findings showed that 76 per cent of the female workers and 69 per cent of the male workers were spending from their last month's salary. Also, 19 per cent of the female workers were using their savings while 21 per cent of the male workers were using their savings to meet their expenses (Figure 7). Fifty-seven per cent of the female workers already borrowed money to cope with the crisis while about 40 per cent of the male workers borrowed to cope with the crisis. At the time of the survey, 27 per cent of the workers reported to have reduced their food expenses. Average expenditure on food was reduced from TK 266/day (\$3/day) to TK 193/day (\$2.27/day).

To further understand the vulnerability of the RMG workers, the survey respondents were asked to report on their expected adjustments on food and non-food expenses. The survey showed that 27 per cent of the workers would partially reduce rice and vegetable consumption and another 27 per cent would partially reduce protein consumption if they did not receive their salary for the month of April. An additional 20 per cent said they would fully

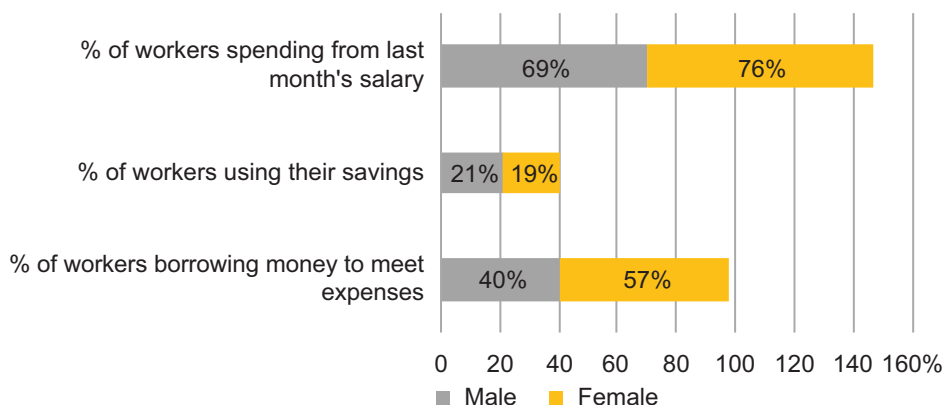


Figure 7 Immediate impact of shutdown on the cash management of the RMG workers

reduce protein consumption if the salary for the month of April was not paid. At this stage, a higher percentage of workers reported to reduce their non-food expenditure compared to their food expenditure. For example, 75 per cent said they would stop sending remittance to their family in the village and 43 per cent said they would stop purchasing mobile talk time. Also, 76 per cent said they would stop savings. The percentage of workers reporting partial reduction of food expenditure (rice and vegetables) increased to 54 per cent if the salaries for the months of April and May were not paid. The percentage of workers reporting full reduction in protein consumption increased to 29 per cent if the salaries for April and May were not paid. At this stage, 88 per cent of the workers reported that they would fully stop sending remittance to their family in their village. A higher percentage of female workers (98 per cent) reported fully stopping sending remittance to their village compared to male workers (79 per cent) if the salary for both the months of April and May were unpaid (Table 1) (Sarwar, 2020a).

The findings showed that the baseline income of the formal wage labourer and the informal wage labourer was nearly the same. Also, they are comparable in terms of number of income earners in their household. However, the impact was more severe and immediate on the formal wage workers compared to the informal wage workers as the informal wage workers still had some disposable income during the shutdown while the income of the formal wage workers slumped to near zero. This vulnerability was compounded by the fact that the formal wage workers in urban areas had lower savings per capita than the informal wage workers in rural areas. Only 20 per cent of the surveyed RMG workers reported having savings. The average net savings among those who had savings was TK 37,412 (\$441). The savings per capita of the surveyed RMG workers was TK 7,571 (\$90). Of the samples, 32 per cent reported having outstanding loans. The average outstanding loan amount was found to be TK 47,040 (\$556) per capita for the RMG workers. The per capita outstanding loan was thus about six times the per capita savings which is nearly equal to the informal wage workers in rural areas.

