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WHAT WORKS AT THE LAST MILE?

BRAC Integrated Development Programme

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An impact study and cost-benefit analysis of BRAC's development programming in Bangladesh's *haor* (wetlands) regions

BRAC Integrated Development Programme

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ABOUT BRAC

BRAC is an international development organisation founded in Bangladesh in 1972 that partners with over 100 million people living with inequality and poverty globally to create sustainable opportunities to realise potential.

BRAC's community-led, holistic approach is reflected in its unique integrated development model, which brings together social development, social enterprises and humanitarian response for lasting, systemic change. BRAC is born and proven in the south, and has become a world leader in developing and implementing cost-effective, evidence-based programmes at scale, with a particular focus on communities in marginalised, extremely poor or post-disaster settings across Asia and Africa.

VISION

A world free from all forms of exploitation and discrimination where everyone has the opportunity to realise their potential.

MISSION

Our mission is to empower people and communities in situations of poverty, illiteracy, disease and social injustice. Our interventions aim to achieve large scale, positive changes through economic and social programmes that enable women and men to realise their potential.

VALUES

Integrity
Innovation
Inclusiveness
Effectiveness

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Acknowledgments

This impact study and cost-benefit analysis of BRAC's development programming in Bangladesh's haor (wetlands) regions entitled `what works at the last mile?' is conducted by LightCastle Partners –a business consulting firm in Bangladesh in consultation with Professor Abul Kashem, Department of Soil Science, Sylhet Agricultural University, Bangladesh.

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Executive Summary

Bangladesh has witnessed significant economic and human development growth over the past decade. Unfortunately, the growth has not been geographically uniform. Hard-to-reach areas, such as the waterlogged Haor[1] basins in eastern/north-eastern Bangladesh, have had high levels of poverty and are significantly lagging in socio-economic development. To alleviate the above-mentioned problems associated with hard-to-reach areas, BRAC has been running both Integrated Development Programmes and Non-Integrated Development Programmes (Non-IDP)[2] in Haor areas of Sylhet and Mymensingh. Although both IDP and Non-IDP aim to bring about significant socio-economic development in these waterlogged Haor regions, IDP delivers development services in 10 key areas, in an integrated approach through one single programme organiser (PO), a Village Development Organisation (VDO), which consists of local women from the programme participant areas. Non-IDP, on the other hand, delivers individual development services in a siloed approach.

This study is a multi-fold Impact and Cost-Benefit Analysis of IDP in Haor regions of Sylhet and Mymensingh. The study has 2 key segments, an Impact Study, which gauges the impact of different IDP interventions, and a Cost-Benefit Analysis, which calculates the net benefit per unit cost of each IDP component. The Impact Study assess the impacts of the IDP over the last 5 years by comparing data on socio-economic indicators across 4 groups – IDP (2020), No-Intervention/Control (2020), Non-IDP (2020), and IDP Baseline (2015). Analysis of socio-economic indicators for the Impact Study is used to calculate the benefit-cost ratio of each IDP component for the Cost-Benefit Analysis segment.

The multi-fold approach of the study, therefore, aims to assess which method of development interventions are best suited for the Haor region, given the unique geographical and climatic challenges. To undertake a comprehensive assessment, household data has been collected and analysed from more than 1,463 Households in the 3 groups

1 Bowl-shaped low-lying river basin that remains waterlogged

2 The study areas were selected where an integrated approach is not implemented. The selected Upazilas were Madan in Netrokona, Austagram in Kishoreganj, Sulla in Sunamganj

– 708 from IDP, 426 from Non-IDP, and 329 from No Intervention or Control. Focus Group Discussions (FGDs) – 8 in the IDP area and 4 in the Non-IDP area – were conducted with programme participants to evaluate the progress of female empowerment and power dynamics in the intervention areas. In addition, Key Informant Interviews (KIIs) with multiple stakeholders – POs, community members in study areas, BRAC Field Staff, BRAC Employees from the IDP Team and other teams – provided insight into operations and impact of IDP and Non-IDP interventions.

Comparison of the current socio-economic conditions in the IDP area, compared to that of Control, Non-IDP and Baseline (2015), clearly establishes the success of the IDP. The success of the IDP can be attributed to the combination of multiple programmes under one umbrella and a strong support system from the VDO and PO. As a result, IDP Programme participants show better performance in almost all critical socioeconomic categories, as shown in the table below. The average annual per capita incomes of IDP Programme participants have more than doubled since the Baseline and are much higher than that of Non-IDP and Control. The IDP programme participants have the highest female labour force participation rates and ownership of the most productive assets. Compared to Baseline, Control, and Non-IDP, families in the IDP area demonstrate much better vaccination and complementary feeding practices, better access to healthcare, access to ANC and PNC, etc. In addition, the proportion of school-aged household members who do not go to school at all has decreased by two-third in the IDP area over the last five years. IDP Programme participants have higher access to sanitary latrines, compared to the Baseline, Control, and Non-IDP. Furthermore, women in IDP areas are more empowered, aware, and have higher social acceptance. Therefore, this demonstrates that BRAC's development activities are creating much-needed impact in the IDP areas. Despite the onset of the pandemic in March 2020, the IDP programme participants have benefited from the development approaches over the last five years.

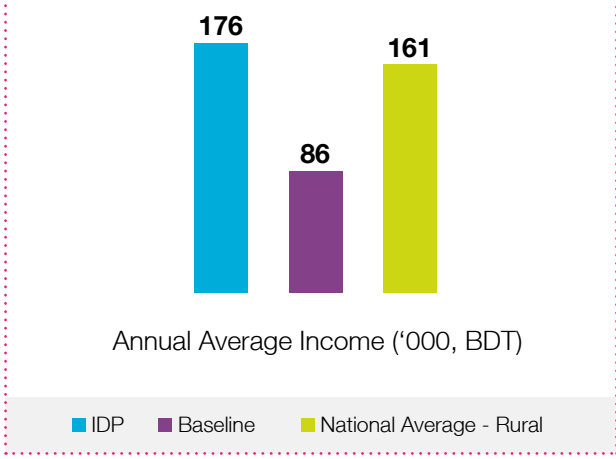
Brief Summary

Indicator(s)	Key Statistics & Information
Income & Poverty Alleviation	Average Annual Income per household (2019) is highest in the IDP Area BDT 175,958, and is higher than Non-IDP, BDT 169,569, and Control, BDT 135,576. Average Annual Incomes have more than doubled since the Baseline Study in 2015, where it averaged at BDT 85,879. According to HIES 2016, the annual income of rural population is BDT 160,776. In addition, compared to 53% of the population in the Baseline, only 21% of Households in the IDP area are living under the international poverty line of $1.9 per day (using 2011 PPP prices). The poverty headcount ratio in the IDP area is 7 percentage points higher than the national headcount ratio, 14.9%. The IDP area has high Ultra Poor Graduation Rates - 88% of IDP UPGP Participants, met all 6 criteria of Ultra Poor Graduation Programme.
Expenditure	Average Annual Expenditure (2019) in IDP Households, BDT 147,148, is also higher than that of Non-IDP, BDT 139,441, and Control, BDT 122,019. Since IDP Programme participants have greater financial capacity and awareness, they spend more of their income on food and education, and less on loan repayments, as they rely less on local lenders who charge high interests.
Employment	Female labour force participation rates are the highest in IDP area and have significantly improved since the Baseline Study. More than a quarter, 27% of the female programme participants in the IDP area are involved in farming, while 20% are involved in entrepreneurship.
Asset Ownership	BRAC Programme participants have highly benefited from financial literacy training – 97% of programme participants in the IDP and Non-IDP Area have savings, compared to 40% in Baseline. The average of amount of loan taken and repaid is much lower in the IDP area than in Control and Non-IDP. For example, the average size of loan in the IDP area is BDT 28,689, while that in Non-IDP is BDT 38,250, and in Control is BDT 33,009. A higher proportion of households in the IDP area own productive assets, such as cows and chickens. For example, 69% of IDP respondents' own cows, which is more than double than that of the Baseline Study (30%), Non-IDP (36%), and Control (31%). However, the average number of some productive assets per household is lower in the IDP areas, e.g., the average number of cows owned per household in the IDP area is 1.95 and 2.02 in Control and Non-IDP.

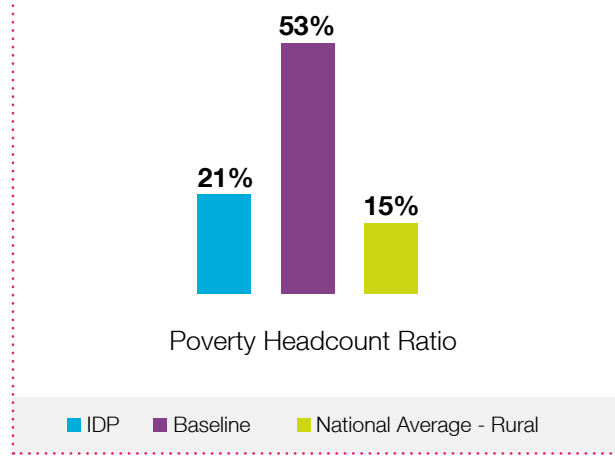
Indicator(s)	Key Statistics & Information
Education	The literacy rates of females aged 7 and up in the IDP area is equivalent to that of the National Average, 61%, and higher than Non-IDP (59%) and Control (56%). The literacy rate of males in the IDP area, aged 7 and up, is 52% and lagging national literacy rates for males, 66%. The proportion of male and female household members (aged 5-24) who do not go to school at all, has decreased by two-third from that of the Baseline Study. For example, 8% of females aged 5-24 in the IDP area do not go to school or any educational institute at all, compared to 37% in the Baseline, 14% in Non-IDP, and 19% in Control. Similarly, 14% of males aged 5-24 in the IDP area do not attend school or any educational institute, compared to 34% in the Baseline.
Maternal and Child Health	IDP programme participants also demonstrate much better vaccination and complementary feeding practices, better access to healthcare, ANC, and PNC. For example, 87% of parents responded that their children have been completely vaccinated compared to 59% in the Baseline, 72% in Non-IDP, and 67% in Control. 80% of women who has had a child within the last one year have had access to at least one ANC from a compared to 88% of women in Sylhet and Mymensingh and 62% of Baseline. Similarly, 76% of women who had a child within the last year had access to least 1 PNC, compared to 91% average of Sylhet and Mymensingh. IDP programme participants also have a higher tendency to seek health care at formal institutions, including government hospitals and BRAC Healthcare centres. The reproductive health of women also shows improvements from that of the Baseline Study – respondents are getting married and having children at a much later age. However, the reproductive data highlights some areas of improvements. For example, 41% of the women in the IDP area deliver children in the presence of skilled birth attendant. Although this proportion is much higher than the Baseline, 17%, it is lower than the national average of 63%.
Dietary Diversity	66% of IDP programme participants have food security, and the proportion is higher than Baseline (42%), Non-IDP (61%), and Control (60%). However, Dietary Diversity is an area of improvement, as IDP is lagging Non-IDP in percentage of respondents who consumer 7 or more important food groups daily.

Indicator(s)	Key Statistics & Information
Status of Vulnerability and Women Empowerment	The IDP area also has the highest proportion of female respondents who have power in making decisions about the amount to save each month, contraceptives, having or not having children, reproductive health, working outside of home for employment, taking and paying off loans, seeking treatment, and household purchase of food and consumer durables. In addition, 20% of respondents in the IDP area are included in local power structures, compared to 8% in Non-IDP and 5% in Control. 98% of IDP programme participants are aware of the legal age of marriage for boys and girls, compared to 67% of respondents during the Baseline Study. As a result, the IDP area has the lowest percentage of female marriage under 18. Only 22% of female household members were married before turning 18 in IDP, compared to 53% in Baseline. IDP programme participants are also more knowledgeable about social protection schemes - 42% of respondents are now receiving some form of social protection, compared to 8% in the Baseline Study and 13% in Control. However, a high proportion of residents across all 3 study areas, are vulnerable to damage of crops due to natural calamities. The percentage is the highest in IDP, 51%, followed by Non-IDP, 41%, and Control, 35%.
Agriculture and Farming	The respondents in the IDP regions had the lowest land size with 44 Decimals. Majority of the respondents in the IDP region, 89%, have received resilient farming training from BRAC.
WASH	91% of the respondents in the IDP regions do not share latrine with other households, compared to 73% in Control, 82% in Non-IDP and 87% in Baseline. 89% of the households have access to sanitary latrine in the IDP region, which is a vast improvement from the baseline, which was 12%. 88% of Programme participants wash hands with soap after defecation, compared to 33% of National Rural Average.
Migration	On average, the migrant workers sent back BDT 14,842 per month which is approximately BDT 3,608 more than the Non-IDP region (BDT 11,234) and BDT 5,169 more than the Control region. In the Baseline, on average, they sent back BDT 7,636.

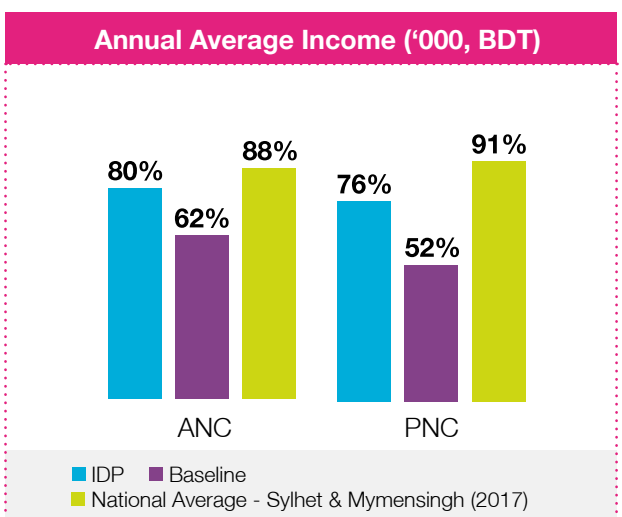
Annual Average Income ('000, BDT)



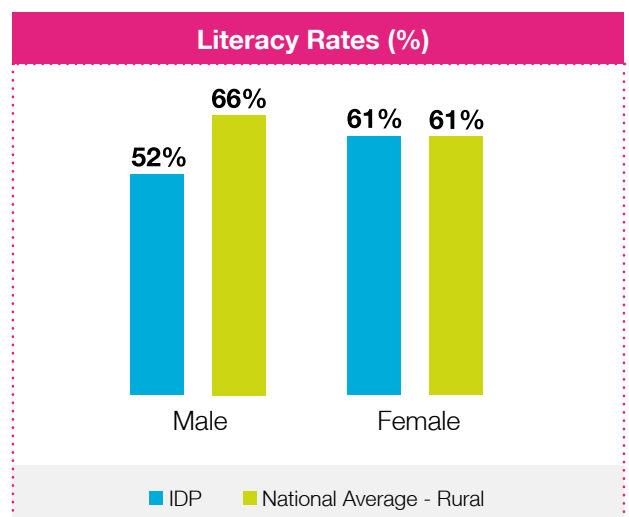
Poverty Headcount Ratio (%)



