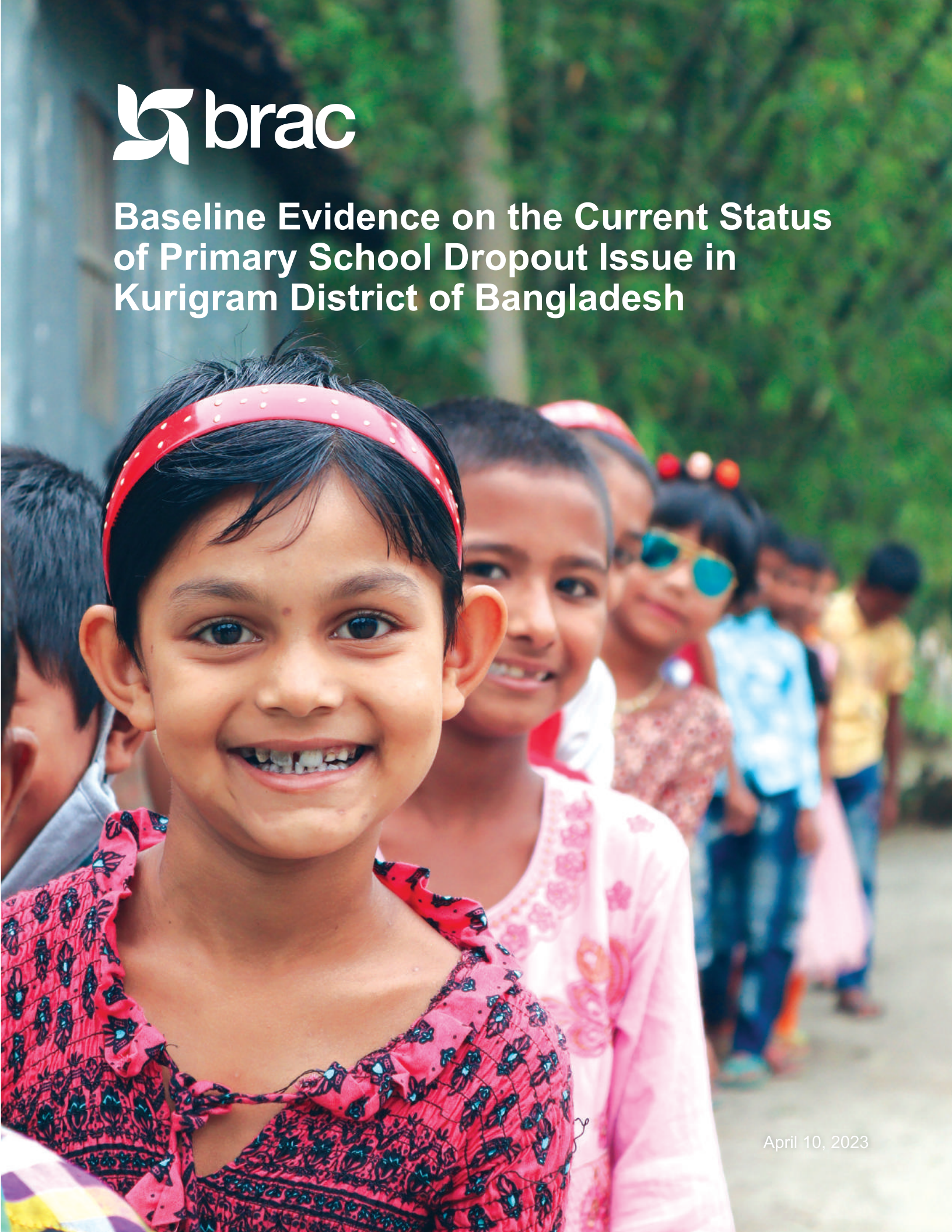

Baseline Evidence on the Current Status of Primary School Dropout Issue in Kurigram District of Bangladesh

April 10, 2023

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10 April 2023

BRAC James P Grant School of Public Health, BRAC University

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BASELINE EVIDENCE ON THE CURRENT STATUS OF PRIMARY SCHOOL DROPOUT ISSUE IN KURIGRAM DISTRICT OF BANGLADESH

10 April 2023

DISCLAIMER

This study was conducted at the request of the BRAC Education Programme.

Any opinions, findings, conclusion or recommendations expressed in this publication are those of the authors and do not necessarily reflect the view of the BRAC Education Programme.

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The Hempel Foundation and BRAC Education Programme generously provided funding for this baseline research. This study would not have been possible without their support.

We sincerely appreciate the BRAC Education Programme team's assistance during the baseline research. Without the support and direction of BRAC's Regional Managers and Branch Managers in Kurigram, this study would not have been feasible. We also appreciate the support of BRAC Education Programme's teachers in the collection of school-level social-emotional data of students.

Additionally, we would like to express our gratitude to the Field Research Assistants for their dedication, hard work, and effort in collecting data from the Kurigram district amidst all the geographical and infrastructural constraints.

EXECUTIVE SUMMARY

COVID-19, one of the most significant pandemics to ever hit the world, has significantly impacted the education sector worldwide. With diverse challenges faced in almost every sector of an economy, starting from job security and health and agricultural products, the impacts of COVID-19 were devastating, affecting years of progress and incurring trillions of dollars in losses globally. According to the International Labor Organisation (ILO), 114 million people lost their jobs (International Labor Organisation, 2020). Not only that, but the economic recession and job loss caused by the pandemic may lead to 588 million people living in extreme poverty in 2030 globally (Kharas & Dooley, 2021)

Simultaneously, almost 1.6 billion students were deprived of proper education for nearly two years (United Nations, 2020). Until 24th January 2021, statistics indicated that partial or complete school closure has impacted over 616 million students globally (UNICEF, 2022). According to UNICEF, approximately 430 million children in South Asia have been affected by school closures. They are at risk of dropping out of school as a result of their families' financial constraints. Moreover, children who were to be reached through different online platforms also lagged due to insufficient connections to the internet.

As the schools closed, students who were to study from home faced difficulties connecting to their educational institutions and ultimately lost touch with their educators and classmates for the two years

that Bangladesh was in lockdown. This caused a massive knowledge gap among those students and led to them engaging in other activities, which usually involved helping their families cover the financial losses suffered due to the pandemic.

In order to help the Government of Bangladesh address the challenge of continuing education for children, BRAC Education Programme (BEP) has come forward and collaborated with the Hempel Foundation to engage in trying to cover the learning loss experienced by primary school students in selected areas of Bangladesh. The main aim behind their collaborative project is to ensure that the students who have fallen out of school and can be categorised as out-of-school children (OOSC) are being facilitated so that their learning loss and their dropout rate is minimised.

BRAC Education Programme has developed a 10-month "Accelerated Model" intervention, which will aim to help out-of-school children cover the learning loss they have incurred due to the pandemic and fast-track themselves back to the educational track they have been following pre-pandemic. With Hempel Foundation's more than 10 years of experience in the education sector and its main aim to empower children living in poverty to learn, the Hempel Foundation has initiated projects supporting quality education for 280,000 children. Of these 280,000 children globally involved in Hempel Foundation projects, 213,000 children are in projects either currently ongoing or being developed (Hempel Foundation, 2020)

A 4-month catch-up course and a 6-month accelerated course make up this 10-month "Accelerated Model" non-formal primary education initiative. Bridge School's cohorts consist of roughly 25–30 children. Students take an aptitude exam at the beginning of the course to determine their readiness. The model encourages the children to pick up where they left off in school and make the most of their prior learning investments. The 6-month accelerated course will be utilised to develop and receive grade-level competency.

The following are the objectives of the baseline research:

Objective 1: To explore the present condition of targeted beneficiaries (OOSC, their families and the broader communities where they live) in selected study sites where BEP plans to implement the intervention;

Objective 2: To generate evidence on the local factors preventing students from returning to schools in the study districts;

Objective 3: To provide a point of reference against which the achievement of outputs and outcomes will be assessed, monitored, and evaluated;

Objective 4: To document the challenges of implementing the projects in the study districts and propose recommendations to achieve the project goals;

Objective 5: To assess the literacy and numeracy proficiency as well as social and emotional development of OOSC at the baseline level;

Objective 6: To explore the capacity of the teachers to provide accelerated teaching-learning pedagogy and socio-emotional support to OOSC at the baseline level;

Objective 7: To collect data relevant to resources spent by the BRAC Education Programme for different projects during the baseline period.

A concurrent mixed methods design was used to carry out the study, and quantitative and qualitative data were collected at the same time simultaneously. A desk review was also carried out in Pubmed. The qualitative component included in-depth interviews (IDIs) among school-going children as well as with their parents, focus group discussions (FGDs) with parents, school committee members and residents, and key informant interviews (KIIs) among government and non-government stakeholders. In contrast, the quantitative component included a representative household survey in the study sites where school-going children reside. OOSC are children in the official primary school age range who are not enrolled in either primary or secondary schools (INEE, n.d.).

For the quantitative survey, the enumerators visited 1,243 households in 24 unions of Kurigram district. A small percentage of the respondents (7.3%) were from the Rajarhat sub-district, whereas 21.7% were from the Fulbari sub-district and 5.8% from the Chilmari sub-district.

Among the 1,243 survey respondents, 182 were males, and 1,061 were females. More than three-fifths (69.4 %) of the respondents were from the age group 15 to 35 years, followed by 30.6% who were above 35 years old. Muslim respondents made up 91% of the sample, with the remaining respondents being of Hinduism faith.

Multiple factors contributed to the overall dropout of students. Among the 2% that did not go to school (20 out of 1,243) at the time of survey data collection, the most prevalent reason is school closure for COVID-19, followed by lack of awareness regarding education.

Parents reported that before the pandemic, the prevalence of dropout was quite low. Even if students were not as severe in their studies or would not get good grades, they still would attend classes. As COVID-19 struck, the less enthusiastic students and the studious ones suffered greatly. The number of dropouts increased rapidly in the two years as institutions were physically closed and alternative remote learning methods were not accessible to all. However, respondents shared that slowly, the students have been trying to overcome the learning loss. Even if the education status of people is poor in the area, parents are aware of the importance of education and enrolling their children in schools.

We have administered aptitude tests among 1,119 students across the Kurigram District to evaluate their current numeracy and literacy condition.

An assessment was also conducted to evaluate the socio-emotional conditions of the students in Kurigram through the help of behavioural screening questionnaire, “Strengths and Difficulties Questionnaire (SDQ)”. It showed that most of the students are in a good state of mental health and psychosocial well-being. Among all the students, 96% are unlikely to have a significant emotional problem. Besides, 96%

of the students are unlikely to have significant difficulties in social life, whereas only 2% are at risk of problems in social behaviour.

The value-for-money analysis provided a detailed description of the costs incurred in the accelerated learning programme. Our estimate showed that among the total cost of the programme, teachers' costs accounted for about 27 percent of the total cost, followed by learner costs accounting for 23 percent, supervision and monitoring costs 16 percent and infrastructure and teacher development costs each 17 percent. Besides, programme development cost accounted for 19 percent of the total programme cost and programme implementation cost was responsible for 81 percent of the entire programme cost. In terms of unit costs, it was found that for the 6 months period from January 2022 to July 2022, the average cost per school was BDT 86,958 and per month the cost was about BDT 12,423. Besides, the monthly cost per child was found as BDT 497, which can be around BDT 8,124 yearly (based on the programme budget). In terms of effectiveness and equity, most of the indicators could not be calculated due to the unavailability of relevant data since the current study is doing a baseline assessment. But based on the MIS data the study team could avail so far, it is worth saying that the programme is ensuring equity by emphasising on enrolling girl children and children with disabilities in the schools.

Through the baseline investigation, the research team gathered several recommendations from different groups of study respondents. According to the survey respondents, many parents suggested that BEP schools should offer snacks and stipends to entice more OOSC to enrol back in classes. Additionally, parents wanted better academic and infrastructure assistance, especially for children with impairments.

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LIST OF ABBREVIATIONS

APSC	Annual Primary School Census
BEP	BRAC Education Programme
BIDS	Bangladesh Institute of Development Studies
COVID-19	Coronavirus Disease 2019
DFID	Department for International Development
DPE	Directorate of Primary Education
FGD	Focus Group Discussion
GoB	Government of Bangladesh
HtRA	Hard-to-reach area
IDI	In-depth Interview
ILO	International Labor Organization
KII	Key Informant Interview
Mesh	Medical Subject Headings
MoPME	Ministry of Primary and Mass Education
OOSC	Out-of-school children
SDG	Sustainable Development Goal
SDQ	Strengths and Difficulties Questionnaire
SMC	School Management Committee
VfM	Value for Money
WFP	World Food Programme

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BACKGROUND

Education is known to contribute to comprehensive human development through its influence on a person's intellectual, socio-emotional, physical, productive, and interactive skills (Hahn & Truman, 2015). It also has a consequential impact on the overall well-being of a person, mainly due to its influence on employment, capacity building, awareness, and sustainable development based on progress. Sustainable Development Goals (SDGs) also highlight the importance of education for all irrespective of gender, ethnicity, culture, and other social traits, particularly through SDG 4, which states that all countries must "ensure inclusive and equitable quality education and promote lifelong learning opportunities for everyone." It further reinstates that "education builds on itself, creating greater capacity to educate others and nurture a culture that values learning" (United Nations, 2022).

The benefits of education surpass its essential potential to build capacity within individuals. According to existing evidence, 420 million people will be lifted out of poverty with proper access to education (UNESCO Institute for Statistics , 2017) by 2030. Education also promotes gender equality and helps empower girls and women. A World Bank report found that an extra year of schooling for girls reduces teen pregnancy by six percent, whereas according to UNESCO, a child born to a mother who can read is 50 percent more likely to survive past the age of five as compared to mothers who have no reading or writing skills. Hence, to eradicate poverty and hunger, have substantial financial security, and influence awareness regarding human rights, environmental sustainability, and health, education is a necessity.

Since the early 1990s, Bangladesh has been doing well in increasing access to education. But the progress has significantly manifolded within the last 10 years. With about 98 percent of

children of primary school age attending school, Bangladesh, a nation with more than 18 million primary school students, has achieved near-universal net primary enrolment. Furthermore, significant projects such as Quality Learning for All Programme totaling $700 million with the World Bank have helped Bangladesh to establish better primary education services within the country (The World Bank, 2018).

However, there is a prominent educational disparity in certain geographical communities where infrastructure, access to educational facilities, and natural calamities have affected regular access to educational facilities and resources. Even though urban areas of Bangladesh have multiple educational outlets, rural communities, particularly the hard-to-reach areas (HtRA), face extreme hardship in the continuation of basic primary education due to lack of proper teachers, supplication of books and stationaries, proper housing for conducting classes etc.

Even though Bangladesh has one of the largest primary education systems in the world, according to the Directorate of Primary Education (DPE), with a total of 37,672 government primary schools in the country with an estimated 10.7 million primary school-aged children (6 to10 years), at present, a total of 6,300 primary schools do not have a headmaster. The minimum international standard for student-teacher ratio is 30:1, but in Bangladesh, this ratio is 53:1 (Haider, 2014).

The World Bank defines hard-to-reach (HtRAs) areas as “Areas with poor water and sanitation coverage due to adverse geological formation and frequent occurrence of natural calamities which result in a higher rate of child mortality and accelerate the vicious cycle of poverty.” People of hard-to-reach areas are called hard-to-reach people due to their social exclusion from adequate water and sanitation services (Ahmed & Hassan, 2012).

HtRAs also specifically lag in terms of financial stability; thus, the situation becomes dire for most hard-to-reach people to facilitate their children’s education. This economic and educational disparity is of great concern in Bangladesh. According to a report by Ahmed & Hassan, almost 17% population of the country suffers from extreme poverty and can only maintain livelihood hand to mouth. The hard-to-reach people have a very fragile financial and economic standing. Lack of proper sanitation and water has made day-to-day life difficult for the hard-to-reach population. (Ahmed & Hassan, 2012).