Table 1 Expected adjustments to food and non-food expenses by the RMG workers if the salaries for the months April and May 2020 were not paid

Household expense	Full reduction			Partial reduction			No change			
	Overall (%)	Male (%)	Female (%)	Overall (%)	Male (%)	Female (%)	Overall (%)	Male (%)	Female (%)	
Food consumption/buying groceries from the market (rice, vegetables)	4	5	2	54	48	60	43	48	38	84
Buying nutritious food for your children (milk, eggs, different food containing protein)	29	21	36	48	50	45	24	29	19	84
Transport cost	89	86	93	0	0	0	11	14	7	84
Entertainment	86	86	86	0	0	0	14	14	14	84
Remittance to village	88	79	98	2	5	0	10	17	2	84
Repayment of loan	77	67	88	0	0	0	23	33	12	84
Tuition/educational expenses of your children	75	64	86	0	0	0	25	36	14	84
Medicine	38	36	40	30	19	40	32	45	19	84
Pocket money	74	64	83	7	10	5	19	26	12	84
Mobile talk time/expense for mobile bills per month	68	57	79	6	5	7	26	38	14	84
Savings	76	67	86	0	0	0	24	33	14	84
House rent	79	69	88	1	2	0	20	29	12	84
Utility bills (electricity, water, gas, etc.)	81	76	86	2	5	0	17	19	14	84
Buying necessary utilities for the household	43	12	45	36	7	57	50	17	33	84

Source: Sarwar, 2020a

Key trends in findings between formal and informal wage workers in urban and rural areas

The findings presented show several common threads between formal and informal wage workers in urban and rural areas. The savings per capita is much lower than the outstanding loan per capita. The impact of the decline in income on food expenses, especially on protein consumption, increases over time if the income continues to drop. Even though a higher percentage of rural informal workers have savings, the net savings is similar for both urban and rural informal workers. However, urban formal wage workers appear to be more vulnerable to an immediate liquidity crisis compared to urban informal wage workers and rural informal wage workers. This means that the adjustments in food and non-food expenses made by the urban formal wage workers are more rapid than the adjustments made by the urban informal wage workers and the rural informal wage workers.

These findings were mirrored in a much larger-scale survey undertaken by BIGD and the Power and Participation Research Centre (PPRC) in April 2020. They undertook a phone survey on 5,471 samples which was almost evenly split between urban (49 per cent) and rural (51 per cent) areas. According to the classification used in the BIGD-PPRC survey, the samples of the Innovision survey could be classified as non-poor, having per capita monthly income above the median income (i.e. TK 3,872 for 2020; approximately \$46). This survey concluded that reduction in diet diversity was the first-order response to the crisis. In this study, 47 per cent of the urban respondents and 32 per cent of the rural respondents indicated reduction in food consumption. The survey identified three dominant personal coping strategies: use of savings, reduction in food consumption, and borrowing or grocery shop credit (Rahman et al., 2020). In the Innovision survey on RMG workers, 57 per cent of the female respondents reported having borrowed money to cope with the crisis and around 40 per cent of the male workers reported the same. Also, 19 per cent of the female workers and 21 per cent of the male workers reported that they were managing from their savings. Additionally, in the Innovision survey, 33 per cent of the female workers and 14 per cent of the male workers reported that they were spending from other household members' earnings.

The BIGD survey also reported that the urban respondents could support their family expenditure without external support for 8 days while the rural respondents reported that they could support their family expenditure for 14 days. This mirrored the survey undertaken by Innovision Consulting in May 2020 on 244 random samples from eight different types of informal workers. The survey showed that the respondents had cash to support their family for eight days. Also, it reported that the households had 11 days of basic food grain in their house. Of these respondents 65 per cent reported that they would use their savings to cope with the income shock and 40 per cent reported that they would borrow from their relatives.

Impact of the shutdown on rural on-farm and off-farm households: findings from the Suchana Programme

In October 2020, Innovision undertook a baseline and an impact survey on two cohorts of beneficiaries of the UK Aid FCDO (Foreign, Commonwealth & Development

Office) and European Union (EU) funded Suchana Programme in the Sylhet and Moulvibazaar districts in Bangladesh. The seven-year, multi-sector nutrition programme is implemented by Save the Children in collaboration with Helen Keller International, World Fish, iDE, icddr,b, Center for Natural Resource Study, Friends in Village Development Bangladesh, and Rangpur Dinajpur Rural Services. The household impact survey was conducted on 1,254 samples of the Phase 3 cohort of the programme while the baseline survey was conducted on 1,265 samples of the Phase 4 cohort of the programme. The survey, which was led by the author, assessed the impact of COVID-19 on three different time periods: pre-COVID-19 shutdown, during COVID-19 shutdown, and post-COVID-19 shutdown period. The sampled households represented a wide mix of on-farm and off-farm extremely poor households in Bangladesh. As such, it provided a unique opportunity to make a comparative analysis of the impact of COVID-19 shutdown on on-farm and off-farm extremely poor households in Bangladesh.