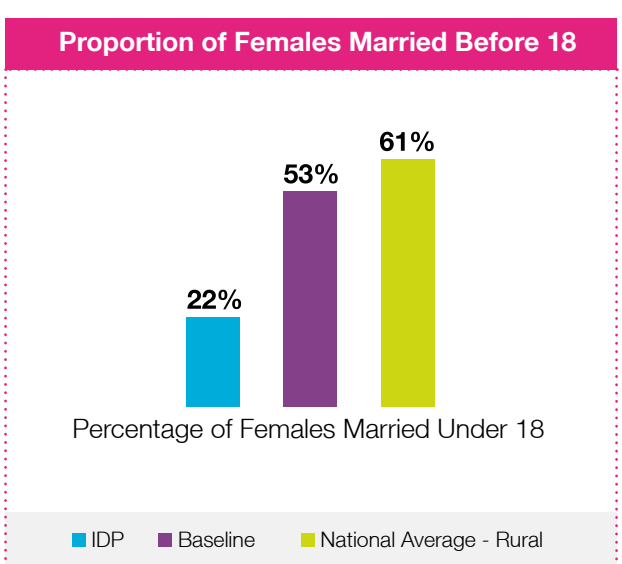
Annual Average Income ('000, BDT)



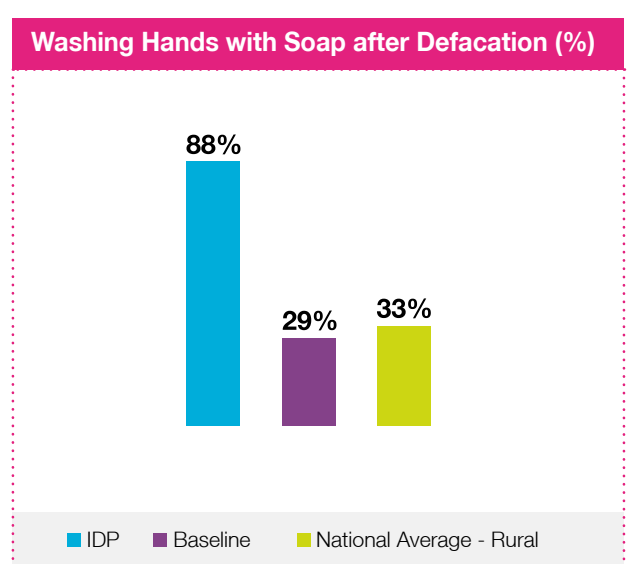
Literacy Rates (%)



Proportion of Females Married Before 18



Washing Hands with Soap after Defacation (%)

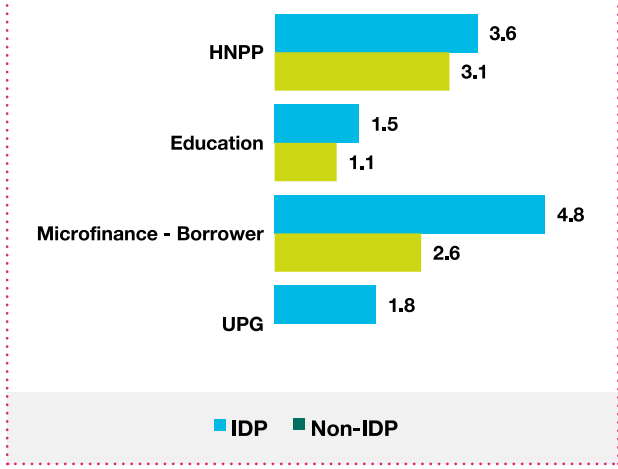


The statistics from the Impact Study, some of which have been outlined above, were used to conduct a robust Cost-Benefit Analysis of selected IDP and Non-IDP components. The Cost-Benefit Analysis calculations incorporate the positive and negative externalities associated with each intervention. The Cost of each IDP and Non-IDP Intervention is calculated as the summation of cost to BRAC and the cost to the programme participant. In all cases, the cost to the programme participant is the opportunity cost of attending the programme. The benefits of each programme component are calculated often as additional income or savings that have resulted from being part of the programme. The ratio of Benefits to Cost demonstrates the benefit of each unit of investment in a programme and is an indicator of the cost-effectiveness of the programme. It must be noted that the Cost-Benefit Analysis of the IDP Programmes incorporates the Cost and Benefits of running the programmes in an integrated way, opposed to running the programme individually. For example, the Cost-Benefit Analysis of an Education Programme in the IDP area shows the Cost-Benefit Ratio of offering an Education Programme, along with 9 other development components in the Haor area.

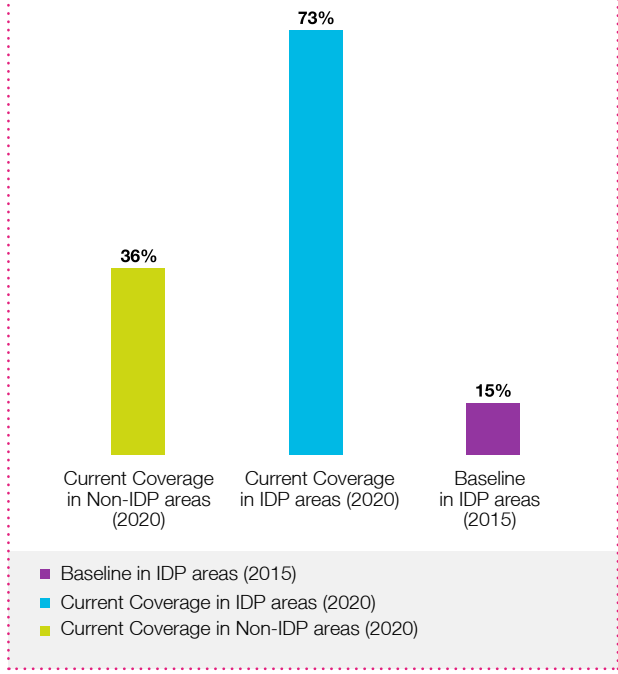
As shown in the figures below, the Benefit-Cost Ratios of 2 comparable IDP and Non-IDPs – Education and Health (HNPP) – show that the IDP is the most cost-effective one. For example, one unit of BDT spent on HNPP generates benefits worth 3.6 BDT in the IDP area and 3.1 BDT in the Non-IDP area. Among 4 IDPs, Microfinance has the highest Benefit-Cost Ratio. The analysis for IDP's Microfinance Programme is conducted for Members who borrow and save – Borrowers. One unit of BDT spent on Borrowers generates 4.8 units of benefits. In IDP components, such as Health, programme participants spend less time compared to counterparts in Non-IDP, as many public health messages are communicated through VDO meetings, other programmes and/or platforms. IDP has a lower cost per programme participant, compared to Non-IDP components as programmes are delivered in an Integrated Approach. IDP also benefits from spill over effects – interventions of one programme are reinforced by interventions of another programme. Therefore, the benefits of IDP components are higher.

In addition to the IDPs being more cost-effective than Non-IDP, the cost-effectiveness of the IDPs is set to increase, given that the cost per programme participant in the IDP area is declining as IDP increases coverage of its programmes. The percentage of the population covered by IDPs has increased by 58

Benefit Cost Ratio of IDP and Non-IDP Programmes



Percentage of Households Covered by Baseline, Non-IDP & IDP



percentage points since Baseline Study and is 37 percentage points higher than Non-IDP.

The success and cost-efficacy of the IDP demonstrate the need for the continuation of the programme in existing areas and expansion to new areas. The poverty in the Haor region is multi-dimensional, e.g., social indicators in all areas such as Health, Education, Women Empowerment, etc., used to lag national averages, given the water-logged and hard-to-reach situation. As a result, interventions in such areas need to incorporate multiple development

components, as well as a robust network of social and psychological support. The statistics from the Impact Study demonstrate that there is a need to include all possible development components of the IDP, as the components work in synergy. In addition, the VDO model of support system should be replicated. In this way, programme participants receive constant guidance and encouragement and can, therefore, receive optimal benefits of all development components.

However, before expansion, some modifications need to be considered for the operations. For example, there need to be more efforts to advocate the success and cost-efficacy of the IDPs. The IDP team should advocate the unique strengths of the programme within BRAC and the international donor community. This will benefit the expansion and fund-raising efforts of the IDP and aid collaboration efforts with other BRAC programmes.

Modifications could be made to the operations and strategy of IDP, as well as individual programme components. Increasing capacity building of BRAC Field Staff, for example, will further enhance the effectiveness of the IDP. The IDP will also benefit from digitization, such as the wider proliferation of digital payments, telemedicine, digital education, etc.

Collaboration with the Government of Bangladesh (GoB) may further strengthen IDP's impact in the Haor area. The GoB has development programmes for the area as part of the Haor Masterplan and the Eight Fifth Year Plan. There are areas for collaboration in component programmes, such as Agriculture, Education, Health, etc.

Modifications can also be made to individual programme components. For example, the Education programme can incorporate some strategies to incentivise students to continue education beyond primary school. The Health Programme can motivate more women to seek the support of skilled personnel or BRAC Health Centre during delivery and increase awareness of the importance of dietary diversity. The WASH programme can collaborate with local WASH entrepreneurs to increase the installation of sanitary latrines in the IDP area. BRAC should encourage women to seek occupations outside of agriculture and even facilitate access to technical training. Agricultural training programmes, aimed at reducing crop loss due to natural hazards, must be more effective. These modifications will be beneficial as they align with IDP's current strategies, and in addition, will aid sustainability of development in programme participant areas.

The results of the study indicate that there is a high need for the continuation of BRAC's development efforts in hard-to-reach areas of Bangladesh, such as that of the Haor region. Like that of the IDP, development efforts must be delivered using a rigorous integrated approach and by engaging local women in leadership positions and as agents of positive change.

The study also aims to evaluate IDP in 4 categories: **Relevance, Effectiveness, Efficiency, Sustainability, and Impact**. First and foremost, our study finds that IDP is relevant in mitigating the problems in the Haor area. This is because the cycle of poverty in the Haor area is multi-dimensional in nature, and straightforward development approaches will not be as effective at alleviating poverty. IDP has been successful at generating positive impact because the integrated approach is more robust and multi-plex. The combination of multiple development programmes, delivered through the 'one-stop service' model, makes the IDP programme highly effective. The benefits of the 'one-stop service' model are not only limited to relevance, effectiveness, and positive socio-economic impacts it has generated. As demonstrated by the Cost-Benefit Analysis, IDP components are more cost-efficient compared to Non-IDP programmes. Furthermore, the 'one-stop service' model appoints local women as agents of positive change. Therefore, the development activities will continue even after IDP operations stop operating in the area, creating sustainable change.

ABBREVIATION

Code	Full form
ADB	Asian Development Bank
ADC	Area Development Coordinator
AEW	Agriculture extension workers
AI	Artificial Insemination
AIGAS	Alternate Income Generating Activities
ANC	Antenatal Care
BCG	Bacille Calmette-Guerin
BCR	Benefit Cost Ratio
BEP	BRAC Education Programme
CBA	Cost Benefit Analysis
CBO	Community Based Organization
CEP	Community Empowerment Programme
CIA	Central Intelligence Agency
CNA	Coordinated Needs Assessment
CNG	Compressed Natural Gas
CSBA	Community Skill Birth Attendant
DAE	Department of Agricultural Extension
DDS	Dietary Diversity Score
DLS	Department of Livestock Services
DMCC	Disaster Management and Climate Change
DoF	Department of Fisheries
DPHE	Department of Public Health Engineering
DWA	Department of Women Affairs
FGD	Focus Group Discussion
GDP	Gross Domestic Product
GJD	Gender, Justice, and Diversity
GO	Government Organizations
GPCS	Grant Plus Credit Support
GPS	Government Primary School
HH	Household
HIES	Household Income and Expenditure Survey

HNPP	Health, Nutrition and Population Programme
HRLS	Human Rights and Legal Aid Services
HSC	Higher Secondary Certificate
HYV	High Yielding Variety
IDP	Integrated Development Programme
IDP-IP	Integrated Development Programme- Indigenous People
IGA	Income-Generating Activities
IP	Indigenous People
IYCF	Infant and Young Child Feeding
KII	Key Informant Interview
LPL	Lower Poverty Lines
LSP	Local Service Providers
MF	Microfinance
MoHFW	Ministry of Health and Family Welfare
MR	Menstrual Regulation
MTP	Medically Trained Professional
NGO	Non-Governmental Organisation
PACE	Post Primary and Continuing Education
PKSF	Palli Karma Sahayak Foundation
PLEW	Poultry & livestock extension workers
PNC	Postnatal Care
PO	Programme Organiser
PPP	Purchasing Power Parity
PRL	Programme Development, Resource Mobilization & Learning
RNGPS	Registered Non-Government Primary School
SDG	Sustainable Development Goals
SIP	Special Investment Programme
SK	Shasthya kormi
SMP	Safe Migration Programme
SS	Shasthya shebika
TB	Tuberculosis
UDC	Upazila Development Coordinators
ULSC	Union Livestock Service Centre
UPG	Ultra-Poor Graduation
UPL	Upper Poverty Lines
VAWG	Violence Against Women and Girls
VDO	Village Development Organization
WASH	Water, Sanitation, and Hygiene

CHAPTER 1

INTRODUCTION

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INTRODUCTION

1.1 Background

Bangladesh's annual GDP growth rates of over 6% in 2011-19 have accelerated the country's development, contributed to increased digitization, higher disposable income, and better living standards for its people. Despite such achievements, the pace of economic development has not been uniform across Bangladesh. Among 491 Upazilas in Bangladesh, 50 have been identified to be lagging in terms of economic and social development.[3] Haors, Chars, and Indigenous Peoples (IP) in plain lands suffer from relatively higher rates of poverty.

The Haor region, for example, with area of approximately 19,998 sq. km, is the home to 19.37 million people. It has a unique hydro-ecological characteristic, which can be described as depressed basins.[4] Haor areas are found in the North-eastern region of Bangladesh, specifically in Sunamganj and Habiganj districts of the Sylhet region. The depressed basins (locally named as Haor), are bowl-shaped, low-lying river basin that remains waterlogged for almost half of the year.[5] Geographically, Haor regions are prone to flash floods, seasonal floods, and river erosion. Agricultural activities are limited to the mono-cropping system as most of the land primarily remains

3 UNICEF (2010). A case for geographic targeting of basic social services to mitigate inequalities in Bangladesh. Dhaka: UNICEF Bangladesh.

4 Master Plan of *Haor* Area (2012). Bangladesh *Haor* and Wetland Development Board.

5 BRAC. (2017). A New Approach to Reducing Poverty and Vulnerability: Evidence from BRAC's Integrated Development Programme

submerged and waterlogged for the rest of the year, limiting cultivation possible only in dry/Boro season. Paddy is the dominant crop in this region.

Although the Haor region is abundant in water resources, most of the water bodies of Haor areas are leased out to influential people who make it impossible for poor households to have proper access to the water resources. On the other hand, due to the poor communication system, the population living in deep Haor areas are also deprived of proper transportation, health, and educational facilities. Thus, in the absence of proper economic opportunities and infrastructure, people living in the Haor areas are mostly driven to the den of poverty.

As a result of the geographical and communication challenges, the people in this region are deprived of numerous basic rights and face a number of socio-economic and geo-natural obstacles. Lack of minimum proper education, healthcare, sanitation, hygiene, and maternal and child healthcare impair growth and productivity. The impact of a high level of poverty is visible in the socio-economic status of the households. Many households have little to no access to basic life amenities.

Facing critical life challenges every day, education is a challenge to the Haor residents, reflected in an average of 43% literacy rate in this region against the national 53.34% literacy rate.[6] Education facilities are either sparse in the region or remote due to the geographic constitution of the region. Children are deprived of primary and secondary education and proper nutrition. This has been leading to poor productivity and underperformance in the long run, reducing the population's contribution to the economy, and unfortunately failing to elevate their socio-economic standing. As a result, generations are trapped in a vicious circle of poverty.

Similarly, maternal health, childcare and post-natal services are inaccessible due to the lack of proper infrastructure and communications. Due to lack of agricultural land as well as economic conditions, nutritious food is in scarcity, causing malnutrition among children, which is significant compared to national rates.