The COVID-19 pandemic has significantly impacted the education sector worldwide. COVID-19, one of the largest pandemics to ever hit the world, made a radical difference in the way education is run in the world. With diverse challenges faced in almost every sector of an economy, starting from job security, health and agricultural products, the impacts of COVID-19 were devastating and diverse, adversely affecting years of progress and incurring trillions of dollars in losses. According to the International Labor Organisation (ILO), 114 million people lost their jobs (International Labor Organisation, 2020). Not only that, but also, the economic recession and job loss caused by the pandemic may lead to 588 million people living in extreme poverty in 2030 globally (Kharas & Dooley, 2021).

Simultaneously, almost 1.6 billion students were deprived of proper education for nearly two years (United Nations, 2020). Until 24th January 2021, statistics indicated that partial or complete school closure has impacted over 616 million students globally (UNICEF, 2022). According to UNICEF, approximately 430 million children in South Asia have been affected by school closures.

They are at risk of dropping out of school due to their families' financial constraints. Moreover, children who were to be reached through different online platforms also lagged due to insufficient connections to the internet.

As the schools closed, students who were to study from home faced difficulties connecting to their educational institutions and ultimately lost touch with their educators and classmates for the two years that Bangladesh was in lockdown. This particularly caused a massive knowledge gap among those students and also led to them engaging in other activities, which usually involved helping their families cover the financial losses suffered due to the pandemic.

These struggles related to the pandemic were faced the most by the hard-to-reach people as they were already in a vulnerable state regarding their educational facilities. The transition from in-person classes to online classes was tough to adapt for the hard-to-reach children as inadequate technological infrastructure, poor internet connection, lack of digital literacy, availability of mobile networks, the expense of the internet method of online teaching, and other variables limit the effectiveness of online education.

A study conducted among university students in Bangladesh showed that only 55.3 percent of students had access to a laptop, computer, or tablet to attend an online class which suggests that 44.6 percent of students are unable to attend online classes due to logistical issues (Khan, Rahman, & Islam, 2021). Even though such marginalised communities struggled with these technological strains, teachers also faced similar constraints in trying to stay connected with the students. It is difficult for most of them to teach through online platforms. Lack of digital literacy, training in proper conduction of classes through a digital platform and remote learning methodologies, among other constraints, led to teachers struggling to cope with the demands of the students and further made it a tiresome process to conduct a single class.

Education plays a vital role in the inclusivity of people of different ethnic, racial, and religious backgrounds. Still, COVID-19 pandemic also caused a disparity within such communities as inclusive teaching practices could not be executed well over digital platforms. Differences in socio-economic conditions within the communities also fueled the lack of active and equal participation.

In order to help the Government of Bangladesh address the challenge of continuing education for children, BRAC Education Programme (BEP) has come forward and collaborated with Hempel Foundation to try to cover the learning loss experienced by the primary school students in selected areas of Bangladesh. The main aim behind their collaborative project is to ensure that the students who have fallen out of school and can be categorised as out-of-school children (OOSC) are being facilitated so that their learning loss is reduced and their dropout rate is minimised.

BRAC Education Programme (BEP) has been well known globally because of its prominent and impactful projects in the education sector. With more than 35 years of experience in providing education and encouraging basic reading, numeracy, and life skills among underprivileged and vulnerable primary school pupils in numerous remote and HtRAs areas of Bangladesh, BEP has played a significant role in the achievement of Education for All (EFA) in Bangladesh. Starting from 1985 with 22 one-room primary schools, BEP has collaborated with prominent education bodies in Bangladesh including the Ministry of Primary and Mass Education (MoPME) of the Government of Bangladesh. BEP also engaged with the Ministry

of Social Welfare and the Ministry of Education to improve access to education for children with disabilities the implementing inclusive schooling policy and procedures.

BRAC Education Programme has implemented many different models to facilitate educational equity. Amongst them, one significant model known as "Bridge School" can be associated with the programmes they have established to cover the learning loss experienced by the students due to the pandemic.

"The Bridge School Programme", will last over five-year period, will aim to enrol 60,000 vulnerable and disadvantaged OOSC across Bangladesh into quality primary education. The project will mainly include activities in the country's urban slums and hard-to-reach locations where the dropout rate amongst class 2 through 4 students is especially pronounced. BRAC has targeted three main goals for their bridge school, which include enrolling OOSC who have dropped out of formal primary school, ensuring retention and the completion of the primary cycle of enrolled students, and providing quality primary education that engenders holistic development.

The project will establish 2,500 schools in 36 districts across seven of Bangladesh's Divisions. Each Bridge School will comprise one locally recruited teacher and no more than 24 students.

The model was first piloted by BRAC in Bangladesh in 2013, with 39 schools, and has rapidly expanded since, now engaging 59,433 students through 2,100 school sites. After completion, students sit Bangladesh's Primary Education Completion Examination (PECE). Pass rates are impressive – 99.83% of students passed in the first cohort in 2016, and consequent years have borne similar results. To date, 30,428 students have graduated (Touhid, 2021).

Even though the Bridge Schools succeeded in enrolling those who were out of school for a very long time, the sudden shift in teaching methods due to the COVID-19 pandemic led to a disruption in the way these schools were run. This further impacted the course programme to lose track and, ultimately, hampered the enrolment rates that the programmes were achieving.

Thus, the BRAC Education Programme alongside Hempel Foundation has come up with a 10-month "Accelerated Model" intervention which will aim to help out-of-school children cover the learning loss they have incurred due to the pandemic and fast-track themselves back to the educational track they have been following pre-pandemic. With Hempel Foundation's more than 10 years of experience in the education sector and its main aim to empower children living in poverty to learn, the Hempel Foundation has initiated projects supporting quality education for 280,000 children. Of these 280,000 children globally involved in Hempel Foundation projects, 213,000 children are in projects either currently ongoing or being developed (Hempel Foundation, 2020)

The Accelerated Model will include establishing one-room schools in several districts of Bangladesh to provide 10 months of primary education to OOSC. As the pandemic has increased the dropout rate significantly within Bangladesh, this programme will allow the students to transition into government primary schools. Run by one female teacher with an average class size of 25 children, these schools will aim to be inclusive towards all kinds of ethnic, racial, religious and gender segments and are targeting to facilitate students with mild to moderate disabilities (up to 3 percent of the class size).

A 4-month bridging course and a 6-month accelerated course make up this 10-month "Accelerated Model" non-formal primary education

initiative. Under the model, BEP personnel administer an aptitude exam, and assess students' learning ability using a standardised evaluation system. By doing so, BEP can evaluate a child's literacy and numeracy skills and place them in the proper standard class. Bridge School's cohorts consist of roughly 25–30 children. Students take an aptitude exam to determine their readiness. Those who are evaluated as having a class 1 competency level begin learning at the level of class 2, and those who are evaluated as having a class 2 competency level begin at the level of class 3. This encourages the children to pick up where they left off in school and make the most of their prior learning investments. The 6-month accelerated course will be utilised to develop and receive grade-level competency.

Keeping SDG 4 ("ensure inclusive and equitable quality education and promote lifelong learning opportunities for everyone") in mind, the project will try to ensure the provision of quality education in marginalised and poor households across Bangladesh.

BRAC James P Grant School of Public Health (JPGSPH), BRAC University is partnering with BEP to conduct a baseline assessment of the current situation of OOSC in selected districts of Bangladesh. It is aimed that the research will contribute towards the understanding of the current situation of OOSC and will generate data on the current condition of targeted beneficiaries (OOSC, their families and the broader communities where they live) in selected study sites where BEP plans to implement the establishment of the programme.

Value for money (VfM) is seen as an appropriate framework for measuring performance in development programmes. In order to evaluate whether an intervention is worthwhile, the money spent needs to be assessed alongside what has been delivered (outputs) or achieved (outcomes and impact). Value for money (VfM) is defined as a utility derived from every purchase or every sum of money spent. The term is now used widely by development actors such as International NGO umbrella networks, institutional donors, and multinational organisations. VfM is often expressed through three different criteria – Economy, Efficiency, and Effectiveness. Economy is used to assess the costs of inputs and resources of a programme or intervention. Unit costs are typically used as Efficiency, that is used to assess how much output can be produced from the inputs used in a programme. This dimension deals with maximising outputs for given inputs or minimising input for an output. Effectiveness refers to how far a programme achieves its intended outcomes, while cost effectiveness assesses a programme's ultimate impact on society relative to the inputs used. UK agencies have recently added a significant fourth 'E' – Equity that deals with the fair allocation of benefits of a programme among the vulnerable and marginalised groups of the population. Frequently, these criteria serve as principles that inform the decision-making of funders. It is now common VfM practice to map the 4E framework against a standard results chain (Figure 1 as adopted from DFID (DFID, 2011)).

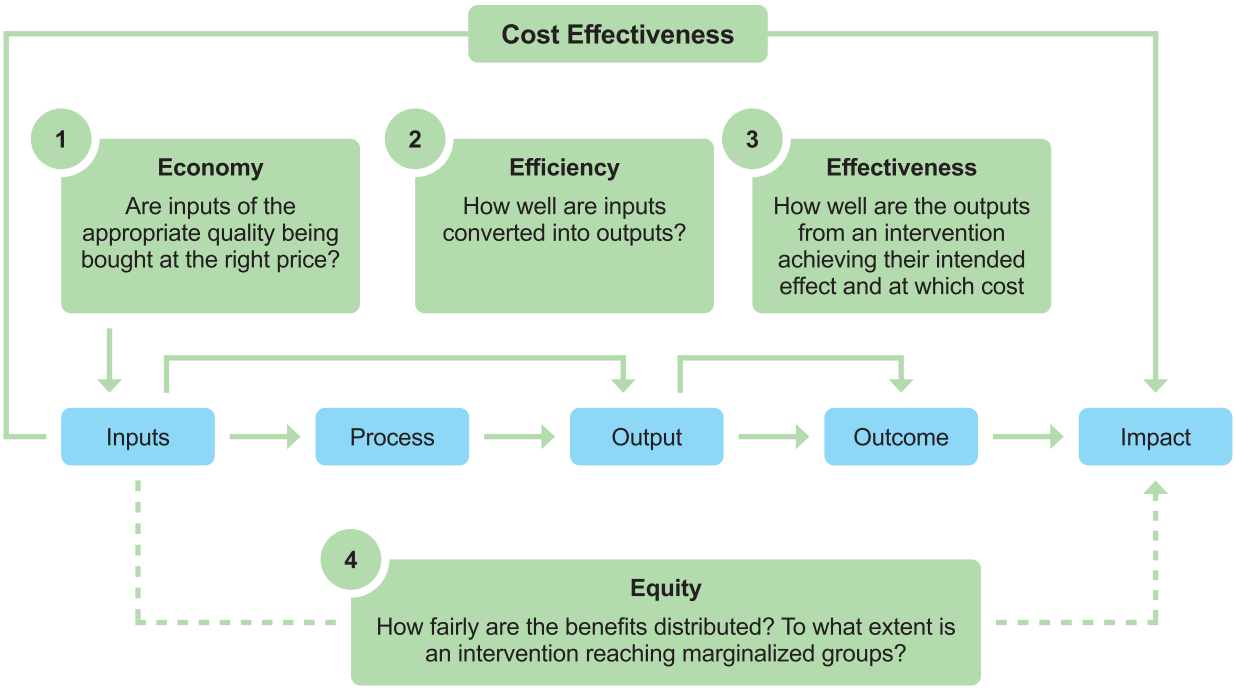

Figure 1: The framework of value for money (DFID)

BEP strives to ensure the best value for the money spent through all its efforts. BEP plans to utilise its limited resources and budget as optimally as possible to add value to the result under the four pillars of VFM (4E's). This study thus aims to assess the value for money being spent on a programme that supports OOSC in Bangladesh to return to learning funded by the Hempel Foundation. In addition to this study's core objective, doing a baseline assessment to understand the primary school dropout condition, we focused on collecting data relevant to resources spent by the Hempel Foundation in this programme. Though currently the programme is being implemented, we attempted to use expenditure data of this programme for a few months and looked at the expenditure pattern following the 4E's as discussed above.

The following are the objectives of the baseline research:

Objective 1: To explore the present condition of targeted beneficiaries (OOSC, their families and the broader communities where they live) in selected study sites where BEP plans to implement the intervention;

Objective 2: To generate evidence on the local factors preventing students from returning to schools in the study districts;

Objective 3: To provide a point of reference against which the achievement of outputs and outcomes will be assessed, monitored, and evaluated;

Objective 4: To document the challenges of implementing the projects in the study districts and propose recommendations to achieve the project goals;

Objective 5: To assess the literacy and numeracy proficiency as well as social and emotional development of OOSC at the baseline level;

Objective 6: To explore the capacity of the teachers to provide accelerated teaching-learning pedagogy and socio-emotional support to OOSC at the baseline level;

Objective 7: To collect data relevant to resources spent by the BRAC Education programme for different projects at the baseline period.

METHODOLOGY

A concurrent mixed methods design was used to carry out the study, and both quantitative and qualitative data were collected at the same time. A desk review was also carried out in Pubmed. The qualitative component included in-depth interviews (IDIs) among OOSC as well as with their parents, focus group discussions (FGDs) with parents/guardians, school committee members and local residents, and key informant interviews (KIIs) among BEP staff, teachers and government and non-government stakeholders. In contrast, the quantitative component included representative household survey in the study sites where school-going children reside. The research team also visited a few schools to observe how the Accelerated Model intervention is implemented. Information regarding the resources used and available at each BEP school was also gathered to analyse the value-for-money (VfM) indicators during the baseline period. Children in the primary school age range of 7-10 years who did not enrol in either primary or secondary schools at the time of survey data collection (May- June 2022) were defined as out-of-school children (INEE, n.d.). A dropout student is defined as a student who leaves school definitively in a given school year (INEE, n.d.).

Desk Review

A desk review for the project to synthesise available scientific evidence on the effect of the COVID-19 pandemic on primary school dropout and learning loss of students in the Kurigram district was performed. The desk review also helped us assess the impact of the COVID-19 pandemic on the livelihoods of households in the study sites and how these difficulties have

contributed to primary school students dropping out of school.

To identify relevant scientific articles and reports, appropriate search strategies with key items (such as school dropout, COVID-19 pandemic, Bangladesh, Kurigram, etc.) were utilised. Pubmed articles were searched for peer-reviewed articles. Existing literature, technical reports and policy/research infographics by the Government of Bangladesh and other relevant entities, newspaper articles, and blogs were also reviewed.

Table 1 displays the number of journal articles available in Pubmed as well as the search step using relevant keywords used to look for available peer-reviewed literature. When the search criteria were narrowed to specific research sites in Bangladesh, such as Kurigram, no specific journal articles were discovered.