The findings of the survey showed that the average monthly income of the Phase 3 households declined from TK 17,368 (\$205) to TK 10,206 (\$120) during the shutdown period. It increased to monthly average income of TK 11,600 (\$136) in the quarter following the withdrawal of the shutdown (Table 2). The impact was similar for the households under the Phase 4 cohort whose monthly average income dropped from TK 16,785 (\$198) in the pre-COVID-19 shutdown period to TK 10,304 (\$121) during the shutdown period. The monthly average household income increased marginally to TK 10,800 (\$127) after the withdrawal of the shutdown. This finding thus showed that the recovery pathway for the rural on-farm and off-farm households was not rapid; it was rather slow.

Suchana targets two categories of households: poor and very poor. Based on the input support they received from the programme, they are further categorized into two groups: Homestead Food Production (HFP) beneficiaries receiving poultry or aquaculture support; and Income Generation Activities (IGA) beneficiaries who engage in either off-farm or on-farm business ventures based on their choice/preference. The study assessed the impact of the shutdown on the economic activities of each of these categories of households. The findings showed that the percentage of households who reported disruption in production and marketing activities was quite low (Table 3). For example, only 12 per cent of the on-farm households and 4 per cent of the off-farm households under the Phase 3 cohort

Table 2 Comparative analysis of impact of COVID-19 shutdown on the monthly income of the extremely poor households under the FCDO-funded Suchana Programme

	Phase 3 cohort (TK)	Phase 4 cohort (TK)
Pre-COVID-19 lockdown period (Jan–Mar 2020)	17,368	16,785
COVID-19 lockdown period (Apr–Jul 2020)	10,206	10,304
Post-COVID-19 lockdown period (Aug–Oct 2020)	11,600	10,800

Note: Exchange rate TK 1 = US\$0.0118

Source: Sarwar, 2020d

Table 3 Impact of the shutdown on economic activities of the Suchana programme beneficiary households

	Phase 3 cohort				Phase 4 cohort			
	HFP- Poultry (%)	HFP- Aquaculture (%)	On- farm (%)	Off- farm (%)	HFP- Poultry (%)	HFP- Aquaculture (%)	On- farm (%)	Off- farm (%)
Minimum or no impact on livelihood	11	10	6	8	5	8	6	8
Collapse/disruption of agriculture/poultry/fisheries/cattle production supply chain (seeds, feed, fertilizer, irrigation, etc.)	13	10	12	4	9	5	6	5
Collapse/disruption of agriculture/poultry/fisheries/cattle product-selling facility/marketing system	9	6	9	5	5	5	5	5
Collapse/disruption of regular livelihood (day labour, auto rickshaw / car driver, transport worker, shops, etc.) activity/facility	29	21	32	24	29	22	31	23
Shortage/unavailability of cashflow	67	64	71	69	78	63	75	70
Shortage/unavailability of labour	53	55	60	58	67	53	59	50
Lost job/income/salary due to reduced economic activities	9	12	10	7	6	11	9	7
Lost job/income/salary due to sickness	2	4	2	2	2	2	1	1
Reduction in income/salary due to reduced economic activities	21	32	19	26	21	33	15	26
Reduction in income/salary due to sickness	3	2	2	3	3	1	2	1
Base (n)	325	300	443	186	329	280	444	212

Source: Sarwar, 2020d

reported disruption in production. The percentage of households who reported loss in jobs or income was also very low.

