EFFECT OF COVID-19 ON SCHOOL DROPOUT AND CHILD MARRIAGE: A STUDY IN SOME SELECTED AREAS OF HAOR REGION IN BANGLADESH

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This is to certify that the thesis entitled "**Effect of COVID-19 on school dropout and child marriage: a study in some selected areas of Haor region in Bangladesh**" submitted to the Faculty of Agribusiness Management, Sher-e-Bangla Agricultural University, Dhaka, in partial fulfilment of the requirements for the degree of **MASTER OF SCIENCE IN DEVELOPMENT AND POVERTY STUDIES,** embodies the result of a piece of bona fide research work carried out by **Farzana Islam**, Registration No. **15-06868** under my supervision and guidance. No part of the thesis has been submitted for any other degree or diploma.

I further certify that such help or sources of information as has been available of during the course of this investigation has duly been acknowledged.

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Dedicated to
My Beloved Parents

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Abstract

The Novel Corona Virus (COVID-19) has created tremendous negative impacts on the education sector all over the country, significantly in disadvantageous agricultural wetland (haor) areas of Bangladesh. The study assessed the impact of COVID-19 on school dropout and child marriage in haor areas of two districts (Netrokona and Sunamgonj) of Bangladesh. The effect of COVID-19 was estimated by different descriptive statistics, multiple regression, and intensity index. Data were collected from the 112 respondents who were regular students from primary to higher secondary levels before the pandemic. This study revealed that the COVID-19 pandemic severely affected the school dropout and child marriage situation in the study areas. It was found that about 59.17% of participants permanently dropped out of school while the rest (40.83%) students continued their studies. Of the total dropped-out participants, about 54% were female, and 46% were male students. Among all interviewed female students, about 59.38% were married (child marriage), whereas 89% of these married students permanently dropped out of their educational institutions. Among all participants, about 68% of students had no access to digital devices for online learning during school closures due to the pandemic. The socio-economic study found that COVID-19 highly affected the participant's family income as it has the highest intensity index. Contribution of 12 independent variables on the effect of COVID-19 on school dropout found that gender, family size, number of earning members, monthly family income, study level, marital status, access to digital devices, condition of house, and knowledge of COVID-19 etc., significantly contributed to the dependent variable. From the 12 hypothesized relationships, five (05) variables, namely, gender, monthly family income, use of electricity, number of meals per day, condition of house etc., had a significant contribution to the dependent variable, effect of COVID-19 on child marriage in the haor areas of Bangladesh. To avert the long-term effects of long-time shutdown due to COVID-19, it is highly recommended to take concerted initiatives involving guardians, students, society and religious leaders, government, and other relevant stakeholders of the study areas. This study highly recommends an intensive focus on female education and facilitating online learning environment to achieve sustainable development goals. This study is supposed to help policymakers develop action plans for students and quick educational recovery in the disadvantaged agricultural areas, particularly haor regions of Bangladesh.

Chapter 1

Introduction

1.1 Background of the study

The novel coronavirus (COVID-19) originated in China, started to spread in every corner of the world, and was recorded as a pandemic by World Health Organization (WHO). Since the disease is highly contagious, health experts and the WHO recommend maintaining social distancing to curb this virus's spread (Ciotti et al., 2020; Hill, 2020; WHO, 2020). Countries have adopted strategies like closing public and private organizations, completing or partial lockdown of educational institutions, etc. The Bangladesh government closed all educational intuitions to prevent the spread of the coronavirus in March 2020, which has already been more than one and a half years (AL JAZEERA, 2021). This prolonged closing of educational institutions significantly impacts students' mental health and livelihoods (Ela et al., 2021; Sakamoto et al., 2020). Even though students from all social classes have been affected by COVID-19, students from lower socio-economic communities have been affected in the worst condition (Paul et al., 2021; Shammi et al., 2021). According to recent research, some unspoken consequences like child labor, child trafficking, child marriage, sexual exploitation, and death have increased alarmingly in the marginal group of people (Musa et al., 2021; UN, 2020; UNESCO, 2022). In developing countries like Bangladesh, girls are most vulnerable as they are already marginalized in rural areas (Abedin & Khatun, 2020; Daily Star, 2017). This pandemic has harmful effects on the most susceptible household economies and raises child labor and marriage risk. As COVID-19 forces marginal people back into poverty, the pandemic worsens the overall poverty condition of Bangladesh. Since Bangladesh is one of the high-risk countries of the COVID-19 pandemic, the country needs to take appropriate measures to achieve the United Nation's sustainable development goals (SDGs), reconsidering COVID-19 impacts and its chain consequences.

1.2 Statement of the problem

As in many other countries, the coronavirus disease (COVID-19) pandemic has been an unprecedented shock to livelihoods and education in Bangladesh. All educational institutions were closed beginning on 17 March 2020, and government services and all nonessential businesses were closed on 26 March 2020. Economic activities gradually resumed from June 2020 but were hit again in 2021 due to the lockdown in April–August 2021 (Auger et al., 2020). Even though the countrywide COVID-19 lockdown affected all regardless of the social classes, people belonging to disadvantageous areas (e.g., haor areas) were affected in every aspect of life. Several studies revealed that prolonged shutdown of educational institutions alarmingly increased school dropout, child marriage, child labor, child trafficking, etc., particularly in the lower socio-economic group.

In the above circumstances, some questions motivated this research from Bangladesh. The research purpose was to find answers to the following questions:

1. How COVID-19 lockdown affects school dropout and child marriage in the study area?
2. What are the predominant reasons for school dropout and child marriage in the study area?
3. How is socio-economic condition linked with the problems mentioned above?
4. What would be appropriate strategies for quick educational recovery in the disadvantageous areas of Bangladesh?

1.3 Objectives of the study

This study aimed to assess the COVID-19 impact on school dropout and child marriage in disadvantageous areas of Bangladesh and possible solutions to move forward. The specific objectives of the study are:

a) To examine the determinants of school dropout and child marriage
b) To analyze the effect of COVID-19 on school dropouts and child marriage
c) To explore the consequence of the pandemic resulting from school dropouts and child marriage on socio-economic condition

1.4 Justification of the study

In terms of mainstream socio-economic development initiatives, in northeast areas, people are becoming increasingly marginalized. The national policies of Bangladesh have pledged special attention to the disadvantaged community, such as the haor people. Still, they are yet to enjoy full access to the essential services by the government. Education is the most victimized sector in this area and needs massive attention from policy players also demands innovative approaches to ensure education for all children. Unlike in the rest of Bangladesh, school attendance is lower in this area, especially attendance by girls is much lower than that of boys. The economic hardship arising from geographical isolation and socio-economic condition primarily keep the children from schooling in such areas. As COVID-19 affected the socio-economic condition of all classes with high severity in poor people, this study will provide information on how COVID-19 consequences school dropout and child marriage in disadvantageous areas of Bangladesh. This study will help academicians, policymakers, consultants, beneficiaries, and relevant government and non-government officials properly manage education systems with guaranteed place for the students of disadvantaged societies.

Chapter 2

Review of Literature

2.1 Novel coronavirus and its impacts

The coronavirus disease 19 (COVID-19) is a highly transmittable and pathogenic viral infection caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), which caused a global pandemic that led to dramatic changes in human life worldwide(Hill, 2020). The global spread of SARS-CoV-2 and the thousands of deaths caused by coronavirus disease (COVID-19) led the World Health Organization to declare a pandemic on 12 March 2020 (Ciotti et al., 2020). To date, the world has paid a high toll in this pandemic regarding human lives lost, economic repercussions, and increased poverty. SARS-CoV-2 (COVID-19) is a single-stranded RNA virus. The name "Corona" is a Latin word meaning "Crown," which has been given due to the similarity of its spikes to a crown (Lal et al., 2021). However, the spikes on the outer surface of coronaviruses are responsible for the attachment and entry of the virus to host cells. The transmission of SARS-CoV-2 was via human-to-human contact by droplet transmission (Hill, 2020) and, more particularly, by respiratory secretions of the infected person, such as sneezing or coughing (**Figure 1**).

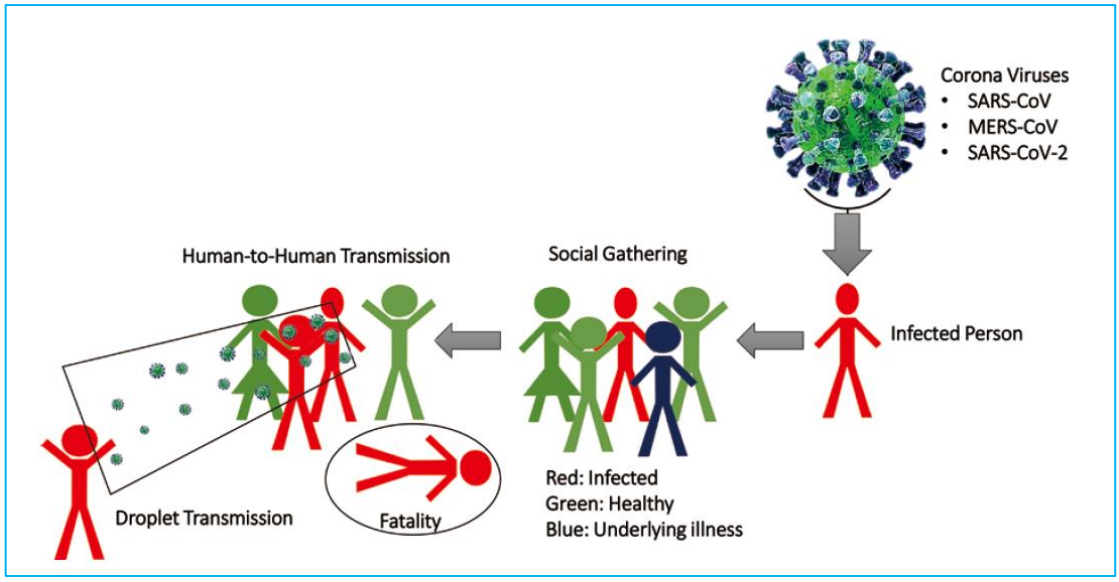

Figure 1. Demonstration of human-to-human COVID-19 transmission (Baloch et al., 2020)

Since the disease is highly contagious, health experts and the WHO recommend maintaining social distancing to curb this virus's spread (WHO, 2020). Countries have adopted strategies like closing public and private organizations, complete or partial lockdown of educational institutions, etc. (Lal et al., 2021). The Bangladesh government closed educational intuitions to prevent the spread of the coronavirus in March 2020, which has been closed for more than one and a half years. This prolonged closing of educational institutions significantly impacts students' mental health and livelihoods (Ela et al., 2021; Sakamoto et al., 2020). Even though students from all social classes have been affected by COVID-19, students from lower socio-economic communities have been affected in the worst condition (Paul et al., 2021; Shereen et al., 2020).