Search number	Query	Sort by	Filters	Search details	Results	Time
1	(((Primary Schools) OR (School, Primary)) OR (Schools, Primary)) OR (Primary School)			"schools"[MeSH Terms] OR "schools"[All Fields] OR ("primary"[All Fields] AND "schools"[All Fields]) OR "primary schools"[All Fields] OR ("schools"[MeSH Terms] OR "schools"[All Fields] OR ("school"[All Fields] AND "primary"[All Fields]) OR "school primary"[All Fields]) OR ("schools"[MeSH Terms] OR "schools"[All Fields] OR ("schools"[All Fields] AND "primary"[All Fields]) OR "schools primary"[All Fields]) OR ("schools"[MeSH Terms] OR "schools"[All Fields] OR ("primary"[All Fields] AND "school"[All Fields]) OR "primary school"[All Fields])	654,094	0:02:00
2	Kurigram			"Kurigram"[All Fields]	23	0:03:09
3	"student dropouts" [MeSH Terms] OR Student dropout[Text Word]			"student dropouts"[MeSH Terms] OR "student dropout"[Text Word]	1,886	0:04:46
4	"COVID-19"[Mesh]			"COVID-19"[MeSH Terms]	179,254	0:07:09
5	((((Primary Schools) OR (School,			("schools"[MeSH Terms] OR "schools"[All Fields] OR ("primary"[All Fields] AND	567	0:08:12

	Primary)) OR (Schools, Primary)) OR (Primary School)) AND (“student dropouts” [MeSH Terms] OR Student dropout[Text Word])			“schools”[All Fields]) OR “primary schools”[All Fields] OR (“schools”[MeSH Terms] OR “schools”[All Fields] OR (“school”[All Fields] AND “primary”[All Fields]) OR “school primary”[All Fields]) OR (“schools”[MeSH Terms] OR “schools”[All Fields] OR (“schools”[All Fields] AND “primary”[All Fields]) OR “schools primary”[All Fields]) OR (“schools”[MeSH Terms] OR “schools”[All Fields] OR (“primary”[All Fields] AND “school”[All Fields]) OR “primary school”[All Fields])) AND (“student dropouts”[MeSH Terms] OR “student dropout”[Text Word])		
6	((((((Primary Schools) OR (School, Primary)) OR (Schools, Primary)) OR (Primary School)) AND (“student dropouts” [MeSH Terms] OR Student dropout[Text Word])) AND (Kurigram)) AND (“COVID-19”[Mesh]) - Schema: all			(((“Primary”[All Fields] AND “Schools”[All Fields]) OR (“School”[All Fields] AND “Primary”[All Fields]) OR (“Schools”[All Fields] AND “Primary”[All Fields]) OR (“Primary”[All Fields] AND “School”[All Fields])) AND (“student dropouts”[MeSH Terms] OR “student dropout”[Text Word]) AND “Kurigram”[All Fields] AND “COVID-19”[MeSH Terms]	0	0:14:16
7	((((((Primary Schools) OR (School, Primary)) OR (Schools, Primary)) OR (Primary School)) AND (“student dropouts” [MeSH Terms] OR Student dropout[Text Word])) AND (Kurigram))			(“schools”[MeSH Terms] OR “schools”[All Fields] OR (“primary”[All Fields] AND “schools”[All Fields]) OR “primary schools”[All Fields] OR (“schools”[MeSH Terms] OR “schools”[All Fields] OR (“school”[All Fields] AND “primary”[All Fields]) OR “school primary”[All Fields]) OR (“schools”[MeSH Terms] OR “schools”[All Fields] OR (“schools”[All Fields]	0	0:14:16

	AND ("COVID-19"[Mesh])			AND "primary"[All Fields]) OR "schools primary"[All Fields]) OR ("schools"[MeSH Terms] OR "schools"[All Fields] OR ("primary"[All Fields] AND "school"[All Fields]) OR "primary school"[All Fields])) AND ("student dropouts"[MeSH Terms] OR "student dropout"[Text Word]) AND "Kurigram"[All Fields] AND "COVID-19"[MeSH Terms]		

Table 1: Search results for available peer-reviewed literature available in Pubmed

Quantitative Survey

Sample Size Estimation

The sample size for the study was calculated considering a varying prevalence of outcome indicators (e.g., proportion of children who attained grade-specific literacy and numeracy competency) at baseline and an anticipated change of 10-20% in these indicators at endline with 80% power and a two-sided significance level of 5%. The minimum sample size was calculated as 774 if a simple random sampling was to be performed. However, the sample size was fixed as 1,161, considering a design effect of 1.5 (adjustment due to multi-stage cluster sampling).

Sampling Technique

We followed a multi-stage cluster sampling procedure to conduct the baseline survey among households with children aged between 7-10 years in the study site. In the first stage of sampling, we randomly selected 1 district, i.e., Kurigram, from 3 districts where BEP is currently implementing the intervention following a simple random sampling procedure. The team was informed by the BEP team that the Hempel Foundation project is currently being implemented in 25 unions of the Kurigram district. A complete list of 158 villages under these 25 unions were developed. In the second sampling stage, 25 villages were randomly selected from 158 villages, and in the final stage of sampling, 48 households were systematically chosen from each village for the survey. The guardians of school-going children were asked to participate in the research. The total number of eligible households (households that have 7-10 years children) and interval were calculated based on the information provided by the key informants of the village, i.e., BEP school teachers, community influencers, and general people. The team moved to the nearby village for survey data collection if and only if there were a fewer number of eligible households (i.e., 48) in a particular village.

School Selection

The research team administered aptitude tests among 1119 BEP students across the Kurigram district in order to evaluate their current numeracy and literacy condition. The schools were chosen on the same study sites where the household survey was conducted. In unions that had one BEP school, only that particular school was chosen. In the case of unions that had more than one BEP school, multiple schools were selected for the aptitude tests.

Qualitative Interviews

In-depth Interviews (IDIs)

Respondents for the IDIs were chosen based on different characteristics such as socio-economic status, parental educational qualification, geographical residence, disability of school going children and guardian type (grandparents, uncle/aunt etc.). The IDI respondents were questioned about the difficulties they had experienced during the COVID-19 pandemic and their overall health and well-being. Additionally, they were asked to discuss school dropouts, obstacles for OOSC returning to school, and the impact of the nationwide lockdown, due to the COVID-19 pandemic, on learning. We also attempted to explore whether the guardians want their child to continue his or her education and, if not, why they do not want to do so. A few IDIs were also conducted with the students. Through the interviews, we tried to observe the eagerness of the students towards attending BRAC schools by asking about their perceptions and thoughts about the education quality and facilities provided by the BRAC schools. We also explored any cases of child marriage and child labor that resulted in school dropout among primary school students. Respondents were asked to give their recommendations/suggestions on how to minimise the constraints that contribute to school dropouts and improve access to alternative learning systems at the individual, community, and national levels.

Focus Group Discussions (FGDs)

Three focus group discussions (FGDs) were conducted among parents/guardians, school committee members and local people. The purposes of the FGDs were to gather information regarding the impact of COVID-19 on the community, school dropout and learning loss of children, child marriage/labor, continuing education of children with disability, and feasibility of remote learning. FGDs aided the research team's comprehension of the institutional, social, and negative effects of COVID-19 that contribute to school dropout among primary school children in the study sites. The FGD respondents were also encouraged to discuss dropout, obstacles to re-enrolment, including internal (institutional, sociocultural, etc.) and external (behaviour, opinions, etc.) obstacles, learning loss brought on by the pandemic, and strategies for overcoming this loss.

Key Informant Interviews (KIIs)

We conducted key informant interviews (KIIs) with community influential BRAC Programme staff, educational institution personnel including teachers, and other representatives from both the government and non-government sectors for the baseline study. A total of 10 KIIs were conducted with the key informants. Through the KIIs, we explored the challenges the implementers are currently facing in order to help children learn during the pandemic, as well as what their organisations are doing to address the school dropout issue in their communities.

The key informants were queried about the literacy and numeracy proficiency of the primary school students living in the study site. We also explored the capacity of the newly appointed teachers of BRAC schools to provide accelerated teaching-learning pedagogy and socio-emotional support to OOSC living in the study sites. Respondents were also requested to share their recommendations/suggestions for coping with the current issue on an individual, institutional, communal, and national level.

Aptitude Test

The aptitude test questionnaire was created by a team of primary school academic specialists. The team is made up of academics, including an Associate Professor from the Institute of Education Research (IER), Dhaka University and two BRAC Education Programme professionals. The Ministry of Primary and Mass Education's grade-specific learning outcome indicator for grade 1 and grade 2 were used as the foundation for creating the aptitude test questions for cohort one. Following that, a series of questions for each section, including Bangla, English, Math, and Oral, were created. Initially, a set of questions consisting of 22 items were prepared to assess the skills of students from cohort 1 in Bangla, English and Mathematics. After pre-testing the questionnaire, 2 items were removed from the aptitude test exam. The final aptitude test examination question paper included 20 items that covered Bangla, English and Mathematics. The research team also assessed the oral speaking skills in both Bangla and English. The team arrived at the final form of the aptitude exam for cohort one, which consists of nine items for Bangla, five for English, six for Mathematics, and six for oral (Bangla 3 - English 3).

Socio-emotional Skill Test

We used the teacher's version of the SDQ (The Strengths and Difficulties Questionnaire), which is a questionnaire for measuring the socio-emotional state of the students who enrolled in the BEP schools in Kurigram. The SDQ is a brief behavioural screening tool for children aged 2 to 17. It is available in a variety of formats to meet the needs of researchers, doctors, and educators. Each version has one to three of the following elements: A) 25 items on psychological qualities, B) impact supplements and C) follow-up questions. We employ the Bengali Teacher version of the 25 characteristics psychological questionnaire, which consists of five scales: 1) emotional symptoms (5 items), 2) conduct difficulties (5 items), 3) hyperactivity/inattention (5 items), 4) peer relationship problems (5 items), and 5) prosocial behaviour (5items). SDQ's website contains information about the scales *https://www.sdqinfo.org/a0.html.*

We used the teacher version of the tool, which allowed us to get information about some of the students who were not present during the school visit. We collected a total of 1276 data points. However, we calculated the scores and classified them using the SDQ website's proposed algorithm.

Value for Money (VfM) Analysis

Generally, economic evaluation is used to evaluate the costs and benefits of development programmes. But in recent years, various evaluation techniques like Cost-Effectiveness Analysis, Cost-Utility analysis, Cost-benefit analysis, and social return on investment are also used to measure VfM within programmes. Since this study has conducted a baseline assessment and has not investigated the improvement in the intended outcomes yet, we took an attempt to analyse some of the expenditure data (as available) that was spent in the learning programme so far to understand the key cost drivers, the unit cost of different inputs and resource items and their distribution in the total cost of the programme. Though the detailed VfM analysis is only possible after the programme's completion and evaluation of the programme outcomes. But, this prior analysis will help to inform the programme implementers and donors about the distribution of costs following an economic cost analysis, which is quite different from usual accounting processes. Because economic analysis gives an accurate and complete picture of any programme costing by considering all types of resources (i.e., direct, indirect, unrealised) used in the programme. In addition, we also estimated the costs of capital equipment over their useful life instead of allocating the costs to the year of expenditure.

Collection of Cost Data

The research team met the BEP programme and finance team and discussed the requirement of the relevant cost data for conducting the VfM analysis. BRAC JPGSPH team collected the VfM indicators and framework as set by the BEP team and prepared a checklist of necessary cost items for collecting relevant expenditure data of the programme. Since the current study is conducting a baseline assessment, our objective was to only look at the extent of resources being used in the programme. Because only after the endline assessment of the programme it would be possible to look at what is the incremental cost of implementing the programme (comparing with cost of any other similar programme of BRAC or status quo (doing nothing) situation), which can be analysed against the incremental effectiveness of the programme in order to understand and estimate the value for money. At this stage, the study team basically looked at the expenditure data of the programme (routinely recorded as part of the accounting procedure) to identify different sectors where costs are being incurred. Though ideally, it is needed to follow an activity-based approach in this kind of exercise to clearly track the money spent in different activities for implementing the programme. But this needs planning during the initial stage of programme design, and continuous tracking of activity-based costing is required. For this project, since the programme is ongoing, we could collect actual expenditure data for only 7 months (January 2022 – July 2022). To get an overall idea about the year wide expenditure, we also collected the actual budget of the accelerated learning programme for the period of January 2022 to June 2023. Besides, programme finance people were consulted regarding the costs associated with the project's activities, the salary/incentive structure of the programme staff and other related costs, etc.

Categorisation of Costs

A top-down approach was used to analyse all costs of the programme. A crucial step in any costing exercise is to categorise the resources used in any programme. After the collection of the expenditure data for the accelerated learning programme, the next step was to organise the

costs into different categories. The study team categorised the cost components into two broad areas: (i) **Programme design and development costs** refer to the expenses that were incurred for designing, developing and initiating the programme. For instance, infrastructure costs like setting up schools, buying furniture & equipment, curriculum and materials development, providing training to the teachers, etc. were considered under this category. These were required to initiate learning in the schools. (ii) **Operational/ recurrent/Programme Implementation costs** refer to those costs that were incurred for running/ implementing the programme in the schools. The recurrent costs were again divided into several other categories (i) Human resource cost (including salaries and incentives provided to the programme personnel: teachers, technical and support staff (ii) Materials (expenses for buying teaching and learning materials for the students and teachers), (iii) Transport (including costs for travel, transport and other communication means), (iv) Cost of Periodic meetings with the school management committee, parents (v) Cost of advocacy with different stakeholders. The detailed cost categorisation has been presented in Table 2.

Programme phases	Broad cost categories	Specific cost items	Description of cost items
Programme Design and Development	Fixed Asset (Furniture & Equipment)	Computer and IT Equipment	Laptop for Head and Field office for official use
	Capacity development of teacher's	Teachers' Basic Training	Cost of Teachers' Basic Training once only for new teachers
	Curriculum and Materials Development	Curriculum and Materials Development	Cost of Development of curriculum, Teachers guide, Assessment, worksheet, and student profiling
Programme Implementation	Organising and coordinating programme at the field level	Salary and benefits of Programme Organiser (PO)	Salary and benefits of Programme Organisers (PO)
	Teachers' salaries	Teachers' Salary and Benefits	Cost of Teacher salary, Teachers Bonus (Per Teacher, twice a year), Leave salary for teacher (Per Teacher, once a year)
	Teaching Learning Materials	Student Supplies	Cost of Reading Corner book, Values education workbooks and story books, Climate Change workbooks and materials, SEL Material, Government Book-NCTB requisition submission and collection cost, Scale, Wood pencil, Exercise Book, Pencil sharpener, Wood Color pencil, Eraser, White paper
		Classroom Supplies	Cost of Signboard, Fan, Blackboard, Trunk, Mat, Teacher seating stool, Lock & Key, Flag, Duster, Chalk, Calendrer cloth and card, Scale (Big), Attendance and Evaluation register, Accessories for

			drinking water, Co-curriculum activities, Bangladesh and world Map, Painting of Blackboard and Signboard
		Teachers' Supplies	Cost of Teacher Bag, Bound Exercise Book, Ball pen, Clip Files, All subject teachers' guide
	Monthly refreshers for teachers	Orientation and Monthly Refreshers for teachers	Cost of Monthly refreshers (face-to-face)
	Utilities and supplies	School Rent	Cost of School room rent and utilities
		Other Programme supplies	Cost of Hand wash station set-up, hand wash materials such as detergent
	Digital Integration Cost	Technology Integration in Education (TIE)	Cost of Annual Updating, maintenance, and hosting cost of apps in cloud system for real-time use
	Engaging teachers to prevent dropout	Parenting education	Cost for meeting with parents of ex-students Per teacher per Month
	Research, Survey, Networking and Advocacy	Survey Cost	Cost of Door-to-Door Survey and Assessment of potential student cost Per potential student, 50% additional targeted
		Networking, Linkage, Advocacy	Cost to engage relevant stakeholders and share best practices, lessons learnt etc. with partners and stakeholders
		Advocacy, Research and Knowledge Management	Cost of Evidence generation, baseline, midline and end line survey and research activities
		Innovation, Technical Assistance & Learning	Cost of Testing any idea to meet 21st century skills and post covid new normal learning requirement, Emergency response, etc.
	Programme supervision cost	Salary and Allowance	Staff salary and allowance for supervision and management
		Local/ Domestic Travel	Staff local travel for school visits and others
		Basic & Foundation Training	Staff capacity development for different skills
	Offices Common Cost	Office Rent	Head office and field office rent

		Office supplies and stationery, etc.	Head office and field office supplies and stationery
		Other Maintenance Expenses	General expenses and maintenance for head office and field office
		Equipment Maintenance	Maintenance cost for Laptop
	H.O Logistics & Management	Logistics and management	Cost of logistics and management

Table 2 Cost Categorisation for BEP Accelerated Learning Programme for Vulnerable and Out-of-school Children in Bangladesh

Analysis of Programme Cost Data

In order to analyse the cost data of any programme, it is important to determine the perspective of the analysis (i.e., who bears the costs) first, as the perspective will drive which cost data we choose to consider in the analysis. For example, if we analyse the programme from a programme perspective—we would only analyse of data on costs paid by the funder or implementing organisation. Alternatively, we could frame the analysis from a societal perspective and include costs to respondents as well as the organisation, such as time and travel costs. Best practices for economic evaluation indicate using the societal perspective in order to provide the most comprehensive picture of benefits and costs. However, recommendations for education studies emphasise the importance matching the study perspective to the goals of the evaluation, especially in cases when a societal perspective would unnecessarily complicate the interpretation of the study findings. In this current study, we analysed costs from the programme's perspective to understand the distribution of expenses in different line items and what is their value for money.