6 HCTT Coordinated Needs Assessment (CNA), Floods in Northeast (*Haor*) areas of Bangladesh, April-May 2017
The literacy rate in *Haor* areas range from 34.40% to 45.60% in different districts, averaging at around 43% against national 53.34% rate of Literacy.

Residents living in these areas, face an overwhelming nexus of issues driven mainly by extreme poverty, climate vulnerability, lack of access to basic amenities, poor or no access to healthcare, education, and hygiene facilities. Moreover, these inhabitants face a struggle to earn a proper income, with most women facing inequality, discrimination, and lack of input in decision-making in the families.

Residents in Haor or other hard-to-reach areas such as Chars are, therefore, not only vulnerable to poverty, but long-lasting poverty which can be multi-dimensional. As discussed above, people in these areas must tackle multiple challenges simultaneously – lack of sustainable livelihood options, income and wealth inequality, deprivation from socio-economic development initiatives and consequent marginalization, lack of stable transportation systems, etc. Residents are trapped in a never-ending cycle of multi-dimensional poverty, and this problem cannot be solved by straightforward development initiatives that have proven successful in other areas.

To tackle the multidimensional cycle of poverty in hard-to-reach areas, such as the Haor, BRAC initiated the Integrated Development Programme in 2013, to make firm and effective interventions. IDP delivers BRAC's basic support and multiple development interventions rigorously. Development interventions consist of 10 key programmes: Health, Nutrition and Population, Education, Water Sanitation and Hygiene (WASH), Community Empowerment Programme, Adaptive Agriculture, Fisheries, Livestock and Poultry, Gender, Justice and Diversity, Ultra-Poor Graduation (UPG), Human Rights and Legal Aid Services, Safe Migration, and Microfinance. The interventions are primarily driven by IDP's efficient and assimilated approach of 'One-stop service' model, which is centred around the following:

- Uplifting the participation and decision-making capabilities of women through Women Empowerment
- Ensuring access to basic living requirements and services
- Nurturing livelihoods through Ultra Poor Graduation programmes (UPG), farming, stronger financial inclusion, and risk mitigation against disasters
- Upholding the efforts through coherent advocacy between all stakeholders

In a broader perspective, IDP's goal is "to improve the socio-economic condition, empowerment and livelihoods of one million poor and ultra-poor people in the hard-to-reach area by 2020". BRAC Founder (late) Sir Fazle Hasan Abed had said that: "The integrated nature of problems of the people living in poverty and deprivation in hard-to-reach areas requires holistic intervention. BRAC Integrated Development Programme is the answer to that".[7]

1.2 Structure of Integrated Development Programme

Intending to reduce the poverty and vulnerability along with improving the livelihood options for the people in hard-to-reach areas, such as the Haor region, BRAC piloted their IDP in Baniachong and Derai Upazilas of Sunamganj and Habiganj districts respectively from 2013. After the success of the first phase, BRAC has expanded the programme to the Itna in the Kishoreganj district and Khaliajhuri of Netrokona districts respectively in 2015.[8] The IDP is offered as 2 different projects for 2 different areas with different demographics and geographical characteristics – IDP Haor Project and IDP for Indigenous Peoples (IDP-IP) project.[9]

IDP for Indigenous Peoples (IDP-IP) project caters to the marginalised Indigenous population in plain land areas. In addition to suffering from a lack of development support and discrimination, Indigenous people are frequent victims of land grabbing, which has limited their livelihood options and social mobility. The IDP-IP targets improved livelihood opportunities and empower the

IDP Haor Project currently covers 5 Haor Upazilas (Baniachong, Ajmiriganj, Derai, Itna, and Khaliajuri) of Habiganj, Sunamganj, Kishoreganj, and Netrokona districts. From 2021, the programme will be expanded to 2 new Haor Upazilas (Sulla & Mithamain) of Sunamganj and Kishoreganj districts.

7 Provided by BRAC Staff

8 BRAC. (2013). Insights from the Baseline Findings of Integrated Development Programme in Itna and Khaliajhuri

9 BRAC. (2018). Integrated Development Programme (IDP), Strategy for 2016-2020, (Revised October 2018)

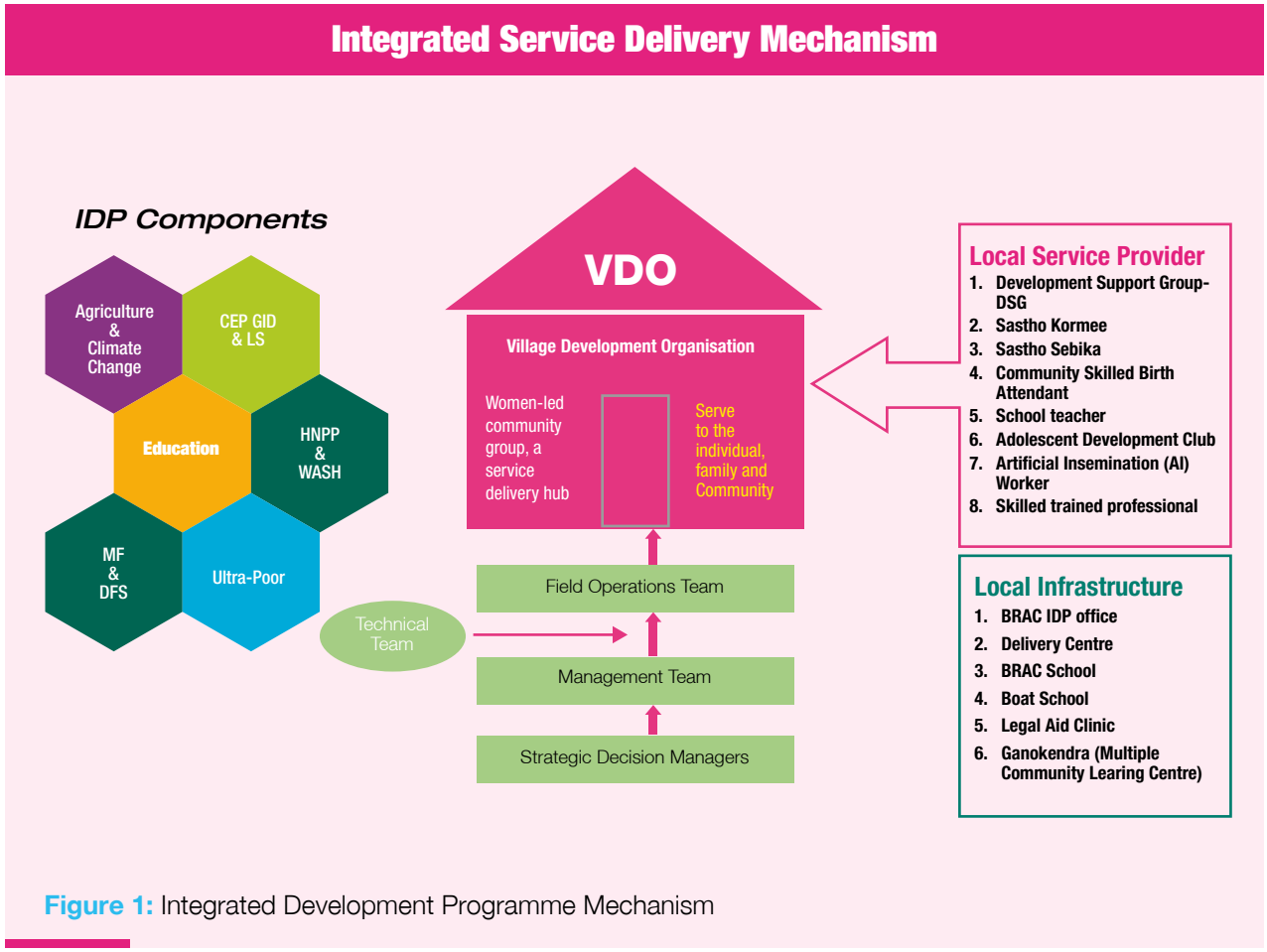


Figure 1: Integrated Development Programme Mechanism

Indigenous people to protect and promote their culture, build leadership capacity, and advocate for issues among the wider community and mainstream service providers. The project covers 4 Upazilas (Patnitola, Mahadevpur, Panchbbi and Nababganj) under 3 districts: Naogaon, Joypurhat and Dinajpur in western Bangladesh.

Under the IDP approach, BRAC developed a model where the target communities will make a transition towards empowerment through attaining a higher level of awareness about their rights and entitlements, gaining access to, and claiming their share of resources from various service providing institutions of the government, stand against exploitation and social injustices, and acquire greater skills to cope with vulnerabilities and shocks. As shown in Figure 1, the delivery mechanism consists of several elements: IDP Components (10 different development programmes), Village Development Organisation (VDO), Local Service Provider, Local Infrastructure, and Local Infrastructure.

The VDOs function as the 'one-stop service centre' and the core platform of IDP interventions. All services, such as awareness-raising, empowerment, community mobilization, basic health, WASH, education, agriculture, legal services, assets for ultra-poor, financial services, etc., are delivered to individuals, households, and communities, as needed by the participants by the VDO. The VDOs are formed from 25-40 active women living in a cluster so that each woman from a programme participant household represents their family by participating in VDO activities.

A cluster of 10-15 VDOs is linked with a Programme Organiser (PO) (part of the field operations team). A single PO oversees the development of 300-350 households and evaluates the specific needs of the community, households, and programme participants. The responsibilities of the PO include conducting monthly visits, visiting programme participant homes,

demonstration of services, counselling programme participants, Income-Generating Activities (IGA), forming associations with Government Organisations (GO), Non-Governmental Organisations (NGO) and other actors, service providers, local resources, etc.

POs and VDOs work closely with Local Service Providers (LSPs), such as health workers, poultry livestock, and agriculture extension workers. The LSPs are not confined to a single village, but rather move within villages and provide door-to-door services. LSPs, POs and VDOs work in close coordination with Local Infrastructures, such as the BRAC IDP Office, Delivery Centre, BRAC School, Legal Aid Clinic, and Gonokendro (Multiple Community Learning Centre).

BRAC has divided Bangladesh into several regions following the individual programmes outreach and activity level. All the regional offices are autonomous with regards to the operational management as they have their field staff, budget, target, and authorities to whom staff are accountable to the BRAC head office. The individual development initiatives taken through the sectoral approach is taken by the top management of BRAC.[4] From a managerial perspective, the roles of the Upazila office of the BRAC IDP and the regional office of the BRAC Non-IDP are identical. The management heads of the office are called the Upazila Development Coordinators (UDC), and they report to the head office. However, there is no Area Office for the IDP. Therefore, while in other programmes Branch Managers are the administrative heads of the branch offices, in IDP areas, Area Development Coordinators (ADCs) oversee the branch offices and Branch Managers report to them. The Area Development Coordinators report to the Upazila Development Coordinators.[10]

1.3

IDP Strategy for 2016-2020

IDP's strategies have been designed to meet priorities of BRAC and Sustainable Development Goals (SDGs), such as eliminating extreme poverty, creating employable skills and decent work opportunities for underprivileged youth and migrants, building resilience to climate change, promoting gender equality and women's empowerment, ensuring universal access to maternal health and improved nutrition, and childhood development and improved quality of education in primary and secondary schools.[8] As mentioned above, IDP operates in areas suffering from vicious cycles of multi-dimensional poverty, and therefore, targets to promote the leadership and knowledge sharing skills of programme participants. IDP's key intervention strategies are stated below.

Strengthening the support mechanism to Village Development Organisations (VDOs) for ensuring their sustainability:

IDP field staff are trained to function in advisory positions so that members of the VDO can independently develop their action plan, form a strong network with local public/private services, and increase inclusion of members in local power structures. IDP field staff also assist in the registration of VDOs at the social welfare or cooperative department of Bangladesh as Community Based Organisation (CBO).

Improve the condition, participation, and influence of women in the household and community-level decision-making process in IDP operational areas:

Given the strong emphasis on improving gender equality in programme participant areas, raising awareness of VDO members on gender and social issues, gender equality, Violence Against Women and Girls (VAWG) prevention, and sexual harassment legal and human rights issues, is a key agenda of IDP. Activities to achieve this agenda include training of VDO members, family counselling, providing preventive, treatment and rehabilitation support to the survivors, capacity building on leadership to facilitate their participation in the local power structure and different committees of local government institutions.

Enhance access to basic services on education, health, WASH in IDP operational areas:

BRAC targets to establish new pre-primary and primary schools while simultaneously, supporting existing educational programmes, as well as programmes for improving child and maternal healthcare, such as ANC, PNC, and safe delivery services. VDO members, through their meetings and courtyard sessions, will be an integral instrument for delivering communications on hygiene practices, and the importance of sanitary latrines.

10 BRAC. (2016). Integrated Development Programme (IDP) for Haor in Derai and Baniachong

Promote diversified and sustainable livelihoods and enhance financial inclusion for the poor, ultra-poor and marginalised farmers:

The Haor area is susceptible to destruction by natural disasters, especially flash floods. Therefore, IDP's strategies include interventions to proliferate diversified and sustainable livelihoods through strengthening financial inclusion for the poor, ultra-poor and marginalised farmers. Under these initiatives, IDP aims to increase the number of borrowers and group savings and standardize the borrower ratio (300 borrowers per PO) for the Microfinance programme.

New Initiatives and innovations:

IDP plan to test 100% cashless branch mobile money operation at least in one area/branch office. In addition, IDP will pilot a new integrated model in selected Haor areas in collaboration with stakeholders from the public, private, and development sectors.

Calibrate implementation plan as per lessons learned:

IDP will leverage feedback and results from existing programmes to continuously improve IDP strategy and operations.

Secure new funding to expand the efficient integrated model and produce knowledge products:

IDP's expansion plans will require efforts for new funding opportunities. Partnerships with public sector institutions like Palli Karma Sahayak Foundation (PKSF), as well as corporate entities like Chevron, and development organisations will enable the continuation and expansion of IDP.

Enhance the capacity of IDP staff towards BRAC strategy, gender sensitivity and quality programme operations:

As shown in Figure 1, the IDP management structure operates as a network of several components, such as VDO, PO, BRAC Field Team, LSPs and Local Infrastructure. Therefore, it is pertinent that IDP Continue with its staff capacity building plan, leadership development. Given IDP's emphasis on gender empowerment and BRAC's emphasis on a gender-equitable workforce, one of IDP's strategies include recruitment of women staff in both Head Office (HO) and field level.

Contingency fund:

The IDP areas have suffered from flash floods in 2017, especially Haor areas. Therefore, IDP had decided to develop a contingency plan for 2019, which was jointly mobilised with BRAC's Disaster Management and Climate Change (DMCC) and risk management services.

Advocacy and Networking:

IDP must continue to advocate achievements and plans for Haor and IP at the national, regional level. These strategies will benefit both fund-raising and policy formulation efforts for IDP's interventions.

Sustainability:

A critical component of IDP's strategy is sustainability – socio-economic development of the programme participant communities must occur after the exit of BRAC's programmes.[11] BRAC targets to empower local communities so that after its exit, former programme participants have a robust network with financial services technical advice, services from relevant government line ministries department, and Union Parishad (UP).

IDP's sustainability plan is heavily dependent on capacity-building, strengthening of community-level ownership, raising awareness and confidence of programme participants, building linkages with potential service providers, local elected bodies, and government institutions. These activities are conducted frequently so that programme participants are aware and confident enough to conduct the activities independently after BRAC's exit.