2.2 School dropout

School dropout has been defined as leaving education without obtaining a minimal credential, most often a higher secondary education diploma. Estimates of dropout rates seem to be higher in South and West Asia (43%) and sub-Saharian Africa (36%), while in other geopolitical areas such as East Asia and Europe. In Bangladesh, the dropout rate is quite higher for numerous reasons (Marinoni et al., 2020). Recently, Bangladesh is facing immense challenges, especially in the disadvantaged area's education sector due

to COVID-19 (F. Islam & Ahmed, 2021). According to the recent report of ILO and UNICEF, COVID-19 pushed millions of children into child labor in Bangladesh. The shutdown of the schools for more than a year and the reduction of family income expose school-going children to the risk of child labor. According to a 2019 report by the Bangladesh Bureau of Educational Information and Statistics (BANBEIS), there are 10.34 million students at the secondary level in the country, of whom 53.83% are female while the dropout rate was 36% at the secondary level (Daily Star, 2022; Ela et al., 2021; M. S. Islam et al., 2020).

2.3 Factors affecting school dropout in Bangladesh

School dropout in developing countries is a serious issue resulting from various causes. The negative consequences of failing to finish high school are extreme, affecting individuals, their families, and society. Interpersonally, dropouts are more likely to be depressed, dissatisfied with their lives, and alienated.

2.3.1 Gender

Bangladesh has made notable progress in education in the last two decades. A significant increase in enrolment rates in primary, secondary, and tertiary levels of education has been perceived. Apart from the increase in enrolment rates, an important aspect of the recent growth is closing the gender gap in primary and secondary enrolment. The gender gap was much wider even a decade ago. A small fraction of girl students completing primary education continued up to secondary education, and the dropout rates for the girls were much higher than their male counterparts. However, gender parity has been achieved in primary and lower secondary enrolments. Still, the number of girl students significantly decreases in the later stages of secondary school, according to the UN Children's Fund (UNICEF). Although 85.6 percent of primary school girls are enrolled, the remaining 14.4 percent who does not represent some 1.5 million girls, UNICEF reported, citing the latest available figures from the Bangladesh Bureau of Statistics (UNICEF 2020b). The situation is worse in slum areas where enrolment rates are only 61 percent, and 26 percent of primary-age girls have never enrolled in a school. According to past studies, only 50 percent of children enrolled in grade six reach grade 10, and only 40 percent of girls pass the secondary school final

exams (UNICEF, 2020a). Bangladesh's government has taken several initiatives, including stipend schemes, to boost female education in the country (Dutta & Smita, 2020).

2.3.2 Economic hardship

Economic hardship or poverty propagates several factors which greatly affect children's schooling. For example- malnutrition, poor health, and chronic diseases are poverty-derived hindrances of education in most developing countries (Kazal et al., 2010). Generally, physical and psychological impediments are the major causes of school dropout in rural areas in Bangladesh. Economic hardship is a major problem for school dropouts (Mottaleb et al., 2020). About 20.5% of people live below the poverty line in Bangladesh. The livelihood is very hard for the people where the price hike of a necessary daily commodity is a regular matter (Alam et al., 2020). People are bound to spend their earnings on purchasing essential commodities by reducing the cost of education. The study reported that 80% of earnings are used for buying essential food items for a livelihood without saving any money in Bangladesh's rural and urban areas whereas most children are bound to leave their school and join to work to earn a livelihood (Alam et al., 2020; Kamruzzaman & Shaw, 2018; Sharma, 2010).

2.3.3 Lack of quality education

Different factors directly influence the quality of education, like lack of quality teachers, frequent absenteeism of teachers, long distance of the school, poor educational and physical facilities, etc. Even though the poor financial condition is the main influential factor in quality education in most cases, some other factors, like a misinterpretation of religion, socio-cultural norms, and illiterate parents, greatly affect school dropout in Bangladesh. Social and economic class is another factor of poor-quality education. Because the upper class of society can manage costly education for their children, which is the opposite in rural Bangladesh. People with a lower class or lower income group are bound to send their children to the government school or NGO’s school where the concerned authority pays less attention to maintaining quality education (Hossain, 2021; Kabir et al., 2021).

2.3.4 Geographical isolation

Bangladesh has eight divisions with a total of sixty-four districts. Mymensingh and Sunamgonj divisions have more than a hundred rivers and waterways spread like a net and are isolated in areas such as haor, riverine islands, and coastal areas. The education access in these areas is smaller than in other plainland areas. The teachers and other regulatory bodies are unwilling to work in these areas. Besides, all the administrative functions of education are based on the city areas and eight divisional areas of Bangladesh. As a result, the most deprived people live in the riverine island and haor areas in Bangladesh. They are characterized by income inequalities, poor communication, poor technology access, seasonal food insecurity, and poor educational facilities. It is seen that most of the schools in riverine islands, coastal areas, and mountainous areas frequently face teacher absenteeism, proxy teachers (who teach children on behalf of assigned teachers), and no monitoring from the concerned authority of the government. These reasons are prominent for school dropout for school dropouts in these areas (Jakariya & Islam, 2017).

2.3.5 Family and social biasness

Most developing countries have biased family and social practices, including Bangladesh. For example, People think that men are the earning member of the household, so it is wise to educate only boys, whereas girls are only doing family affairs, so there is no need to educate them. This value exists in the rural societies in Bangladesh. Other factors like child marriage, human trafficking, slavery, fostering, and multiple household duties negatively influence girls' school dropouts (Kamruzzaman & Shaw, 2018).

It seems like a system where education is necessary for boys but not girls. Nowadays, people are trying to break this norm. The enrollment rate of girls is increasing day by day in rural areas of Bangladesh. But at the same time, school dropout is increasing, especially for girl’s cases than boys. However, religious misinterpretation is also a significant factor for primary school dropout for boys and girls, which is predominant in disadvantageous areas of Bangladesh. The school dropout rate is a little higher in the secondary stage. The educational status of the family member has a great influence on

children's studies. It is seen that the mother's education has more influence than other members. It acts as a predictive factor. The dropout rate is low, and mothers are more educated (Singh, 2020).

2.3.6 Child marriage and early pregnancy

Child marriage and early marriage are predominant factors for girls' school dropouts in remote areas of Bangladesh. It usually happens due to parents' bad tendencies and the dowry system. Sometimes, the parent wants relief by pushing their girls into marriage. This system of rural areas increases school dropout. Pregnancy is a major cause of school dropout in rural areas in Bangladesh. Early marriage is a common phenomenon in rural areas of Bangladesh. Parents and relatives usually don't take any risks during pregnancy. As a result, most of the rural girls are dropout during pregnancy. Proper counselling and quality improvement intervention can reduce school dropout during pregnancy (UNICEF, 2020b).

2.3.7 Other factors

Friends and relatives greatly influence school dropouts, while children are usually motivated by observing a friend's behavior.

There is a co-education system in Bangladesh where boys and girls study together. So, there is a possibility to abused sexually by teachers and fellow friends, which is one of the major causes of dropout for girl students. Girls are unsafe on roads, schools, and markets due to massive eve-teasing, sexual harassment, and rape (Li et al., 2020).

Migration is another cause of school dropout in rural areas of Bangladesh. Some people are migrated frequently for livelihood, and their children are highly vulnerable to school dropouts. Frequent migration positively correlates to school dropout, poor quality of learning, and poor academic performance (Tarkar, 2021; Yeasmin et al., 2020).

2.4 Worldwide school dropout scenario

Before the pandemic, 258 million children and youth of primary and secondary-school age were out of school (Hill, 2020). Even worse, the crisis was not equally distributed:

the most disadvantaged children and youth had the worst access to schooling, the highest dropout rates, and the largest learning deficits. The pandemic has
already had profound impacts on education by closing schools almost everywhere on the planet, in the largest simultaneous shock to all education systems in our lifetimes. As of 2021, schools have closed in 180 countries, and 85% of students worldwide are physically out of school. UNICEF predicted that worldwide student dropout would rise, with many students leaving schooling forever, and the higher dropout will be concentrated in disadvantaged groups. Learning will suffer even more due to economic pressures on households. Even for students who do not drop out, households will be less able to pay for educational inputs—such as books at home or private lessons—until the economy recovers. School closures, fear of COVID-19, and the social and economic disruptions accompanying the pandemic will likely increase stress within the family and lead to anxiety and depression among children and youth.

Before the pandemic, the world faced formidable challenges in fulfilling the promise of education as a basic human right. Despite the near-universal enrolment at early grades in most countries, more than 250 million children were out of school, and nearly 800 million adults were illiterate (De Giusti, 2020). By mid-April 2020, 94 percent of learners worldwide were affected by the pandemic, representing 1.52 billion children and youth from pre-primary to higher education in 200 countries (**Figure 2**).

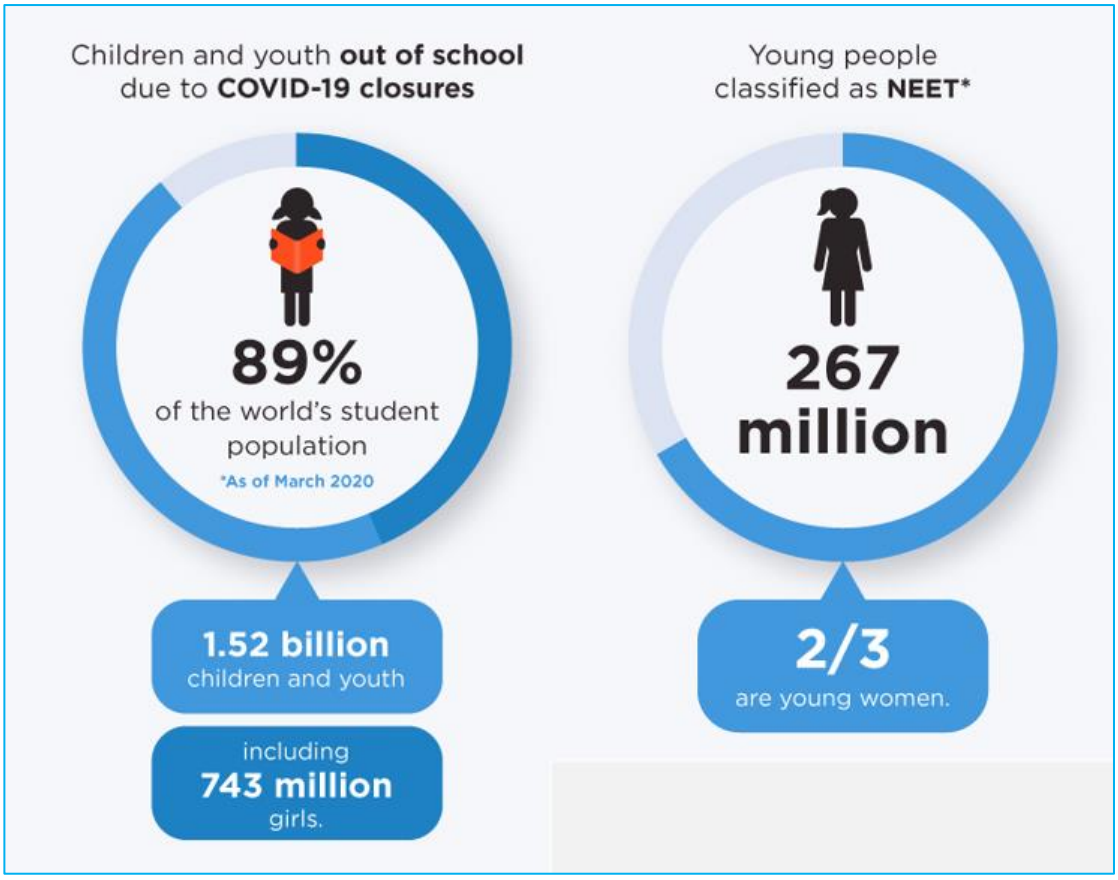

Figure 2. Worldwide school-out scenario (De Giusti, 2020; Hill, 2020)

Even if COVID-19 has the least effect on developed nations' education systems, developing countries witnessed the worst situation of this pandemic.