We used a top-down approach to analyse the costs. In terms of capital items (e.g., furniture and fixtures, IT equipment like computers and laptops as applicable), we annuitised the total actual expenditure since these items generally have a useful life of more than one year. The annuitisation is useful to spread the total cost of any capital items over their useful life instead of allocating those costs to the year of expenditure. While estimating capital costs with annuitisation, the capital costs were calculated with straight-line depreciation (refers to a method where investment value is reduced over its useful life) and a discount rate of 5 percent [In general, the discount rate represents either the real rate of return in the private sector or some social rate of time preference] was considered to calculate the relevant annualisation factor (Drummond et al., 2015). For our cost analysis, the following assumption regarding the useful life of the training and capacity development of teachers was considered:

- Useful life of non-recurrent training for technical staff: 24 months (Yuan and Evan, 2017; Van MM W, 2012). [often, teachers' training is considered as an investment since it improves the efficiency, productivity, and performance of teachers for a longer period that results in students' better learning outcomes.]

Following the above assumption and annuitisation formula, the study team estimated the annual equivalent cost for training and capacity development of the programme. The following formula for Equivalent Annual Cost (EAC) was used:

$$EAC = \frac{P \times r}{1 - (1+r)^{-n}}$$

Where,

EAC = Equivalent Annual Cost
P = Actual cost of the capital item
r = Discount rate
n = Number of years (the useful life of the capital item)

Total and Unit Cost Estimation

Finally, all the costs were added to estimate the total programme cost. All the estimation was conducted in Bangladesh currency (Bangladesh Taka). In addition to the total cost analysis and determining the distribution of resources, we estimated the unit cost of providing the accelerated learning programme per child enrolled in the programme.

Analysis of Value for Money Indicators

For evaluating the economy, we identified the key costs of the programme and looked at the key cost drivers. Besides, we also determined different key costs as a percentage of total costs. For assessing efficiency, we collected programme-based data (number of schools, number of students, distribution of boys and girls, number of students with disabilities) from BEP MIS and analysed per student cost, the survival rate of students, the retention rate of teachers, etc. Though for analysing effectiveness and cost-effectiveness, several indicators were identified (e.g., proportion of children who attained grade appropriate level reading and numeracy proficiency, the proportion of students who passed the required learning and numeracy competencies, Retention rate as a percentage of graduated students who transitioned to formal primary schools and average cost on retention per child), we could not look at all the indicators due to unavailability of data since the endline evaluation is yet to be started. Similarly, for evaluating equity, we looked into percentage of students from HTR and Climate vulnerable areas, percentage of students who are girls and who are with disabilities.

Selected Site Visits

We visited certain sites to observe and record difficulties encountered by the BEP team when implementing the intervention (Accelerated model) in schools. The team also monitored how the primary school dropout pupils are given access to the essential study materials, such as worksheets and textbooks. Figure 2 shows the study sites where the baseline study was conducted.

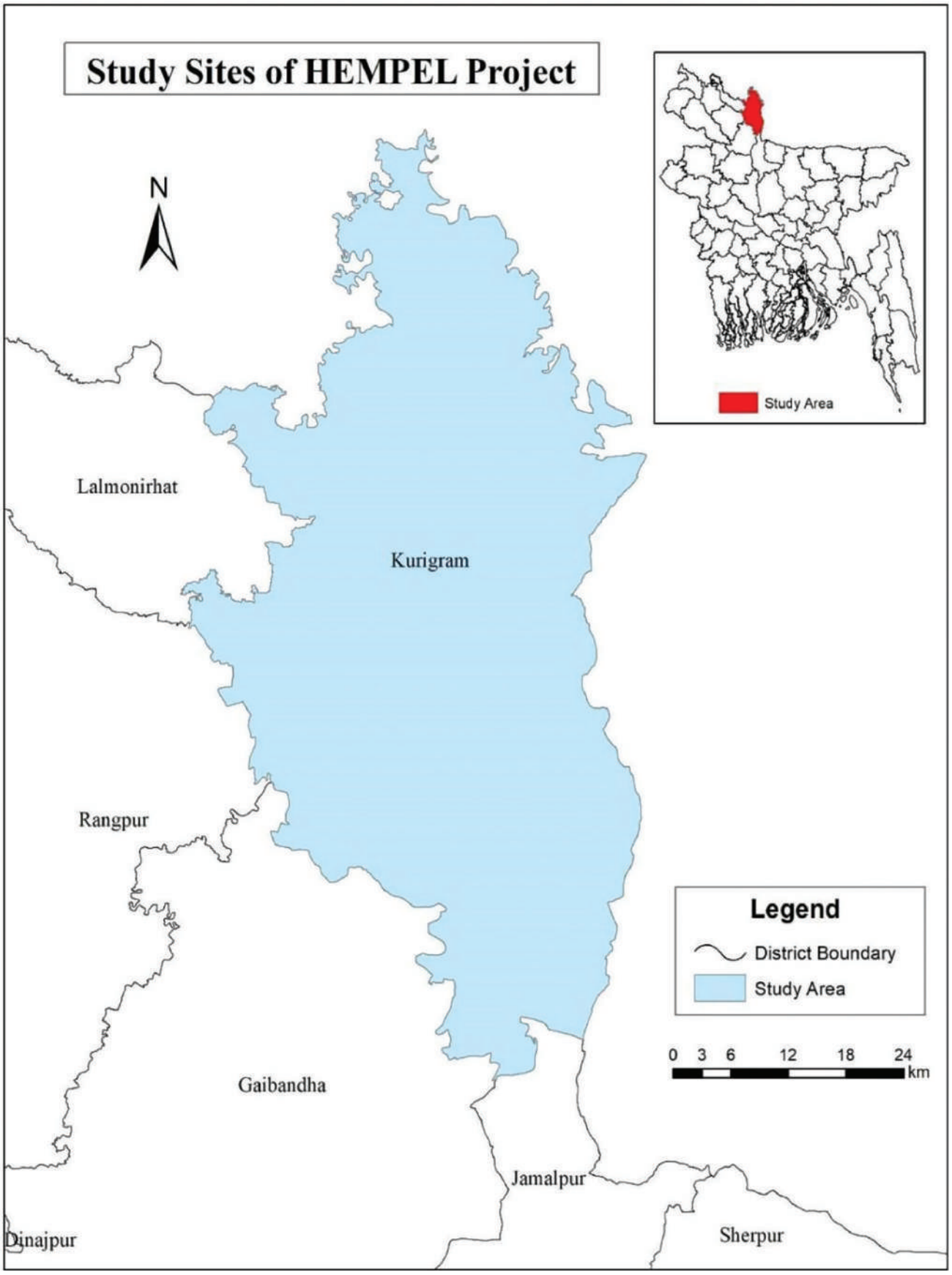

Figure 2: Study Sites

Data Analysis

Survey data were analysed using Stata version 13. Various descriptive and multivariable analyses were performed to achieve the research objectives. The results of the descriptive analysis are presented in statistical graphs and tables.

Qualitative data were analysed using Atlas Ti. For analysis, the qualitative information acquired from a large number of research respondents was transcribed and categorised. The themes and content were examined using Atlas Ti. To create the final report, the desk review, quantitative data, and qualitative data were triangulated.

FINDINGS

Section 1

Results of the quantitative household survey, aptitude tests, SDQ and the qualitative interviews are presented in this section. The section begins with a few background traits of both qualitative and quantitative respondents and then moves on to information about respondents' livelihood challenges during COVID-19, learning loss of the students, numeracy and literacy proficiency, and socio-economic conditions of school-going children.

1.1 District and Upazila wise distribution of respondents and their socio-demographic characteristics

For the quantitative survey, the enumerators visited a total of 1,243 households in 24 unions of Kurigram district. For survey data collection, parents/guardians of the school-going children were interviewed. As presented in Table 3, 7.3% of the respondents were from Rajarhat sub-district whereas 21.7% from Fulbari sub-district and 5.8% from the Chilmari sub-district.

Sub-distrct (Upazila)	Union	Number of respondents	Weighted percentage (%)
Bhurungamari	Tilai	48	4.5
	Boldia	52	3.6
	Paikerchhara	52	3.9
	Subtotal	**152**	**12.0**
Chilmari	Ramna	52	2.0
	Ranigonj	52	2.0
	Thanahat	52	1.9
	Subtotal	**156**	**5.9**
Fulbari	Baravita	48	2.9
	Shimulbari	52	11.1
	Bhangamore	49	7.7
	Subtotal	**149**	**21.7**
Kurigram-Sadar	Holukhan	49	5.3
	Kanthalbari	49	2.2
	Subtotal	**98**	**7.5**
Nageswari	Roygonj	52	6.0
	Hasnabad	50	3.0
	Subtotal	**102**	**9.0**
Rajarhat	Umar Majid	44	1.7
	Nazim khan	47	0.7
	Bidyananda	48	1.8
	Chakirpashar	48	0.9
	Rajarhat	52	2.2
	Subtotal	**239**	**7.3**
Rajibpur	Mohanganj	48	1.4
	Rajibpur	48	1.7
	Subtotal	**96**	**3.1**
Rowmari	Shailmari	49	2.8
	Jadurchar	48	2.1
	Subtotal	**97**	**4.9**
Ulipur	Gunaigachh	52	12.5
	Tabakpur	52	10.4
	Pouroshobha	50	5.9
	Subtotal	**154**	**28.8**
Total		**1243**	**100.0**

Table 3: Distribution of survey respondents by upazila and union

In total, 23 qualitative interviews were conducted, including 10 In-depth interviews, 10 Key Informant Interviews and 3 Focus Group Discussions. Among these, most interviews were conducted in Nageswari, Rowmari and Ulipur sub-districts (Table 4).

Interview type	Upazila	No. of respondents
IDI	Bhurungamari	0
	Chilmari	1
	Fulbari	0
	Kurigram Sadar	0
	Nageswari	2
	Rajarhat	0
	Rajibpur	0
	Rowmari	5
	Ulipur	2
	Total	**10**
KII	Bhurungamari	0
	Chilmari	1
	Fulbari	0
	Kurigram Sadar	0
	Nageswari	4
	Rajarhat	0
	Rajibpur	0
	Rowmari	2
	Ulipur	3
	Total	**10**
FGD	Bhurungamari	7
	Chilmari	0
	Fulbari	0
	Kurigram Sadar	7
	Nageswari	0
	Rajarhat	0
	Rajibpur	0
	Rowmari	0
	Ulipur	7
	Total	**21**

Table 4: Distribution of qualitative respondents by upazila

Information about the Respondents' Demographics

A small percentage (13.7%) of the 1,243 survey responders were men, and 86.3% were women. More than three-fifths (69.4 %) of the respondents were from the age group 15 to 35 years, followed by 30.6% who were above 35 years old. Muslim respondents made up 91% of the sample, with the remaining respondents being of Hinduism faith (Table 5).

For the qualitative component of the study, 41 respondents were interviewed from the Kurigram district. Out of the 41 respondents, 10 took part in the IDIs, which consisted of drop-out children and their parents or siblings. All the respondents belonged to poor or lower-middle-class Muslim families. Most of the parents of the drop-out children had completed primary education, and some of them had no education at all.

A total of 10 Key Informant Interviews (KIIs) were conducted. Respondents for the KIIs included teachers from primary schools, Upazila Education Officer, BEP educators and Programme organisers from BEP. Among the respondents, 5 were males, while the rest were females. They belonged to well-educated lower middle-class or middle-class families. All of them were Muslim except one, who followed Hinduism. While five respondents had completed their university education, the other five had studied until HSC.

A total of 3 Focus Group Discussions (FGDs) were conducted in Kurigram district in Ulipur, Singair and Bhurungamari sub-districts. Each FGD included 7 respondents. The respondents were primary school teachers, parents of out-of-school students, and community members. To maintain homogeneity, it was ensured that respondents from the same socio-economic background attended the FGDs.

Survey data analysis has shown that 72.9% of the respondents lived in plain land, followed by 17.1% in char land and 9.1% in the border areas at the time of survey data collection. The majority (96%) of the 1,243 survey respondents were married, 1.1% were single, and 2.9% were divorced, separated, or widowed. About three-quarters (75%) of them were homemakers, whereas the rest were either unemployed or engaged in the informal job sector (Table 5).

Figure 3 further explains that 21.0% of the respondents have completed their primary education, whereas 10.1% completed their secondary education and 8.9% completed higher than secondary education.

Characteristics		Number	Weighted percentage (%)
Gender	Male	182	13.7
	Female	1,061	86.3
Age of the respondents	15-25 years	177	15.2
	26-35 years	665	54.2
	36-49 years	301	22.2
	50 years and above	100	8.4
Religion	Islam	1,116	91.0
	Hinduism	127	9.0
Kind of area respondent lives in	Slum	2	0.5
	Plain land	930	72.9
	Char land	206	17.1
	Border area	100	9.1
	Haor	1	0.1
	Government-owned land	4	0.4
Highest completed grade	No formal education	53	3.6
	Primary incomplete	206	19.4
	Primary complete	214	21.0
	Secondary incomplete	394	37.0
	Secondary complete	117	10.1
	Higher than Secondary education	100	8.9
	Others	1	0.0
Main occupation	Unemployed	7	0.9
	Employed	307	23.7
	Informal job	5	0.5
	Homemaker	924	75.0
Current Marital Status	Unmarried	15	1.1
	Married	1,194	96.0
	Widowed/Polygamy/ Separated/Divorced	34	2.9
	Unemployed	29	2.4
	Employed	1,016	84.3

Spouse's main occupation	Informal job	16	1.3
	Homemaker	152	11.1
	Others	14	1.0
Head of the family	Myself	228	19.3
	Husband/wife	910	73.4
	Father/Mother	32	2.3
	Father-in-law/Mother- in-law	46	3.3
	Other family members	27	1.8

Table 5: Demographic details of survey respondents

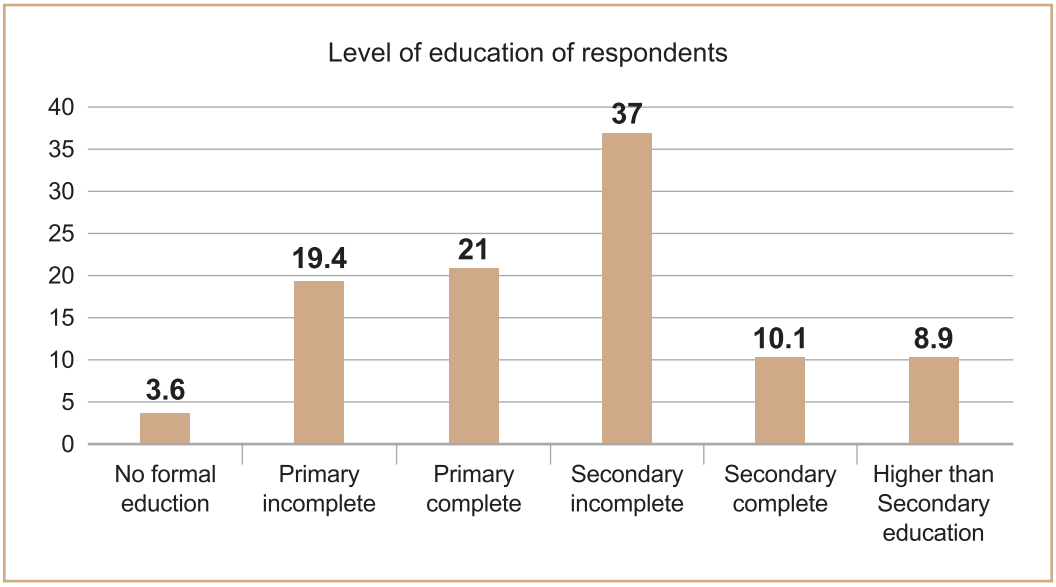

Figure 3: Education status of respondents

Out of the 1,243 survey respondents, those who provided information (1,227) regarding their own and spouses' employment status revealed that 75.0% of them were homemakers, 23.7% were employed, and 0.9% were unemployed (Figure 4).