The concept of sustainability, for example, is built into VDO activities. IDP provides awareness and capacity-building support for VDO members and empowers them to have better decision-making capacity within and outside the domestic sphere. The following activities will continue after IDP's exit from programme participant communities:

- VDO members will continue to hold monthly meetings to share knowledge, raise awareness and solve community obstacles independently. In addition, VDO members will develop annual action plans and measure progress every quarter against the action plans.

11 BRAC. Strategy for Sustainable Development for Integrated Development Programme (IDP)

- The VDO will continue to maintain strong networks with BRAC MF, LSPs, local government stakeholders. VDO members can, therefore, continue to access different social services, as well as financial services from BRAC MF, such as access to credit and savings.
- The VDO members will continue to be part of local power structures, such as Union Parishad Standing Committee, School Management Committees, Market Committees, Parents Teacher Association, Nari Nirjatan Protirad Committee, and other local power structures, etc. VDO members will continue to maintain and expand their decision-making power in the local community.
- LSPs, such as poultry & livestock extension workers (PLEW), agriculture extension workers (AEW), Artificial Insemination (AI) technicians, etc., will maintain a robust network with the VDOs to provide benefits to the communities.
- The VDOs will also take lead in connecting programme participant families to government and Non-government services so that programme participants can have more access to social safety nets, social protection schemes and other safety services.
- VDO members will continue to encourage families to continue children's education after completing BRAC Primary School.
- VDO will also ensure enrolment of UPG in BRAC's MF programme, especially as savers. In addition, all graduates of the 2-year UPG programme will be receiving financial support from BRAC's MF.

1.4 Integrated Development Programme Details

Through the IDP BRAC is implementing a comprehensive development package in partnership with other BRAC programmes such as HNPP, BEP, WASH. BRAC has contextualised its development interventions for Haor region through this integrated development approach. After closely monitoring the living situations of Haor region dwellers, BRAC decided on the following ten key programmes of IDP, the objective and activity plan for each of the ten programmes are described as follows:[4]

1 Health, Nutrition and Population

The key reason for the failing health facilities and services in the Haor region is the geographic inaccessibility of the area. Under the integrated approach, BRAC provides community-based healthcare services as part of its core health intervention model along with primary healthcare. They have adopted an appropriate approach to delivering services and the provision of an active referral system suitable to accelerate the process. Services are provided not only to reduce vulnerabilities but also, to provide health care services for the people who desperately need them to recover from their illness. Within the arena of the holistic development approach of the IDP, several interventions were applied to reduce health vulnerabilities, specifically the risk of maternal and child deaths and morbidities.

2 BRAC Education

In the Haor area, it is substantially difficult for underprivileged children to have access to good quality educational facilities and institutions. So, under this intervention area BRAC is providing pre-primary, primary, secondary, adolescent, and continuation of education. The teachers at pre-primary schools are locally recruited and trained by BRAC. After one year of pre-primary courses, the graduates are enrolled in the nearest Government Primary School (GPS) or Registered Non-government Primary School (RNGPS).

3 Water Supply, Sanitation, and Hygiene

BRAC operated its Water, Sanitation, and Hygiene (WASH) programme in the Haor region to improve sanitation and hygiene practices. To meet the objectives of this programme BRAC is engaged with building community institutions, the capacity of community/social leaders, and training of teachers and student brigades. In addition, they are collaborating with different stakeholders as well as advocacy of government bodies. With

adherence to the National Sanitation Strategy BRAC is also creating latrines for the communities in the Haor region.

4 Community Empowerment

The main objective of the Community Empowerment Programme (CEP) is to empower the poor, with a special emphasis on women. The intervention method of BRAC is to increase their awareness regarding human, social, and political capital so that they can exercise their rights, can claim their entitlements, resist exploitation, and play a more active role in public life.

5 Adaptive Agriculture, Fisheries, Livestock, and Poultry

In Bangladesh, agriculture is the predominant source of occupation for most living in rural areas, and the Haor regions are no different. Boro rice is the only crop cultivated in the Haor basins, so BRAC has introduced several initiatives which include homestead vegetable cultivation, crop cultivation, livestock, and poultry raising, and fish culture. They have also introduced initiatives for better financial support for the farmers residing in Haor regions.

6 Gender, Justice, and Diversity

The main objective of this programme is to promote gender equality and reduce gender discrimination practices. To achieve this objective, BRAC staff raise awareness among the stakeholders by increasing their capacity regarding gender equality and empowerment.

7 Ultra-Poor Graduation

The programme aims to respond to the need where conventional poverty reduction strategy had not reached, especially to help the ultra-poor to develop their livelihoods and improve their human capabilities. Under the IDP framework, BRAC implemented two approaches: Special Investment Programme (SIP) for the specially targeted ultra-poor and Grant Plus Credit Support (GPCS) for the other targeted ultra-poor. Both SIP and GPCS give a daily allowance to their programme participants along with other financial aid such as loans for enterprise development training for SIP and enterprise development, life skill training, and soft loan for GPCS.

8 Human Rights and Legal Aid Services

In Bangladesh, the rights of the poor and marginalised are often violated due to a lack of knowledge and awareness. To mitigate this problem BRAC started its Human Rights and Legal Aid Services (HRLS) programme, which aims to defend the human rights of these poor and marginalised people through legal education, legal aid, and supportive services to realize legal empowerment.

9 Safe Migration

One of the main sources of foreign exchange earnings for Bangladesh is remittance, however, most of the time the human rights of those migrants' workers are neglected. BRAC's Safe Migration Programme (SMP) is an initiative for safe migration for unemployed youths to enhance their livelihood. Through the programme, information regarding methods of safe migration is disseminated among various stakeholders.

10 Microfinance

To help alleviate the financial pressure and poverty, BRAC has introduced the Microfinance Programme, under this BRAC offers an assortment of savings and credit products to the target programme participants. The borrowers generally use this to help finance their shops and small-scale manufacturing activities. BRAC has additionally added a specialised microloan for adolescent girls so they can continue their education, accumulate savings, and receive livelihood training to start smaller home-based enterprises.

CHAPTER 2

RESEARCH DESIGN AND DATA COLLECTION

CHAPTER 2

RESEARCH DESIGN AND DATA COLLECTION

2.1 Objectives of the Study

The broad objectives of the study are summarised below:

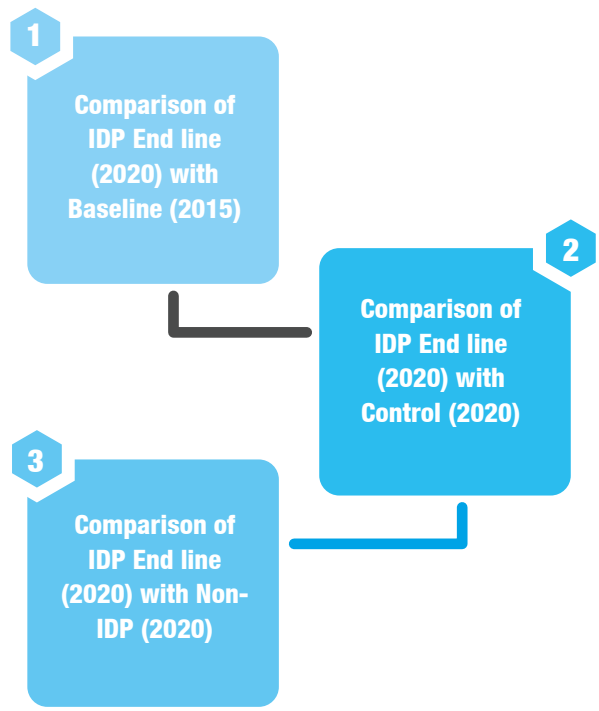
- Identify the impact of the integrated interventions in *haor* dwellers with special focus on 9 areas – Demographics and Socioeconomic Status, Education, Agriculture & Farming, Assets, Maternal and Child Health, Dietary Diversity, Status of Vulnerability and Women Empowerment, Migration, and WASH

- To document the impacts/ results of IDP interventions in comparison with Baseline Study results
- To identify the impact and results in comparison with Control (Non-IDP intervention) vs treatment (IDP intervention) in the similar *haor* areas
- To come up with recommendations to share IDP's impacts with potential donor agencies, Government, academicians, and other respective audiences for further attention in *haor* region.
- To compare cost-benefit analysis (per-programme participant and per-service) of IDP along with its results at households' level; IDP vs other single component operating BRAC programme i.e., integrated vs single operations (cost and result/ impact)

As delineated below, this study has been divided into 2 key components to fulfilling the objectives in a more methodological approach:

1 Impact Study

This portion of the study attempts to gauge the impact of the IDP Interventions across 9 different areas: Demographics and Socioeconomic Status, Education, Agriculture & Farming, Assets, Maternal and Child Health, Dietary Diversity, Status of Vulnerability and Women Empowerment, Migration, and WASH. To measure actual impact, a comparison must be done to see the effect of the IDP interventions over the past 5 years. Simultaneously, it is critical to compare data from the IDP Area to that of areas without any interventions (Control), and areas with Non-IDP Interventions. This 3-step approach will ensure rigorous impact analysis of the IDP Interventions in the *haor* areas. Therefore, the Impact Study will have 3 Sub-Components:



Chapters 3-11 in this report had been segmented according to the abovementioned 9 different areas and included analyses for sub-components I, II, & III. In addition, Chapter 13 does a rigorous comparison of the impact of the COVID-19 pandemic across the 3 different study areas: IDP, Control and Non-IDP.

2 Cost-Benefit Analysis

Drawing on the analysis from subcomponent III of the Impact Study, this segment attempts to answer the fundamental question: what is the Net Benefit per unit cost of each IDP? This portion of the study will go a step further to dissect the successes and weaknesses of the integrated approach and provide recommendations on improving the modality, to make the programme more effective and practical for nationwide scale-up.

2.2
Research Design

The research modalities to address each of these two approaches have been specified in the following chapters. The research questions that this study will attempt to answer are as follows:

- What is the overall impact of integrated programming in *haor*?
- What are the impacts in comparison with the Baseline Study in *haor*?
- What are the impacts and results comparison with Control (Non-IDP intervention) vs. treatment (IDP intervention) in similar *haor* areas?
- What is the cost-benefit analyses (per-programme participant and per-service) of the programme interventions (IDP vs Non IDP / other BRAC regular programme) along with their results/Impact at the households' level?
- What are the key recommendations to share with management and a wider audience including donor agencies, Government, academicians for further strategic decisions?
- What are the key findings of the integrated delivery approach in terms of its efficiency, effectiveness, inclusiveness, and sustainability?

Based on our understanding of Bangladeshi context requirements in the ToR, we have designed an impact assessment framework with 6 core phases corresponding to different stages of the IDP project: sampling finalization (Upazila-level), desk-based review phases, data collection instrument development phase, data collection phase, impact assessment phase, and final dissemination phase. Individual project reports, programme participant success stories and ad-hoc learning studies will also be produced. The diagram below outlines our overall approach to assessing the impact of IDP and comparing the effectiveness of IDP with Non-IDPs.

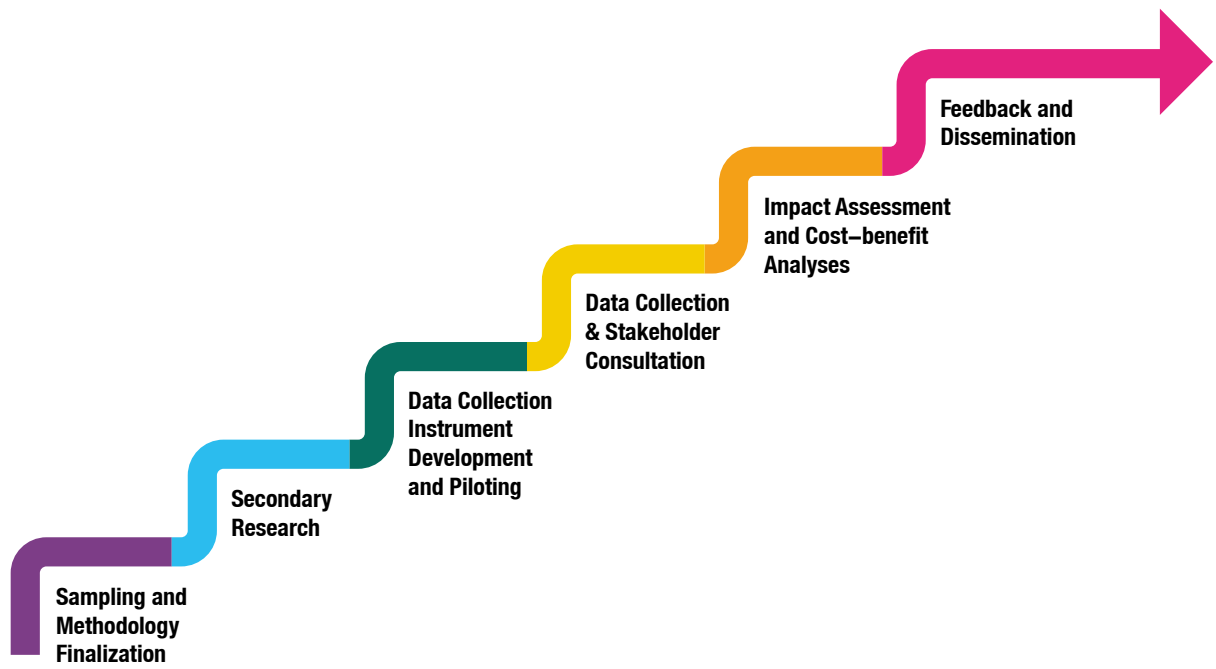


Figure 2: Data Collection Overview

2.3

Data Collection Methods, Tools, and Sampling

The diagrams below summarise the proposed approaches for 2 different key components. The data collection methods are explained in detail in the following sections.

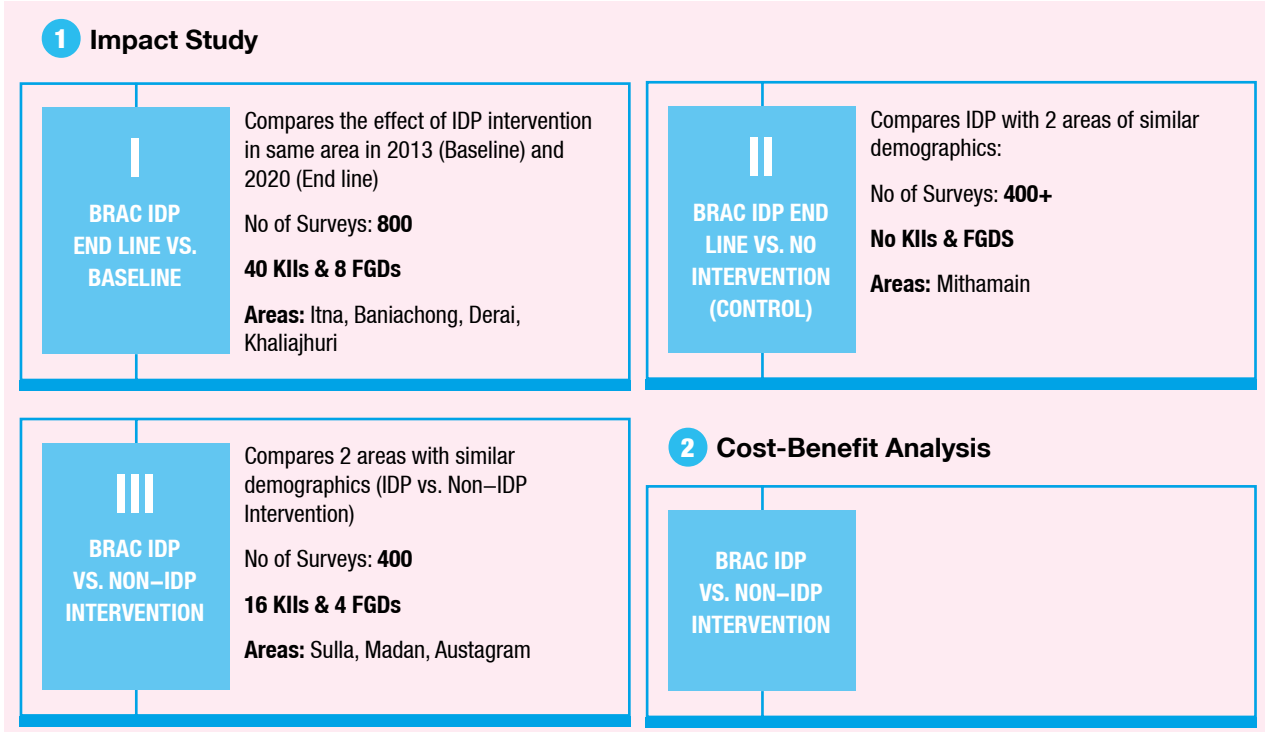


Figure 3: Data Collection Overview

Table 1 demonstrates the initial household survey sample. Data points were be collected from 3 villages in each union in each intervention area, and 20 data points were being collected from each village. A maximum of 10 households were interviewed for each village.