However, during the shutdown period, the impact on household savings, assets, and food security appears similar to the findings from the surveys on urban and rural formal and informal wage workers. For example, 57 per cent of the off-farm beneficiary households of the Suchana Phase 3 cohort used household savings to cope with the shock while 61 per cent borrowed money from others. Twenty-five per cent of the off-farm households under the Phase 3 cohort reported to have reduced daily meal intake and another 36 per cent reported to have reduced food consumption (Table 4). These findings further proved that an exogenous shock like COVID-19 increases the vulnerability of the low-income households in both urban and rural areas and in both formal and informal wage labour by affecting the household savings and food security and by increasing the household exposure to informal loans.

Recovery pathway of the low-income population from the shutdown-induced shock and the long-term implications for poverty

The early results in the months of April and May 2020 showed poor coping capacity of the low-income households employed in the formal and informal sectors which is characterized by low savings, high outstanding loan, and dependence on a single income earner, and this impacted their food consumption, especially protein intake. The findings highlighted the importance of increasing savings, diversifying sources of income, and reducing dependence on loans while increasing cash in hand and food grains at home as important determinants of resilience to poverty. An important question remained: which households had a faster trajectory to recovery, and why?

Even though published accounts on the impact of the COVID-19 shutdown on the low-income population in Bangladesh are abundant, there is a scarcity of published data on the recovery pathway. Based on findings from June 2020, BIGD reported that informal workers had slower recovery than workers engaged in formal sectors and the agricultural sector after the withdrawal of the lockdown at the end of May 2020. BIGD reported that after the lockdown was withdrawn, the unemployment rate was highest (54 per cent) among house maids, followed by skilled/ unskilled workers (18–20 per cent), small business owners (17.2 per cent), and transport workers (16.7 per cent) compared to 17.2 per cent among all workers. They further reported that the unemployment rate was only 10 per cent among the agricultural workers. A more recent account is not available to establish whether the gap between informal and formal workers has reduced by the end of 2020. Also, there is scarcity in the literature that could be used to explain the long-term impact of adjustments that the low-income households made to cope with the distress. Experts warned that the use of savings, informal borrowing, reduction of food consumption, and weakened dietary diversity, among others, could lead to long-term intergenerational effects (Raihan, 2020). Manusher Jonno Foundation (MJF), a leading NGO in Bangladesh working on gender-based

Table 4 Impact of the shutdown on savings, assets, and food security of the Suchana programme beneficiary households

	Phase 3 cohort				Phase 4 cohort			
	HFP- Poultry (%)	HFP- Aquaculture (%)	On- farm (%)	Off- farm (%)	HFP- Poultry (%)	HFP- Aquaculture (%)	On-farm (%)	Off-farm (%)
Using household savings	52	47	49	57	54	49	46	47
Borrowing money from others	54	64	59	61	54	60	57	62
Reducing daily meal frequency (intake)	17	17	25	25	25	21	31	17
Reducing food consumption (amount)	27	28	30	36	34	32	40	28
Receiving support from friends/neighbours/relatives	24	34	28	37	29	32	30	31
Receiving government support/relief	13	8	12	10	11	9	17	11
Receiving NGO support/relief	1	1	2	1	1	1	1	1
Receiving private support/relief	5	12	11	6	6	10	7	3
Base (n)	288	269	417	172	312	257	418	196

Source: Sarwar, 2020d

violence reported in July 2020 that child marriages were on the rise (Manusher Jonno Foundation, 2020). Experts also feared that secondary school drop-out rates could increase from 36 per cent to 45 per cent in Bangladesh if the schools did not reopen as early as August 2020 (Mamun, 2020).

Conclusions

The findings presented in this paper show that the decline in income is more rapid for formal wage workers than informal wage workers who continue to have daily income even though it reduces significantly given an exposure to an exogenous shock like COVID-19. Consequently, the formal wage workers are more cash starved than informal wage workers.

In general, a lower percentage of formal and informal wage workers in urban areas have savings compared to informal wage workers in rural areas. However, the net savings per capita, outstanding loan per capita, and the ratio of savings to outstanding loan of the formal and informal wage workers in urban and rural areas are similar. The trends show that the savings are much lower than outstanding loans and the COVID-19 shutdown further impacted these variables as households consumed their savings and borrowed more money informally. Also, the findings show that across all income segments there is rapid impact on household food security and dietary diversity as the households resort to reduction in their food expenses and in the number of meals as a means to off-set the impact on their income. The sex-disaggregated impact on the RMG workers show that the female wage labourers are more vulnerable than their male counterparts.