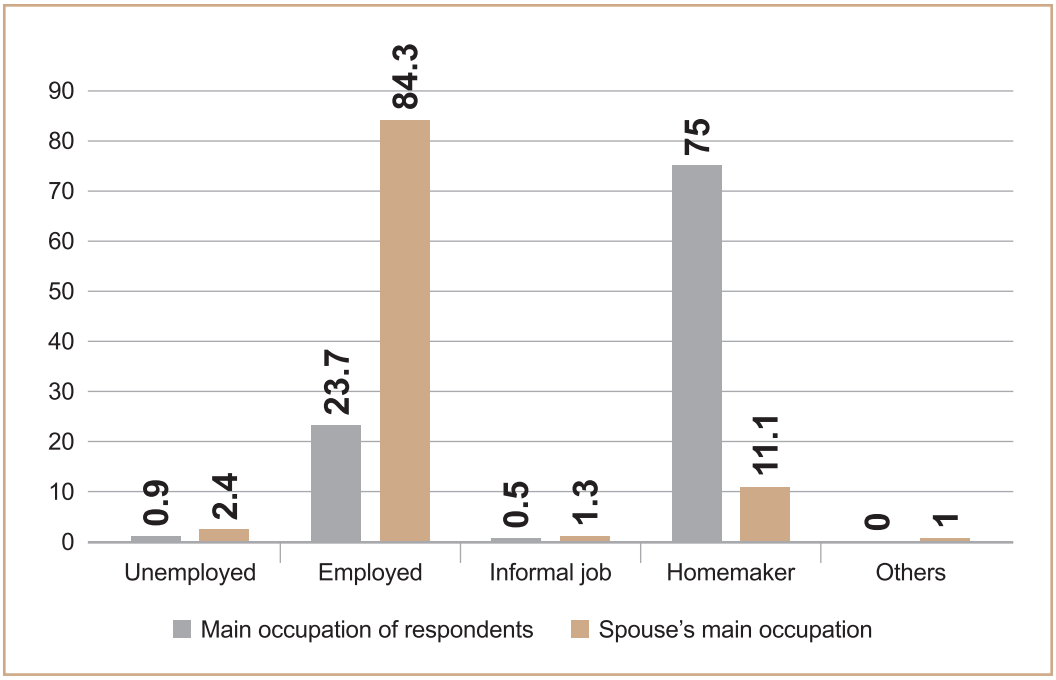

Figure 4: Employment status of the survey respondents and their spouses

Housing Condition of the Survey Respondents

Out of the 1,243 respondents interviewed in the survey, 1,205 were living in land owned by the households, followed by only 24 respondents living in rent-free accommodations at the time of survey data collection. Most of them (80.7%) were living in houses with tin walls, followed by 12.3% with brick walls and 6.1% with cement. Approximately half (47.5%) of the households had two bedrooms, whereas 92.1% had tin roofs. The majority (97.6%) of the households used the tube well as a source of drinking water (Table 6).

More than three-fifths (61.9%) of the respondents reported having a toilet inside their house. Among all survey respondents, 43% (n=535) reported that their households used a kacca toilet (permanent), whereas 23.1% (287) used sanitary and 18.2% used a pakka toilet (with water supply), as shown in Table 6.

Characteristics		Number	Percentage (%)
Ownership of the house	Land owned by the household	1,205	96.9
	Rented house/land	4	0.3
	Rent free	24	1.9
	Government land (Khas Jomi)	9	0.7
	Don't know	1	0.1
Wall of the house	Earth/Sand /gravel	7	0.6
	Palm Bamboo	1	0.1
	Ceramic tiles/cement	76	6.1
	Tin	1,003	80.7
	Brick	153	12.3
	Others	3	0.2
Floor of the house	Earth/Sand /gravel	939	75.5
	Ceramic tiles/cement	192	15.5
	Tin	33	2.7
	Brick	79	6.4
Total number of bedrooms in the house	1 bedroom	315	25.3
	2 bedrooms	590	47.5
	3 bedrooms	232	18.7
	4 bedrooms and above	106	8.5
Roof of the house	No roof	57	4.6
	Bamboo	19	1.5
	Cement	6	0.5
	Stone with lime/cement	6	0.5
	Bricks	6	0.5
	Cement blocks	1	0.1
	Wood planks	1	0.1
	Tin/iron sheet/metal	1,145	92.1
	Straw/stick	2	0.2
Source of drinking water	Piped water into dwelling	20	1.6
	Piped into yard or plot	3	0.2
	Public taps/standpipe	1	0.1
	Tube well/borehole	1,213	97.6
	Protected well	2	0.2
	Supply line water	1	0.1
	Pond	1	0.1
	Others (Please specify	2	0.2
	Piped water into dwelling	25	2.0
	Piped into yard or plot	3	0.2
	Public taps/standpipe	1	0.1

Source of water used for cleaning and washing	Tube well/borehole	1,140	91.7
	Unprotected well	1	0.1
	Pond	47	3.8
	River	23	1.9
	Others (Please specify	3	0.2
Availability of toilet inside the home	Yes	769	61.9
	No	474	38.1
Toilet facility type	Sanitary	287	23.1
	Pakka Toilet (with water supply)	226	18.2
	Pakka Toilet (without water supply)	173	13.9
	Kacca Toilet (Permanent)	535	43.0
	Kacca Toilet (Temporary)	16	1.3
	Open Field/ No Toilet available	5	0.4
	Others	1	0.1

Table 6: Characteristics of the households of the respondents

1.2 Economic background of the survey households

Almost 47% of the household heads had a monthly earning of BDT 11,000 (USD 108), whereas 17.4% of the household heads earned BDT 9,000- BDT 11,000 (USD 88-USD 108), and the rest earned below BDT 9,000 (USD 88).

Figure 5 depicts the association between the respondent's living area and household income. It can be observed that most families who lived in government owned land had household income between BDT 9,001-11,000 (USD 88-USD 108) per month. In contrast, most families who lived in plain land, char land and border area had monthly family income BDT> 11000 (USD 108 or more).

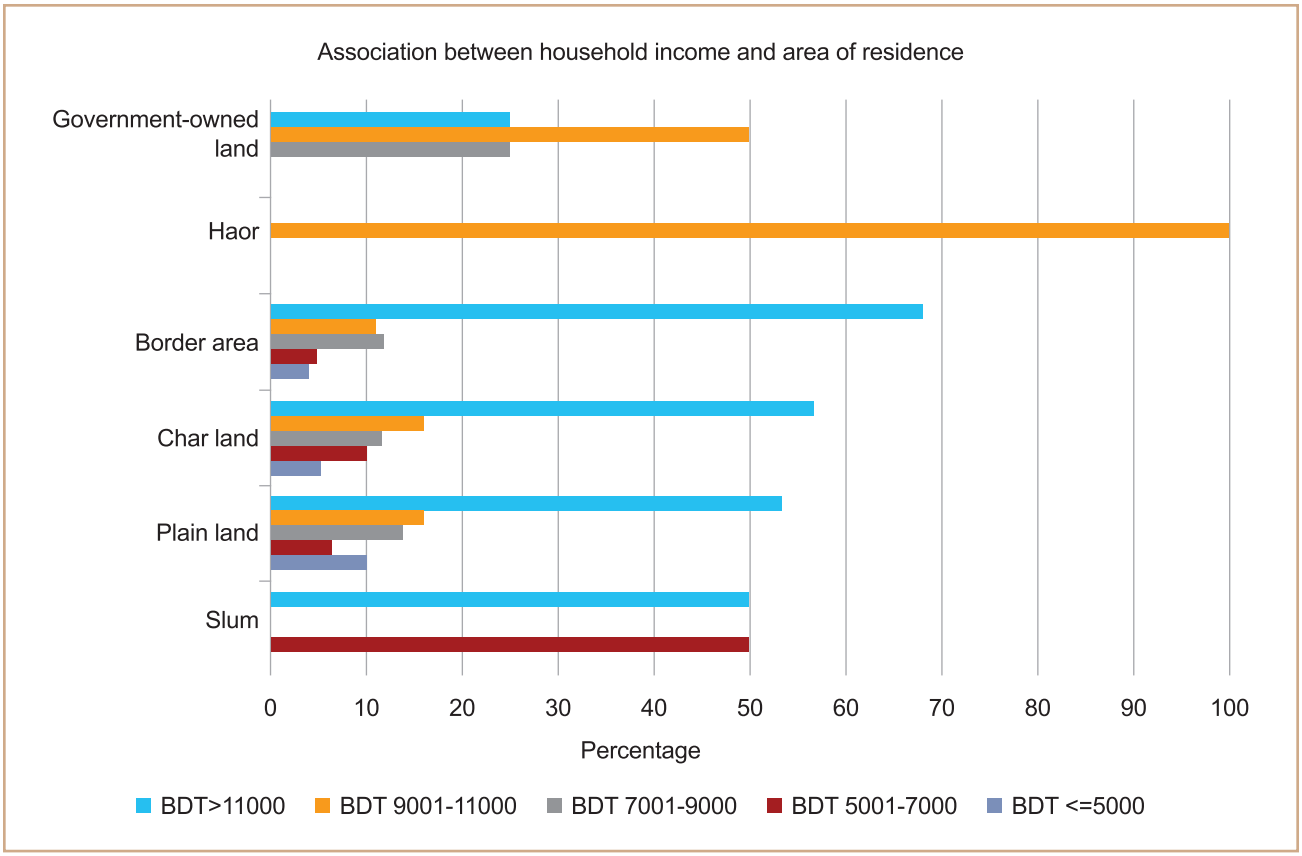

Figure 5: Association between income and area of residence

1.3 Livelihood challenges and health related problems experienced at the household and community level

According to survey data, multiple challenges are affecting the overall socio-economic conditions of the families and communities, the most dominant being natural disasters (70.4%) such as cyclones and hurricanes. As Kurigram is also a flood-prone area, they regularly affect daily lives and movements. This further becomes a barrier to the day-to-day earning sources of people. Lack of income-generating sources (30.1%) is the second biggest challenge faced by residents of the Kurigram district, closely followed by food insecurity (28.2%), as shown in Table 7.

Challenges currently faced by the community (n=1243)	Frequency (n)	Percentage (%) of cases*
Food insecurity, manga	350	28.2
Natural disasters	875	70.4
Political conflict	13	1.1
Lack of land	138	11.1
Lack of income-generating sources	374	30.1
Lack of drinking water	88	7.1
Lack of necessary infrastructure	72	5.8
Inadequate transportation system	70	5.6
Inadequate health care (hospital/clinic) system	96	7.7
Irregular power supply	177	14.2
Did not face	155	12.5
Poor road condition	35	2.8
Lack of WASH facilities (Toilet)	7	0.6
Poor quality of education	2	0.2
Lack of proper schools in the community	6	0.5
Lack of proper networks/communication system	2	0.2
Victims of sexual harassment	1	0.1
Early child marriage	2	0.2
Other	2	0.2

*Percentage total exceeds 100 due to multiple responses

Table 7: Challenges faced by the community

Amid the lack of income sources and the necessary skills required for it, other livelihood challenges were further fueled by the COVID-19 pandemic. Out of 1243 respondents who have shared the difficulties regarding how COVID-19 has impacted their lives, 625 respondents mentioned losing income followed by facing a financial crisis (914 respondents). Not only that, but also, movement restriction (650 respondents) and food insecurity (464 respondents) were critical factors that impacted their daily lives during the pandemic (Data not shown).

According to the qualitative findings, the region is vulnerable to floods and droughts. One of the BEP programme organisers mentioned that, despite the slow development process in this area, many people are below the poverty level, mainly because of a lack of employment opportunities.

"Even though Kurigram has developed recently, people from Nageswari are still suffering financially. Most people work as laborers or farmers and their income gets hampered during floods." (Programme Organiser, Nageswari - KII)

During monsoon, people are often left homeless as their houses are washed away by the flood, and they must take shelter on the roads. During these times when people are hit by natural disasters, people suffer from scarcity of food and resources.

"In this district, we have 2-3 unions situated on highlands, but other unions are in low land, so most of the time floods are caught in these areas. We cannot harvest anything because of the flood." (Father, Singair Kurigram - FGD).

Floods not only make earning difficult but also worsen the already dire conditions of the roads. As a result, moving from one union to another in case of emergencies becomes impossible. Because of poor road conditions, people of HtRAs of Kurigram district do not seek formal medical care from nearby health facilities.

Section 2

2.1 Prevalence of dropout and factors associated with dropout of children

According to survey data, out of 1,243 children, 20 (1.6%) were not attending the schools at the time of survey data collection. Data from the blanket survey of the situation analysis found a 25% dropout rate in the Bamandanga union and an 8.8% drop out in the Durgapur union, the two unions of Kurigram selected for the situational analysis. Comparatively, it can be seen that there is a decrease in the dropout percentage due to several reasons, such as the opening of educational institutions and interventions such as the Accelerated Model of BRAC schools.

Results show that out of these 20 children, 12 dropped out of school at the age of 7, whereas 4 dropped out at 8, and the rest 4 dropped out at 9. Among the 20 OOSC, 9 dropped out in 2020, whereas 5 dropped out in 2021 and 6 dropped out in 2022. Most students (11) dropped out in Class 1 compared to Class 2, where only 4 ,and 5 children dropped out from Class 3-Class 5 (Table 8).

Variable		Frequency (n)
Primary school children attending school	Yes	1,223
	No	20
	Total	**1,243**
Age of the child dropping out of school	7 years	12
	8 years	4
	9 years	4
	Total	**20**
Year of dropout	2020	9
	2021	5
	2022	6
	Total	**20**
Grade of dropout	Class 1 or equivalent	11
	Class 2 or equivalent	4
	Class 3 or equivalent	1
	Class 4 or equivalent	2
	Class 5 or equivalent	2
	Total	**20**
Type of school the child dropped out of	Government Primary School	10
	Alia Madrasa (Ebtedayi Madrasa)	1
	Non-formal school	1
	Kowmi Madrasa	3
	Hafezi Madrasa	1
	NGO-operated School	1
	BRAC School	1
	Others	2
	Total	**20**

Table 8: Demographics of out-of-school children

Multiple factors contributed to the dropout of students. Among the 2% that did not go to school (20 out of 1,243) at the time of survey data collection, the most prevalent reasons mentioned by the guardians are school closure for COVID-19 followed by lack of awareness regarding education. The percentage is not shown, as only 20 children were not attending any schools at the time of survey data collection.