Table 1: Initial Distribution of Household (Quantitative Surveys)

Upazila	Number of Households Surveyed	Study	Total Number of Observations Per Study
Baniachong	111	IDP	**756**
Derai	118	IDP	
Itna	280	IDP	
Khaliajhuri	247	IDP	
Austagram	219	Non-IDP	**435**
Madan	120	Non-IDP	
Sulla	96	Non-IDP	
Mithamain	412	Control	**412**
Total Number	**1603**		

As a routine part of the analysis, a quality check was performed to ensure maximum accuracy of the data points. The Upazilas from and distribution of the final sample are outlined below. The final quantitative sample has 1463 data points.

Table 2: Final Distribution of Household (Quantitative Surveys)[12]

Upazila	Number of Households Surveyed	Study	Total Number of Observations Per Study
Baniachong	111	IDP	**708**
Derai	115	IDP	
Itna	265	IDP	
Khaliajhuri	217	IDP	
Austagram	212	Non-IDP	**426**
Madan	118	Non-IDP	
Sulla	96	Non-IDP	
Mithamain	329	Control	**329**
Total Number	**1463**		

Almost 50+ KIIs were conducted with the following stakeholders as demonstrated in the table (Table 3) below.

Table 3: KII and FGD Distribution Sample

Sl.	Type of Institutions	Target Interviews
1	Government Service Provider (One Per upazila from Each Category: 1) Health (MoHFW, etc.) & WASH (DPHE, etc.) 2) Education (Ministry of Primary Education, etc.) & Women Affairs (DWA, etc.) 3) Agriculture (DAE), Livestock (DLS) and Fisheries (DoF))	12
2	BRAC IDP Staff (e.g., SK, PO, Field Staff, etc.)	4
3	BRAC Staff (such as Area Development Coordinators, Sector Specialist, Programme Organiser, Director-CEP and IDP, Programme Head, Programme Manager-Operations, Technical Managers, Programme Head UPG, Programme Head / Programme Manager MF, Programme Head BEP, ED Office, PRL, Advocacy for Social Change)	20+
4	Village Development Organisations (VDO) members	8
5	Community Gatekeepers and Local Government Representatives	4
	Total	**50+**

12 Itna Upazila and Mithamain Upazila were part of the baseline study. Itna was the study area and Mithamain was the control area.

The maps below outline the areas that have been covered for data collection purposes.

Figure 4: Areas Covered in Mymensingh

Figure 5: Areas covered in Sylhet

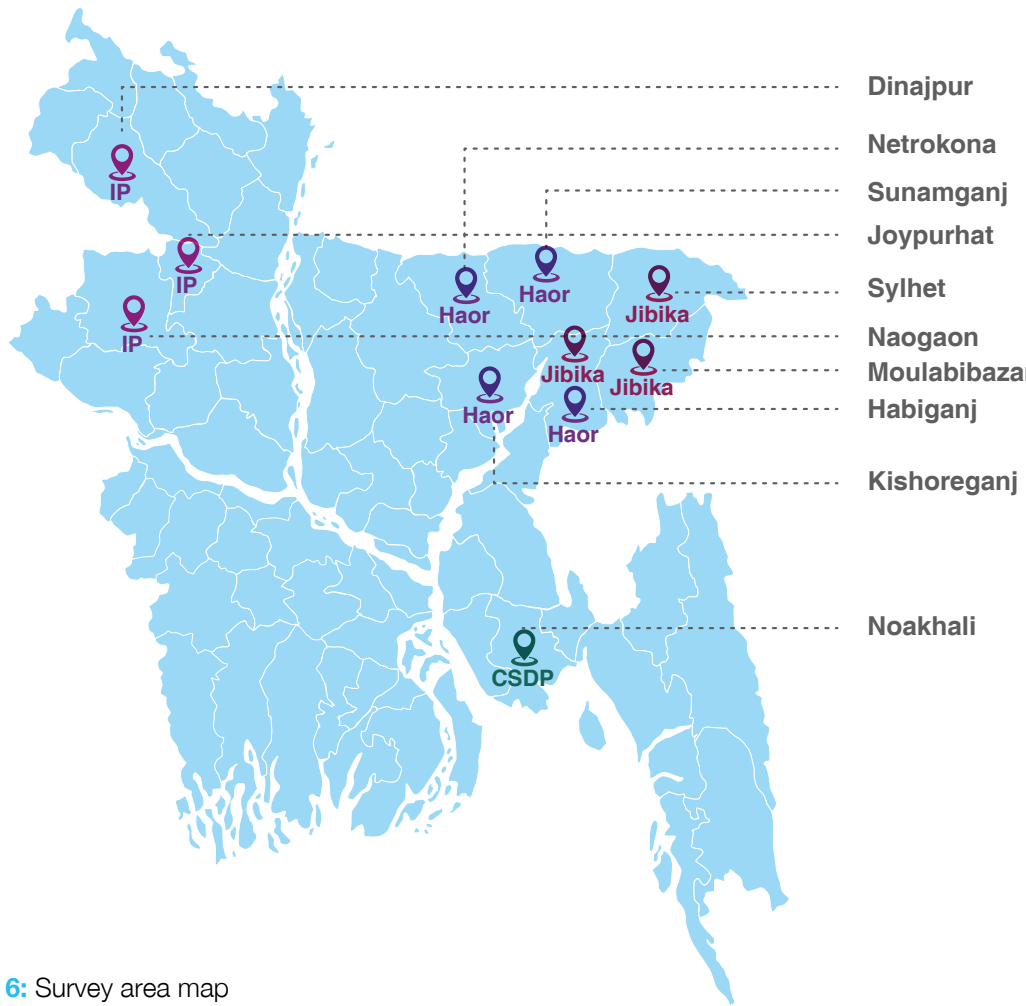


Figure 6: Survey area map

2.4
Study Limitations

The study was rigorous in the sense that it combines and quantitative data from the household level with qualitative data from BRAC Employees, VDO members, Community Members, etc. However, several challenges faced during were the collection. First and foremost, the data collection process took longer than expected because of the extra health precautions maintained during COVID. The data was also collected at the end of October when the *haor* region was extremely waterlogged. As a result, travelling from one village to another and collecting the household surveys, while maintaining proper safety precautions, was extremely difficult for the field team. Given the scope of the study, the questionnaire was lengthy and to maintain the quality of data collection, the number of household surveys conducted each day had to be limited.

The data collected from the Control Area was challenging, as several households in the Mithamain are BRAC Programme participants, especially for the Microfinance Programme. Additional 50 points were collected from households who had never taken any services from BRAC to evaluate the true impact of IDP Interventions.

Due to the ongoing pandemic, some of the results may not reflect the full impact of the IDP. Furthermore, it would be interesting to analyse the socio-economic conditions of the IDP Programme participants without the onset of the pandemic. Therefore, analysis of IDP's impacts in the *haor* Areas needed to be conducted more frequently in the coming years.

The analysis of the impact also relies on historical data and the mindset of the interviewee. For example, for many of the questions, interviewees had to remember what the scenario was like 4-5 years back. Although the questions were standardised to avoid confusion, the recollection method may slightly be different for some interviewees.

In the case of the Cost-Benefit Analysis, as discussed in section 13.6, the data for the Non-IDPs was limited and not as robust as that of the IDP. Therefore, the availability of more cost data from the Non-IDPs would render more comparisons between the 2 areas.

CHAPTER 3

DEMOGRAPHIC DESCRIPTION & SOCIOECONOMIC STATUS

CHAPTER 3

DEMOGRAPHIC DESCRIPTION & SOCIOECONOMIC STATUS

Summary

Comparison of demographics between the 3 study areas and analysis of socioeconomic status demonstrates the strong need for continuation of BRAC's IDPs in the *haor* areas. Compared to the Baseline Study, a higher proportion of households in IDP, are now working age members, signalling the need for stronger education and technical training programmes. The mean household size and age of head of household remains similar between the 3 areas and between IDP areas during the Baseline Study and in 2020. However, more IDP areas have female heads of households compared to Control and Non-IDP. In addition, IDP areas have seen a stark decline in the proportion of females who were married before the age of 18 – from 52.5% during Baseline to 22% in 2020. The demographics demonstrate the success of the VDO's women empowerment initiatives, especially those aimed at raising awareness about critical social issues such as the legal age of marriage for girls. The proportion of girls who were married before the age of 18 is lowest amongst all 3 study areas.

The income data further demonstrates the effectiveness of IDP's interventions in the *haor* areas. Despite residing in waterlogged areas and suffering from a lack of proper road communication, surveyed IDP recipients now have the highest annual average income amongst all 3 groups, as well as the highest monthly income and average wage per hour. Furthermore, the income of IDP recipients has more than doubled from BDT 85,879 during the Baseline Study to BDT 175,958 in 2019. Per Capita Income in the IDP area almost doubled since the Baseline. The

proportion of households who live with an annual per capita income of less than $1.90 per day (using 2011 PPP prices) was 21% in 2020, compared to 53% in the Baseline.

The increase in income can be attributed to a variety of factors. Although IDP programme participants are primarily involved in Farming, Fishing, and Non-Agriculture Day labour due to lack of proper road communication, they benefit from the availability of multiple development programmes under one umbrella. For example, due to women empowerment activities of the VDO, a higher proportion of women are involved in income-generating activities in IDP, compared to Control and Non-IDP. Furthermore, the proportion of women who identified as an unpaid caregivers in IDP was 29% in 2020 compared to 49% during the Baseline Study. In the VDO activities, IDP programme participants receive direct support for bolstering incomes from BRAC Agricultural Training Programme, BRAC Microfinance Programme, and Safe Migration. IDP Programme participants spend a smaller portion of their income on loan repayments, due to the prevalence of BRAC's Microfinance Services. As a result, programme participants spend more of their disposable income on food, education and seeking healthcare, which results in better health and education outcomes (see chapter 4, 7 and 8).

The robust combination of direct income support and behavioural change training, e.g., encouragement by VDO to increase female labour force participation, has resulted in a significant decline of the Ultra Poor population in the IDP Area. 88% of IDP programme participants meet all 6 criteria of Ultra Poor Graduation. The IDP area also has the highest proportion of programme participants with productive assets. For example, 69% of IDP respondents' cows, which is more than double that of Control (31%) and almost double that of Non-IDP (36%). The proportion of homeowners in the IDP area has increased from 80% during Baseline to 96% in 2020. IDP programme participants, therefore, have the highest income, productive asset ownership, and female workforce participation amongst all 3 groups. Compared to the Control group, IDP programme participants, demonstrate significant improvement in homeownership, and socioeconomic status since the Baseline Study.

3.1
Demographic Description

The tables below represent the demographics of the areas that were surveyed and include statistics such as mean household size, the proportion of male members and the percentage of married household members. As shown in Table 4, the mean household sizes in IDP, Control and Non-IDP areas are in the range of 4.5-5 members, and IDP has the highest mean number of members per household – 4.9. The IDP area has a slightly higher mean household size than in the Baseline Study[13]: an increase to 4.9 from 4.8 members per household. The Control Area, on the other hand, has a slightly lower mean household size than the Baseline Study – a decrease to 4.7 from 4.9. The proportion of male members in the household, like mean household size, is the lowest in IDP and Control Area – 52% – compared to Non-IDP. The higher number of women in the IDP and Control area could demonstrate a need for a women-empowerment oriented development approach such as that of IDP in those 2 areas. As for marital status, around three-quarters of all household members in all 3 study areas are currently married. The high proportion of married members also signals the need for women-empowerment interventions, such as awareness about the legal age of marriage, dowry, reproductive health, in all 3 areas.

13 Understanding the challenges to development: Insights from the Baseline Findings of Integrated Development Programme in Itna and Khaliajhuri

Table 4: Household Characteristics

Study Variable	IDP	Control	Non–IDP
Household Size (Mean)	4.9	4.7	4.7
Proportion of Male Members	52%	52%	56%
Married Household Members	74%	74%	76%

The data on characteristics of Head of Household, as outlined in Table 5, demonstrates that an extremely low proportion of households – below 10% in all 3 areas – are female-headed. Out of all 3 areas, the IDP area, has the highest proportion, 7%, of female-headed households, demonstrating a need for the continuation of women-empowerment activities by the VDO. The proportion of female-headed households in both IDP and Control Areas is lower than that of the Baseline Study, where almost 10% of households were headed by females. The mean age of the Household Head, including both genders, is 42 in IDP and Control and 43 in Non-IDP, and the age composition has not changed significantly since the Baseline Study. The proportion of household heads who can read and write letters in Bengali is the highest in the IDP area, 45%, compared to Control and Non-IDP. This is a reverse of the situation in the Baseline Study, where household heads in the Control area had higher mean years of schooling and literacy rates than the IDP areas.

Table 5: Characteristics of Head of Household

Study Variable	IDP	Control	Non–IDP
Female Head of Household	7%	4%	5%
Mean Age of Head of Household	42	42	43
Household Head Can Read and Write Letters in Bengali	45%	40%	41%
Total Number of Observations	**708**	**329**	**426**

The mean age of household members in the IDP Area is 26 and slightly higher than that of the Baseline Study. The mean age in the Non-IDP area is 27 and Control Area is 25. As shown in Table 6, there is a presence of a young working population in all 3 areas – more than 65% of the population in all 3 areas are in the Working Age (14-65) range. Compared to the Baseline Study, where the proportion of Working Age members in IDP and Control was in the 37% range, the proportion in 2020 is much higher. Therefore, development plans for the Haor Areas should highly prioritise rigorous education and technical training programmes aimed to generate socio-economic benefits.

Table 6: Age Structure

Study Variable	IDP	Control	Non–IDP	Baseline
Mean Age	26	25	27	23
Proportion of Members below 14	31%	29%	30%	38%
Ratio of Working Age Members (14–65)	68%	69%	70%	58%
Ratio of Members above 65	1%	2%	1%	6%
Total Number of Observations (All Household Members)	**1778**	**1521**	**1940**	**3,315**

In comparison with the national population pyramid of Bangladesh, IDP has a lower proportion of the population living beyond 75+. This is expected given that the older population of the IDP region had sparse access to healthcare before interventions of BRAC. The IDP region also has a high proportion of females in the age range of 34-39. This is expected given our sampling process – i.e., we only sampled households with an IDP programme participant, and the mean age of the programme participant was 36 (out of 702 programme participants who responded regarding age).