2.5 Impact of COVID-19 lockdown on the education sector

The pandemic of COVID-19 has disrupted the education system from primary to university worldwide. Due to the pandemic, all schools, colleges and universities are declared closed in most countries, disrupting the whole education system. Access to education was difficult, and the shutdown also had social and economic ramifications. With COVID-19 affecting lives and livelihoods profoundly, the psycho-social strain impeded learning. The switchover to remote learning meant additional costs for acquiring a smartphone and other gadgets. The gendered digital divide was more

pronounced in countries where more boys than girls reported owning mobile phones, access to smartphones for girls was restricted for fear of misuse, and they had to rely on family members to meet their needs. The prolonged closure of schools and colleges also meant keeping abreast of learning goals in the face of uncertainty. Confinement imposed responsibility with household chores increasing for girls and boys undertaking more income-generating activities, which tended to affect their learning during the lockdown. Moreover, learning uncertainties have increased early marriage and social and domestic violence in different parts of the world (F. Islam & Ahmed, 2021; World Bank, 2021).

2.5.1 Unbearable economic hardship to support education

The poverty impact of COVID-19 brought unprecedented demand and supply-side shocks to the socioeconomic lives of the people of developing nations. The Covid pandemic has significantly eroded Bangladesh's past rapid success, and it is happening worldwide, regardless of whether developed or developing countries whatsoever. In Bangladesh, significant shocks emerge from the labor market through large-scale job losses. COVID-19-induced lockdowns and movement restrictions have already increased unemployment and underemployment, severely reducing net income and consumer purchasing power. The International Labor Organization (ILO) estimates that the participation of the global working force in the first quarter of 2020 declined by 4.5%, equivalent to 130 million full-time jobs. In 2019, a total of 135 million people worldwide were severely food insecure due to job loss for COVID-19-induced lockdowns. Food insecurity triggered by conflicts affected 77 million people in 22 countries; economic shock-related food insecurity affected 22 million people in eight countries, and weather extremes caused food insecurity for 34 million people in 25 countries. Bangladesh's nationwide lockdown and movement restriction curved the earning opportunity of the permanent and migratory labor force throughout the country. The International Labor Organization (ILO) stressed that the income opportunity of informal workers and casual labor in both farm and nonfarm sectors are mostly affected by the COVID-19-induced contraction of employment and the restricted movement measures. As COVID-19 induced lockdown puts most people in an unbearable economic situation, it is difficult for them to support education for family members.

2.5.2 Child labor

Child labor is defined as work that deprives children of their childhood, potential, and dignity, which is harmful to physical and mental development. In contrast, child marriage occurs when at least one of the partners, as described in the convention on the rights of children, is under 18 years of age (ILO, 2020). Millions more children risk being pushed into child labor as a result of the COVID-19 crisis, which could lead to the first rise in child labor after 20 years of progress, according to a new brief from the International Labour Organization (ILO) and UNICEF. COVID-19 resulted in a rise in poverty and, therefore, in child labor. Some studies show that a one percentage point rise in poverty leads to at least a 0.7 percent increase in child labor in certain countries. As poverty rises, schools close, and social services availability decreases, more children are pushed into the workforce, particularly in developing countries. The COVID-19 pandemic negatively impacts the most vulnerable children's lives, hopes, and futures. Studies have shown that the longer children are out of school, the less likely they are to return (Idris, 2020).

The 2013 National Child Labour Survey estimates in Bangladesh at least 3.4 million children aged 5 to 17 are economically active and working, among which 1.8 million have been identified as child laborers. And another 1.3 million are engaged in the worst form of child labor. Many of these children have been subject to bonded labor, forced labor, and slavery, especially in urban areas. Several reports highlight the widespread issue of child labor in Dhaka – the world's most densely populated capital city. Many children, especially girls, also work across the country. In Dhaka, about 33% of domestic help is offered by poor and hungry children who are school-aged. Besides all these, thousands of boys used to work in various small enterprises, including roadside workshops (repairs, welding, furniture making, etc.), restaurants and stalls, small shops, saloons, bakeries, chemicals, waste picking, and transportation. The prolonged lockdown has seized their livelihood and left them unable to meet their basic needs. Many school-going children have left schools during the COVID-19 pandemic and joined in different works for family support. The scenario has turned even worse for Rohingya refugee children. The study found that the shutdown has exposed many school-going children to various vulnerabilities and made them more susceptible to

work, even in crime. The government must collaborate with international agencies, non-government organizations, and civil society members to create a sustainable protection framework for ensuring the welfare of these children.

2.5.3 Child marriage

Child marriage is defined as a legal or customary union that occurs before the age of 18. It is a violation of human rights. It adversely affects education, health and well-being of girls and perpetuates cycles of poverty. Child brides experience the detrimental physical, psychological and social consequences of child marriage. This is a global phenomenon and a grave cause for concern. Child marriage is substantially associated with numerous unintended births, pregnancy termination, and female sterilization. Around 12 million girls are married every year before their 18th birthday (Rahiem, 2021). A Save the Children's study shows that a further 2.5 million girls are at risk of marriage by 2025 due to the pandemic—the largest increase in child marriage rates in 25 years; and as many as one million more girls at risk of becoming pregnant alone this year with childbirth the leading cause of death amongst mothers who are 15–19 years of age (Musa et al., 2021). UNFPA-UNICEF predict that COVID-19 will hinder attempts to end child marriage, possibly leading to an additional 13 million child marriages between 2020 and 2030 that could otherwise have been prevented (UNICEF, 2020a). Bangladesh has one of the highest rates of child marriage in the world. Survey shows that in Bangladesh, 64% of women currently aged 20–24 were married before the age of 18. This is despite the fact that the minimum legal age of marriage for females in Bangladesh is 18 years and 21 for males (ICDDR'B, 2013).

The coronavirus pandemic has caused a sharp and steady rise in child marriages in Bangladesh, raising fears that the South Asian country might not meet its goal of eliminating child marriage any time soon. Before the virus, Bangladesh secured a notable development in curbing child marriage but growing concerns regarding joblessness, poverty, food scarcity and fear and insecurity among parents due to the pandemic are blamed for a surge in child marriages. Experts fear that child marriages can force girls to abandon school when the pandemic is finished, and they suggest immediate and effective action, including financial measures, to help families stop the

practice. Bangladesh is among the top 10 countries in the world for child marriage. It is eighth from the bottom in South Asia, according to a UN report that said Bangladesh has a 51% child marriage rate (UN, 2021) (**Figure 3**).

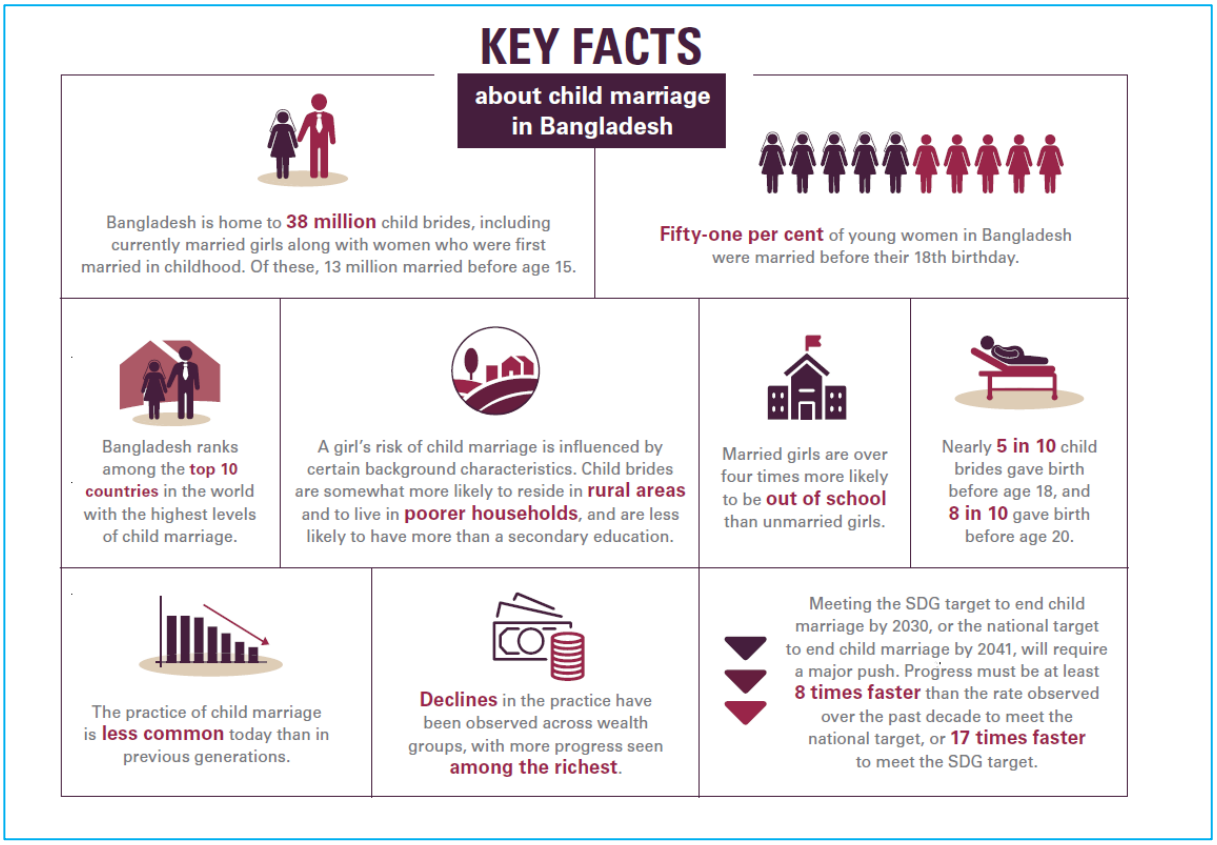

Figure 3. Key facts of child marriage in Bangladesh (UNICEF, 2020a)

According to Bangladeshi law, marriage before 18 for girls and 21 for boys is unlawful. School closure for a long time, job loss in families and the country's overall economic condition are among the causes behind the rise in child marriage in the pandemic. Besides, arranging marriage events during the pandemic is a comparatively low cost for families. Low mobility among all concerned, and officials keep those incidents hidden during the pandemic. According to BRAC, many Bangladeshi migrants returned home during the pandemic, which prompted grooms and influenced guardians to a rash in child marriage. A current scenario of country-wide child marriage is shown in Figure 4.

