

# **Impact of COVID-19 Pandemic on Households' Incomes and Expenditures: A Study of the Mymensingh Division in Bangladesh**

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**Abstract:** The COVID-19 pandemic has had a significant detrimental impact on socioeconomic conditions worldwide, including Bangladesh. A questionnaire survey was done in four districts – Mymensingh, Jamalpur, Sherpur, and Netrokona to determine the impact of the COVID-19 epidemic on household earnings and expenditures in the Mymensingh division of Bangladesh. A questionnaire that was used to gather information from 142 households divided into twelve distinct professional groups from four districts was created using a purposive sampling strategy. The questionnaire that is included as an appendix has a variety of questions. For the purpose of assessing the responses to the questionnaire's questions, simple tabular and graphical representations have been conducted. Based on the responses to the two open-ended questions that were attached to the lower portion of the questionnaire, the researcher also made an effort to summarize the findings and suggest a few policies in this regard. The study has found that though the number of people in Bangladesh who have lost their jobs is very low, the COVID-19 pandemic has negatively affected the households' overall income-generating capacity and expenditure conditions, which ultimately affect their standard of living. This study is a field-level original research work from the perspective of Bangladesh from where the policy formulators of the government may become helpful in determining their paths to battle this pandemic. One of the best ways for Bangladesh to get out of this crisis is expected to be the formulation, implementation, and careful monitoring of dynamic, well-balanced short-, medium-, and long-term initiatives by a powerful, long-lasting advisory committee.

**Keywords:** COVID-19 Pandemic, Household Income, Household Expenditure, Earning Capacity, Standard of Living

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## **1. Introduction**

Global human health had been seriously threatened by an epidemic of the COVID-19 pandemic disease, which was brought on by the new coronavirus SARS-CoV-2. On March 8, 2020, Bangladesh reported the discovery of the first COVID-19 patient ("Bangladesh: First Cases," 2020). Since that time, a total of 2.04 million individuals have been officially reported as having COVID-19, and 29,425 have passed away as of November 6, 2022 (Health Department, People's Republic of Bangladesh, 2022). The government then took a number of measures to combat COVID-19, including diagnosing suspected cases, quarantining suspects, isolating infected patients, implementing local or regional lockdowns, closing down public places, closing all government and private offices, increasing public awareness, enforcing social distancing, etc. Additionally, the government launched multiple financial stimulus measures totaling roughly USD 11.90 billion to address the negative impact on socioeconomic conditions. Bangladesh's economy does not, however, appear to be operating at full capacity as it was prior to the pandemic. Thousands of employees lost their jobs as a result of the closure of numerous small businesses that relied on exports. Food shortages became apparent, inflation has reached probably the highest point in its history, and remittance income is likewise trending downward. COVID-19's effects on poverty caused virtually unprecedented demand- and supply-side shocks in Bangladesh. The COVID-19 pandemic has significantly eroded the country's past rapid success, and it is happening worldwide, regardless of whether it is in developed or developing countries. Iqbal (2021) reported that according to the UNU-WIDER study in April 2020, with a 5.0 percent contribution to per capita incomes, the world could witness a potential increase in the number of poor people by nearly 85 million living on 1.9 dollars per day, relative to rising from 759 to 844 million. Of these 85 million, South Asia's share would be 45 million. Iqbal (2021) investigated that Bangladesh, like other countries, would face the daunting challenge of fully recovering from the COVID-19 pandemic, which has constrained economic activities and reversed some of the gains achieved in the last decade. Such scenario also already has come true. The COVID-19 pandemic decelerated economic growth from the previous few years. The

pace of poverty reduction slowed down, exports declined, inequality increased across several dimensions, and the poverty rate in 2020 increased to 18.1 percent from 14.4 percent. (Mona, 2022). The researcher wanted to measure the impact of COVID-19 on the household incomes and expenditures of Mymensingh Division in Bangladesh, taking samples from its several districts. The researcher believes that such a study might be helpful for policy recommendations to properly combat this crisis.

## **2. Rationale of the Study**

Socioeconomic devastation is usually unavoidable after every pandemic. The COVID-19 pandemic, which began in late 2019, has caused the deaths of several millions of people worldwide. The socio-economic condition around the world is significantly affected by this. Many export-generating businesses have closed, leaving many workers without jobs. Food shortages are increasingly apparent all across the world, and inflation is also rising daily. Therefore, this pandemic has had a significant effect on global macroeconomic output and distribution. According to the Asian Development Bank (2010), large-scale employment losses are creating severe shocks in Bangladesh's labor sector. Since more than 85% of the labor force is employed in the unofficial sector, job losses are mostly unreported. They will unavoidably have an impact on Bangladesh's poverty now and in the future. Due to a sharp drop in remittance incomes, the vulnerable poor households in rural areas that receive remittances have also become more vulnerable. The economy will undoubtedly be negatively impacted by the projected increase in poverty. Therefore, research on the impact of COVID-19 pandemic is crucial for the development of effective policy recommendations.

## **3. Objectives of the Study**

This study's main objective is to assess how COVID-19 affects the earnings and spending of Bangladeshi households by employing a representative sample from four conveniently chosen districts in the Mymensingh division. The specific objectives are:

- i. To determine how COVID-19 has affected households' incomes in the Mymensingh division of Bangladesh.

- ii. Make an effort to analyze COVID-19's impact on households' expenditures in the same Bangladeshi region.

#### **4. Literature Review**

To the best of the researcher's knowledge, there are very few studies on the socioeconomic impacts of the COVID-19 pandemic in the context of Bangladesh to date. However, a good number of researchers have studied the psychological as well as physical impacts of the COVID-19 pandemic in the context of Bangladesh. Shahriar, Islam, Zayed, Hasan, and Raisa (2021) found that COVID-19 has reduced employment opportunities as most companies have stopped their recruitment processes to cut their operational costs, which increases the rate of graduate unemployment in Bangladesh. Their findings showed that the rate of graduate unemployment increased from 47% to 58% in 2020, with an expected annual loss estimated at \$53 million. Alam et al. (2020) found from a study that the COVID-19 pandemic has significant impacts on the different indicators of the economy of Bangladesh, especially the ready-made garment sector, foreign remittances, banks and financial institutions, food and agriculture, local trade, foreign trade (export and import), GDP (gross domestic product), SDGs (sustainable development goals), government revenue and employment, etc. Karim, Islam, and Talukder (2020) identified that the migrant workers of Bangladesh and their dependents are in a socially vulnerable and economically difficult situation due to the dire impacts of COVID-19. They also described that the migrant workers from Bangladesh in other countries were facing adverse impacts such as unemployment, short working hours, isolation, poor quality of living, social discrimination, and mental pressure, while their dependents at home were facing financial crises due to the limited or reduced cash flow from their working relatives. A significant number of migrant workers had been sent back to Bangladesh, and many were in constant fear of being sent back due to the impacts of COVID-19 in their host countries. Thus, according to them, COVID-19 intensified numerous socio-economic crises such as joblessness, consumption of reserve funds by family members, and shrinking of the country's remittance inflow. Gautam, Setu, Khan, and Khan (2022) conducted a study to assess the socio-economic impacts of COVID-19 in Bangladesh by collecting data from different sources. Among other findings, they addressed the fact that decreasing