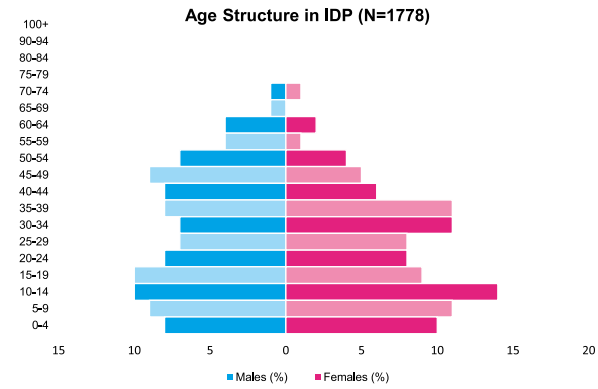


Figure 7: Population pyramid in IDP region

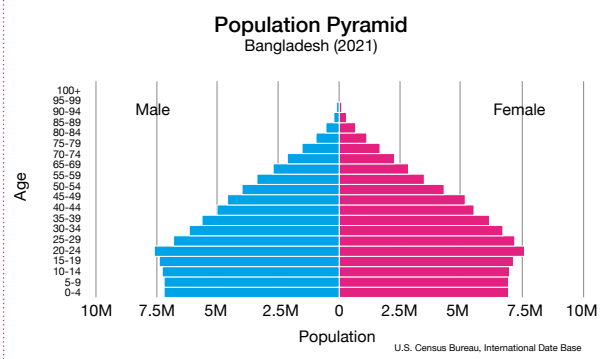


Figure 8: Population Pyramid of Bangladesh (2021)[14]

3.2
BRAC Programme participants

As shown in Table 7, the IDP area has a higher percentage of programme participants for each programme compared to Non-IDP. The most availed programme in the IDP Area is HNPP which serves 95% of the programme participants followed closely by Microfinance, 91%, and WASH, 88%. As for the Non-IDP area, 60% of the programme participants are participants in the WASH Programme, followed by Education.

Table 7: Distribution of BRAC Programme Participants (Study Sample)

Programme	IDP	Non–IDP
Agriculture	61%	2%
Education	55%	14%
Community Empowerment Programme (CEP)	86%	3%
Gender Justice and Diversity (GJD)	79%	3%
Health, Nutrition and Population Programme (HNPP)	95%	22%
Human Rights and Legal Aid Services (HRLS)	79%	3%
Microfinance	91%	60%
Safe Migration	20%	0%
Ultra–Poor Graduation (UPG)	65%	3%
WASH	88%	4%
Total Number of Observations	**708**	**426**

14 Central Intelligence Agency (CIA). 2020. The World Factbook – Bangladesh. Accessible at: https://www.cia.gov/the-world-factbook/countries/bangladesh/

In addition, IDP's programme coverage has steadily increased over the years since its inception. As shown in the figure below, in 2016 IDP covered 129,000 of VDO's households and 619,000 individuals. In 2020, it has covered 133,000 VDO's households and 639,000 individuals.

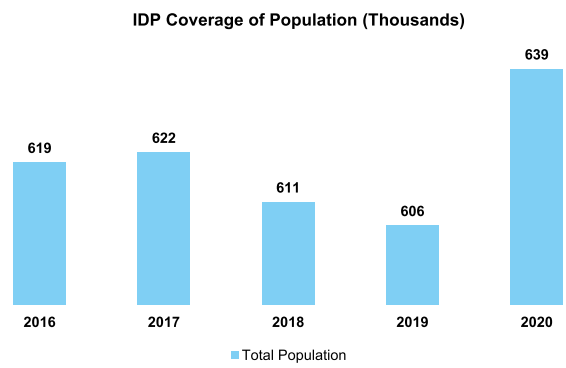


Figure 9: IDP Coverage of Population (2016-20)

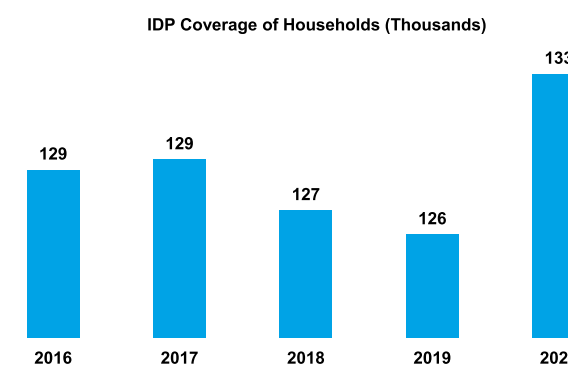


Figure 10: IDP Coverage of Households (2016-20)

Therefore, the percentage of households covered by IDPs has increased by 58 percentage points from Baseline, as shown in Figure 11. The coverage in Non-IDP areas is less than that of IDP – 36% of the population was covered by some Non-IDP BRAC service.

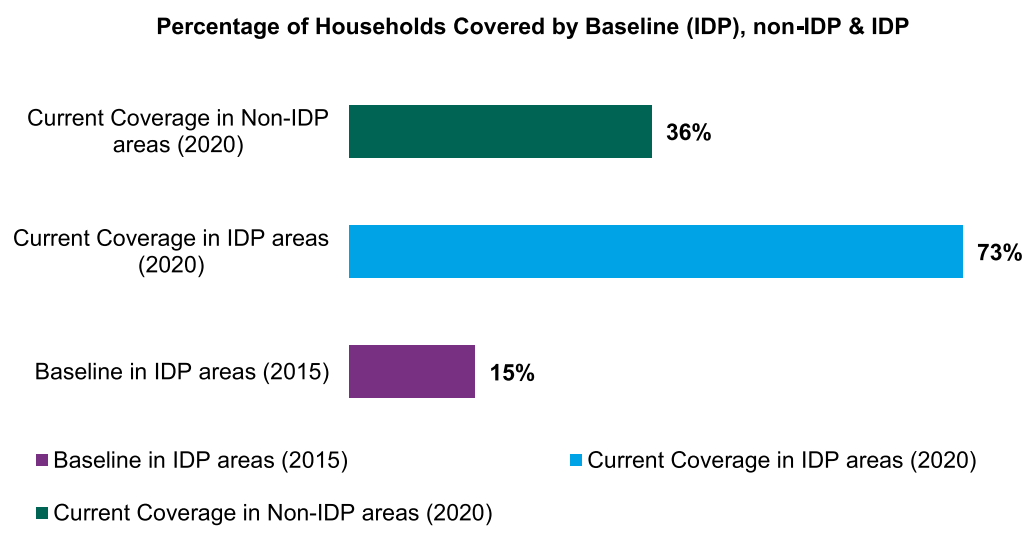


Figure 11: Coverage of IDP (Baseline, Current) & Non-IDP (Current)

The percentage of population covered by IDP has increased in all Upazilas, with coverage increasing in most in Derai, as shown in Figure 12.

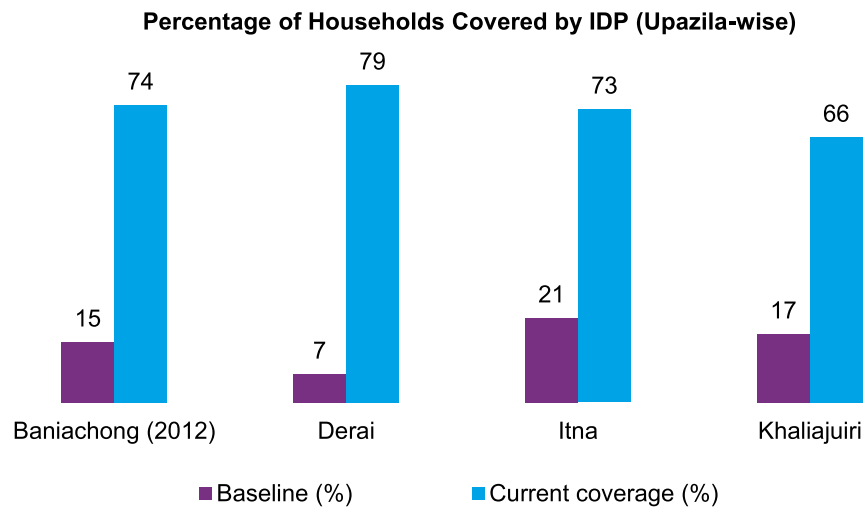


Figure 12: IDP Coverage by Upazila

The programme-wise coverage data shows that in the IDP areas, the Health programme has the highest coverage, followed by CEP and WASH. In comparison, programme coverage in Non-IDP areas is significantly less than that of IDP. As shown in Figure 13, the Health Programme in the IDP area covers 93% of the population, whilst that of the Non-IDP area covers only 42%. Programme coverage dates for both programmes include individuals who have received at least one service from each component programme.[15] [16] [17]

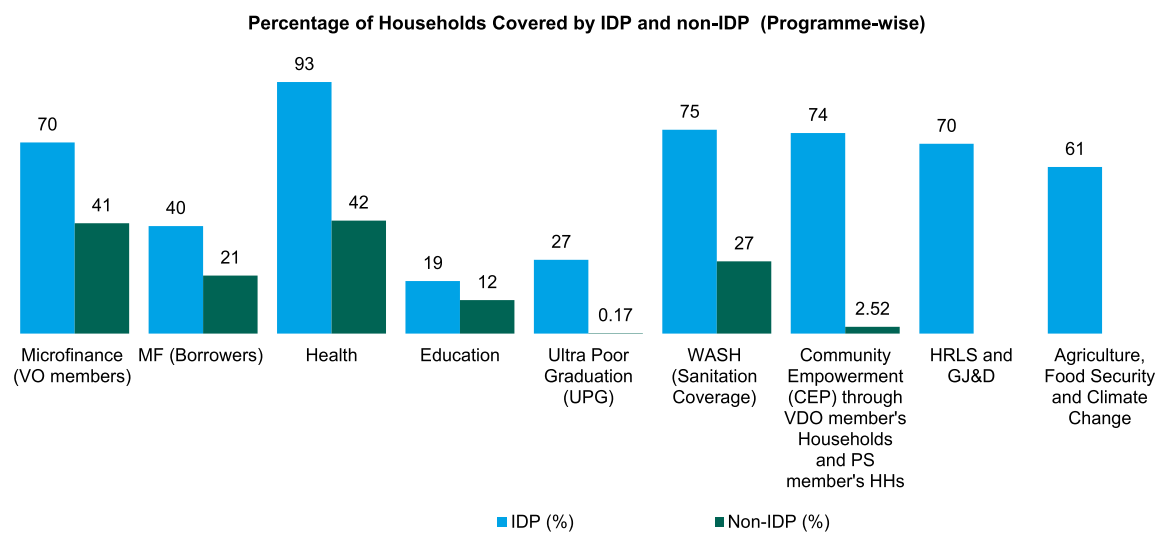


Figure 13: Programme-wise Coverage of IDP & Non-IDP

15 Health Programme Coverage for IDP Areas is as follows: Baniachong 94%, Derai 76%, Itna 54%, Khaliajuri 60%.

16 Health Programme Coverage for Non-IDP Areas is as follows: Sulla 48%, Mithamain 18%, Madan 52%, Austagram 22%.

17 There are no GJ&D intervention and few HHs coverage through HRLS in Non-IDP areas.

3.3
Early Marriage

The early marriage statistics, as shown in Table 8, demonstrate the success of the VDO activities in the IDP Area. Compared to Control, where 34% of female household members were married before the age of 18, only 22% of female household members were married before turning 18 in IDP. The proportion of women who were married before 18 in the IDP areas has decreased significantly from the Baseline Study – 53% of women in the IDP areas were married before the age of 18 in the Baseline Study, which was marginally higher than the national average of 51%.[31] Therefore, the mean age of first marriage for girls is 18 in IDP and Non-IDP areas, and 17 for those in the Control Areas.

For male household members, the proportion of those married before 21 is the same across all 3 areas – 25%. The mean age of marriage for male household members has increased to 23 from 19 in the Baseline Study.[18]

Overall, the early marriage statistics demonstrate significant achievement for the IDP, and the comparison with the statistics in the Control determine the need for expansion of VDO activities in the Control areas as well. During the Focus Group Discussions (FGDs) in the IDP areas, members of the VDO mentioned that one of the key benefits of regular VDO meetings was an increase in awareness about critical social issues – such as the legal age of marriage for girls. Furthermore, KIIs with BRAC IDP Field Staff and IDP Staff, also confirmed that increasing awareness was a critical component of IDP's design.

Table 8: Marital status of Female Household Members

Study Variable	IDP	Control	Non–IDP	Baseline
Percentage of Female Members Married before 18	22%	34%	31%	53%
Mean Age of Female Household Member at First Marriage	18	17	18	15
Total Number of Observations (All Eligible Household Members)	**718**	**344**	**399**	**3315**

Table 9: Marital status of Male Household Members

Study Variable	IDP	Control	Non–IDP	Baseline
Proportion of Male Household Members married before 21	13%	15%	14%	12%
Mean Age of Male Household Member at First Marriage	23	23	23	19
Total Number of Observations (All Eligible Household Members)	**1057**	**457**	**641**	**3315**

3.4
Occupation Statistics

The most common occupation of all female household members in all 3 areas is being an unpaid caregiver. However, the proportion of women in IDP Areas, 29%, who identify as unpaid caregivers is almost half of that from Control and Non-IDP areas, 62% (for both). A similar percentage of women, 27%, in the IDP areas are involved in Farming. Approximately one-fifth, 20%, also identify as being involved in business/entrepreneurship. This is a significant improvement from the Baseline data, where 49% of the females in the IDP Areas were identified as unpaid caregivers. The comparison with IDP Baseline Data, Control, and Non-IDP Data further

18 The Baseline Study shows that only 12%/9% of males were married before the age of 21, yet the mean age is 19. The data from the Baseline Study needs to be revaluated for this indicator.

highlights the benefits of being empowered by the VDO. Alongside, IDP programme participants reported feeling confident to pursue work outside their homes during the FGDs. The VDO and IDP Field Staff members, during the KIIs, also reiterated the importance of encouraging women to pursue paid employment outside of home.

Table 10: Occupation of Household Members (Female)

Study Variables	IDP	Control	Non–IDP
Farming	27%	2%	5%
Day Labouring	0%	0%	5%
Fisheries	1%	4%	0%
Non–Agricultural Day Labouring	7%	7%	5%
Informal Sector Employment (Hawkers, van and rickshaw driving, etc.)	13%	7%	8%
Formal Sector Employment	3%	7%	8%
Business	20%	7%	5%
Unpaid Caregiver	29%	62%	62%
Other	0%	4%	0%
Total Number of Observations	**113**	**45**	**37**

The male household members in the IDP areas, as shown in Table 11, are primarily involved in Farming, Fishing, and Non-Agriculture Day Labour. Given the waterlogged nature and lack of reliable road communication in the IDP areas, a high percentage of male members stay within the locality and work in these occupations. Men in the Control Areas, who benefit from having better road communication, are more involved in Informal Day Labour and Business. These men have a higher tendency to move outside their locality for work. Similarly, the Non-IDP areas, which also have better road communication than IDP, have a higher proportion of male household members, involved in Informal Sector Employment (often due to higher migration rates), and business. The high proportion of men involved in Farming and Fishing in the IDP areas demonstrates the need for the continuation of BRAC's Agricultural Training Programmes. Compared to the Baseline report, there is a lower proportion of males from IDP households involved in informal sector employment. This is expected because households where men who work in the formal sector, e.g., doctor, nurse, teacher, etc., would not have been selected as BRAC IDP programme participants.