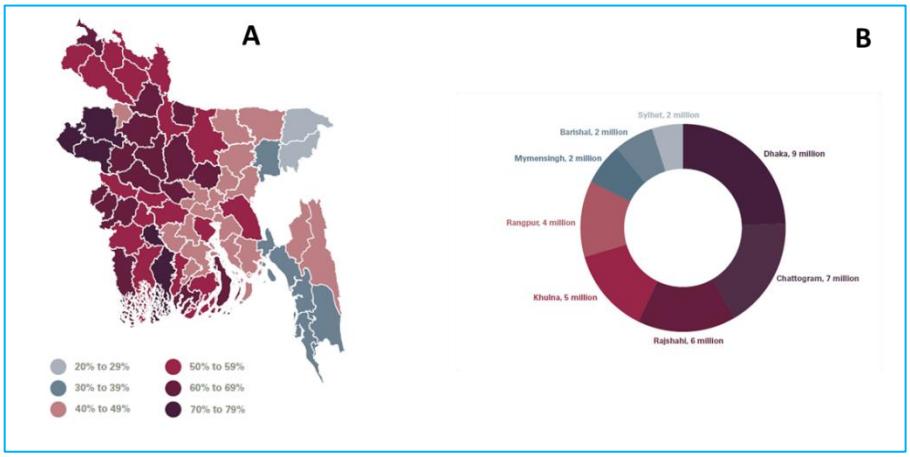

Figure 4. Current scenario of child marriage in Bangladesh: A. Percent child marriage in different districts; B. Number of girls and women who were married before age 18 in different divisions.

2.6 Research gap of this study

The pandemic has impacted the socio-economic, social, cultural, educational and health aspects of people's lives worldwide. School dropout and child marriage are the most significant impacts of the COVID-19 pandemic, particularly in developing countries. Many researches have been published on the impacts of COVID-19 on education and health worldwide, even in Bangladesh (Dutta & Smita, 2020; M. S. Islam et al., 2020; Li et al., 2020; Paul et al., 2021; Sakamoto et al., 2020; World Bank, 2021). Still, to the best of our concern, there was no published research regarding the COVID-19 pandemic severity on school dropout and child marriage in Bangladesh's disadvantageous wetland (haor) areas. As it is understandable that the marginal people (e.g. from haor areas) of the country are the worst victim of this pandemic, it is crucial to know how COVID-19 severely affected the different socio-economic parameters of such communities. School dropout is directly linked with child labor, marriage, terrorism, and other negative socio-cultural consequences. However, these negative consequences are not limited to social and expand to the nation. Considering this research gap, the present research aimed to assess the impacts of the COVID-19 pandemic on school dropout and child marriage on Bangladesh's disadvantaged agricultural households.

Chapter 3

Methodology

3.1 Research design

This study used both qualitative and quantitative approaches to conduct the study from primary to higher secondary students and teachers. Our study has assessed “how COVID-19 affected student dropout and child marriage” and “how COVID-19 deteriorated socio-economic indicators”.

3.2 Study area

The study was conducted in the Kolmakanda upazila under the Netrokona district and Modhonogor Upazilla under the Sunamgonj district. These areas were selected due to some reasons such as less access to students' study materials, economic hardship of parents, and negligence of female education etc. The study area is presented in Figure 5.

Figure 5. Map showing study areas (red and green points)

3.3. Population and sampling technique

Primarily we have selected different primary and high schools (at least one primary and one high school from each Union) from both Upazilas. All students from the selected schools were our population and the sample size of the study was determined by applying the following formula (Arkin, 1963):

$$n = \frac{Nz^2p(1-p)}{Nd^2 + z^2p(1-p)} \quad \text{..... (1)}$$

Where: n= Sample size

N= Total Number of students (2650)

z= Confidence level (at 95% level z=1.96)

p= Estimated population proportion 8.34% (=0.0834)

d= Error limit of 5% (=0.05)

From the equation, we got 112 students who acted as the representative of the population. 112 Students were randomly and proportionately selected from the population. A pre-prepared structured interview schedule used face to face interview schedule to gather the needed information for this study.

3. 4. Data collection tools

Keeping in mind the objectives, a structured interview was prepared to collect reliable and valuable information from the students. Simple and direct questions and different scales were used in order to collect the information. Direct questions were included to collect information like age, education, marital status etc. Scales were used to identify the factors affecting school dropout and child marriage during COVID-19 and the socio-economic impacts of COVID-19 in haor areas. However, Likert scales were also used for other related pieces of information.

3. 5. Data collection

The researcher herself, along with local guides, collected the data from the students through personal interviews. At the time of data collection, the aims and objectives of the study were explained to the participants. It helped the researcher to be friendly with the participants to collect the necessary information. The information provided by the participants was recorded very carefully.

3.6. Measurement of variables

Variables are the elements which are measured in any research. Research work usually consists of two main variables: independent and dependent variables. Independent variables are factors manipulated to ascertain their relationship to the phenomenon observed by the researcher. The dependent variable is the factor that changes, disappears or varies when the researcher introduces, removes or varies the independent variable. In research, the selection and measurement of variables constitute a significant task. Following this conception, the researcher reviewed the literature to widen the understanding of the natures and scope of the variables relevant to the research work. Finally, nine independent variables were selected: age, gender, family size, Number of earning members, monthly family income, study level, marital status, service availability, knowledge of COVID-19, COVID-19 related factors, socio-economic consequences etc. In this research, dependent variables are school dropout and child marriage of students in haor areas of Bangladesh.

3.6.1 Independent variables

3.6.1.1 Age

Age of the students was measured in terms of birth to the period of carrying out of the interview schedule based on the student's statement. Participants' age (in the year) was directly recorded as a score in the interview schedule given in the Appendix part.

3.6.1.2. Gender

The gender of the students was recorded in the first part of the interview schedule by providing them with two options (Male and Female), as given in the appendix.

3.6.1.3. Family size

Family size, or the total number of family members, was directly recorded as a variable score in the interview schedule. For example, if any interviewee has a total of 9 family members, his score would be 9.

3.6.1.4 Monthly family income

Monthly family income is a crucial factor in life style and children's education in haor areas. Based on our pre-interview experiences, we have provided three options for monthly family income: 1) below 2000Tk., 2) between 2000-5000Tk., and 3) above 3000TK. We have recorded option number (not amount in Tk.) as their monthly income score for statistical analysis.

3.6.1.5 Level of study

The level of study was measured by assigning scores against a participant's successful level of schooling. Generally, there are three levels of school study in Bangladesh: 1. Primary school (up to grade 5), 2. Secondary school (grades 6-10), and 3. Higher secondary school (grade11-12). We have recorded any one option of study level for each student.

For example, if a respondent is studying in primary school, his score would be 1; for secondary, the score would be 2; for higher secondary score would be 3. This variable is shown on the first page of the interview schedule, presented in the Appendix.

3.6.1.6 Current status of study

The current status of the study was considered the main documentation for calculating school dropout in this study. Each student participant in this study was asked if he/she was continuing or dropping school. If the participant continued study or supported to restart soon, his score was recorded as 1, otherwise 2. (see Appendix-I).

3.6.1.7 Marital status

Marital status was measured by providing two options which were married or unmarried. We only considered female students for describing marital status in the result and discussion part. Our pre-survey records found that no male students married up to higher secondary school age.

3.6.1.8 Service availability

Our pre-interview experience found that some service availability crucially affected the study status of the studied area. Therefore, we have recorded such service availabilities to check whether these factors have significance in school dropout decisions and child marriage. These service availabilities are described below:

Access to digital devices

Access to digital study devices was recorded by providing two options (Yes or No). If the answer was "Yes", the score was recorded as 1; otherwise, 2.

Use of electricity

The use of electricity was recorded by providing two options (Yes or No). If the answer was "Yes" score was recorded 1; otherwise, 2.

Number of meals per day

The number of meals per day score was recorded in any three provided options as

given in the service availability section of the interview schedule (see appendix-I).

Condition of house

The condition of the house's score was recorded in any of the three provided options as given in the service availability section of the interview schedule (see appendix-I).

3.6.1.9 Knowledge of COVID-19

Participants' knowledge of COVID-19 was measured by asking 5 questions related to different parts of COVID-19. It was measured by giving 2 points for each question. Therefore, the total points for all questions became 10. The point was given according to the answer by the respondents. A person is given 2 points for a correct answer, but if their answer is wrong, they do not get any points. And his score is 0. A partial score was given for a partially correct answer. So, the respondents' scores range from 0 to 10, where 0 indicates low knowledge and 10 indicates sound knowledge. This variable was placed in section 2 of the interview schedule given in the appendix.

3.6.1.10 Socio-economic consequences

Socio-economic consequences of COVID-19 were measured by asking 7 questions about the extent of these factors. Each factor scores from 0 (no effect) to 4 (severe effect). Therefore, a score of COVID-19 related factors for an individual respondent ranged between 0-28, while 0 indicates overall COVID-19 had no effect and 28 indicates a very high effect of COVID-19.

Rank order or intensify index was used to assess the COVID-19 induced socio-economic consequences. The intensity index or rank order was calculated by using the following formula (self-formulated):

$$Intensity\ index = 4N_{si} + 3N_{hi} + 2N_{mi} + 1N_{li}$$

Where,

N_{si}= Number of respondents faced severe intensity

N_{hi}= Number of respondents who faced high intensity

N_{mi} =Number of respondents faced medium intensity

N_{li} =Number of respondents who faced low intensity

3.6.2 Dependent variables

The dependent variables are the effect of Covid-19 on school dropout and the effect of Covid-19 on child marriage during the pandemic. These dependent variables were measured by asking different questions having five alternative responses (given in the Appendix)

3.6.2.1 Effect of COVID-19 on School dropout

Effect of COVID-19 on school dropout was measured by asking 9 questions (Appendix, section 3). Each question scored from 0 (no effect) to 4 (severe effect). Therefore, the score of COVID-19 effects for an individual respondent ranged between 0-36, while 0 indicates overall COVID-19 had no effect and 36 indicates a very high effect of COVID-19 on school dropout.

3.6.2.2 Effect of COVID-19 on Child marriage

Effect of COVID-19 on child marriage was measured by asking 7 questions (Appendix, section 4). Each question scored from 0 (no effect) to 4 (severe effect). Therefore, the score of COVID-19 effects for an individual respondent ranged between 0-28, while 0 indicates overall COVID-19 had no effect and 28 indicates a very high effect of COVID-19 on child marriage.