remittance from non-residents and shutting down the RMG industry resulted in the loss of jobs and badly affected the economic section. Almost 20 million workers lost their jobs in Bangladesh's informal sector. According to their findings, the Corona pandemic has jeopardized the agriculture sector, and 66% of farmers (53% of crop and vegetable farmers, and 99% of fish farmers) got lower prices than they used to get in a normal situation. Sohel et al. (2022) adopted a semi-structured questionnaire-based qualitative research design in which four urban areas were chosen purposively from various parts of Dhaka city. They showed that respondents were massively affected due to loss of income and occupation in the period of induced lockdown. Their findings also revealed that the respondents followed some survival strategies such as taking loans, reducing expenses, consuming less food, selling land, jewellery, and goods, relatives' and neighbors' support, and government relief. Paul et al. (2021) investigated the psychological and livelihood-related impacts of COVID-19 on Bangladeshi people from lower-income groups who depend on their daily earnings for their living. Out of their 572 sampled respondents, 94.1% had been affected by the COVID-19 outbreak in terms of generating their livelihood. They also found that, in comparison to unemployed respondents, daily workers have been hardly affected by the COVID-19 outbreak. Kabir, Maple, and Use (2020) expressed their concerns about the potential impact of the COVID-19 pandemic on the ready-made garment (RMG) workers of Bangladesh. They argued that the COVID-19 pandemic would have long-lasting effects on garment workers, especially related to their health issues, financial hardship, and inability to pay for essentials such as food and future employment opportunities. Chronopoulos et al. (2020) examined consumer spending responses to the onset and spread of Covid-19, and subsequent government-imposed lockdown in Great Britain, GB (England, Scotland, and Wales) they found a strong increase in grocery spending consistent with panic buying and stockpiling behavior in the two weeks following the World Health Organization (WHO) announcement describing Covid-19 as a pandemic. (Haque, Ansar, Biswas, Islam, & Mamun, 2020) aimed to provide a small-scale quantitative overview of the impact on socio-economic conditions in lockdown wards of Khulna City Corporation (KCC), Bangladesh due to this pandemic. Their study reveals that about 46% of maids were suspended due to hygienic concerns and 45% of drivers were suspended because of the inability to

afford maintenance costs, i.e., economic pressure, which has been reflected in all classes of people.

## **5. Conceptual Details**

### *Household Income*

According to Investopedia, the term "household income" generally refers to the combined gross income of all members of a household above a specified age. Household income includes every member of a family who lives under the same roof, including spouses and their dependents. The incomes of everyone count even if they aren't all used to support the household. Household income also includes anyone living in that home, even if they're not related. Household income is a useful economic indicator of an area's standard of living.

### *Household Expenditure*

The amount that resident households spend on their daily necessities, such as food, clothing, housing (rent), energy, transportation, durable goods (particularly cars), health expenses, recreation, and other services, is referred to as household expenditure.

## **6. Methodology**

This study consists primarily of a questionnaire-based descriptive analysis. Purposive sampling was used in the creation of a questionnaire that was used to collect data from twelve different professions throughout four districts in the Mymensingh division, mostly through personal interviews. Two open-ended questions along with a couple five-point Likert scale-type questions are among the others included in the questionnaire. The researcher relied on some graphical analysis, tabular analysis, pie charts, etc. to analyze the information that was gathered. The researcher has examined the answers of two open-ended questions i.e. Q13, Q14 in order to explain the findings and recommendations section of this manuscript.

## **7. Sample and Data Collection**

The researcher used data from 142 purposefully chosen households from four districts of Mymensingh division for convenience, which include Mymensingh, Jamalpur, Sherpur, and Netrokona. The researcher has deliberately set aside the affluent households, e.g., government job holders, large businessmen, doctors, engineers, etc.; those incomes were supposed to be less vulnerable at the time of the pandemic. The number of sample

respondents from a wide variety of professions was collected in the following ways:

S.N.	Profession	Mymensingh	Jamalpur	Sherpur	Netrokona	Total
1.	Day laborers	03	03	03	03	12
2.	Construction workers	03	03	03	03	12
3.	Dairy farming	03	03	03	03	12
4.	Farming other than dairy	03	03	03	03	12
5.	Poultry sector businessmen	03	03	03	03	12
6.	Remittance earning workers	03	03	03	03	12
7.	Garments sector workers	03	03	03	03	12
8.	Private sector workers excluding garments sector	03	03	03	03	12
9.	Non-government/private school teachers	03	03	03	03	12
10.	Rickshaw puller including Auto/CNG	03	03	03	03	12
11.	Grocery shopkeepers	03	02	03	02	10
12.	Small businessmen other than grocery and poultry	03	03	03	03	12
Total number of respondents						142

**Primary data:** Individual interviews and open dialogue with the families represented in the sample were used to gather primary data.

**Secondary data:** Secondary data has been gathered from a variety of reports, journals, newspapers, and other media, as well as websites of different organizations, etc.

## 8. Results and Discussion

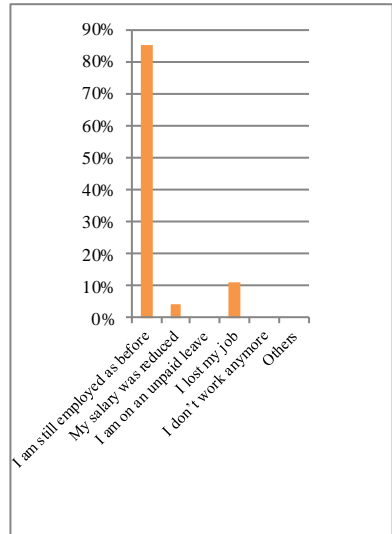
### *Information for question 01*

The researcher has attempted to examine a large of sub-questions included in questions Q1 to Q12 of the questionnaire in this section. Only the summary

representations of the findings of those questions have been displayed in this part.

**Table 01 & Figure 01:** Information of the question- Has your employment/ work status changed due to Covid-19 pandemic?

Still employed as before	Salary reduced	I am on unpaid leave	I lost my job	I don't work anymore	Others
120	06	00	15	00	01
Total number of respondents: 142					



Source: Author’s own calculation on the basis of a questionnaire-based survey

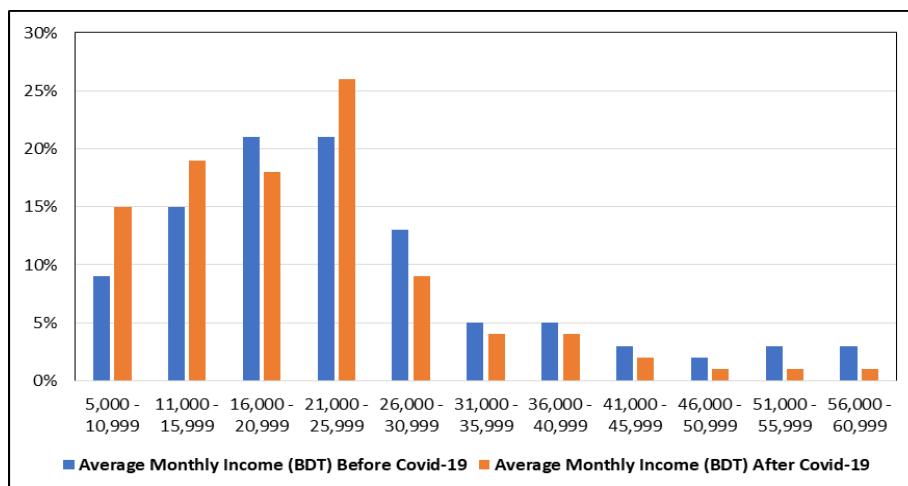
By analyzing the six alternate answers to Question 1 of the questionnaire included in the appendix, the researcher attempted to determine how the employment status of the sampled respondents had altered as a result of the COVID-19 pandemic. In accordance with their remarks, around 85% of the respondents believed the fact that they were still employed meant that COVID-19 had no impact on their employment. 10% of the studied respondents had their jobs completely eliminated, while just 4% had their pay lowered. But when asked if they were out of work, none of them responded. It suggests that many who lost their previous jobs have already been able to find new employment.