Parents reported that before the pandemic, the prevalence of dropouts was relatively low. Even if students weren't as serious in their studies or wouldn't get good grades, they still would attend classes. As COVID-19 struck, the less enthusiastic students both and the studious ones, suffered greatly. The number of dropouts increased rapidly in the two years as institutions were physically closed and alternative remote learning methods were not accessible to all. However,

respondents shared that they have gradually overcome the significant number of dropouts. Even if the education status of people is poor in the area, parents are aware of the importance of education and enrolling their children in schools. Even though the quality of education is not up to the mark, Kurigram does have many educated people working in stable jobs.

"Most people are highly motivated about education. Many people from this area are working at the government's top-level jobs. It is a poor area, but you can find many working people who completed their honours and master's degrees." (Primary School Teacher, Bhurungamari - FGD)

2.2 Overall learning loss

When examining the learning loss of children, as shown in Table 9, most respondents have shared that students have now become reluctant to study (822 respondents) due to the gap caused by school closure. On the other hand, 616 respondents have mentioned that children lack grade-specific knowledge, whereas 338 have shared that children lack competency to enrol in higher grades.

Variable	Frequency	Percentage of cases
No suffering at all	165	13.49
Lack of basic grade-specific knowledge	616	50.37
Lacks competency to enrol in higher grade	338	27.64
Poor performance in school activities (e.g., exams and assignments)	155	12.67
Reluctance towards studies	822	67.21
Got completely derailed from education	172	14.06
Undisciplined lifestyle	92	7.52
No scope to engage in outdoor activities	18	1.47
Time loss	6	0.49
Others	8	0.65
*Percentage total exceeds 100 due to multiple responses		

Table 9: Current condition of learning loss

Children went through a huge educational hurdle with schools being closed for almost two years. Even though the government tried to minimise the gap by introducing online learning methods, it was not as fruitful, especially in areas like Kurigram. As a result, since children lost touch with studies for a very long time, parents shared that their children are having a hard time remembering things, especially the study materials. Since their attention has been diverted for so long, children find it difficult to start where they left off. During the lockdown period, many children spent their time playing or roaming around instead of studying alone. This became a habit for them, and even after schools reopened, children could not regain their interest in studies.

"We had to starve for long days. The school was closed, so my children could not study properly and spent their time being lazy. We spent our days in misery and tension, which was intolerable." (Mother, 31 years, Ulipur, Kurigram -IDI)

As educational institutions and board exams were being withheld for a long period during the pandemic, the government introduced the "auto-pass" system so that children could move on with their studies instead of remaining stuck. But this ended up hampering their overall learning process even more as children were promoted to a higher class before they correctly understood the learning material of the previous classes.

While some parents did not realise the adverse effects of auto-promotion and rather thought that this was good since their children could now continue their education, others shared their discontent with this system during FGDs since their children have only lagged instead of moving forward in their studies. Many suggested re-admitting the children to a lower class so that they could learn the materials properly.

"Covid-19 hampered education. One student did not get sufficient teaching while moving from class one to two. That student continued his/her study with insufficient knowledge. So, when he/she was admitted into class three, his/her knowledge of education did not match class three's standard." (Primary School Teacher, Kurigram Chilmari - KII)

During an FGD in Bhurungamari, Kurigram, a primary school teacher reported that, even though children have been auto-promoted to class five, teachers still have to spend time teaching them content that was taught in grade 2-3 since children do not remember or have not properly learned the material in the first place.

"I shared with the teachers that because of the pandemic, my daughter has lost attention from her studies. She forgets what she learned before. I requested them to educate her again so she can be a meritorious student." (Mother, 31 years, Ulipur, Kurigram - IDI)

2.3 Factors preventing students from returning back to schools

2.3.1 Long study gap and financial constraints of families

Many factors contributed to children not returning to school after the COVID-19 pandemic. Out of 1243 respondents, 375 complained that prolonged school closure drove families to decide not to send their children to school. Furthermore, the gap during the two years of the pandemic further led to the children's growing reluctance to engage in education further (869 respondents). Not only that but also, 560 respondents indicated that there were many changes in the regular lifestyle of the children, starting from playing outside to spending little to no time on learning. Lack of continuation of education through a proper institutional facility further meant that children got used to the casual lifestyle and ultimately, got addicted to playing outside or watching television, phone, internet etc. (Data not shown).

Qualitative findings revealed that the long period of study gap pulled children farther away from education. This was even more so because

accessing education became quite difficult for many families. Being distant from studies for a long time during the pandemic instilled fear in the children for which they are hesitant to rejoin school or give exams in general. On top of that, in an FGD in Ulipur, a father shared that even when students go to attend the classes, teachers are not as regular as they used to be and do not provide appropriate guidance that the children require. The teachers merely sign their exam copies and assignments without properly conducting the classes, for which students end up missing school. On the other hand, teachers also shared that they lost interest in conducting classes and teaching the students because of low attendance rates.

Qualitative findings revealed that one of the biggest factors preventing children from going back to school is their families' financial instability. This challenge increased manifold during the pandemic as families had to go through an increased economic crisis with lockdowns being imposed. And once the daughters are married, most of the time, they leave behind education and get engaged in running their own families.

Even the cost of books and stationery can be too much for some families, let alone additional educational expenses. Families are compelled to put their children to work because the extra income they bring in allows them to make ends meet. Prioritising their livelihood becomes more important than education at such times. And even if they get a stipend from the government, the money is not enough as compared to the money their child could make working outside.

"If the family is dependent on his/her income at that time, the children are considered the income source for the family. If he/she attends school, this extra income will not be possible. Because of poverty, families give priority to income rather than education." - (Primary School teacher, 40 years, Chilmari Kurigram - KII)

Since many parents struggle to generate enough income for running the households, as a result, continuing the education of their children becomes a secondary option. Seeing their parents struggling to make ends meet, children, too, lose interest in studies and end up leaving education behind.

2.3.2 Geographical constraints

During the period of COVID-19, with constant lockdowns and safety issues on the line, families in Kurigram found it extremely difficult to get jobs and feed their household. Seeking medical help was just as difficult when in need because of poor road conditions and the unavailability of hospitals. For any kind of assistance, they would go to the local doctor, but for serious issues, they would have to travel to another district (Rangpur).

Findings from an FGD in Kurigram revealed that the area is infrastructurally very underdeveloped with very poor roads. Going to another union for important work is nearly impossible because the roads are not appropriate for transit. Since they are too far from homes, schools and madrasa classes are missed by students quite frequently.

Despite a good level of awareness among parents and their willingness to educate their children, people of Kurigram have been struggling to attain education, especially since the area is prone to natural disasters, which not only hampers the roads and transportation for the people

but also increases their financial burden. With floods making the road conditions worse, young children find it even more difficult to travel long distances to attend school. Parents worry about the safety and security of their children when traveling far, for which many children stop going to school. Besides, mothers often favor keeping their daughters at home to take care of younger children rather than enrolling them in schools.

"If I send her to a school, who will take care of my little son? I have no one to take care of him. My house is surrounded by flood water, so I feel so insecure about my little son. Tell me how I can send her to the school in this situation." (Mother, Rowmari Kurigram - IDI)

2.3.3 Cases of child marriage and child labor

Parents worry about the safety and security of their children when traveling far, for which many children stop going to school. As a result, many parents resorted to sending their children to work or marrying off their daughters at an early age. However, families that struggle too much financially cannot help but focus more on sending their children to work instead of providing them education.

"Because of poverty, we cannot give extra priority to our children. They are unable to buy study materials for this reason they do not give importance to their education rights." (Mother, 31 years, Ulipur Kurigram - IDI)

Qualitative findings also show that child marriage and labor is most common among less solvent households. Children feel disturbed when they see that their parents are unable to buy the study materials for which they gradually lose their interest in studies. They become depressed and divert themselves from studying to other activities.

"Girls are forced to get married here. If she is doing the household chores in a good manner, she is sent off to get married at a very young age. Eventually she may get pregnant and have a child but will have no feelings towards the child since she herself is too young. Because of this, many girls get divorced a few years after they get married in this village." (BRAC Educator, 30 years, Rowmari - KII)

However, respondents from Ulipur have shared that the perception regarding child marriage is slowly changing in their area. People are becoming more aware of the importance of education instead of early marriage, and if such cases are found, people from the community protest against it. Child marriage rate has significantly decreased as a result of frequent meetings set up by local officials and the intervention of local leaders.

"We all know that the child marriage rate is higher in Kurigram district compared to many other districts of Bangladesh. We are trying to minimise this. At every level, we are arranging meetings so we can reduce child marriage here. If we find any information about child marriage, we take initiative to stop this with the help of the local chairman." (Upazila Education Officer, 42yrs, Nageswari - KII)

2.3.4. Remote learning challenges

When asked about the remote learning challenges, respondents of FGDs and KIIs said that the people lack proper internet connection, electricity and devices in Kurigram district. The district is situated near the border, the network is quite poor. As a result, even if some families manage to own devices, having proper internet connection and attending classes becomes difficult. Qualitative findings also show that most schools have not implemented online learning facilities yet and many families have not even heard of such facilities. In an IDI from Ulipur, a mother mentioned that her children do not understand how to operate phones or online learning operations neither were they learned the procedure from schools. As a result, most of the families were not able to make use of online learning during the pandemic. However, children tried to attend classes in groups through one device if it was available, but that was not that much fruitful.

"Online learning is active in the primary school but because of poor internet connection and not having the necessary device many cannot attend the classes. Most of them do not have a smartphone, television, or laptop. Though we arrange online classes we did not get a proper response from students." (Primary school teacher, Bhurungamari, Bharkanda -FGD)

Primary school children are too young to be operating phones since they rarely understand the functions. Neither do the parents prefer allowing such small children to carry phones with them. As a result, even when parents try to monitor their children during classes, maintaining the attention required to retain all the information being taught is quite impossible. Children have missed out on the in-hand learning experience required in the first 2-3 years for which their learning growth has been very slow. In most cases, parents have reported that even when their children have been promoted to a higher class, they still cannot properly write the alphabets.

2.4 Continuation of children's education and parental beliefs

Qualitative findings revealed that a good number of parents are enthusiastic about educating their children and also encourage their community members to do the same. They understand the importance of education and think of it as a mandatory step towards getting a better life and it cannot be ignored. If the children are able to get educated and get-well paid jobs, they would be able to take care of the parents just like their parents did. And since many of the parents are uneducated, they realise the sufferings that come with illiteracy and, hence, do not want their children to suffer the same way.

"I am illiterate. I cannot feel the touch of education due to poverty. But I want to make my children educated at any cost. So they can get a secure future. I wish for a better life for them where they need to struggle like me." (Mother, 35 Years, Chilmari, Kurigram - IDI)

According to the respondents, children in Nageswari, Kurigram, have become more regular when it comes to attending schools, and the dropout rates have decreased. An Upazila education Officer from Nageshwari informed that around 60% of children are enrolled in schools with very few dropouts. Despite their economic conditions, parents have been making sure to send their children to schools and finish their education in this area.

On the contrary, not all parents and children are aware of education, so parents do not want to invest money on education, especially since they need to be able to afford dowry to marry off their daughters. Families suffering from extreme poverty are reluctant towards the education of their daughters. For them, spending too much on their education seems like a waste.

Section 3

3.1 Description of students

We administered aptitude tests among 1,119 students in 54 schools across the Kurigram District. The aptitude test procedure has been described in the methods section. Table 10 shows the distribution of Cohort 1 students (cohort-1 students are of age 7-10, who dropped out from grade 1 or 2) who participated in the aptitude test based on their area of residence and gender.

Upazila		Cohort 1
	Bhurungamari	11% (118)
	Chilmari	13% (141)
	Fulbari	11% (122)
	Kurigram-Sadar	14% (155)
	Nageswari	9% (103)
	Rajarhat	21% (235)
	Rajibpur	6% (61)
	Rowmari	9% (95)
	Ulipur	8% (89)
	Subtotal	**100% (1119)**
Child Gender	Boy	40% (446)
	Girl	60% (673)

Table 10: Area of residence and gender of Cohort 1 students

3.2 Aptitude test results of cohort 1 students

The total score for Bangla in the aptitude test was 40 (written: 35; oral: 5); for English: 30 (written: 25; oral: 5); and for mathematics: 30 (only written). The grand total score on the aptitude test was 100 (Bangla – 40, English – 30 and Mathematics – 30).

3.2.1 Distribution of Bangla exam scores of Cohort 1 students

Figure 6 shows distribution of Bangla exam scores of cohort 1 students. Mean of Bangla scores of the students is 24.4, while Median score is 26.

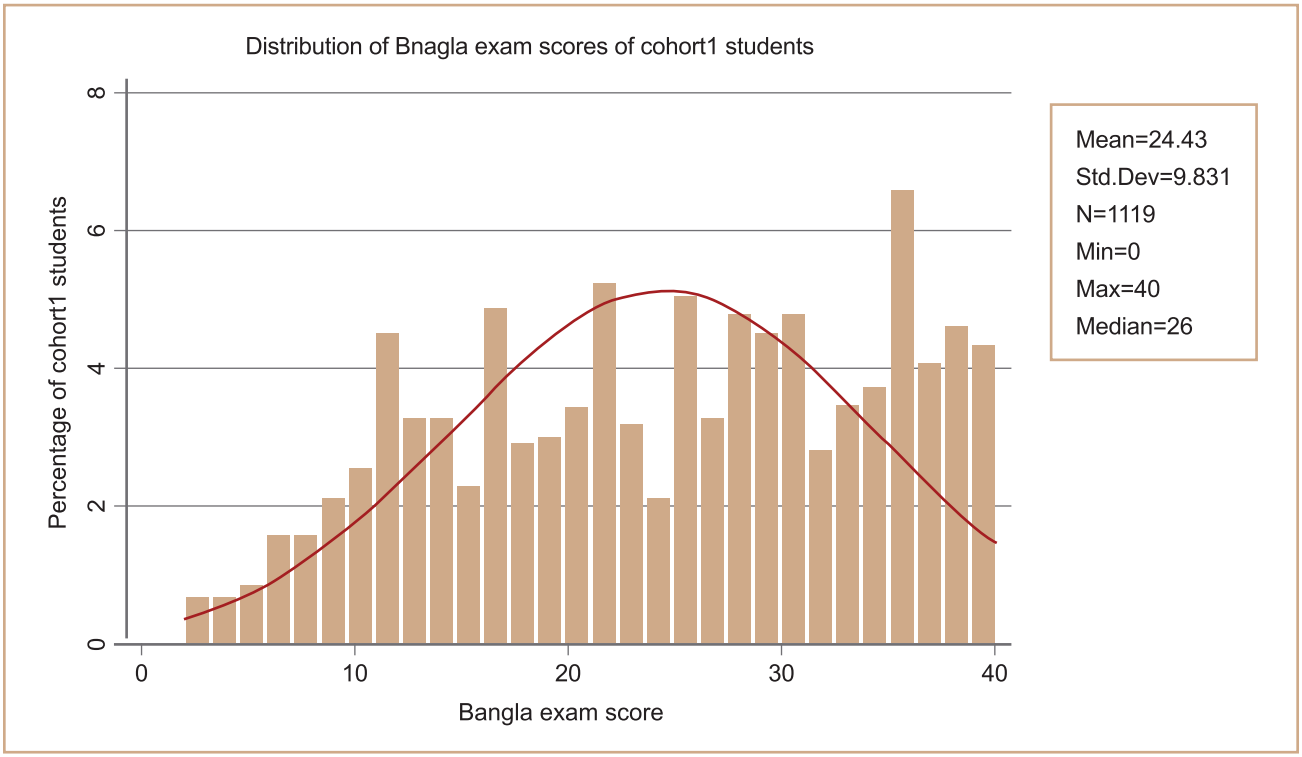

Figure 6: Distribution of Bangla exam scores of Cohort 1 students

3.2.2. Distribution of English exam scores of Cohort 1 students

Figure 7 shows distribution of English exam scores of cohort1 students. Mean of English scores of the students is 12.0 while Median score is 13.