3.7 Calculation of school dropout and child marriage rate

Percent of school dropout students was calculated from the information of the individual variable "current study status," whereas percent of child marriage was obtained from the variable "marital status".

3.9 Collection of recommendations

Class teachers know their students best as most residents in that area. Authors recorded recommendations from class teachers and head teachers to reduce school dropout and child marriage during the pandemic. We summarized their recommendation and discussed them in chapter 4, "Result and Discussion."

3.10 Hypothesis of the study

A hypothesis is a conjectural statement of the relation between two or more variables (Kerlinger, 1973). A hypothesis is always in declarative sentence form and is generally or specifically related from variable to variable. The hypothesis may be broadly divided into 2 categories:

1. Research hypothesis
2. Null hypothesis

Each of the selected characteristics (age, gender, family size, number of earning members, monthly family income, level of study, marital status, service availability, knowledge of COVID-19, socio-economic consequences etc.) of the participants have significant contributions to school dropout and child marriage.

The null hypothesis reflects that there are no observed effects of the research or that there is no contribution between the concerned variables. Therefore, to conduct the test, the following null hypothesis was undertaken for the present study: "There is no contribution of the selected characteristics (age, gender, family size, number of earning members, monthly family income, level of study, marital status, service availability, knowledge of COVID-19, and socio-economic consequences etc.) of the students for school dropout and child marriage in haor areas of Bangladesh.

3.11 Data processing and analysis

The data obtained from the interview schedule were coded and tabulated in a data sheet. All personal traits were categorized and arranged in simple tables for descriptions. Statistical tools such as frequency distribution, percent, range, mean and standard deviation were used to interpret data. Data analysis was performed by Microsoft Excel and Statistical programming language RStudio (Version: 2022.12.0+353.

3.12 Statistical analysis

Multiple linear regression analysis was used to determine the contribution of independent variables on dependent variables. 5% and 1% significance levels were used as the basis for rejecting a null hypothesis. The null hypothesis was rejected if the computed value of was equal to or greater than the designated significance (*p*). Then it was concluded that there was a significant contribution between the two concerned variables. The null hypothesis can't be rejected when the computed value of is small at the designated significance (p).

The model used for the regression analysis of the effect of COVID-19 on school dropouts can be explained as follows:

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + b_6X_6 + b_7X_7 + b_8X_8 + b_9X_9 + b_{10}X_{10} + b_{11}X_{11} + b_{12}X_{12} + e$$

Where,

Y = effect of COVID-19 on school dropouts

a = Constant value of the equation

X_1= Age of participants

X_2 = Gender of the participants

X_3 = Family size

X_4 = Number of earning members

X_5 = Monthly family income

X_6 = Level of study

X_7 = Marital status

X_8 = Access to electronic devices

X_9= Use of electricity

X_{10} = Number of meals per day

X_{11}= Condition of house

X_{12}= Knowledge of COVID-19

e = Random error. b_1, b_2, b_3, b_4, b_5, b_6, b_7, b_8, b_9, b_{10}, b_{11}, and b_{12}, are regression co-efficient of the corresponding independent variables. Each regression coefficient

represents the change in the dependent variable associated with a one-unit increase in the corresponding independent variable, while holding all other independent variables constant. Therefore, a positive coefficient value indicates that an increase in the corresponding independent variable leads to an increase in the dependent variable, while a negative coefficient value indicates that an increase in the independent variable leads to a decrease in the dependent variable. The magnitude of the coefficient value indicates the strength of the relationship between the independent variable and the dependent variable. Larger coefficient values indicate stronger relationships, while smaller coefficient values indicate weaker relationships. The model used for the regression analysis effect of COVID-19 on child marriage can be explained as follows:

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + b_6X_6 + b_7X_7 + b_8X_8 + b_9X_9 + b_{10}X_{10} + b_{11}X_{11} + b_{12}X_{12} + b_{13}X_{13} + e$$

Where,

Y = Effect of COVID-19 on child marriage in haor areas of Bangladesh

a = Constant value of the equation

X_1= Age of participants

X_2 = Gender of the participants

X_3 = Family size

X_4 = Number of earning members

X_5 = Monthly family income

X_6 = Level of study

X_7 =Current study status

X_8 = Access to electronic devices

X_9 = Use of electricity

X_{10} = Number of meal per day

X_{11}= Condition of house

X_{12}= Knowledge of COVID-19

e = Random error, normally and independently distributed with 0 mean and constant

variance. b_1, b_2, b_3, b_4, b_5, b_6, b_7, b_8, b_9, b_{10}, b_{11}, and b_{12}, are regression co-efficient of the corresponding independent variables.

Chapter 4

Result and Discussion

This study was aimed to study aimed to assess the COVID-19 impact on school dropout and child marriage in disadvantageous areas of Bangladesh. The results of this study were presented and discussed in this chapter. For the convenience of easy understanding, the results are presented under a subheading and data are presented in a table or graph.

4.1 Independent variables

4.1.1 Age

The age of the students ranged from 09 years to 18 years, and the mean was 13.32 with a standard deviation of 3.55. The age of the students was classified into 3 categories. 10 years or below, between 11-15 and above 15 (**Table 1)**

Table 1. Distribution of students according to their age (N=112)

Category	**Number of students**	**Percent**	**Mean ±SD**
10 years or below	21	17.50	13.32± 3.55
Between 11-15	64	53.34	
Above 15	32	26.66	

The result showed that among the participants, 17.50% were aged 10 years or below, 53.34% were between 11-15 and 26.66% were above 15. Generally, those aged 10 or below belong to primary school students, and those above 15 belong to higher secondary levels. Therefore, in this study, most participants belong to secondary school students.

4.1.2 Gender

Both male and female students participated in this study. The result showed that 46.66% were male participants while 53.34% were female students. (**Table 2)**

Table 2. Distribution of students according to their gender (N=112)

Category	**Basis of Category (Score)**	**Observed range (score)**	**Number of students**	**Percent**
Male	1	1-2	56	46.66
Female	2		64	53.34

4.1.3 Family Size

Based on family members, the family size of participants was classified into three major categories small, medium and large. The table result showed that among the participants, 23.33% of students had small families, 43.34% had medium families, and 33.33% had a large family (Table 3)

Table 3. Distribution of students based on family size (N=112)

Category	**Basis of Category (Score)**	**Observed range (score)**	**Number of respondents**	**Percent**
Small (Up to 5)	1	1-3	28	23.33
Medium (6-8)	2		52	43.34
Large (Above 8)	3		40	33.33

4.1.4 Number of earning members

The numbers of earning members of the participants vary from 1 to 3. Students are classified into 3 categories based on their number of earning members.

Table 4. Distribution of students based on the number of earning members (N=112)

Category	Basis of Category (Score)	Observed range (score)	Number respondents	Percent
One	1	1-3	93	77.50
Two	2		10	8.33
Three or more	3		17	14.17

Table 4 showed that among the participants, single earning member family was 77.50%, two earning members were 8.33%, and three or more earning members family was 14.17%. Findings indicated that the majority of the students had only one earning member. It may cause a nuclear family or a medium family with more children.

4.1.5 Monthly family income

The monthly family income of the students was categorized into three groups below 2000 Taka (Tk.)., 2000-5000Tk., and more than 5000Tk. Information regarding the monthly family income of the participants is presented in Table 5.

Table 5. Distribution of students based on the number of earning members (N=112)

Category	Basis of Category (Score)	Observed range (score)	Number respondents	Percent
Below 2000Tk.	1	1-3	60	50.00
2000-5000Tk.	2		44	36.66
>5000Tk.	3		16	13.34

The result showed that about 50% of participants had a monthly family income of

less than 2000Tk., 36.66% of participants had a monthly family income between 2000-5000Tk, and 13.34% had more than 5000Tk. These results indicate that most of the people of this area face challenges with their less earnings.

4.1.6 Level of study

Students from primary to higher secondary level participated in this study. The summary of the class finished by student participants are given in Table 6.

Table 6. Distribution of students based on class completed (N=112)

Category	Basis of Category (Score)	Observed range (score)	Number of students	Percent
Primary	1	1-3	26	21.66
Secondary	2		72	60.00
Higher Secondary	3		22	18.34

The table result showed that among the students, 21.66 % were in primary school, 60.00% of students from secondary school, and 18.34% were from higher secondary school. A higher percentage of students from secondary school indicates that most of this area could complete primary school and reach secondary school level.

4.1.7 Current study status

The study status of the participants of this study is presented in Table 7. As we mentioned, students from primary to higher secondary levels participated in this study; they consciously provided their decision based on their state of condition during the data collection period. For example, if any student engaged in any earning source, like in the agriculture sector, he expressed that he would probably drop the study as his family member decided to do so. Therefore, the figure presented in this study does not mean that it is absolute but is a strong indication.

Table 7. Distribution of students based on current study status (N=112)

Category	Basis of Category (Score)	Observed range (score)	Number of students	Percent
Continuing	1	1-2	49	40.83
School dropout	2		71	59.17

From the total of 112 participants, alarmingly 59.17% of students expressed that they would not have a chance to continue their studies as they lost all their motivation due to child labour, marriage or any other unavoidable fact. This means a very high number of students dropped out of school due to COVID-19. However, this reason is not absolute for all dropped-out students, as dropping out existed even before the pandemic. There was no recent published data to compare our results. However, a substantial increase in the dropout rate of primary students in Bangladesh was reported in a recent study (Li et al., 2020). They reported that 13% of primary school students plan to drop out due to the pandemic. They also recognized that the rate is much higher in rural Bangladesh. However, this study revealed that female students had a higher dropout rate (53.53%) compared to male students (46.47%) (Figure 6). This may be due to child marriage, mental depression, lack of study facilities during school closure, etc.(Khan et al., 2020; Zahra et al., 2020).

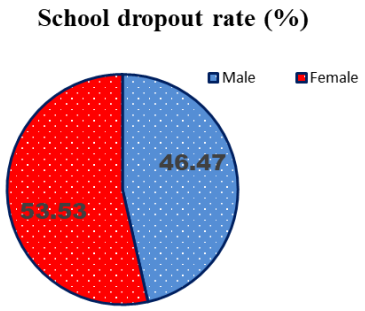

Figure 6. Effect of COVID-19 on school dropout in haor areas of Bangladesh

4.1.8 Marital status

In this study, we tried to measure the number of female students who married (child marriage) during the pandemic and the study status after their marriage. The data is presented in Table 8, and Figure 7 Study found that most female students (59.38%) got married during the pandemic, and only 40.62% were unmarried. During interviewing participants, one female student from grade 10 revealed that all-female students except one got married during the pandemic. This significant number of child marriages may be due to poverty as haors are considered disadvantageous in the country.