*Information for Question 02*

**Table 02 & Figure 02:** Information of the question- Comparison of the average monthly income of your family before and after Covid-19.



Income Range	Before Covid-19 Income (BDT)	After Covid-19 Income (BDT)
Less than 5,000(within sample)	00	00
5,000 - 10,999	13	22
11,000 - 15,999	22	27
16,000 - 20,999	30	26
21,000 - 25,999	30	37
26,000 - 30,999	18	13
31,000 - 35,999	07	05
36,000 - 40,999	07	06
41,000 - 45,999	04	03
46,000 - 50,999	03	01
51,000 - 55,999	04	01
56,000 - 60,999	04	01
Higher then 60,999 (within sample)	00	00
<b>Total</b>	<b>142</b>	<b>142</b>



Source: Author's own calculation on the basis of a questionnaire-based survey

By designating different income ranges and comparing them between the before and after pandemic periods, the researcher aimed to determine whether the income status had altered as a result of the Covid-19 epidemic. If it is carefully examined in Table 02, it can be seen that before Covid-19, the total number of households with income ranges from less than Tk 5,000 to

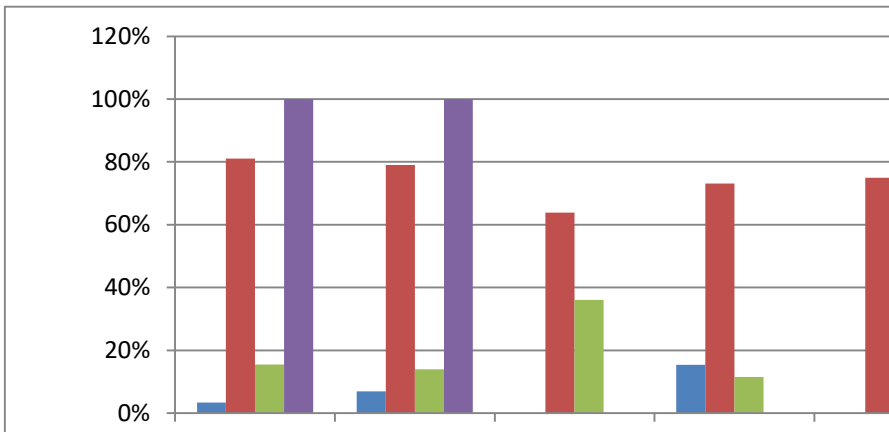
Tk 25,999 was  $(0+13+22+30+30) = 95$  out of 142 (about 67%), while after the pandemic, the total number of families increased to  $(0+22+27+26+37) = 112$  out of 142 (about 79%). Again, the total number of households decreased after the pandemic to  $(13+5+6+3+1+1+1+0) = 30$  out of 142 (about 21%), compared to the total number of households  $(18+7+7+4+3+4+4+0) = 47$  out of 142 (about 33%), before Covid-19 ranged between Tk 26,000 to greater than Tk 60,999. From figure 02, it is also apparent that the number of households with monthly average incomes between Tk 26,000 and Tk 59,999 has decreased since the start of the epidemic. While the number of households with monthly incomes ranging from less than Tk 5,000 to Tk 25,997 has dramatically increased during the pandemic. These results show that after the pandemic's outbreak, the number of lower-income people has increased while the number of higher-income people has significantly decreased.

*Information for Question 03*

The researcher attempted to evaluate the effects of the COVID-19 pandemic on the households' income and borrowing scenarios with seven sub-questions under question 03.

**Table 03 & Figure 03:** Information on the question- How have the following issues of you been affected by the Covid-19 pandemic?

	Income from self-employment	Income from casual labor	Income from job	Income from other sources	Gift/remittances received	Personal borrow	Personal loan/credit repayment received
Increased	02	03	00	04	00	63	00
Decreased	47	34	23	19	09	02	30
No Impact	09	06	13	03	03	17	07
Total	58	43	36	26	12	82	37



Source: Author’s own calculation on the basis of a questionnaire-based survey

With seven sub-questions under question 03, the researcher aimed to evaluate the COVID-19 pandemic's effects on the households' income and credit scenarios. The total number of respondents whose incomes and credit categories have fallen into the respective seven categories have replied to these questions, resulting in the fact that the number of respondents to each category is not very large. The results of the first sub-question make it obvious that although roughly 16% of household income remained unchanged, a sizeable amount, or about 81% of household income from self-employment, decreased as a result of the pandemic. While 79% of Q (ii) respondents reported a decline in their income from casual work and 14% claimed there was no impact. However, a sizeable 64% of Q (iii) respondents reported a decrease in their income, 36% stated there was no impact on their employment-related income. On the other hand, an opposite picture was noticed in the case of Q(iv) compared to the previous Q (iii), where 15% of respondents claimed their income from other sources had increased. While a sizeable 73% reported that it had decreased and only 12% stated that it had no effect on their income. According to Q (v), it appears that there aren't many respondent families in our sample who earn money abroad overall. However, 75% of the families among them had to deal with lower incomes from gifts and remittances as a result of the epidemic, while 25% had no impact. However, as per 77% of Q (vi) respondents, personal borrowing has increased to cover essentials, compared to 21% who say they haven't borrowed any funds and 2% who say it has reduced. By the way, 19% of

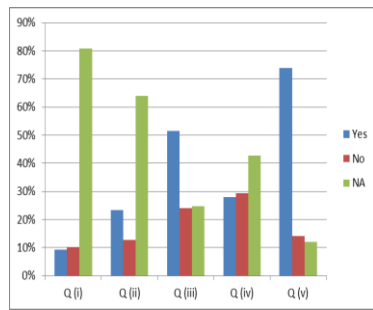
respondents to Question (vi) claimed that COVID-19 has had no effect on personal loans or credit repayment, while a huge number, i.e., 81%, disputed this.

*Information for Question 04*

With the help of the following sub-questions under question 04, the researcher made an effort to assess the COVID-19 pandemic's effects on the respondent's employment and work-related circumstances.