Table 11: Occupation of Household Members (Male)

Study Variables	IDP	Control	Non–IDP
Farming	26%	16%	21%
Day Labouring	3%	5%	4%
Fisheries	20%	16%	8%
Non–Agricultural Day Labouring	24%	23%	26%
Formal Sector Employment	5%	3%	4%
Informal Sector Employment	7%	12%	11%
Business	13%	21%	25%
Others	2%	4%	2%
Total Number of Observations	**398**	**177**	**227**

3.5

Average Working Days and Working Hours

Despite the difference in occupation statistics of males and females, the average hours days worked per month is 29 for all 3 areas. IDP members, on average, tend to work shorter hours, 8 per day, than Non-IDP and Control, who on average work 9 hours a day. The higher proportion of IDP male members involved in Farming, compared to Non-IDP and Control, may explain the shorter workday. In comparison to the Baseline Study, the average hours worked per day has increased for the IDP Area to 8 hours from 7.2 hours for males and 3.76 hours for females. Therefore, the respondents in the IDP area are working more hours per day, compared to that of the Baseline Study.

Table 12: Average working days per month and Average Working hours per day

Study Variable	IDP	Control	Non–IDP	Baseline (Male)	Baseline (Female)
Average Hours Worked Per Day	8	9	9	7	4
Average Days Worked Per Month	29	29	29	156 Per year	229
Total Number of Observations	**359**	**206**	**227**	**7,307**	**1,297**

3.6

Income and Poverty Status

The income statistics, as shown in Table 13, show a significant improvement in socio-economic status since the data collection for the Baseline Study. The annual household income of the IDP area in the Baseline Study was BDT 85,879. It has since almost doubled to BDT 175,958. The average annual income per household is slightly higher than the Average Annual Income of Rural households from HIES in 2016 – BDT 160,776 (BDT 170,029 for 2020, using an inflation rate of 2%).[19] IDP programme participants demonstrate the best performance in terms of income. In the IDP areas, monthly and annual income per household, as well as average income earned per hour, is higher than that of Non-IDP areas and much higher than that of Control. It must be noted that the average annual income of households has also increased in the Control area since the Baseline Study – from BDT 83,988 to BDT 135,576. Although Annual Per Capita Income is slightly lower in IDP compared to Non-IDP (IDP has larger household size), it has also almost doubled since the Baseline Study.

The global poverty line has been estimated at $1.90 a day, using purchasing-power-parity (PPP) prices for 2011.[20] Using the latest (2019) PPP conversion factor of 31.4, this translates to BDT 59.68 per day and BDT 21,784 a year. The proportion of households who survive on annual per capita income less than BDT 21,784 was 21% in the IDP area, compared to 53% in Baseline, 22% in Non-IDP, and 31% in Control. This is close to the national poverty headcount of 14.8% in 2016.[21]

The Upper Poverty Lines (UPL) and Lower Poverty Lines (LPL) for the different regions, Mymensingh and Sylhet, were obtained from the 2016 Household Income and Expenditure Survey (HIES). The poverty lines were updated for 2019 using inflation-adjusted food price index data from Bangladesh Bank. Compared to 42% of the population in Baseline, 27% of the households is living with annual per capita income less than that of the LPL in their region. Similarly, compared to 52% of the population, 37% of the population in the IDP area is living with annual per capita income less than that of the UPL in their region.

19 Average Salary in Bangladesh 2020. Salary Explorer. http://bit.ly/2WBKuy3

20 Cruz, M., Foster, J. E., Quillin, B., & Schellekens, P. (2015). Ending Extreme Poverty and Sharing Prosperity. Accessible at: http://pubdocs.worldbank.org/en/109701443800596288/PRN03Oct2015TwinGoals.pdf

21 The World Bank in Bangladesh. 2020. Accessible: https://www.worldbank.org/en/country/bangladesh/overview

The HIES 2016 shows that for all rural Bangladesh, the percentage living below the LPL was 15% and UPL was 27%. There is, therefore, a 10-12 percentage gap between national poverty rates and poverty rates in the IDP areas, using LPL and UPL. This is a significant improvement from the Baseline Study and demonstrates the need for the IDP in hard-to-reach areas.

Table 13: Annual Income, Expenditure and Poverty Headcount Ratios

Study Variable	IDP	Control	Non–IDP	Baseline
Monthly Household Income (BDT)	14,663	11,298	14,131	7,156
Average Annual Household Income 2019 (BDT)	175,958	135,576	169,569	85,879
Average Annual Household Expenditure 2019 (BDT)	147,148	122,019	139,441	
Annual Per Capita Income (2019) (BDT)	37,415	30,467	38,733	18,830
Poverty Headcount using International Poverty lines of $1.90 (using 2011, PPP)	21%	31%	22%	53%[22]
Poverty Headcount using Lower Poverty Lines (LPL)	27%	40%	29%	42%
Poverty Headcount using Upper Poverty Lines (UPL)	37%	54%	39%	52%
Total Number of Observations	**707**	**329**	**426**	**3,315**

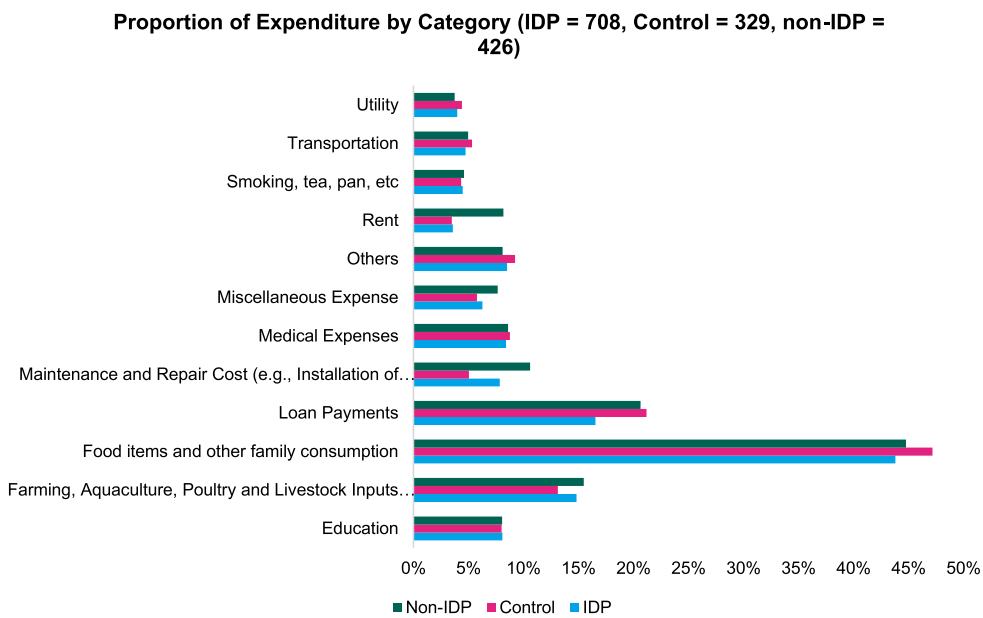


Figure 14: Percentage of expenditure by Category

22 It must be noted that in the Baseline Study the International Poverty Line was calculated using US Dollar to BDT equivalent – the poverty line was defined at BDT 142.5 per day.

The Control area, unlike the IDP and Non-IDP area, does not benefit from BRAC interventions and has the lower income amongst all 3 groups. However, it has still experienced an increase in income since the Baseline Study. This is due to the presence of improved road communication in the area and consequently, greater mobility outside the Haor areas for income-activity.

The significant increase in household income in the IDP areas since the Baseline Study shows the success of BRAC's poverty reduction initiatives. IDP programme participants, despite the geographical challenges and lack of proper road communication in the region, have been significantly benefited by the IDP's rigorous and multifarious approach to socio-economic development.

Table 14: Average Income Earned Per Hour (BDT)

Study Variable	IDP	Control	Non–IDP
Average Income Earned Per Hour (BDT)	62	43	54
Total Number of Observations	**359**	**206**	**227**

The allocation of annual income to different items for expenditure – food, healthcare, education, etc. – was also analysed. Compared to the other groups, IDP programme participants spent the least amount on loan repayments, transportation, and farming. On average, an IDP programme participant pays 23,000 BDT in loan repayments, whereas a programme participant from a Non-IDP area pays 26,500 BDT, and that from Control pays 27,400 BDT. IDP programme participants have little reliance on local lenders who charge high-interest rates. As a result, they pay less in loan repayments. IDP programme participants also spend less on transportation, as the IDP area is more water-logged and mobility outside the Haor is limited. IDP programme participants also spend less on farming, as they are provided with agricultural training from BRAC, and need to spend less on agricultural output. However, since both programme participants in the IDP and Non-IDP areas have higher annual incomes, they spend more on buying higher quality food, and seeking education for their children and medical treatment for their families.

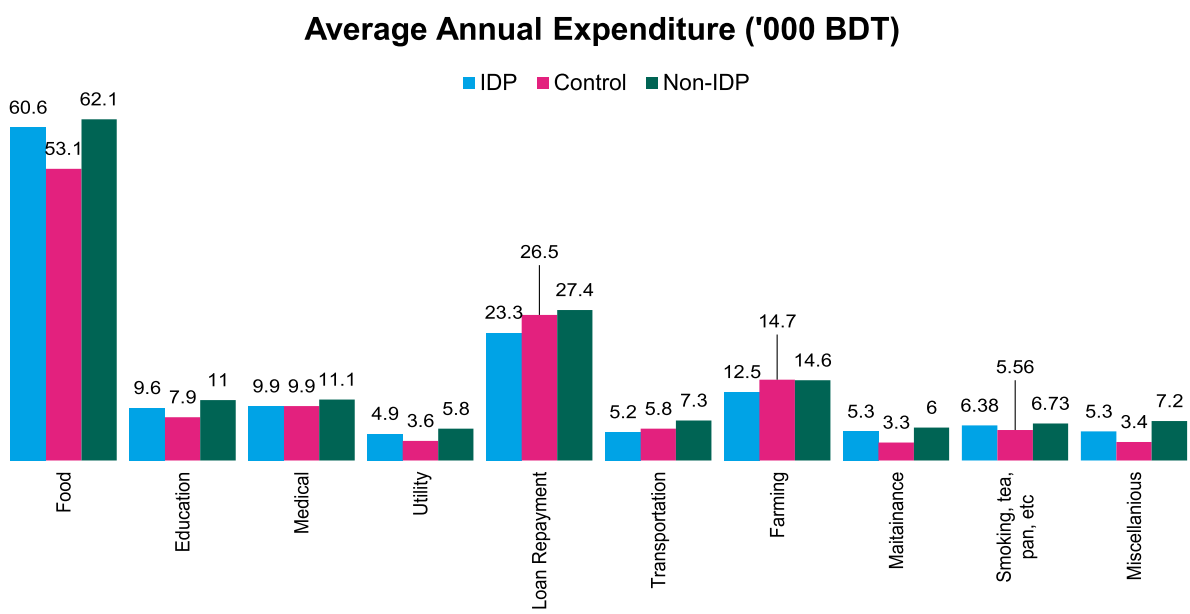


Figure 15: Average Annual Expenditure on Different Categories

Additionally, in 2019, 88% of the IDP programme participants met all 6 criteria for Ultra Poor Graduation Programme. The graduation takes place at the end of each year. The programme participants, who are part of the programme for two years, are clustered in cohorts. Among those who were interviewed, 49 programme participants were part of the programme in 2019.

Table 15: UPG Graduation Rates for 2019

Study Variable	IDP
0 Criteria Met	0%
1 Criteria Met	0%
2 Criteria Met	0%
3 Criteria Met	4%
4 Criteria Met	2%
5 Criteria Met	4%
6 Criteria Met	88%
Total Number of Observations	**49**

3.7
Land Ownership

Almost all the respondents, 96%, in the IDP areas, reside in their own houses, which is slightly lower than that of Non-IDP, 97%, and higher than that of Control, 93%. The proportion of households with homeownership has increased from 80% during the Baseline Study to 95% in 2020, demonstrating significant economic empowerment. The respondents in the Control area, have not experienced a similar increase in homeownership– compared to 85% of respondents during the Baseline Study, 93% now own their own houses.

Table 16: Homeownership Statistics

Study Variable	IDP	Control	Non–IDP	Baseline
Own house	96%	93%	97%	56%
Relative/Neighbour's house	3%	4%	1%	N/A
Rented house	1%	3%	2%	N/A
Total Number of Observations	**697**	**325**	**420**	**N/A**

As shown in Table 17, the average homestead land size in IDP areas is much higher than that of Control at 5.34 decimals and slightly less than that of Non-IDP. Similarly, the average water body size of 2.53 decimals is much higher than that of Control but much lower than that of Non-IDP.

Table 17: Homestead land, Cultivable Land and Water Body Size

Study Variable	IDP	Control	Non–IDP
Average Homestead Land Size (Decimal)	5.34	3.44	5.65
Total Number of Observations	656	286	398
Average Seasonal Pond/Ditch Size (Decimal)	2.53	1.33	5.76
Total Number of Observations	126	40	42

3.8
Productive Assets

IDP Respondents, as shown in Figure 16, outperform the respondents in Control and Non-IDP, when it comes to the ownership of productive assets. For example, almost 69% of IDP respondents' cows, which is more than double that of Control (31%) and almost double that of Non-IDP (36%). Similarly, a much higher proportion of families in IDP own chickens and ducks, than that of Control and Non-IDP. The proportion of IDP programme Participants who own productive assets has also increased significantly since the Baseline Study. For example, during the Baseline Study, only 30% of respondents owned a cow compared to 69% in 220. In comparison, 35% of respondents in the Control area owned a cow during the Baseline Study, which is slightly higher than 31% in 2020. The current ownership of productive assets in IDP, and comparison with Baseline and Control, further demonstrate the success of the IDP in improving the socio-economic status of programme participants residing in hard-to-reach areas.

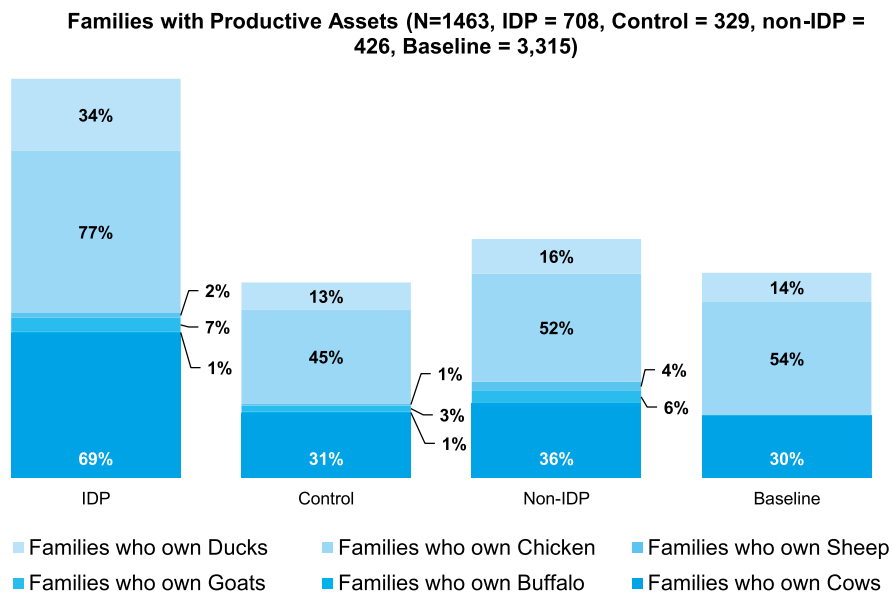


Figure 16: Families with Productive Assets

CHAPTER 4

EDUCATIONAL SCENARIO IN THE STUDY AREAS

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EDUCATIONAL SCENARIO IN THE STUDY AREAS

Summary

BRAC's education interventions in the IDP area, and Non-IDP area, demonstrate success in reducing the proportion of school-aged household members who are not enrolled in any institutions. For example, the proportion of male and female household members, aged 5-24, who do not go to school at all has decreased by two-thirds from that of the Baseline Study. The proportion of that sample has also decreased in Control, but not as drastically as that of IDP. Higher proportions of household members are also enrolled in levels of education beyond primary school in the IDP area, compared to that of the Baseline Study.