Table 8. Distribution of female students based on marital status (N=64)

Category	Basis of Category (Score)	Observed range (score)	Number of students	Percent
Married	1	1-2	38	59.38
Unmarried	2		26	40.62

It has been found that marriage goes hand in hand with higher happiness levels in many studies for different countries and periods. Married people have better physical and psychological health and live longer; premature mortality was found to be lowest for married persons. However, not every marriage has a happy ending. Economic, psychological and mental readiness is essential to a content and healthy marriage (Rasmussen et al., 2021). In some studies, economic reasons, social and cultural backgrounds have been addressed as the reasons behind child marriage (Musa et al., 2021; Rahiem, 2021; UNICEF, 2020b). Therefore, parents and relevant organizations should work together to prevent child marriage at any cost. Child marriage always put girls to a very negative situation. For example, early pregnancy, malnutrition, depression and inevitable school dropout. The rate of study status of married students during the pandemic in haor areas is presented in Figure 7.

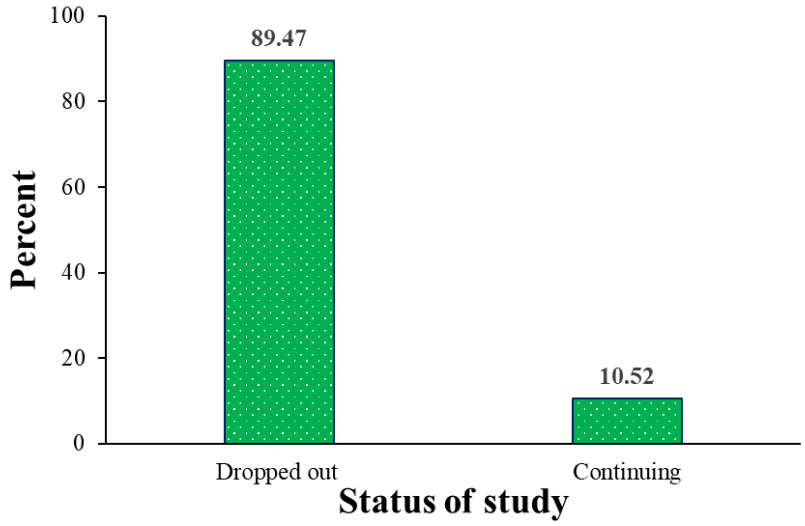

Figure 7. Study status of married female students in haor areas of Bangladesh after COVID-19

It can be seen that about 89% of students are not continuing their studies, while only about 11% of students are planning to continue their studies. However, continuing study after their marriage is not an easy task as most guardians are unaware of the importance of studying.

4.1.9 Service availability

Access to digital devices

The study found that among participants, 31.67% of students had access to digital devices for online classes during COVID-19 while 68.34% had no access to digital devices to connect to online study during COVID-19.

Use of electricity

Electricity has great importance in every sphere of life. This study found that 83.33% of students had access to electricity while 16.67% had no facility to use electricity. This is because some communities in haor areas are not connected to any electricity service provider.

Number of meals per day

Number of per meal is an important indicator of socio-economic condition. As haor areas are considered disadvantageous areas of Bangladesh, we tried to check if the number of meals per day significantly influences dependent variables. We found that 9.17% of participants mentioned having only one meal per day, whereas 50.83% and 40% of participants have two and three meals per day, respectively.

Condition of house

This study found that 64.16% of participants had Kacha house, 25.84% had semi Paka house while rest (10%) had a Paka house. We considered this factor an independent variable to check how it influences dependent variables.

4.1.10 Knowledge of COVID-19

Knowledge of COVID-19 of the students varied from 1 to 8, where the mean was 4.88 and the standard deviation was 1.05. Students were classified into three categories based on their knowledge: low, medium, and high.

Table 9. Distribution of participants based on their COVID-19 knowledge

Category	**Basis of categorization (score)**	**Observed range (score)**	**Number of Students**	**Percent**
Low knowledge	1-4.0 < (Mean -SD)	1-8	48	40.00
Medium knowledge	4.1-6.0 (Mean ± SD)		68	56.66
High knowledge	> 6.0 > (Mean +SD)		04	3.34

Table 9 showed that among the participants, 40% of the students had low knowledge, 56.66 % had medium knowledge, and only 3.34% had high knowledge of COVID-19.

Findings indicated that most students had low to medium knowledge on COVID-19. It was found that students gained knowledge of COVID-19 through television, family or group discussion, and social media that regularly supply news on COVID-19.

4.1.13 Socio-economic consequences of COVID-19

Human beings, by nature, are surprisingly resilient. People fight back against natural disasters, human-induced hazards, economic vulnerabilities, and health shocks and, in the process, they keep learning how to cope with and adapt to these adversities. But the degree to which one can withstand such adversities varies from person to person, even from community to community, based on their capacity and resources. In this study, we tried to estimate the effect of the COVID-19 pandemic on the socio-economic condition of local communities of haor areas. Different socioeconomic parameters were calculated based on the intensity index score summarized in Table 10. The intensity index score studied socio-economic factors ranged from 179 to 435.

Table 10. Rank order of the socio-economic consequences of COVID-19 in haor areas of Bangladesh

Sl. No.	**Name of Factors**	**Intensity index score**	**Rank**
1	Reduction of family income	435	1st
2	Borrowing money	428	2nd
3	Decrease in purchasing behaviour	426	3rd
4	Unable to continue children's education	414	4th
5	Decrease in the number of meals per day	358	5th
6	Decrease in medical facilities	318	6th
7	Migration for higher income	179	7th

According to this study, a reduction of family income due to COVID-19 was ranked first, borrowing money ranked second, decrease in purchasing behaviour ranked third. Then unable to continue children's education, decrease in the number of meals per day, a decrease of medical facilities and migration for higher income secured consecutive rank in decreasing order. The findings indicated that poverty (i.e. reduction of family income) is the height problem faced by local community during COVID-19. This could be resulted of many reasons like lack of working opportunities, less payment, less working

time compared to pre-pandemic time etc. Therefore, this result indicated that people from haor areas are entangled with many socio-economic problems due to COVID-19.

4.2 Dependent variables

4.2.1 Effect of COVID-19 on School dropout

Effect of COVID-19 on school dropout was varied from 4 to 30, where mean was 20.72 and standard deviation was ±7.12. The average value indicates that COVID-19 had considerable effect on school dropout in the study areas.

4.2.2 Effect of COVID-19 on Child marriage

Effect of COVID-19 on child marriage was varied from 4 to 26, where mean was 16.71 and standard deviation was ±7.60. The average value (16.71) indicates that COVID-19 had considerable effect on child marriage in the study areas, whereas the maximum possible score could be 28.

4.3 Contribution of independent variables on the effect of COVID-19 on school dropout

In this study, authors have 12 hypothesized relationships to assess the contribution of independent variables on the dependent variable (the effect COVID-19 on school dropout). From these 12 hypothesized relationships, seven (07) variables, namely gender, family size, number of earning members, monthly family income, study level, marital status, access to digital devices, condition of house, and knowledge of COVID-19 etc., were found to make a significant contribution to the effect of COVID-19 on school dropout in haor areas of Bangladesh. Among them gender, family size, and study level had significant positive contributions and number of earning members, monthly family income marital status, access to digital devices, condition of house, and knowledge of COVID-19 had significant negative contributions (Table 11). All the independent variables cooperatively contribute 57.3% of the variance of the effect of COVID- 19 on school dropout (R^2 =0.573).

Table 11. Multiple linear regression showing the contribution of selected independent variables on the effect of COVID-19 on School dropouts

Dependent variable	Independent variable	Reg. coefficient value	p	R^2	Adj. R^2	F
Effect of COVID-19 on school dropouts	Age	-0.45	0.05	0.573	0.524	11.95
	Gender	4.32	0.00**			
	Family size	1.32	0.00**			
	No. of earning member	-5.76	0.00**			
	Monthly family income	-1.24	0.34			
	Study level	3.79	0.00**			
	Marital status	-4.06	0.00**			
	Access to digital devices	-3.88	0.03*			
	Use of electricity	1.68	0.23			
	No. of meal/day	0.08	0.95			
	Condition of house	-2.45	0.03**			
	Knowledge of COVID-19	-1.41	0.01**			

* Significant at $p < 0.05$ ** Significant at $p < 0.01$

4.3.1 Gender

The contribution of gender was calculated by testing the following null hypothesis, "There is no contribution of gender to the effect of COVID-19 on school dropout of students in haor areas".

The p-value of the concerned variable was found to be 0.00 with regression co-efficient of 4.32.

The following observations were made based on the value of the concerned variable of the study under consideration.

I. The contribution of the gender was 432% (if other variables are constant) at 1% level of significance. In other words, this independent variable (gender) had 4.32 times positive effects on dependent variable (effect of COVID-19 on school dropout) if other variables were constant.

II. It was an important contributor to the effect of COVID-19 on school

dropouts in study areas

III. The null hypothesis could be rejected.

Gender had a positive influence on the effect of COVID-19 on school dropout. So, it can be concluded that the higher gender score (i.e. female) leads to more effect of COVID-19 on school dropout of students. That means female students had a higher risk of school dropout than male students.

4.3.2 Family Size

The contribution of gender was calculated by testing the following null hypothesis, "There is no contribution of family size to the effect of COVID-19 on school dropout of students in haor areas".

The p-value of the concerned variable was found to be 0.00 with coefficient value = 1.32.

The following observations were made based on the value of the concerned variable of the study under consideration.

IV. The contribution of the family size was 132% at 1% level of significance

I. It was an important contributor to the effect of COVID-19 on school dropouts in study areas

II. The null hypothesis could be rejected.

Family size positively influenced the effect of COVID-19 on school dropout. So, it can be concluded that the higher family size (i.e. larger family) lead to more effect of COVID-19 on school dropout of students. That means students from larger families had a higher risk of school dropout than small families.

4.3.3 Number of earning member

The contribution of the number of earning members was calculated by testing the following null hypothesis: "There is no contribution of number of earning members to the effect of COVID-19 on school dropout of students in haor areas".

The p-value of the concerned variable was found 0.00 with coefficient value = -5.76

The following observations were made on the basis of the value of the concerned variable of the study under consideration.

I. The contribution of the number of earning members was -576% at 1% level of significance
II. It was an important contributor to the effect of COVID-19 on school dropouts in study areas
III. The null hypothesis could be rejected.

The Number of earning members negatively influenced the effect of COVID-19 on school dropout. So, it can be concluded that the lower Number of earning member lead to more effect of COVID-19 on school dropout of students. It seems that a higher number of earning members could provide enough study support to their family members for continuing study.

4.3.4 Study level

The contribution of the study level was calculated by testing the following null hypothesis: "There is no contribution of study level to the effect of COVID-19 on school dropout of students in haor areas".

The p-value of the concerned variable was found 0.00 with coefficient = 3.79

The following observations were made on the basis of the value of the concerned variable of the study under consideration.

IV. The contribution of study level was 379% at 1% level of significance
V. It was an important contributor to the effect of COVID-19 on school dropouts in study areas
VI. The null hypothesis could be rejected.