**Table 04 & Figure 04:** Information of the question- Some Yes/No type questions.

	Q (i)	Q (ii)	Q (iii)	Q (iv)	Q (v)
Yes	10	26	73	38	105
No	11	14	34	40	20
NA	88	71	35	58	17
Total	109	111	142	136	142



Source: Author’s own calculation on the basis of a questionnaire-based survey

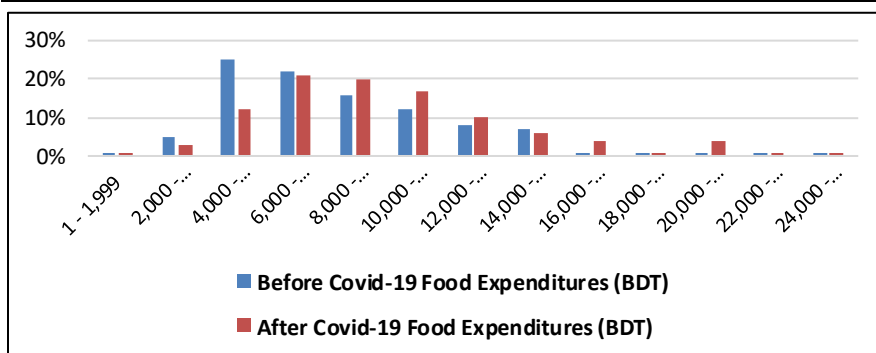
The researcher tried to figure out the impact of the COVID-19 epidemic on the participant's employment and work-related situations using the six sub-questions under question 4. From observing the graph it is clear that 10% of interviewees to Q (i) indicated they were no longer able to manage a similar sort of employment, while 9% claimed they had managed a similar type of employment after losing it previously. By the way, according to Q (iii) respondents, 51% had to borrow money from official institutions as a result of COVID-19, while 24% have not. Due to COVID-19, 28% of Q (iv) respondents claimed that they were unable to repay debts they had received from many sources, while 29% stated that they had been successful in doing so. However, according to 74% of respondents to Q (v) finding suitable employment or income opportunity is substantially more difficult as a result of COVID-19, whereas 14% of respondents disagree. However, 23% of the businesspeople who responded to Question (ii) stated that they had lost their capital, whereas 13% claimed they had not.

### Information for Question 05

The researcher with seven sub-questions of question-05 tried to make an assessment of the impact on household expenditures of the COVID-19 pandemic.

**Table 05 (i) & Figure 05 (i):** Information of the question- What types of changes in the food expenditures occurred for you before and after COVID-19?

Expenditure Range	Before Covid-19 Food Expenditure	After Covid-19 Food Expenditure
1 - 1999	01	01
2000 - 3999	07	04
4000 - 5999	35	17
6000 - 7999	31	30
8000 - 9999	23	28
10000 - 11999	17	24
12000 - 13999	11	14
14000 - 15999	10	09
16000 - 17999	01	06
18000 - 19999	02	01
20000 - 21999	02	05
22000 - 23999	01	01
24000 - 25999	01	02
<b>Total Respondents</b>	<b>142</b>	<b>142</b>

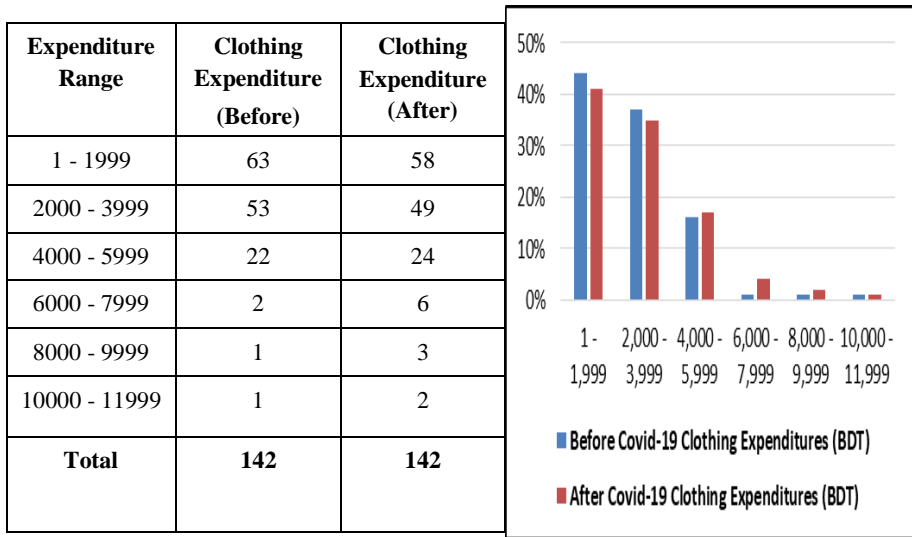


Source: Author's own calculation on the basis of questionnaire based survey

The researcher with this research question attempted to evaluate how the COVID-19 pandemic might affect food expenditures. The numbers of

households in the groups of expenditures (01-1999 to 10,000-11,999) were 104 (73%) after the pandemic as opposed to 114 (80%) before the pandemic, as shown by table 05 (i) and figure 05 (i). In contrast, the number of households in the range of expenditures (12,000–13,999 to the rest) increased from 28 (20%) to 38 (27%) following the pandemic. These figures mean that a larger number of households had to spend large amounts of money on average on overall food expenditures after the pandemic.

**Table 05 (ii) & Figure 05 (ii):** Information of the question- What types of changes in the clothing expenditures occurred for you before and after COVID-19?

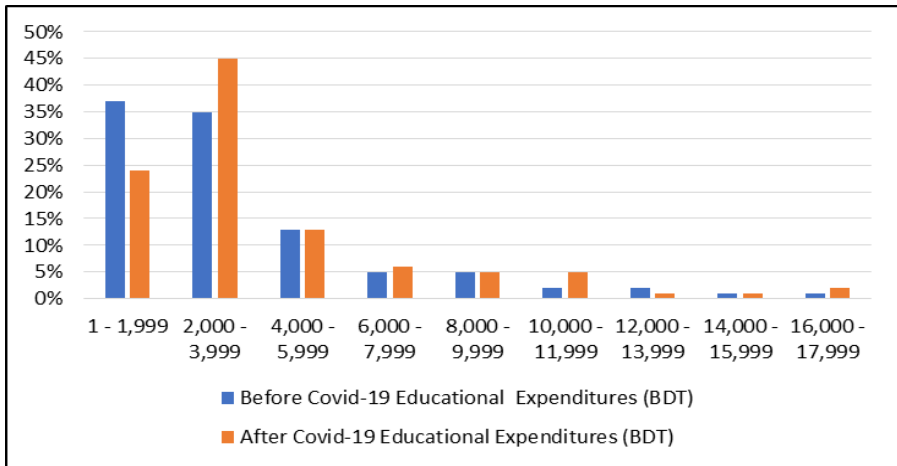


Source: Author’s own calculation on the basis of a questionnaire-based survey

The researcher with this research question attempted to evaluate how the COVID-19 pandemic might affect clothing expenditures. The numbers of households in the groups of expenditures (01-1999 to 2,000-3,999) were 107 (75%) after the pandemic as opposed to 116 (81%) before the pandemic, as shown by table 05(ii) and figure 05(ii). In contrast, the number of households in the range of expenditures (4,000–5,999 to the rest) increased from 26 (19%) to 35 (25%) following the pandemic. These figures mean that a larger number of households had to spend large amounts of money on average on clothing expenditures after the pandemic.

**Table 05 (iii) & Figure 05 (iii):** Information of the question- What types of changes in the educational costs occurred for you before and after COVID-19?