These findings highlight the importance of savings, loan exposure, and food security as determinants of resilience. In other words, programmes working on jobs and income and enterprise development should aim to improve the beneficiaries' coping capacity by improving their net savings, reducing their loan exposure, and by promoting food reserves so that they can withstand temporary loss of income. Further research on the causality between increase in household income and their investments in coping mechanisms could shed light on interventions that could strengthen resilience. Also, it would be relevant to investigate more systematically the pathway to recovery of different low-income groups, especially by gender, engaged in formal and informal sectors over the months since the withdrawal of the lockdown. These insights could improve effectiveness of programme interventions on building resilience and facilitating sustained graduation from poverty.

References

Bangladesh Bureau of Statistics (BBS) (2016) *Household Income and Expenditure Survey*, Dhaka: Bangladesh Bureau of Statistics.

BBS (2019) *Poverty and Extreme Poverty, 2017, 2018, 2019* [online] <http://bbs.portal.gov.bd/sites/default/files/files/bbs.portal.gov.bd/page/5695ab85_1403_483a_afb4_26dfd767df18/2019-12-17-16-30-614e10bcb101bc1df5938723cc141c5d.pdf> [accessed 31 January 2021].

Dong, E., Du, H. and Gardner, L. (2020) 'An interactive web-based dashboard to track COVID-19 in real time', *Lancet Infectious Diseases* 20(5): 533–4 <[https://doi.org/10.1016/S1473-3099\(20\)30120-1](https://doi.org/10.1016/S1473-3099(20)30120-1)>.

Hallegate, S. (2014) *Economic Resilience: Definition and Measurement*, Policy Research Working Paper no. 6852, World Bank, Washington, DC.

Innovision Consulting (2020) *Impact of COVID 19 on Low Income Profession*, Dhaka: Innovision Consulting.

Kharas, H. (2020) 'The impact of COVID-19 on global extreme poverty' [blog], 21 October, Brookings <<https://www.brookings.edu/blog/future-development/2020/10/21/the-impact-of-covid-19-on-global-extreme-poverty/>> [accessed 31 January 2021].

Mamun, S. (2020) 'Covid-19: over 45% secondary school students may drop out', *Dhaka Tribune*, 7 August [online] <<https://www.dhakatribune.com/bangladesh/2020/08/07/covid-19-over-45-secondary-school-students-may-drop-out>> [accessed 31 January 2021].

Manusher Jonno Foundation (2020) *Violence against Women and Children: COVID 19 a Telephone Survey*, Dhaka: Manusher Jonno Foundation.

Parvez, S. (2020) 'Pandemic doubles extreme poverty', *The Daily Star*, 12 August [online] <<https://www.thedailystar.net/business/news/pandemic-doubles-extreme-poverty-1943653>> [accessed 31 January 2021].

Rahman, H.Z., Das, N., Matin, I., Wazed, M.A., Ahmed, S., Jahan, N. and Zillur, U. (2020) *Livelihoods, Coping and Support During COVID-19 Crisis*, Dhaka: PPRC & BIGD.

Raihan, S. (2020) 'Covid-19 and the road to recovery in Bangladesh', *The Daily Star*, 4 November [online] <<https://www.thedailystar.net/opinion/news/covid-19-and-the-road-recovery-bangladesh-1988817>> [accessed 31 January 2021].

Sarwar, M.R. (2020a) *COVID 19 Impact on Low Income Population: Deep Dive on the RMG Workers in Bangladesh in Selected Clusters*, Dhaka: Innovision Consulting.

Sarwar, M.R. (2020b) *COVID-19 Impact on Low Income Population: A Rapid Survey on Occupational Groups. Digest 1: Rickshaw-pullers in Dhaka*, Dhaka: Innovision Consulting Private Limited.

Sarwar, M.R. (2020c) *Digest 2: COVID 19 Impact on the Third Gender Community*, Dhaka: Innovision Consulting.

Sarwar, M.R. (2020d) 'Suchana Semi-Annual Survey 2020', unpublished.

World Bank (2020) 'Poverty: overview' [online] <<https://www.worldbank.org/en/topic/poverty/overview>> [accessed 31 January 2021].