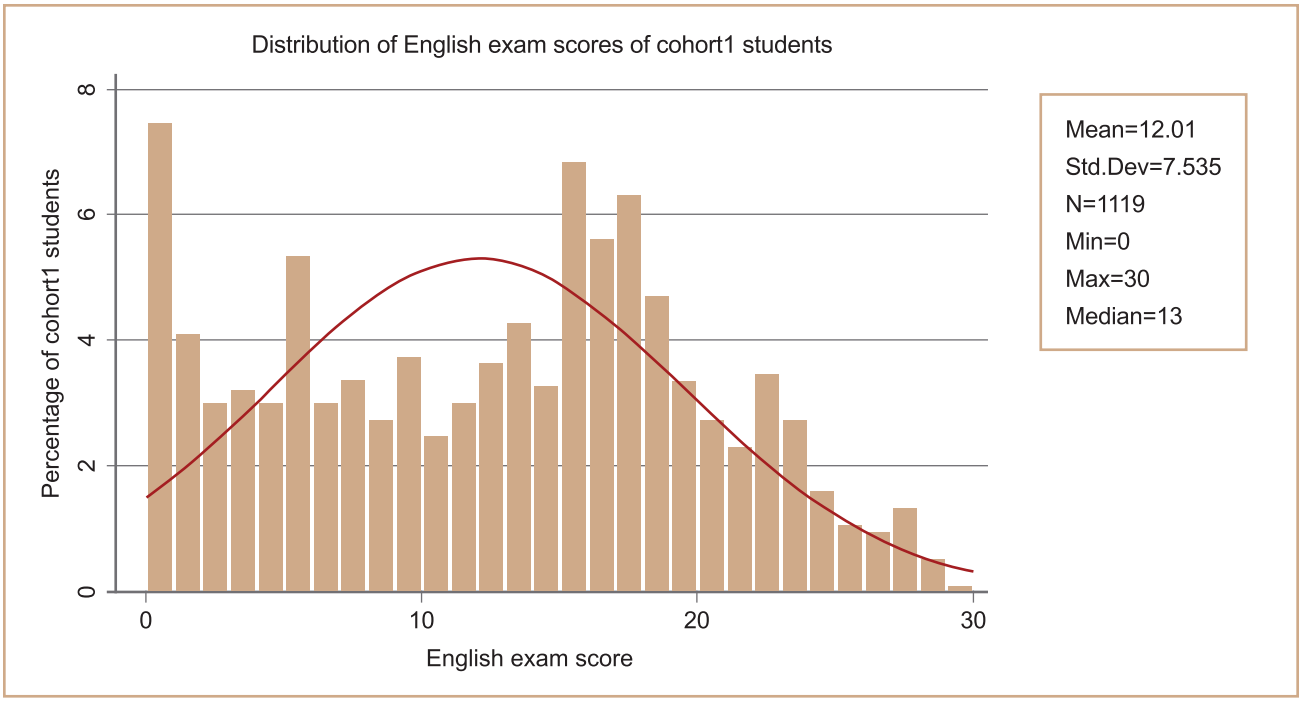

Figure 7: Distribution of English exam scores of Cohort 1 students

3.2.3 Distribution of Mathematics exam scores of Cohort 1 students

Figure 8 shows distribution of Mathematics exam scores of cohort1 students. Mean of Mathematics scores of the students is 12.0, while the Median score is 12.

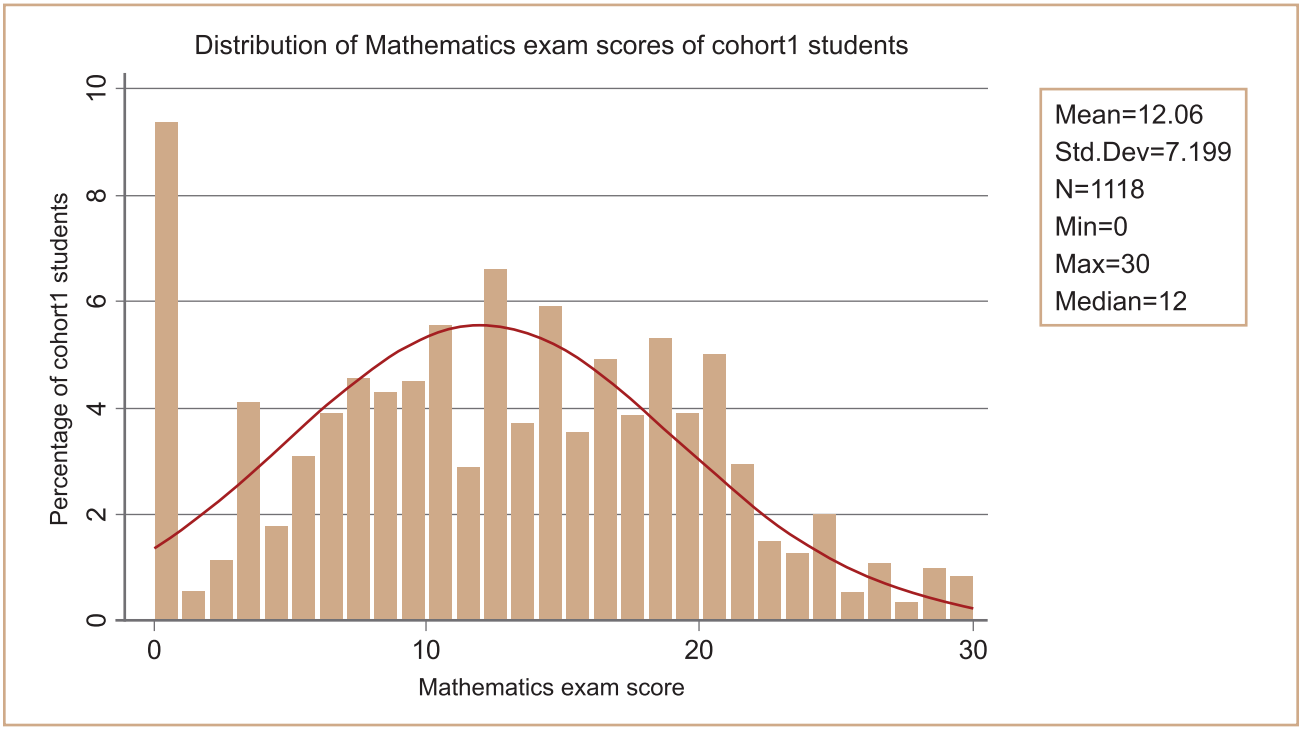

Figure 8: Distribution of Mathematics exam scores of Cohort 1 students

3.2.4 Overall results in the aptitude test for Cohort 1

According to the national standard set by the Government of Bangladesh Education Board, 33 out of 100 marks is considered a minimum mark required for promotion to a higher grade among the students. Figure 9 shows the percentage of cohort1 students who did not obtain 33% marks in different subjects.

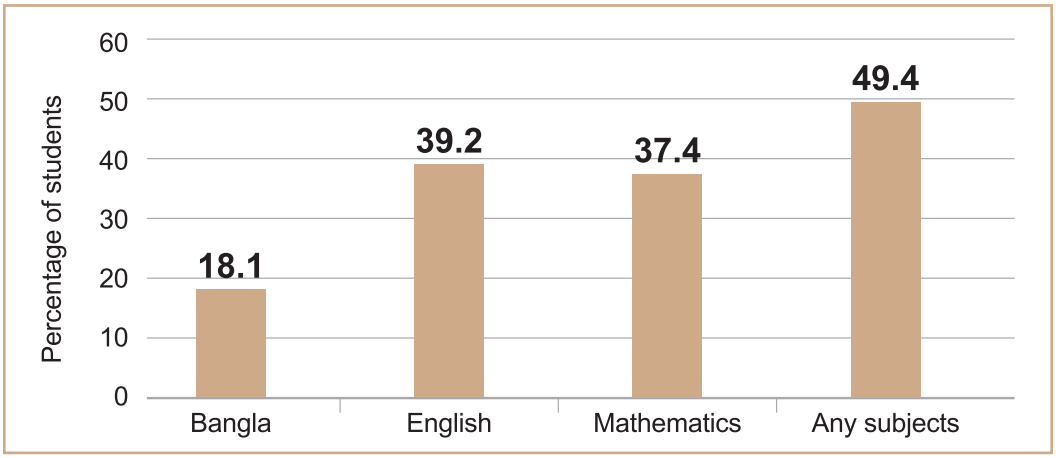

Figure 9: Percentage of cohort1 students who did not receive 33% of marks in different subjects

3.3 Aptitude test results of Cohort 1 students by area of residence and gender

Table 11 shows aptitude test results of cohort 1 students based on their area of residence.

Apitude test results		Bhurunga Mari	Chilmari	Fulbari	Kurigram-Sadar	Nageswari	Rajarhat	Rajibpur	Rowmari	Ulipur	Overall
Bangla	<13.2	14% (16)	12% (17)	13% (16)	17% (27)	16% (16)	20% (46)	20% (12)	28% (27)	29% (26)	18% (203)
	≥13.2	86% (102)	88% (124)	87% (106)	83% (128)	84% (87)	80% (189)	80% (49)	72% (68)	71% (63)	82% (916)
English	<9.9	31% (37)	37% (52)	31% (38)	37% (57)	32% (33)	41% (97)	72% (44)	44% (42)	44% (39)	39% (439)
	≥9.9	69% (81)	63% (89)	69% (84)	63% (98)	68% (70)	59% (138)	28% (17)	56% (53)	56% (50)	61% (680)
Math	<9.9	29% (34)	41% (57)	34% (42)	32% (49)	36% (37)	41% (97)	57% (35)	36% (34)	37% (33)	37% (418)
	≥9.9	71% (84)	59% (83)	66% (80)	68% (106)	64% (66)	59% (138)	43% (26)	64% (61)	63% (56)	63% (700)

Notes: Column percentage reported; the total score was 100 (Bengali 40, Math-30, English 30)

Table 11: Aptitude test results of cohorts1 students by area of residence

Table 12 shows aptitude test results of cohort 1 students by gender.

Apitude test results		Boy	Girl
Bangla	<13.2	22% (97)	16% (106)
	≥13.2	78% (349)	84% (567)
English	<9.9	43% (190)	37% (249)
	≥9.9	57% (256)	63% (424)
Math	<9.9	41% (184)	35% (234)
	≥9.9	59% (262)	65% (438)
Notes: Column percentage reported			

Table 12: Aptitude test results of cohorts1 students by gender

3.4 Socio-emotional skill test

3.4.1. Student social-emotional qualities

We employed a behavioural screening questionnaire called the "Strength and Difficulties Questionnaire (SDQ)" to evaluate the social-emotional well-being of students. The teacher version of the SDQ was used. More details are available here https://www.sdqinfo.org/a0.html.

The SDQ is especially suitable for community samples since it places attention on both strengths and challenges (abstract). Numerous sizable epidemiological investigations have utilised it. Since the SDQ is a dimensional measure over its whole range and each additional point corresponds to a higher rate of disorder, it is well suited for research of the general population.

The 25 items in the SDQ have five scales: prosocial behaviour (5 items), conduct issues (5 items), hyperactivity/inattention (5 items), peer interaction issues (5 items), and emotional symptoms (5 items).

The SDQ scores were categorised into three types: "normal", "borderline" and "abnormal". The cut points for these categories were chosen based on the fact that 80% of the children are likely to be in the "normal" category, 10% in "borderline", and 10% in "abnormal" categories. More details can be found here *https://www.sdqinfo.org/a0.html.* Table 13 shows that most of the students are in a good state of mental health and psychosocial well-being. Among all the students, 96% are unlikely to have a significant emotional problem. Besides, 96% of the students are unlikely to have significant problems in social life, whereas only 2% of the students are at risk of significant problems in social behaviour (Table 13). It is important to mention here that as the teachers were the source of SDQ-19 assessment data, there might be a possibility of bias. Most of the teachers were newly recruited (hence, had less experience) and only got 2 months to know the children. There is a probability that the teachers might not be completely aware of the student's situation. If the SDQ-19 data were also taken from the parents and triangulated with the teacher's data, then we could have gotten more accurate results.

Teachers completed SDQ	Cohort-1		
	Normal n (%)	Borderline n (%)	Abnormal n (%)
Total difficulties score	1177 (92.24)	65 (5.09)	34 (2.66)
Emotional problems score	1258 (98.59)	5(0.39)	13 (1.02)
Conduct problems score	1135 (88.95)	77 (6.03)	64 (5.02)
Hyperactivity score	1074 (84.17)	83 (6.50)	119 (9.33)
Peer problems score	1142 (89.50)	83 (6.50)	51 (4.00)
Prosocial score	1218 (95.45)	37 (2.90)	21 (1.65)

Table 13: Socio-emotional Skills of students

Section 4

4.1 Challenges BEP encountered in recruiting students and running the schools

According to Table 14, 67.98% of survey respondents have shared that the reason behind enrolling their children to BRAC school are the provision of quality education followed by good reputation of the school (38.37%), convenient location (39.27%), proper attention from teachers (28.7%), providing study materials (36.25%) and high standard of curriculum (20.54%).

Main reasons behind enrolling their children to BRAC School	Frequency	Percentage of cases *
Quality education	225	67.98
Good reputation	127	38.37
Are located in near-distant places	130	39.27
BRAC provided practical knowledge	64	19.34
Students receive adequate attention from teachers	95	28.7
Students do not need any extra support (home tutor, additional class) with their	60	18.13
BRAC schools provide school materials (copy, pen)	120	36.25
BRAC school's curriculum is of high standard	68	20.54
BRAC school's environment is very good	96	29
Somebody from the family is related to BRAC school	13	3.93
Free education	42	12.69
Other	6	1.81

*Percentage total exceeds 100 due to multiple response

Table 14: Reasons behind enrolling children to BRAC Schools

Qualitative findings suggest that one of the factors BEP staff faced were convincing the parents that educating their children was very important and they should send them back to schools. However, even when parents were interested in re-enrolling their children, the financial toll that COVID-19 took on the families was something they were having a hard time overcoming. For which, even when parents were aware, they could not afford their child's education. As a result, BEP arranged regular meetings with parents and even went door to door to bring students back to schools.

Additionally, many students had migrated to Dhaka for employment and were not as concerned about education as they previously were. Overcoming the financial burden was more important to some of the families, for which the parents as well as the children resorted to choosing earning mediums instead of spending on education. However, BEP were able to deal with some of those factors through parents' meetings and raising awareness in the community. A BEP Programme Organiser (PO) from Nageswari mentioned that, even though usually community members are sceptical about new programmes being introduced in such places, the community members were relatively very welcoming towards this initiative by BRAC. Last but not least, infrastructural concerns were raised as an issue for many guardians and students. The unavailability of electricity at schools at times created operational difficulties for the teachers. And during warmer weather, not having fans made attending classes even more difficult for the students and teachers.

4.2 COVID-19 preventative measurements installed in BEP schools

According to survey data, 25.91% of the respondents are aware of the COVID-19 preventive measures implemented in the schools. However, 74.09% are unaware of the measurements. The schools reopened after the COVID-19 emergency period. Therefore, the preventive measures were not mandatory. Among the preventive measures taken at BRAC schools, 250 respondents (77.64%) said that the schools enforced usage of masks. Similarly, 192 (59.63%) respondents shared that there were proper hand washing and sanitising facilities with water and soap and 181 respondents shared that there was scheduled handwashing for everyone (Table 15).