Expenditure Range	Before Covid-19 Educational Expenditure	After Covid-19 Educational Expenditure
1 - 1999	47	31
2000 - 3999	45	57
4000 - 5999	16	16
6000 - 7999	06	07
8000 - 9999	06	06
10000 - 11999	03	06
12000 – 13999	02	01
14000 – 15999	01	01
16000 - 16000	01	02
<b>Total</b>	<b>127</b>	<b>127</b>



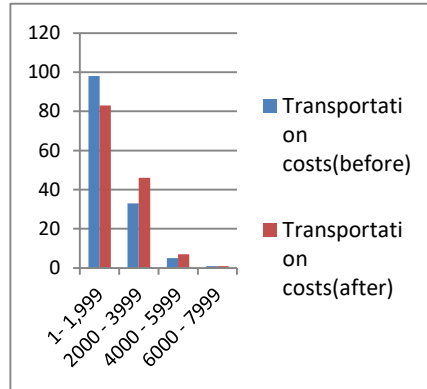
Source: Author’s own calculation on the basis of a questionnaire-based survey

The researcher with this research question attempted to evaluate how the COVID-19 pandemic might affect the educational costs. The numbers of households in the groups of expenditures (01-1999 to 2,000-3,999) were 88 (69%) after the pandemic as opposed to 92 (73%) before the pandemic, as shown by table 05 (iii) and figure 05 (iii). In contrast, the number of households in the range of expenditures (4,000–5,999 to the rest) increased from 39 (31%) to 35 (27%) following the pandemic. The slight rise in the

number of households falling within the higher ranges suggests that, on average, the pandemic raised overall educational expenditures for so many of the surveyed households.

**Table 05 (iv) & Figure 05 (iv):** Information of the question- What types of changes in the transportation costs occurred for you before and after COVID-19?

Range	Transportation costs (before)	Transportation costs (after)
1 - 1999	98	83
2000 - 3999	33	46
4000 - 5999	05	07
6000 - 7999	01	01
<b>Total</b>	<b>137</b>	<b>137</b>



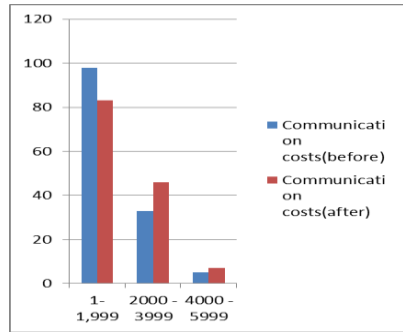
Source: Author’s own calculation on the basis of a questionnaire-based survey

The researcher with this research question attempted to evaluate how the COVID-19 pandemic might affect transportation costs. The numbers of households in the groups of expenditures (01-1999) were 83 (61%) after the pandemic as opposed to 98 (71%) before the pandemic, as shown by table 05 (iv) and figure 05(iv). On the other hand, the number of households in the range of expenditures (2,000 to the rest) increased from 54 (39%) to 39 (29%) following the pandemic. The rise in the number of households falling within the higher ranges suggests that, on average, the pandemic raised overall transportation costs for so many of the surveyed households.

**Table 05 (v) & Figure 05 (v):** Information of the question- What types of changes in the communication costs (other than transportation) occurred for you before and after COVID-19?



Range	Communication costs (before)	Communication costs (after)
1 - 1999	117	108
2000 - 3999	14	20
4000 - 5999	04	07
<b>Total</b>	<b>135</b>	<b>135</b>

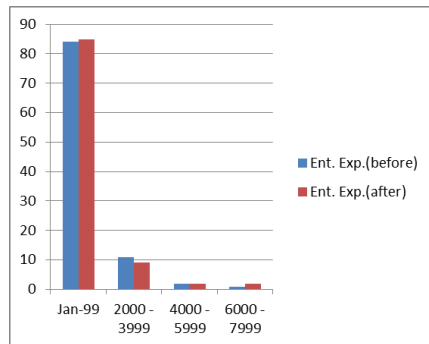


Source: Author’s own calculation on the basis of a questionnaire-based survey

The researcher with this research question attempted to evaluate how the COVID-19 pandemic might affect communication costs (other than transportation). The numbers of households in the groups of expenditures (01-1999) were 108 (80%) after the pandemic as opposed to 117 (87%) before the pandemic, as shown by table 05 (v) and figure 05 (v). On the other hand, the number of households in the range of expenditures (2,000 to the rest) increased from 18 (13%) to 27 (20%) following the pandemic. These figures mean that a larger number of households had to spend large amounts of money on average on overall communication costs (other than transportation costs) after the pandemic.

**Table 05 (vi) & Figure 05 (vi):** Information of the question- What types of changes in the Recreational/Entertainment expenditures occurred for you before and after COVID-19?

Range	Entertainment Exp.(before)	Entertainment Exp.(after)
1 - 1999	84	85
2000 - 3999	11	9
4000 - 5999	02	02
6000 - 7999	01	02
<b>Total</b>	<b>98</b>	<b>98</b>



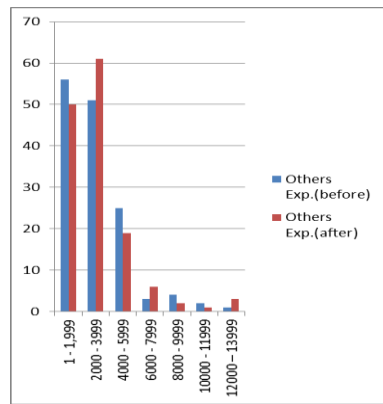
Source: Author’s own calculation on the basis of a questionnaire-based survey

With this study topic, the researcher sought to assess how the COVID-19 pandemic would impact the costs associated with entertainment and recreation. Table 05 (vi) and Figure 05 reveal that there were 85 households

in the categories of expenditures (01-1999) after the epidemic as opposed to 84 (86%) before the outbreak (vi). However, after the pandemic, the number of households in the 2,000 to the remainder range of spending somewhat dropped from 14 (or around 14%) to 13 (or roughly 13%). These results imply that the number of households that spent a larger amount of money on entertainment and recreation has slightly decreased after the pandemic.

**Table 05 (vii) & Figure 05 (vii):** Information of the question- What types of changes in the other expenditures (except previously stated) occurred for you before and after COVID-19?

Range	Others Exp.(before)	Others Exp.(after)
1 - 1999	56	50
2000-3999	51	61
4000-5999	25	19
6000-7999	03	06
8000- 9999	04	02
10000-11999	02	01
12000-13999	01	03
<b>Total</b>	<b>142</b>	<b>142</b>



Source: Author’s own calculation on the basis of a questionnaire-based survey

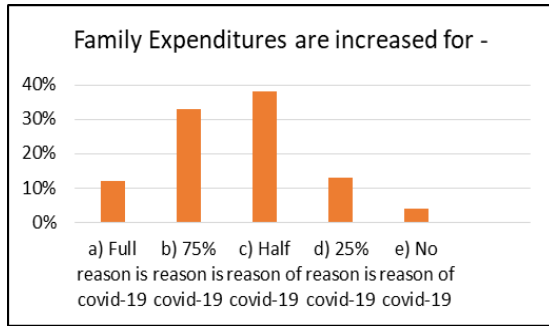
The researcher with this research question attempted to evaluate how the COVID-19 pandemic might affect other expenditures (except as stated previously). The numbers of households in the groups of expenditures (01-1999) were 50 (35%) after the pandemic as opposed to 56 (39%) before the pandemic, as shown by table 05 (vii) and figure 05 (vii). In contrast, the number of households in the range of expenditures (2,000–3,999 to the rest) increased from 86 (61%) to 92 (65%) following the pandemic. These figures mean that a larger number of households had to spend large amounts of money on average on other overall expenditures after the pandemic.

*Information for Question 06*

The researcher attempted to evaluate the COVID-19 pandemic's effects on family expenditures using the following question under question 06 in this study.