The study level positively influenced the effect of COVID-19 on school dropout.

So, it can be concluded that the lower grade students were highly effected by COVID-19 which leads higher school dropout.

4.3.5 Marital status

The contribution of marital status was calculated by testing the following null hypothesis, “There is no contribution of marital status to the effect of COVID-19 on school dropout of students in haor areas”.

The p-value of the concerned variable was found to be 0.00 with coefficient = -4.06

The following observations were made based on the value of the concerned variable of the study under consideration.

I. The contribution of the marital status was 406% at 1% level of significance
II. It was an important contributor to the effect of COVID-19 on school dropouts in study areas
III. The null hypothesis could be rejected.

Marital status negatively influenced the effect of COVID-19 on school dropout. So, it can be concluded that if any student got married, she had more effect of COVID-19 on her school dropout.

4.3.6 Access to digital devices

The contribution of access to digital devices was calculated by testing the following null hypothesis, “There is no contribution of the access to digital devices to the effect of COVID-19 on school dropout of students in haor areas”.

The p-value of the concerned variable was found 0.03 with coefficient = -4.06.

The following observations were made based on the value of the concerned variable of the study under consideration.

I. The contribution of access to digital devices was 406% at 5% level of significance
II. It was an important contributor to the effect of COVID-19 on school dropouts in study areas
III. The null hypothesis could be rejected.

4.3.7 Condition of house

The contribution of condition of house was calculated by testing the following null hypothesis, “There is no contribution of condition of house to the effect of COVID-19 on school dropout of students in haor areas”.

The p-value of the concerned variable was found 0.03 with co-efficient = -2.45
The following observations were made based on the value of the concerned variable of the study under consideration.

IV. The contribution of condition of house was 245% at 5% level of significance
V. It was an important contributor to the effect of COVID-19 on school dropouts in study areas
VI. The null hypothesis could be rejected.

The condition of house negatively influenced the effect of COVID-19 on school dropout. So, it can be concluded that poor house condition leads to more effect of COVID-19 on school dropout of students in haor areas.

4.3.8 Knowledge of COVID-19

The contribution of knowledge of COVID-19 was calculated by testing the following null hypothesis, “There is no contribution of knowledge of COVID-19 to the effect of COVID-19 on school dropout of students in haor areas”.

The p-value of the concerned variable was found 0.01 with co-efficient = -1.41
The following observations were made based on the value of the concerned variable of the study under consideration.

I. The contribution of knowledge of COVID-19 was 141% at 5% level of significance
II. It was an important contributor to the effect of COVID-19 on school dropouts in study areas
III. The null hypothesis could be rejected.

The knowledge of COVID-19 negatively influenced the effect of COVID-19 on school dropout. So, it can be concluded that less knowledge of COVID-19 leads to more effect of COVID-19 on school dropout of students in haor areas.

4.4 Contribution of independent variables on the effect of COVID-19 on child marriage

To evaluate the impact of independent variables on the dependent variable (the effect of COVID-19 on child marriage), 12 hypothesized relationships are used in this study. From the 12 hypothesized relationships, five (05) variables, namely, gender, monthly family income, use of electricity, number of meals per day, condition of house etc., were found to make a significant contribution to the effect of COVID-19 on child marriage in haor areas of Bangladesh. Among them, gender, monthly family income, use of electricity, number of meals per day, condition of house etc. had significant positive contributions and monthly family income, number of meals per day, condition of house etc. had a significant negative contribution (Table 12). All the factors cooperatively contributed 64% of the variance of the effect of COVID- 19 on child marriage (R^2 =0.64).

Table 12. Contribution of independent variables on the effect of COVID-19 on child marriage

Dependent variable	**Independent variable**	**Reg. coefficient value**	**p**	**R^2**	**Adj. R^2**	**F**
Effect of COVID-19 on child marriage	Age	1.05	0.05	0.64	0.58	10.63
	Gender	4.77	0.03*			
	Family size	0.08	0.86			
	No. of earning member	0.29	0.82			
	Monthly family income	-6.61	0.01**			
	Study level	-3.47	0.22			
	Current study status	-3.77	0.12			
	Access to digital devices	-4.12	0.08			
	Use of electricity	5.14	0.03			
	No. of meal/day	-3.15	0.04			
	Condition of house	-5.03	0.00**			
	Knowledge of COVID-19	-0.17	0.84			

* Significant at p< 0.05 ** Significant at p< 0.01

4.4.1 Gender

The contribution of gender was calculated by testing the following null hypothesis, "There is no contribution of gender to the effect of COVID-19 on child marriage of students in haor areas".

The p-value of the concerned variable was found 0.03 with regression coefficient of 4.77.

The following observations were made based on the value of the concerned variable of the study under consideration.

I. The contribution of the gender was 477% (about 4.77 times) at a 5% level of significance if other variables were constant.
II. It was an important contributor to the effect of COVID-19 on child marriage in study areas
III. The null hypothesis could be rejected.

Gender had a positive influence on the effect of COVID-19 on child marriage. So, it can be concluded that the girls (higher score) had highly affected by COVID-19 induced child marriage.

4.4.2 Monthly family income

The contribution of monthly family income was calculated by testing the following null hypothesis, "There is no contribution of monthly family income to the effect of COVID-19 on school dropout of students in haor areas".

The p-value of the concerned variable was found 0.01with coefficient = -6.61
The following observations were made based on the value of the concerned variable of the study under consideration.

IV. The contribution of the monthly family income was 661% at 5% level of significance
V. It was an important contributor to the effect of COVID-19 on school dropout in study areas
VI. The null hypothesis could be rejected.

The monthly family income negatively influenced the effect of COVID-19 on child marriage. So, it can be concluded that students from lower-income families were more prone to get married during the pandemic.

4.4.3 Use of electricity

The contribution of the use of electricity was calculated by testing the following null hypothesis, “There is no contribution of use of electricity to the effect of COVID-19 on child marriage of students in haor areas”.

The p-value of the concerned variable was found 0.03 with coefficient = 5.14.

The following observations were made based on the value of the concerned variable of the study under consideration.

I. The contribution of the use of electricity was 514% at 5% level of significance
II. It was an important contributor to the effect of COVID-19 on child marriage in study areas
III. The null hypothesis could be rejected.

The use of electricity positively influenced the effect of COVID-19 on child marriage in haor areas. So, it can be concluded that in the villages out of electricity (score “2’’) had a significantly higher chance of getting married.

4.4.4 Number of meals per day

The contribution of the number of meals per day was calculated by testing the following null hypothesis, “There is no contribution of the number of meals per day to the effect of COVID-19 on child marriage of students in haor areas”.

The p-value of the concerned variable was found to be 0.04 with coefficient = -3.15.

The following observations were made based on the value of the concerned variable of the study under consideration.

I. The contribution of the number of meals per day was 315% at 5% level of significance
II. It was an important contributor to the effect of COVID-19 on child marriage in study areas
III. The null hypothesis could be rejected.

The number of meals per day negatively influenced the effect of COVID-19 on child marriage. So, it can be concluded that less the number of meals per day led to more effect of COVID-19 on child marriage of students. That means child marriage could have been avoided in some cases by providing direct financial support to the vulnerable families.

4.4.5 Condition of house

The contribution of the condition of house was calculated by testing the following null hypothesis, "There is no contribution of the condition of house to the effect of COVID-19 on child marriage of students in haor areas".

The p-value of the concerned variable was found 0.00 with co-efficient= -5.03.

The following observations were made based on the value of the concerned variable of the study under consideration.

I. The contribution of the condition of house was 503% at 1% level of significance
II. It was an important contributor to the effect of COVID-19 on child marriage in study areas
III. The null hypothesis could be rejected.

The condition of house had a negative influence on the effect of COVID-19 on child marriage. Understandably, poor families live in kacha house who were in a vulnerable condition to support the study of their family members. That's why they decided to marry their girls.

4.5 Recommendation to reduce school dropout and child marriage in haor areas of Bangladesh

Education is not only a fundamental human right. It is an enabling right with a direct impact on the realization of all other human rights. It is a global common good and a primary driver of progress across all 17 Sustainable Development Goals as a bedrock of just, equal, inclusive peaceful societies (Sakamoto et al., 2020). When education systems collapse, peace, prosperous and productive societies cannot be sustained. Many social problems like child marriage and labour are linked with education. Therefore, it is urgent to educate the next generation by preventing school dropout and child marriage all over the country, even in any worse situation like pandemic.

The COVID-19 pandemic has varying degrees of impact on school dropout and child marriage in haor areas of Bangladesh. This study revealed that even though school dropout and child marriage existed before COVID-19 but the pandemic has severely worsened the situation. According to student participants and interviewed school teachers, the crucial factors behind school dropout and child marriage during COVID-19 in the study area are listed below:

- Lower family income due to the lockdown
- Parent's lack of interest
- Lack of online study facilities
- Parent's forced to work/marriage
- School phobia due to longtime shutdown
- Hostile environment
- Death of main earning members
- Religious and social constraints

Based on identified factors of school dropout and child marriage, we have collected suggestions from school teachers for reducing school dropout and child marriage in the study area. We prioritized their opinion as they know best about their students and their social and other constraints. We carefully summarized the characteristics and intensity of each problem and possible ways to move forward.

Support to the vulnerable families

Family income, or in other words, “economic status,” plays an immense role in the education of family members, as quality education depends on investing money in this sector. This study elicited that the study was severely affected by the financial condition of their guardians during the pandemic as many students dropped out due to a lack of money to bear the expenditure of new online systems. Most of the respondents spoke about the financial crisis, which impacted their studies. In some cases, the situation worsened due to the loss of earning member’s jobs due to COVID-19. Some respondents expressed that they depend on their families for daily needs. It was a burden for them to manage extra money for buying internet packages. The high cost of attending online classes was a major reason behind their dropout. In addition, some female representatives said they suffered from malnutrition and immunity problems and didn’t have proper food and medical facilities as their earning members became jobless during the pandemic. They also identified that poverty due to lower family income was the main reason for their child marriage and school dropout. Therefore, it is recommended that government and rural development organizations to focus on local job creation (float farming, rearing cattle, cottage industry, fish processing factory etc.) both for men and women so that they can sustain even in any worse situation like a pandemic. Moreover, special financial support focusing on education, particularly female education, should be provided by national and international agencies.

Parents' motivation and counselling

Education is the most dependable weapon in terms of national policy to enhance skills. However, family, then the nation should recognize this truth first. Unfortunately, many parents do not recognize it might be because of their illiteracy or financial crisis. This study found severe effects of COVID-19 on school dropout and child marriage in the hoar areas of Bangladesh. Most respondents expressed that their parents did not know how to and did not help children in this unprecedented time and incredibly rapid change in learning methods. Parents from haor areas failed to adopt children to the online learning systems.