COVID-19 measurements taken at school	Frequency	Percentage of cases *
Proper hand washing/sanitising facilities with water and soap	192	59.63
Enforced use of mask	250	77.64
Scheduled regular hand-washing	181	56.21
Availability of hand sanitiser	78	24.22
Social distancing	73	22.67
Others	85	26.4
*Percentage total exceeds 100 due to multiple responses		

Table 15: COVID-19 preventative measurements

BRAC Educators from Rowmari and Nageswari also informed that BRAC had provided strict guidelines to be followed because of COVID-19. Masks were provided, and the teachers were to ensure that children washed their hands on regular intervals. The schools were also instructed to have hand stations outside the classrooms.

Section 5: Value for Money

5.1 Economy and efficiency

In this section, we will discuss the findings on the key cost drivers of the accelerated learning programme, their sharing of costs (as a percentage of total costs), and the unit cost of the programme. Table 16 represents the detailed findings of the cost analysis whereas Table 17 displays the estimation and distribution of total costs across several broad cost categories.

We can see that total costs related to programme start-up accounted for BDT 4,801,344 for providing teachers with basic training. On the other hand, programme implementation costs accounted for BDT 24,329,435 with the largest amount being spent on teachers' salaries (salary and benefits of BEP teachers), BDT 7,359,913. Teaching learning materials also accounted for a large amount of cost, about BDT 5 million. Programme supervision cost was another key cost item with a total expenditure of BDT 4.6 million over the last 7 months. Thus, the total actual cost of the programme over the last 7 months amounted to BDT 29,130,779. In addition to estimating the actual cost of the programme, as described in the methodology section, we also calculated the cost by annuitising the capital items used in the programme (i.e., infrastructure, training related costs) to distribute the costs over the 7 months period for which we collected expenditure data. Thus, the total programme cost with annuitisation of capital items was estimated BDT 25,748,272. Total programme level cost per month was BDT 4,161,540.

Here, it is worth mentioning that the costs we have considered in our cost analysis do not cover all the expenditure recorded by the accounting team. Some of the costs are solely programme management related costs that are not directly associated with the programme implementation (e.g., overhead cost of the programme). We tried to take into account only those costs that are anyhow relevant to the programme implementation and that will be needed if this programme is further scaled up in the future. Thus, our analysis will not exactly reflect the expenditure being forecasted and tracked by the accounting team of the programme.

Broad cost categories	Specific cost items	Total expenditure (BDT)
Costs related to Programme design and development		
Fixed Asset (Furniture & Equipment)	Computer and IT Equipment	-
Capacity development of teachers	Teachers' Basic Training	4,801,344
Curriculum and Materials Development	Curriculum and Materials Development	-
Total programme design and development costs		**4,801,344**
Costs related to Programme Implementation		
Organising and coordinating programme at the field level	Salary and benefits of programme organiser	2,001,001
Teachers' salaries	Salary and Benefits of BEP teachers	7,359,913
Teaching-Learning materials	Student Supplies	761,428
	Classroom Supplies	3,999,729
	Teachers' Supplies	517,390
Monthly refreshers for teachers	Orientation and Monthly Refreshers for teachers	184,310
Utilities and supplies	School Rent	1,026,382
Digital Integration Cost	Technology Integration in Education (TIE)	-
Engaging teachers to prevent dropout	Parenting education	2,907
Research, Survey, Networking and Advocacy	Survey Cost	23,079
Programme supervision cost	Salary and Allowance	3,716,144
	Local/Domestic Travel	610,822
	Basic & Foundation Training	271,800
Offices Common Cost	Office Rent	307,022
	Office supplies and stationery, etc.	326,711
	Other Maintenance Expenses	58,963
	Internet	-
	Computer Operating Cost	10,466
H.O Logistics & Management	H.O Logistics & Management	3,151,368
Total programme implementation costs		**24,329,435**
Total programme costs		**29,130,779**
Total programme costs with annuitisation of capital items		**25,748,272**
Programme cost per month		**4,161,540**
Average cost per school		**86,958**
Average cost per school per month		**12,423**
Average cost per child per month		**497**

Table 16: Detailed expenditure pattern of Hempel programme during Jan'22 to July'22

Table 17 depicts programme costs across different broad cost categories and their contribution as a percentage of the total cost. Programme development cost accounted for 16.5 percent of the total programme cost, with training and capacity development of teachers accounting for 100 percent of the programme development cost.

Programme implementation cost was responsible for 83.5 percent of the total programme cost, with 25 percent for teachers' salaries, 18 percent for teaching learning materials, 16 percent for programme supervision and about 11 percent for H.O Logistics & Management.

Broad cost categories	Total expenditure (BDT)	% of the total actual cost
Costs related to Programme design and development		
Capacity development of teachers	4,801,344	16.5%
Total programme design and development costs	**4,801,344**	**16.5%**
Costs related to Programme Implementation		
Teachers' salaries	7,359,913	25.3%
Organising and coordinating programme at the field level	2,001,001	6.9%
Teaching-Learning materials	5,278,547	18.1%
Monthly refreshers for teachers	184,310	0.6%
Rent, utilities, and supplies	1,026,382	3.5%
Engaging teachers to prevent dropout	2,907	0.0%
Research, Survey, Networking and Advocacy	23,079	0.1%
Programme supervision cost	4,598,766	15.8%
Offices Common Cost	703,162	2.4%
H.O Logistics & Management	3,151,368	10.8%
Total programme implementation costs	**24,329,435**	**83.5%**
Total Programme Costs	**29,130,779**	**100.0%**

Table 17: Cost distribution according to broad categories

Table 18 shows the cost analysis according to the set indicators for value for money. The above cost categories were further accumulated into 4 broad key cost items: Learner cost, teachers cost, teacher development cost, infrastructure cost and supervision and monitoring cost. These categories included the above discussed specific cost categories as follows:

- Learner cost includes salary and benefits of Programme Organiser, expenses for student and classroom supplies, for engaging students in CLG and Remedial support, and for parenting education.

- Teachers' cost includes salary and benefits of BEP teachers and expenses for the purchase of teachers' supplies.

- Teacher development cost includes expenses for teachers' basic training, subject-based training, orientation and monthly refreshers for teachers.

- Infrastructure cost includes expenses of furniture and fixtures, computer and IT equipment, curriculum and materials development, content development for SEL & wellbeing, paying school and office rent, buying other programme supplies and stationery, expenses for Technology Integration in Education (TIE), software Maintenance Expenses, service Integration, other maintenance expenses, internet bill, computer operating cost (as applicable).

- Supervision and monitoring costs include salary and allowance of programme management staff, local/domestic travel, basic and foundation training of programme staff, research and evaluation activities, survey cost, networking, linkage, advocacy, auditing fees.

We found that teachers' costs accounted for about 27% of the total cost, followed by learner cost accounting for 23%, supervision and monitoring costs 16% and infrastructure and teacher development costs each 17%.

Broad cost categories	Expenditure (BDT)	% of the total actual cost
Learner Cost	6,765,065	23%
Teachers cost	7,877,303	27%
Teacher development cost	4,985,654	17%
Infrastructure cost	4,880,912	17%
Supervision and monitoring	4,621,845	16%
Tota	**29,130,779**	**100%**

Table 18: Estimation of VFM Indicators

Since the Accelerated learning programme is ongoing and we could collect expenditure data for seven months, we looked at the expenditure pattern across those months. Figure 10 shows that over the months, supervision and monitoring costs remained almost the same. In the early months, there were larger costs for teacher development (arrangement of training, refresher sessions, etc.) (e.g., in March). Since March, learner, teachers', and infrastructure costs remained almost the same.

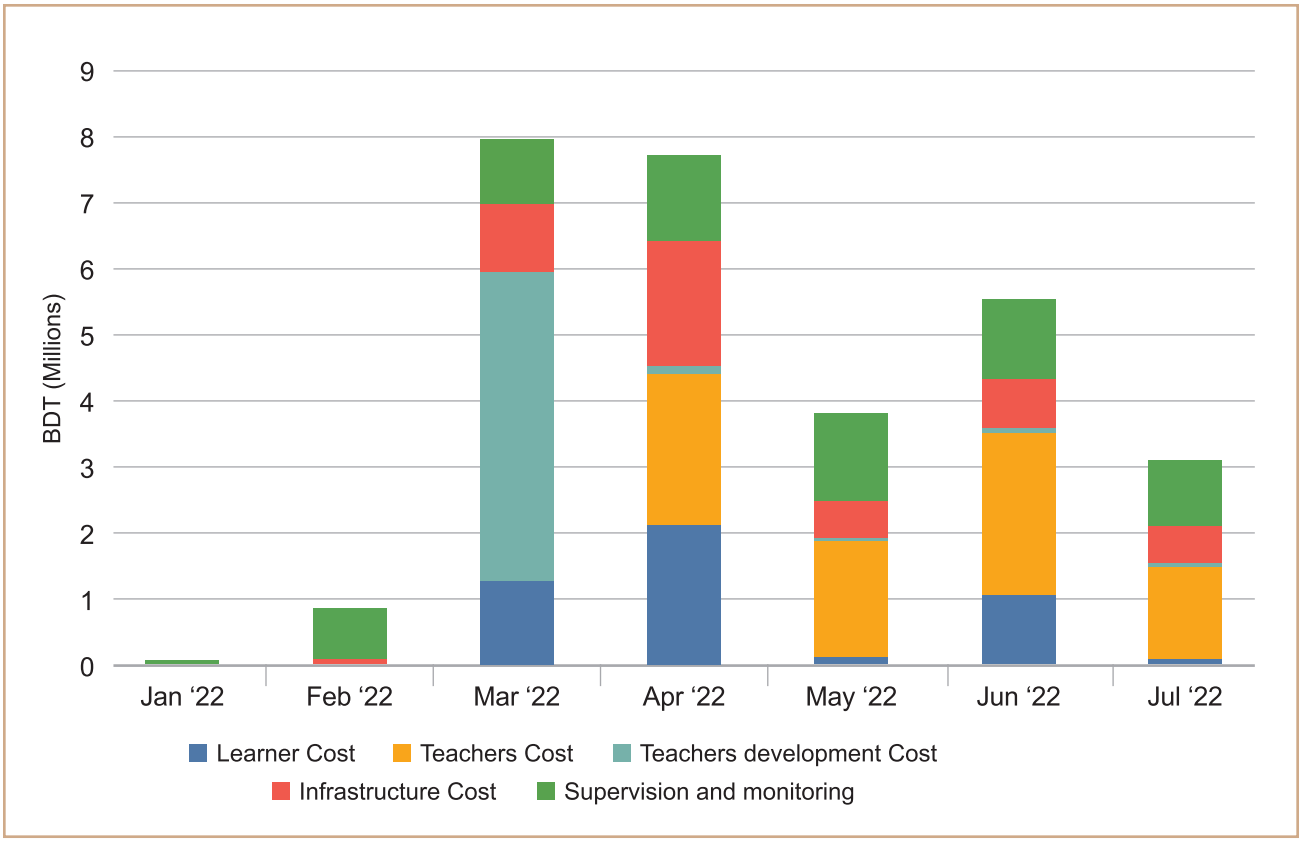

Figure 10: Distribution of different cost items over different months

In order to evaluate efficiency, we estimated the cost per child and cost per school of the accelerated learning model (Table 18). Per child cost is the amount spent per child per year for the schools under VfM reporting that is derived from the total expenditure incurred for school operation (total of teacher, learner, direct supervision and monitoring and infrastructure cost and others, if any). We have found that over the period of January 2022 – July 2022, the average cost per school (there are a total of 335 schools) was BDT 86,958 and per month, the cost was about BDT 12,423. We also estimated the cost per child per month, and we found it to be BDT 497 (there are a total of 8,375 students enrolled in the accelerated learning programme). For determining yearly estimates, we used the total budget of the programme and found that the per child cost per year would be about BDT 8,124 (though it will vary based on the actual expenditure over the next 5 months, August 2022 – December 2022).

For evaluating efficiency, it is also important to measure the attendance rate of children in accelerated non-formal primary education, the survival rate of students as a proportion of learners starting an education course in BEP schools, and the retention rate of teachers as a percentage of trained teachers. But, these can be calculated after the programme is successfully completed to collect relevant data for these analyses.

5.2 Effectiveness and cost effectiveness

Several indicators can be used to evaluate effectiveness and cost-effectiveness: retention rate as the percentage of graduated students who transitioned to formal primary schools, transition rate as a percentage of graduates, and students result in National exams (PECE/ JSC/ SSC) and/or, Achievement results from alternate measurement. The current baseline study looked at the status of numeracy literacy scores of the students enrolled in the programme and found the results, which have been explained in section 3.

Once the programme is completed and the endline evaluation is done, we will be able to understand the improvement in the indicators, and then we will be able to analyse the effectiveness as well as cost-effectiveness of the programme following the aforementioned indicators. During that time, it will be required to learn how different cost items are related to the specific intended outcomes of the programme. As it will help to measure the cost outcome of the programme (since the impact can only be achieved in the long term, cost-effectiveness is usually difficult to measure).

5.3 Equity

Equity can be evaluated by looking at different indicators: percentage of students from HTR areas, percentage of students in Climate vulnerable areas, percentage of students who are girls, percentage of students with disabilities, percentage of students from ethnic populations, and percentage of recruited teachers who are females. Based on the availability of BEP MIS data, we found that in Hempel's accelerated learning programme the percentage of students who are girls is 56.19 percent and the percentage of students with disabilities is 4.81 percent.

The above value-for-money analysis provided a detailed description of the costs incurred in the accelerated learning programme. Our estimate showed that among the total cost of the programme, teachers' costs accounted for about 27% of the total cost followed by learner cost accounting for 23%, supervision, and monitoring cost 16% and infrastructure and teacher development costs each 17%. Besides, programme development cost accounted for 19% of the total programme cost and programme implementation cost was responsible for 81% of the total programme cost. In terms of unit costs, it was found that over the period of January 2022 – July 2022, the average cost per school was BDT 86,958 and per month, the cost was about BDT 12,423. Besides, the cost per child per month was found as BDT 497, which can be around BDT 8,124 yearly (based on the programme budget). In terms of effectiveness and equity, most of the indicators could not be calculated due to the unavailability of relevant data since the current study is basically doing a baseline assessment. But based on the MIS data the study team could avail so far, it is worth saying that the programme is ensuring equity by giving an emphasis on enrolling girl children as well as children with disabilities in the schools.

RECOMMENDATIONS

A lot of the parents and school teachers believed that if BRAC was able to provide snacks or stipends to the children, they would be more encouraged to join BRAC schools. Since many of the families are going through financial difficulties, affording education while managing their households becomes quite impossible. Hence, providing some financial support to these families would help them overcome their struggles and focus on their child's education.

"Most of the people here are too poor and don't have the luxury of sending children to schools. BRAC should give incentives and financial aids so that families can send their children to school" (Primary School teacher, Chilmari, Kurigram - KII)

On top of that, many parents are reluctant to admit their children to BRAC schools since they are worried that the children will face difficulties adjusting to other schools after they finish BRAC school. According to the parents, 10 months is not enough for the children, and they would prefer BRAC to have longer sessions, until primary or secondary school so that their children get quality education. Parents are satisfied with the care and guidelines provided by the BRAC educators, but the transition from BRAC to other schools after their course is over concerns the parents as children too do not like adjusting to new environments and learning methods so frequently.

Additionally, as schools throughout the world are now rapidly adapting to technological changes due to both the COVID-19 and to further achieve digitalisation, it might be beneficial for Accelerated Model schools to standardise their classrooms according to global standards and incorporate

facilities such as chairs, tables and usage of laptop if resources are available.

Altogether, even though the current conditions of learning loss and dropout rates have been significantly high compared to the years before COVID-19, it can be assumed that through the interventions implemented by BEP, there are positive changes occurring in the BRAC schools located in Kurigram. Not only that, through the help of the models implemented, the present literacy and numeracy of the OOSC children, along with the conditions of their community, societal beliefs and financial condition, are taken into consideration so that the learning loss can be minimised and the overall education gap that has happened for COVID-19 can be reduced.

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