**Table 06 & Figure 06:** Information of the question- If family expenditures are increased what are the causes you consider responsible for it-

Full reason for covid-19	17
75% reason for covid-19	47
Half reason for covid-19	54
25% reason for covid-19	19
No reason for covid-19	5
<b>Total</b>	<b>142</b>



Source: Author’s own calculation on the basis of a questionnaire-based survey

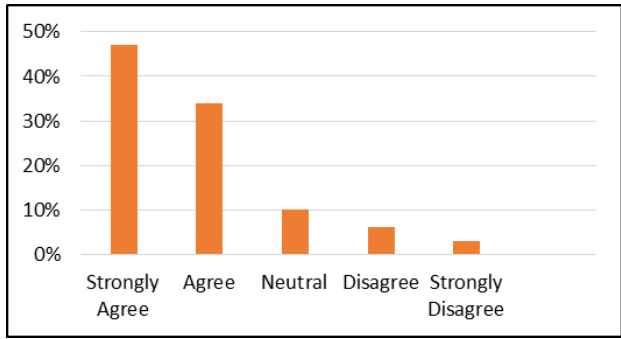
In response to question 6 (i), the researcher tried to determine what factors might be to blame if family expenses are on the rise. According to respondents' responses, 12% of respondents claimed that COVID-19 was the predominant cause of the increase in household expenses. They blame COVID-19 as the sole cause of rising family expenses. However, 33% of those surveyed claimed that the rise in family expenses is more or less due to COVID-19. Furthermore, 38% of them think that COVID-19 is partially to blame for rising household expenses. They assert that there are more variables contributing to the rise in household expenses. Additionally, 13% of respondents think that the covid-19 incidence is 25% due to rising family expenses. The final 4% of respondents, however, do not believe that COVID-19 has increased family spending.

*Information for Question 07*

The researcher made an effort to determine with question-07 whether COVID-19 had any significant long-term detrimental effects on households' overall earning capacity.

**Table 07 & Figure 07:** Information of the question- Covid-19 has a significant negative impact on the overall earning capacity of your family.

Strongly Agree	67
Agree	48
Neutral	14
Disagree	8
Strongly Disagree	5
<b>Total</b>	<b>142</b>



Source: Author’s own calculation on the basis of a questionnaire-based survey

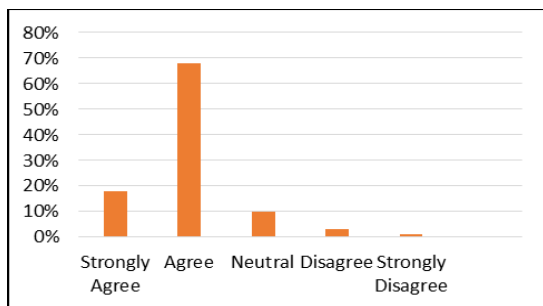
The researcher has attempted to determine whether the covid-19 has a long-run negative impact on the overall earning capacity of the families. According to the responses of respondents, 47% of respondents strongly agreed with this question. They firmly believe that covid-19 has a significant long-run impact on their earning capacity. Moreover, 34% of the respondents just agreed with this statement. However, 10% of the respondents are neutral to this question which means they neither agreed nor disagreed with this question. By the way, 6% of the respondents don’t think covid-19 has a long-run impact on earning capacity by disagreeing with this question. Also, 3% of the respondents have a strong disagreement with this question.

*Information for Question 08*

With question-08, the researcher wanted to determine whether or not the COVID-19 pandemic is a key contributor to the current inflationary economy.

**Table 08 & Figure 08:** Information of the question- A major contributing factor to the current inflationary economy is the Covid-19 pandemic.

Strongly Agree	25
Agree	97
Neutral	14
Disagree	4
Strongly Disagree	2
<b>Total</b>	<b>142</b>



Source: Author’s own calculation on the basis of a questionnaire-based survey

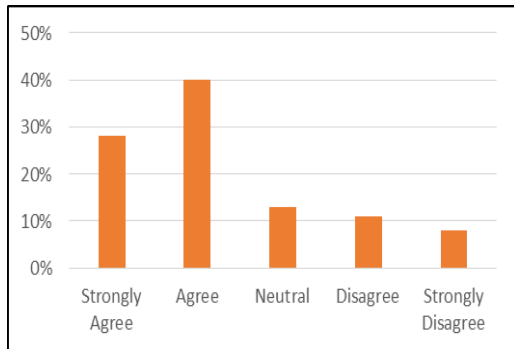
The researcher has attempted to determine whether the covid-19 is a major contributing factor to the current inflationary economy. According to the responses of respondents, 18% of respondents strongly agreed with this point. They firmly believe that covid-19 is a major contributing factor to the current inflationary economy. Also, 68% of the respondents agreed with this question. They also believe that covid-19 is really a factor in inflation. However, 10% of the respondents are neutral to this question which means 10% of respondents neither agreed nor disagreed with this question. They are confused about this factor. By the way, 3% of the respondents don't think covid-19 is a major contributing factor to the current inflationary economy by disagreeing with this question. Moreover, 1% of the respondents have a strong disagreement with this question. In general, most of the respondents have consented to this point.

*Information for Question 09*

With question-09, the researcher wanted to determine whether or not due to the COVID-19 pandemic the households had to sell their precious assets, withdraw savings, or increase borrowing.

**Table 09 & Figure 09:** Information of the question - Due to the Covid-19 pandemic, you had to sell previous assets, withdraw savings, or increase borrowing.

Strongly Agree	40
Agree	57
Neutral	19
Disagree	15
Strongly Disagree	11
<b>Total</b>	<b>142</b>



Source: Author's own calculation on the basis of a questionnaire-based survey

The researcher attempted to examine whether due to the covid-19 pandemic, anyone had to sell previous assets, withdraw savings, or increase borrowing. According to the responses, 28% of the respondents are experienced and strongly agreed with this point. They strongly believe that due to the covid-19 pandemic, they had to sell previous assets, withdraw savings, or increase borrowing. As well as, 40% of the respondents agreed with this opinion.

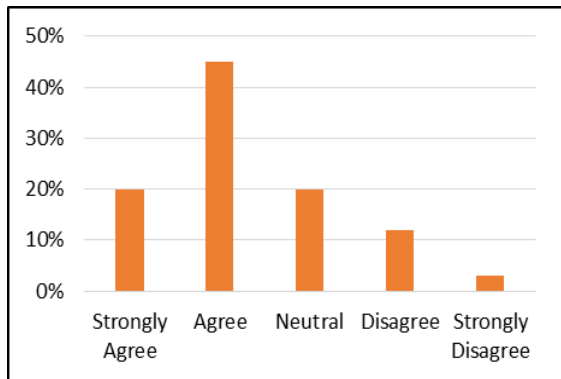
They also believe that covid-19 is really a situation for which they had to sell previous assets, withdraw savings, or increase borrowing. However, 13% of the respondents are neutral to this question which means this 13% of respondents neither agreed nor disagreed with this question. By the way, 11% of the respondents have shown disagreement with this question which means they didn't have to sell previous assets, withdraw savings, or increase borrowing. Moreover, 8% of the respondents have a strong disagreement with this question. In general, the results show that most of the respondents had experienced selling previous assets, withdrawing savings, or increasing borrowing.

*Information for Question 10*

With regard to question 10, the researcher sought to ascertain if or not the respondents are able to earn as they did before the COVID-19 pandemic.

**Table 10 & Figure 10:** Information of the question- You still haven't been able to earn as much as you did prior to Covid-19 arriving.