Moreover, we found that parents with no or low education background did not understand the effects of child marriage effect such as health, economic situation and the physical or mental abuse that might happen to the girl. Regrettably, many parents worried about their school-going daughters being considered a spinster. They are more afraid that their children do not obey the social or cultural standards and, consequently, how the family will be viewed. Therefore, parents' interest in education is mandatory to overcome this situation. Teachers from local educational institutes suggested that motivation and parental counselling is a good way to overcome this situation. For example, school dropout and child marriage rates increase during school-off periods. Therefore, during such periods, teachers can keep in touch with their students and guardians to keep track. This approach is somewhat present in some areas that seem very effective to many respondents.

Promotion of online learning facilities

In this pandemic crisis, online education has emerged as an immediate alternative to the traditional tertiary education system worldwide, even in Bangladesh. Though online learning has its share of issues, it is a popular innovative method for providing education. The present study identified several common problems concerning online education in the haor areas of Bangladesh. Bangladesh faced many challenges in implementing online education with limited technical resources in developing country. The online learning problems were: the absence of electronic devices like smartphones and computers, limited or no access to the internet, high cost of mobile internet packages, absence of broadband connections, and interruption in online classes because of low speed or no speed of the internet and frequent power cut problem in the haor areas. These findings followed the results of previous studies (Dutta & Smita, 2020).

Moreover, this study indicated the factors that could hamper students' online academic education: lacking of skills in using technical devices, unfamiliarity with the functions of online class platforms like Zoom, Google Meet, and Google classroom, no and little preparation of teachers for running online teaching. Therefore, solving the issues concerning online education is essential to run the proper educational program during a Pandemic like COVID-19. So, it is recommended to provide necessary equipment like electronic devices and free or

cheaper internet packages to tertiary-level students during the COVID-19 pandemic period. Also, immediate actions should be taken to improve internet speed, develop easy learning management systems and providing technical training for students and teachers on online education.

Promotion of female education

In certain cultures, faith has become the key reference point for human beliefs, which have become an integral part of an episode of a person's life. However, if the faith is biased or manipulated, then the consequences are drastic. Bangladesh is an Islamic country. Here, more than 90% of people are Muslim. This peaceful religion highly promoted to be educated and acquiring knowledge. However, we can see many anomalies happen by the name of religion in different parts of the country, mainly due to improper teaching of religion. In this study, we experienced issues that appeared to be wrongly presented by religion. For example, many believe that early or child marriages can prevent adultery, a major sin in Islam. While marriage is widely accepted as a personal choice in developed countries, people of haor areas of Bangladesh still believe that marriage extends beyond their personal choice and considers it a religious demand or a social obligation. Local religious leaders usually promote marriage to prevent premarital sexual activities, as having a child out of wedlock is viewed negatively. Maintaining the family's good name and social status is also explained by the participants in this research. However, overcoming this social and religious miss explanation is tough, but the situation can be improved gradually. In this case, proper study and acknowledgement of the beauty of religion are essential. Therefore, religious and community leaders must be trained to promote female education and stop child marriage in the study area.

Government intervention to prevent school dropout and child marriage

Education is the backbone of a nation. Any nation without an educated future generation will not sustain itself. School dropout and child marriage are two important issues hindering any nation's progress. In this study, we found that school dropout and child marriage increased significantly in haor areas due to the closure of educational institutions because of COVID-19 pandemic. To stop such pandemic-influenced school dropouts and child marriage, we have discussed some issues to keep the severity minimum. However, it is impossible unless government motivate

and take proper initiatives. The present government of Bangladesh has taken numerous initiatives to boost online learning by providing direct financial support to students of disadvantaged areas throughout the country. But, the government should focus more on students of haor areas concerning some particular issues to reduce child marriage and school dropout. We found that financial problems and online learning facilities were the major drawbacks in the haor areas; thus, the government should focus on these issues seriously. The government should take appropriate steps to reduce the price of the internet. They can provide education loans for students and teachers to buy smart gadgets. With the Ministry of Education and various agencies' help, teachers need to be trained and made suitable for taking online classes.

Moreover, the government should try its best to hand over electronic devices to the students, which Italy did within months of the onset of the epidemic. We must follow how China has launched the world's most extensive online education system across the country. To prevent cheating in online exams, teachers can set questions that require a higher level of thinking. The government should give a helping hand to vulnerable families who lost their jobs due to this pandemic. To prevent the students' anxiety and depression in this situation, society and family have to play a huge role alongside the government.

Furthermore, massive social awareness and proper financial support from the respective should be ensured for the students during this pandemic. Otherwise, the total educational system may be devastated. Cost-free nutritional food and drinking water should be provided to needy children by the government, besides ensuring economic support to their families.

Chapter 5

Conclusion

The COVID-19 outbreak has spread its adverse effects on students' education, including health, economy, and societal relationship. The measures like social distancing, quarantine, and closure of educational institutions taken to reduce the transmission of the disease have impacted students' academic learning to a great extent. The significant effects of this pandemic have crippled the conventional education system of Bangladesh, whereas disadvantageous areas have experienced its worst. Students from such areas have fallen into a massive problem with their future due to school dropouts or child marriage. The current study sheds light on the impacts of the COVID-19 pandemic on school dropout and child marriage in the haor areas of Bangladesh. It was found that the difficulties with the new paradigm of learning, physical and mental health problems, and the economic crisis caused by the outbreak of COVID-19, had discrepant consequences like school dropout and child marriage on the students of disadvantageous agricultural areas in Bangladesh. Based on the structured study, the key points are summarized below:

- The age of the students ranged from 09 years to 18 years, and the mean was 13.32 with a standard deviation of 3.55.
- 46.66% of participants were male, and 53.34% of participants were female students
- 23.33% of students were from a small family (member: <=5), 43.34% were from a medium family (member: 6-8), and rest, 33.33% from a large family (member:>8), whereas most families (about 77.5%) has one earning member
- About 50% of respondent's family has a monthly income below Tk.2000, followed by a monthly income range of Tk. 2000-5000 (about 36.66%) and above Tk. 5000 (13.34%)
- About 60% of respondents were from secondary school which was followed by primary school (21.66%), and higher secondary school (18.34%)
- Alarmingly, about 59.17% of participants permanently dropped out of school while the rest (40.83%) students continued the study. In 59.15% dropped out participants, about 54% were female and 46% were male students.

- Among all female students interviewed in this study from primary to higher secondary schools, about 59.38% were married (child marriage), whereas 89% of these married students permanently dropped out.
- Among all participants, about 68% of students had no access to digital devices for online learning during school closures due to the pandemic.
- COVID-19 affect assessment study found school dropout ranked top, followed by child marriage, and child labor
- Contribution of independent variables on the effect of Covid-19 on school dropout found that gender, family size, and study level had a significant positive contribution and number of earning members, monthly family income marital status, access to digital devices, condition of house, and knowledge of COVID-19 had a significant negative contribution. All the factors cooperatively contribute 57.3% of the variance of the effect of COVID- 19 on school dropout (R^2 =0.573).

- From the 12 hypothesized relationships, five (05) variables, namely, gender, monthly family income, use of electricity, number of meals per day, condition of house etc., were found to significantly contribute to the effect of COVID-19 on child marriage in haor areas of Bangladesh. Among them gender, monthly family income, use of electricity, number of meals per day, condition of house etc. had significant positive contributions and monthly family income, number of meals per day, condition of house etc had a significant negative contribution. All the factors cooperatively contribute 64% of the variance of effect of COVID- 19 on school dropout (R^2 =0.64).
- To avert the long-term effects of longtime shutdown due to COVID-19 pandemic such as child marriage and school dropout in haor areas, it is highly recommended to take concerted initiatives involving parents, students, society and religious leaders, government, international bodies and other relevant stakeholders.

In summary, in the post-COVID situation, there is an opportunity to rebuild the education system in haor areas of Bangladesh with a special focus on female education and vulnerable students. To reduce the school dropout and child marriage in any negative situation like pandemic, a sustainable action plan is also need to be

implemented with concerted efforts from family to the government level. History says that crisis creates an opportunity to think new. One of the positive aspects of the COVID-19 impact on haor areas is that it allows rebuilding the policy, philosophy and action plan for the days ahead.

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Appendix

Department of Development and Poverty Studies

Sher-e-Bangla Agricultural University, Dhaka-1207

Questionnaire for the study entitled-

Effect of COVID-19 on school dropout and child marriage: a study in some selected areas of Haor region in Bangladesh

Serial No.: _____ **Date: _____**

Dear respondent,
All of your information will be kept confidential and will be used for research purposes only.
Please provide the following information.

1. Socio-demographic information

Name of respondent:	
Address:	Village: Union: Upazila: District:
Name of the School/College:	
Age	
Gender	1. Male 2. Female
Family size (Total Family Members)	
Number of earning members	
Monthly family income (Tk.)	1. <2000 2. 2000-5000 3. > 5000
Level of study	1. Primary 2. Secondary 3. Higher Secondary
Current study status	1. Continuing 2. Dropout
Marital status	1. Married 2. Unmarried
Service availability (S)	**Access of digital devices (S1):** 1) Yes 2) No **Use of electricity (S2):** 1) Yes 2) No **No. of meal per day (S3)**: 1) 1 meal 2) 2 meal 3) 3 meal **Condition of house (S4)**: 1) Katcha 2) Semi Paka 3) Paka

2. Knowledge on COVID-19

Sl. No.	Questions	Full marks	Obtained marks
1	Do you know what COVID-19 is?	2	
2	What are the symptoms of COVID-19?	2	
3	How can anyone be affected by COVID-19?	2	
4	Do you know what quarantine and isolation are?	2	
5	What are the preventive measures for this pandemic?	2	

3. Effect of COVID-19 on school dropout

Sl. No.	Effects	Intensity or Score				
		Severe (4)	**High (3)**	**Medium (2)**	**Low (1)**	**Not at all (0)**
1	Not attending school at all					
2	Not promoted to the expected class					
3	Unable to bear higher cost					
4	Decrease study time					
5	Child marriage					
6	Lost motivation for study					
7	School phobia due to longtime shutdown					
8	Depression					
9	Child labor					

4. Effect of COVID-19 on child marriage

Sl. No.	Effects	Intensity or Score				
		Severe (4)	High (3)	Medium (2)	Low (1)	Not at all (0)
1	Permanent school dropout due to marriage					
2	Load of household works					
3	Depression and mental pressure					
4	Malnutrition					
5	Less medical support					
6	Early maternity					
7	Others (Please specify)					

5. Socio-economic consequences of COVID-19

Sl. No.	Parameter	Extent of effect				
		Severe (4)	High (3)	Medium (2)	Low (1)	Not at all (0)
1	Reduction of family income					
2	Decrease in purchasing behavior					
3	Decrease in number of meals per day					
4	Decrease of medical facilities					
5	Unable to continue children's education					
6	Borrowing money					
7	Migration for higher income					

6. Teachers Recommendation

Have your school provided any financial aid to bring back school dropout students?	○ Yes ○ No
What is your recommendation to avoid school dropouts during the pandemic?	
What is your recommendation to reduce child marriage in your area?	

Thank you for your response!