Strongly Agree	28
Agree	64
Neutral	28
Disagree	17
Strongly Disagree	5
<b>Total</b>	<b>142</b>



Source: Author's own calculation on the basis of a questionnaire-based survey

The researcher attempted to determine whether people still haven't been able to earn as much as they did prior to Covid-19 arriving. According to the responses, 20% of the respondents have experienced and strongly agreed with this point that due to the covid-19 pandemic, they haven't still been able to earn as much as they did prior to covid-19 arriving. Moreover, 45% of the respondents agreed with this point. They also believe that covid-19 is a true factor for which they haven't still been able to earn as much as they did. However, 20% of them are neutral to this question which means this 20% of respondents neither agreed nor disagreed with this question. They aren't sure

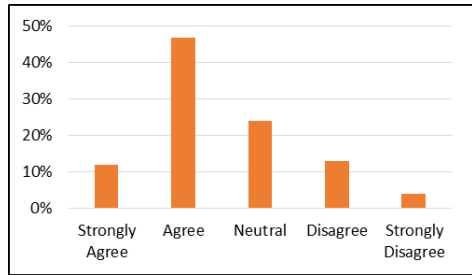
enough about the situation. By the way, 12% of the respondents have shown disagreement with this question. Moreover, 3% of the respondents' strong disagreement with this question means they are earning as much as they did prior covid-19 arriving.

*Information for Question 11*

Regarding question 11, the researcher wanted to know if the respondents were having any trouble meeting their fundamental needs as a result of Covid-19 effects.

**Table 11 & Figure 11:** Information of the question- You are still facing difficulties in covering your basic needs due to Covid-19 impacts.

Strongly Agree	17
Agree	66
Neutral	34
Disagree	19
Strongly Disagree	6
<b>Total</b>	<b>142</b>



Source: Author’s own calculation on the basis of a questionnaire-based survey

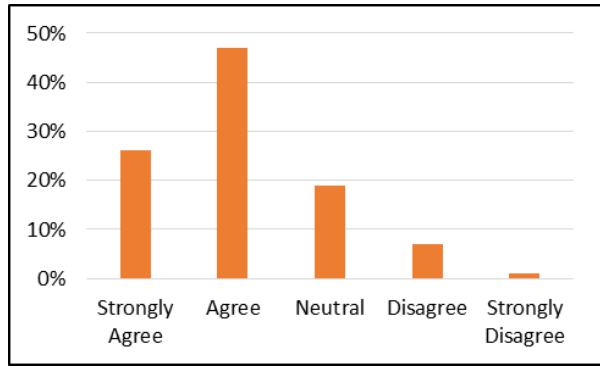
The researcher attempted to know whether people are still facing difficulties in covering their basic needs due to Covid-19 impacts. According to the responses of respondents, 12% of them strongly agreed with this question that due to the covid-19 pandemic, they are still facing difficulties in covering their basic needs due to covid-19 impacts. Additionally, 47% of the respondents agreed with this question. They also believe that covid-19 is a prominent factor for which they are still facing difficulties in covering their basic needs due to covid-19 impacts. However, 24% of them are neutral to this question which means this 20% of respondents neither agreed nor disagreed with this question. By the way, 13% of the respondents have shown disagreement with this question. Moreover, 4% of the respondents strongly disagree with this question which means they are not still facing difficulties in covering their basic needs due to covid-19 impacts.

*Information for Question 12*

With question-12, the researcher wanted to determine whether or not the Covid-19 pandemic has significantly lowered the households’ quality of life.

**Table 12 & Figure 12:** Information of the question- The Covid-19 pandemic has significantly lowered your family's quality of life.

Strongly Agree	37
Agree	67
Neutral	27
Disagree	10
Strongly Disagree	1
<b>Total</b>	<b>142</b>



Source: Author’s own calculation on the basis of a questionnaire-based survey

The researcher attempted to examine whether covid-19 pandemic has significantly lowered the households' quality of life. According to the responses of respondents, 26% of the respondents strongly agreed with this question that due to the covid-19 pandemic, the households' quality of life has significantly lowered. Moreover, 47% of the respondents agreed with this question. They also believe that covid-19 is a significant factor for which their families’ quality of life has significantly lowered. However, 19% of the respondents haven’t answered anything in response to this question. They are neutral to this question. By the way, 7% of the respondents have shown disagreement with this question which means covid-19 has not significantly lowered their families’ quality of life. Additionally, only 1% of the respondents have a strong disagreement with this question.

**9. Summary of the Important Findings**

Besides the responses to the closed-ended questions, i.e., Q1 to Q12, the author made an effort to explain the following section using the participants' responses to two open-ended questions i.e. Q13 and Q14 of the questionnaire attached to the Appendix.

- i. Even though the pandemic has not significantly impacted the employment or work-related status of the households noted in Q1(i), which is also guaranteed by Q4(i), the findings in Q7 revealed that COVID-19 has a significant negative impact on their family's overall earning capacity. This discrepancy may be caused by the households' prospective reliance on other income sources, as shown by the results of



- Q10, where  $28 + 64 = 92$  out of 142 (or 65%) respondents stated "their families still weren't able to make as much as they had before COVID-19 arrived."
- ii. The responses to Q2(ii) show that after the start of the epidemic, there are more people with lower incomes than before, while there are much fewer people with higher incomes. This outcome is consistent with the results of the Q7, which showed that  $(67 + 48 = 115)$  out of 142 respondents (81%) either strongly agree or agree that COVID-19 has a major negative influence on their family's overall earning capacity.
  - iii. The results of Q3 (i), (ii), (iii), and (iv) reveal that they faced a considerable reduction in their income, although only 10% of the respondents said they had completely lost their jobs in Q (i).
  - iv. According to the Q3 (vi) results, the COVID-19 epidemic has increased household personal borrowing. The answer to question Q3 (vii) revealed that the households were unable to recoup their previously given credits. These results are consistent with the results of Q9, which revealed that  $40 + 57 = 97$  out of 142 respondents (i.e., 68%) strongly agreed or agreed that they had to sell prior assets, take money out of savings, or take on more debt due to the pandemic.
  - v. The rise in institutional and personal borrowing seen in Q3 (vi) and Q4 (iii), respectively, suggests that the epidemic has increased household borrowing overall.
  - vi. Finding adequate employment or income prospects was significantly more difficult, according to 74% of respondents to Q4 (v), as a result of the COVID-19 pandemic. This demonstrates that the creation of new income opportunities for newcomers was extremely challenging after the COVID period.
  - vii. The results of Q5 (i), (ii), (iii), (iv), and (v) show that, on average, costs for essential goods have increased since the COVID-19 pandemic. Again, in line with Q6's findings,  $17 + 47 + 54 + 19 = 137$  of 142 respondents (or roughly 97%) attributed this rise in spending to the emergence of the pandemic, either entirely or in part.
  - viii. According to Q11's findings, 83 out of 142 households (or 58%) are still unable to meet their basic necessities as a result of COVID-19's impacts, with the previously mentioned income-expenditure mismatch being the main factor. Their standard of living has diminished significantly, which is also supported by Q12's results, which show that  $37+67=104$  out of

142 (or 73%) respondents either strongly agree with or merely agree with this statement. Similar results were discovered in Q5 (vi), where households spent less money on recreation and entertainment following the epidemic, which is also a sign that their standard of living has deteriorated.

## **10. Recommendations**

This part of this study mainly has been prepared from the responses to the open-ended questions i.e. Q14 of the questionnaire attached to the Appendix along with an open discussion with other experts. The key recommendations came from the respondents are as follows:

- i. To support rural poor people, the government of Bangladesh should increase funding for a number of social programs, such as Food for Work (FFW), Food for Education Program (FEP), Vulnerable Group Development (VGD), Vulnerable Group Feeding (VGF), Women Entrepreneurs Development Program, Poor Lactating Mothers' Assistance Program, etc.
- ii. Many responders called for expanding the Social Security Policy Support (SSPS) Programs' coverage, particularly during the years when the global pandemic was being fought.
- iii. The respondents requested the government to effectively monitor and expand the main functions of the Trading Corporation of Bangladesh (TCB).
- iv. Many responders mention more convenient loan terms and scheduling options for personal loans from financial institutions.
- v. The government of Bangladesh must take the necessary steps to promptly increase the number of employment opportunities, as it was found in finding (vi) that COVID-19 has endangered the possibility for upcoming job seekers to find their ideal employment.
- vi. Some of the experts recommended the Bangladeshi government monitor and regulate the markets, particularly for essential goods, as strongly as possible.
- vii. Some experts recommended that a powerful advisory council made up of high-ranking government officials be established for the purpose of formulating, implementing, and appropriately supervising short-, medium-, and long-term plans to battle the COVID-19 pandemic.

## 11. Conclusion

The COVID-19 pandemic costs a lot by taking away about several million lives around the world, including about 29,425 lives in Bangladesh (Health Department, People's Republic of Bangladesh, 2022). This pandemic has significantly affected socioeconomic conditions all over the world. Several millions of families have lost their sole income earners. A great majority of people have lost their previous jobs, are confronted with a significant reduction of their wages or salaries, or still haven't been able to manage any jobs after the pandemic. The researcher in this study has tried to assess the impact of COVID-19 on household incomes and expenditures in Mymensingh division in Bangladesh on the basis of a questionnaire survey conducted in four districts of greater Mymensingh, i.e., Mymensingh, Jamalpur, Sherpur, and Netrokona. The researcher also wanted to summarize the important findings and try to recommend some policies in this regard based on the suggestions of the respondents. The researcher has found that, though the number of people in Bangladesh who have lost their jobs is very low, the COVID-19 pandemic has negatively affected the households' income-generating capacity and expenditure conditions, which ultimately lowered the standard of living of the households. Vibrant, well-balanced short-, medium-, and long-term steps in formulation, application, and proper monitoring by a high-powered advisory committee might be good solutions to escape from this crisis.

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### Appendix:

#### Questionnaire on the Consequences of Households' Incomes and Expenditures of Covid-19 Pandemic in Mymensingh Division of Bangladesh

This study aims to assess the long-run effect of COVID-19 pandemic on household income and expenditure of Bangladesh. The researcher also wants to find out the major challenges to fight this global crisis for Bangladesh, and try to recommend some policies in this regard based on the suggestions of the respondents. For convenience of data collection, the researcher has selected the 04 (four) districts of greater Mymensingh, i.e. Mymensingh, Jamalpur, Sherpur, and Netrokona, as the survey area. The study is conducting for academic purposes, and all data will be used for research work only. The researcher is committed to maintaining the secrecy of your provided information. You are earnestly requested to furnish your responses to the survey questionnaire, which will only take about 10 to 15 minutes. Your valuable opinion will be helpful to increase the standard, efficacy, and reliability of the research.

<b>Name:</b>		<b>Occupation:</b>	
<b>Mobile no.:</b>		<b>Location:</b>	
<b>Number of Family Members:</b>			

**Q1: Has your employment/work status changed due to Covid-19 pandemic?**

(Put a **Tik Mark** in appropriate answer)

- i) **No- I am still employed as before**
- ii) **Yes-My salary was reduced**
- iii) **Yes-I am on an unpaid leave**
- iv) **Yes-I lost my job**
- v) **Yes-I don't work anymore**
- vi) **Other-(Please specify)**

**Q2: Comparison of average monthly INCOME of your family before and after Covid-19.**

<b>Before Income(BDT)</b>	<b>After Income(BDT)</b>

**Q3: How have the following issues of you been affected by the Covid-19 pandemic? (Put a Tik Mark in appropriate answer)**

	Questions	Increased	Decreased	No Impact
i.	Income from self-employment			
ii.	Income from casual labor			
iii.	Income from job (i.e. salary/wages)			
iv.	Income from other sources			
v.	Gift/remittances received			
vi.	Personal borrow			
vii.	Personal loan/credit repayment received			

**Q4: Some Yes/No type questions-(Put a Tik Mark in appropriate answer)**

	Questions	YES	NO	NA
i.	Have you been able to manage your original/similar type of job again?			
ii.	Have you lost any portion of the capital for Covid-19 if you were a businessperson before Covid-19?			
iii.	Your family received a loan from a formal institution as a result of COVID-19?			
iv.	Do you have any loans that you have been unable to repay because of Covid-19?			
v.	Do you think that getting a suitable job/income opportunity is much harder due to Covid-19 pandemic?			

**Q5: What types of changes in the following expenditures occurred for you before and after COVID-19? (Put a Tik Mark in appropriate answer)**

	Questions	Before Covid-19(BDT)	After Covid-19(BDT)
i.	Food expenditures		
ii.	Clothing expenditures		
iii.	Educational costs		
iv.	Transportation costs		
v.	Communication costs (other than transportations)		
vi.	Recreational/Entertainment expenditures		
Vii.	Other expenditures		

**Q6: Comparison of average monthly expenditures of your family before and after Covid-19.**

Before Expenditure(BDT)	After Expenditure(BDT)

If family expenditures are increased what are the causes you consider responsible for it-

- a) Full reason is Covid-19
- b) 75% reason is Covid-19
- c) Half reason of Covid-19
- d) 25% reason is Covid-19
- e) No reason of Covid-19

**Q7: Covid-19 has a significant negative impact in the overall earning capacity of your family.**

a)	Strongly Agree	b)	Agree	c)	Neutral	d)	Disagree	e)	Strongly Disagree
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**Q8: A major contributing factor to the current inflationary economy is the Covid-19 pandemic.**

a)	Strongly Agree	b)	Agree	c)	Neutral	d)	Disagree	e)	Strongly Disagree
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**Q9: Due to the Covid-19 pandemic, you had to sell previous assets, withdraw savings, or increase borrowing?**

a)	Strongly Agree	b)	Agree	c)	Neutral	d)	Disagree	e)	Strongly Disagree
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**Q10: You still haven't been able to earn as much as you did prior to Covid-19 arriving.**

a)	Strongly Agree	b)	Agree	c)	Neutral	d)	Disagree	e)	Strongly Disagree
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**Q11: You are still facing difficulties in covering your basic needs due to Covid-19 impacts.**

a)	Strongly Agree	b)	Agree	c)	Neutral	d)	Disagree	e)	Strongly Disagree
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**Q12: The Covid-19 pandemic has significantly lowered your family's quality of life.**

a)	Strongly Agree	b)	Agree	c)	Neutral	d)	Disagree	e)	Strongly Disagree
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**Q13:** Describe any important events that occurred during the COVID-19 pandemic that had a substantial impact on your family's ability to earn money and make expenditures.

**Q14:** Do you support of the steps taken by the government of Bangladesh to address the Covid-19? Describe the major challenges to fight this crisis, and recommend some policies for the government to address COVID-19.