The IDP education interventions have also been more effective in increasing enrolment rates for female students more than male students. For example, the percentage of female students who attend primary Class 9-HSC and Kawmi/Hafezi Madrasa is highest in the IDP area, amongst all three groups. The VDO group discussions, especially those centred on the importance of sending daughters to school, may be a reason for the relatively higher success of female students in the IDP area. An increase in income, combined with BRAC's Pre-Primary and Primary Schools, and education awareness by VDOs has drastically increased the proportion of children enrolled in educational institutions, especially beyond primary school level, in the IDP Area.

To increase the success of the BRAC Education Programmes, interventions must be designed to encourage school-aged household members to enrol

in or continue schooling. Amongst the household surveyed in the 3 areas, the most important reason for dropping out or not going to school for students is the lack of motivation of willingness. Therefore, just as VDO discussions in the IDP area have encouraged programme participants to seek healthcare and timely vaccination for their children, interventions encouraging school-aged children to pursue education will reap benefits for the Haor area. The education programmes may also include interventions to ensure greater safety of students who are travelling to school, as many of them walk through water-logged areas during the rainy season.

4.1

Educational Characteristics of Household Members

The Baseline Study revealed that the lack of literacy in the Haor Area was unusually high – 35% of respondents in IDP area and 36% in Control area had not gone to school during the Baseline Study. In 2020, as shown in Table 18, the proportion of all household members who did not go to school in the IDP area is 34% □ slightly lower than the Baseline. However, it must be noted that, as discussed in section 3.3, the most socially disadvantaged households were selected as programme participants in the IDP after the Baseline Study. Therefore, compared to the Baseline, it is expected that households in the IDP Study in 2020 may have a larger proportion of older participants who did not attend school (and are not eligible to have been benefitted by BRAC's Education Interventions). Therefore, as shown in Table 18, the proportion of household members who did not go to school in IDP area is unchanged at 34%, but it is the lowest amongst all 3 study areas. IDP also has the highest proportion of household members who attend Primary School, Secondary School, and Kawmi/Hafezi Madrasa.

Table 18: Household member education profile (%, N)

Study Variable	IDP	Control	Non–IDP	Baseline
Did not go to school	34%	43%	39%	35%
Pre–primary	2%	2%	3%	-
Class 1–5	34%	31%	33%	46%
Class 6–8	13%	11%	12%	10%
Class 9–HSC	9%	7%	8%	8%
Degree (Pass/Honours/Others)	2%	1%	2%	0.6%
Kawmi/Hafezi Madrasa	5%	4%	3%	0.5%
Currently enrolled in school[23]	1%	0%	1%	-
Number of Observations (All Household Members)	**3,119**	**1,401**	**1,793**	**13,607**

The literacy rate[24], as defined by the HIES 2016, is the percentage of population over the age of 7 who can write a letter. As shown in Table 19, females in the IDP region are on par with the national average of 61%. This is marginally better than the residents in the Control (56%) and Non-IDP (59%) regions.

Table 19: Literacy rate of females

Study Variable	IDP	Control	Non–IDP	National Average[3]
Can read and write in Bangla	61%	56%	59%	61%
Cannot read and write in Bangla	39%	44%	41%	39%
Total Number of Observations (Members aged 7+)	**657**	**318**	**353**	

Table 20 shows that the males in the IDP region have literacy rates below the national average of 52%. This is marginally better than that of males in the Control area (56%).

Table 20: Literacy rate of males

Study Variable	IDP	Control	Non–IDP	National Average[23]
Can read and write in Bangla	52%	44%	52%	66%
Cannot read and write in Bangla	48%	56%	48%	34%
Total Number of Observations (Members aged 7+)	**1130**	**514**	**678**	

Table 21 shows the education rates of female household members, who are aged between 5 and 24 years of age. BRAC IDP has the second lowest proportion of female household members who did not go to school and the highest proportion of female members who are attending Class 9-HSC and Kawmi/Hafezi Madrasa. The proportion of female school-aged members who did not go to school in the IDP area in 2020, 8%, is much lower than the proportion during the Baseline Study, 37%. The percentage of female household members in the IDP area who attend Class 9-HSC, 15%, is more than double that of the percentage during the Baseline Study, 7%. Therefore, after IDP interventions, the proportion of female household members, aged 5-24, who do not go to school at all has decreased, and the proportion of females who continue education after primary school has increased significantly.

23 Respondent could not recall what grade the household member was enrolled in.

24 HIES (2016). Bangladesh Bureau of Statistics. https://drive.google.com/file/d/1TmUmC-0M3wC5lN6_tUxZUvTW2rmUxMce/view

Table 21: Education level of a school-going household member, Females (Age 5-24 years)

Study Variable	IDP	Control	Non–IDP	Baseline
Do not go to school or any institute	8%	17%	7%	37%
Pre–primary	3%	5%	5%	-
Class 1–5	42%	34%	47%	46%
Class 6–8	20%	21%	21%	10%
Class 9–HSC	15%	13%	12%	7%
Degree (Pass/Honours/Others)	2%	3%	4%	0.2%
Kawmi/Hafezi Madrasa	8%	5%	2%	0.1%
Currently enrolled in school	2%	2%	2%	-
Total Number of Observations (Members)	**288**	**156**	**156**	**6,696**

The analyses of education data for school-going household members, males (Ages 5-24 years), is shown in Table 22. The percentage of these members in the IDP area who did not go to school is 14%. This percentage is the lowest of all 3 groups and a significant decrease from the rate of 34% in the Baseline Study.

Table 22: Education level of a school-going household member, Males (Age 5-24 years)

Study Variable	IDP	Control	Non–IDP	Baseline
Do not go to school or any institute	14%	25%	16%	34%
Pre–primary	6%	4%	4%	-
Class 1–5	41%	35%	38%	46%
Class 6–8	15%	11%	18%	9%
Class 9–HSC	11%	6%	12%	9%
Degree (Pass/Honours/Others)	2%	3%	4%	1%
Kawmi/Hafezi Madrasa	10%	15%	8%	1%
Currently enrolled in school	2%	-	1%	-
Total Number of Observations (Members)	**374**	**186**	**249**	**6,991**

In addition, respondents were also inquired about why some family members had dropped out of school or the education system (any level). The most important reason stated, in all 3 areas, was the lack of willingness to study. This was also the most important factor stated in the Baseline Study, and therefore, education interventions in the Haor area must target increasing the motivation of students in the programme participant households. In addition, IDP area also has the highest proportion of respondents who dropped out of school (from any level) for income-generating work. Therefore, BRAC Education Interventions should also consider structuring programmes to support students graduating from BRAC Primary School and enrolling in secondary school and beyond.

Table 23: Reasons for dropping out of school (No, %) for School-Aged Children who have dropped out

Reasons	IDP	Control	Non–IDP	Baseline
Do not want to study	28%	22%	27%	49%
Did not reach the school admission age	12%	5%	12%	12%
Cannot bear expenses	12%	7%	6%	16%
Married off	5%	3%	10%	6%
For income generating work	5%	3%	2%	6%
Household Work	4%	0%	10%	-
Sexual Harassment	3%	2%	2%	-
Transportation Problems	1%	-	0%	-
Mistreatment from educational institution	1%	-	0%	-
Others	29%	58%	31%	8%
Number of Observations[25]	**138**	**60**	**49**	**2,280**

4.2
Access to Basic Education3

More than 30% of household members in all 3 areas are enrolled in Non-BRAC primary schools, and this percentage is highest in the Non-IDP Area. The IDP has the highest proportion of household members who are enrolled in BRAC Schools – 11% are enrolled in BRAC Primary and 7% in BRAC Pre-Primary. The IDP area also has the highest proportion of household members enrolled in Madrasa. Compared to the Baseline Study, the percentage of eligible (attending some educational institution) members attending institutions beyond Primary School in the IDP Area is higher in 2020 than during the Baseline Study. For example, compared to 24% of IDP household members who attended secondary school in 2020, only 17.2% of household members attended secondary school during the Baseline Study. BRAC IDP's education interventions have the highest enrolment of household members in BRAC Education programmes, compared to Non-IDP. In addition, IDP education interventions have also improved the access to education, as a higher proportion of household members are continuing education beyond primary school.

Table 24: Type of institution attended by members of the household (%, N)

Type of institution	IDP	Control	Non–IDP	Baseline
Pre–Primary (BRAC School)	7%	6%	5%	
Pre–Primary/Kindergarten (Non BRAC)	4%	8%	7%	7%
Primary (BRAC School)	11%	8%	5%	
Primary (Non BRAC Govt./Non–Govt./ Registered/Unregis–tered/ Satellite/Community) School	35%	36%	41%	55%
Secondary (Lower/Govt./Non–government) School	24%	23%	27%	17%
Madrasa (Dakhil/Alim/Fazil/Kamil/ Ebtedayi/Kawmi/Hafezi/ Khareji)	12%	13%	8%	15%
College/University	7%	6%	7%	5%
Number of Observations (Observations = Households with children enrolled in institutions)[26]	**933**	**396**	**471**	**6,097**

25 A family member can have multiple reasons for dropping out.

26 One household may have members studying in different schools.

4.3

Geographic Location of Schools

During the dry season, most more than 80% of students in all three areas travel to school by foot. Given the water-logged region of IDP and Non-IDP, many students must walk through damp and muddy areas. The methods of communication to schools' change during the wet season. Since many of the roads in the Haor area may be submerged underwater for long periods during the rainy season, a significant proportion, 14%, of school-aged children in all 3 areas travel to school by boat/trawler and walk to school through mud and water. Therefore, BRAC's Education programme may introduce interventions to ensure the safety of students while travelling to school during the monsoon/rainy season.

Table 25: Transport used to go to school (%, No) Table 26: Mode of Transportation for School Going Children (Wet Season)

Mode of Transportation for School – Wet Season	IDP	Control	Non–IDP	Baseline
Walk (Mud/Water)	28%	26%	31%	3%
Walk (Dry)	51%	52%	48%	70%
School Boat	1%	2%	2%	
Boat/Trawler	14%	14%	14%	
Pool/Bridge	3%	4%	2%	
Rickshaw/Van	1%	1%	2%	
Auto/Tempo	2%	1%	1%	
CNG/Bus	1%	0%	0%	
Cycle	0%	0%	0%	
Number of Observations[26]	**850**	**293**	**458**	**3,817**

CHAPTER 5

AGRICULTURE AND FARMING

CHAPTER 5

AGRICULTURE AND FARMING

Summary

Comparison in the agricultural and farming empirically show that training in various methods does co-relate with more output, however, the geographic limitation of the area does hinder the progress. BRAC has provided resilient farming and homestead farming training due to the limitations faced by the IDP region residents, this will help them adapt to their surroundings much better. The above-mentioned training session has improved the agricultural methods used by the farmers, as seen by the increase in gross revenue by approximately BDT 10,723 from the Baseline.

Though BRAC has implemented many of the practices given, it is much more challenging as the geographic limitations play a huge role. Soil erosion and flood are the main reason residents are hesitant to invest too much in agriculture and livestock as most of their cultivatable land is flooded for half a year. In comparison the Non-IDP and Control regions were more inland, so they did not face this barrier as much.

5.1 Land Tenure System

From the table (Table 27) below it can be seen that over 2/3rd of the respondents in each region prefers working on their land.

Table 27: Land tenure for agriculture

Study Variable	IDP	Control	Non–IDP	Baseline
Lease	12%	14%	21%	1%
Mortgage	5%	7%	6%	19%
Own land	79%	79%	71%	58%
Share	4%	0%	2%	10%
Total Number of Observations	**457**	**76**	**131**	**3,315**

5.2
Average Farm Size

Table 28 shows that on average respondents in the Control regions had the greater size of land, when compared to IDP and Non-IDP regions, with 53 Decimals. The respondents in the IDP regions had the lowest land size with 44 Decimals, though it is due to the geographic location of the respondents.

Table 28: Average farm size

Study Variable	IDP	Control	Non–IDP
Average Size of Cultivable Land Used (Owned/Shared) (Decimals)	44	53	46
Total Number of Observations	**359**	**76**	**107**

5.3

Agricultural Productivity in Haor Region

Improvement in agricultural productivity*[27] can be seen below (Table 29). The gross revenue has increased in the IDP region by approximately BDT 10,725 which can be attributed to the efforts of BRAC regarding agricultural practices. The farmers in the IDP regions outperform their counterparts in the control regions.

Table 29: Gross revenue from crops

Variable	IDP	Control	Baseline
Rice	39,998	31,492	11,545
Rice HYV	N/A	N/A	12,948
Non–Rice	19,257	7,817	24,039
Gross Revenue	**59,255**	**39,308**	**48,532**

The figure below (Figure 17) shows that most of the respondents in the IDP region, with 89%, have received resilient farming training from BRAC. Comparatively the respondents in the Non-IDP and Control regions have not received the training from BRAC with only 20% and 16% receiving the training, respectively. While over half the respondents are not are aware of the training in both the Non-IDP and Control regions.

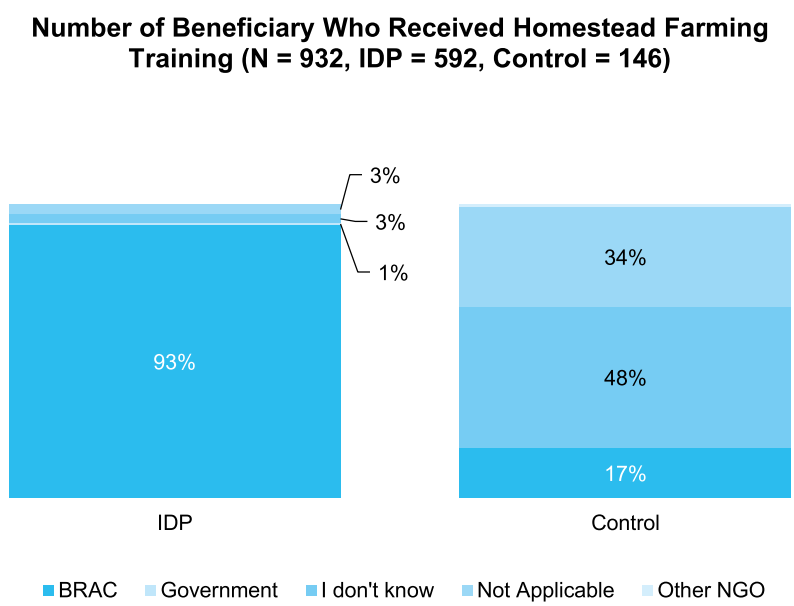

Figure 17: Resilient farming training received.

27 Agricultural programme is not present in the Non-IDP areas.

The figure (Figure 18) below shows the majority of the IDP respondents have received homestead farming training from BRAC with approximately 93%. While some respondents have received the training from BRAC in Non-IDP and Control regions, many of the respondents are not aware of the training. The benefits of receiving both these agricultural training are evident as there is a significant improvement in the earnings of the farmers.

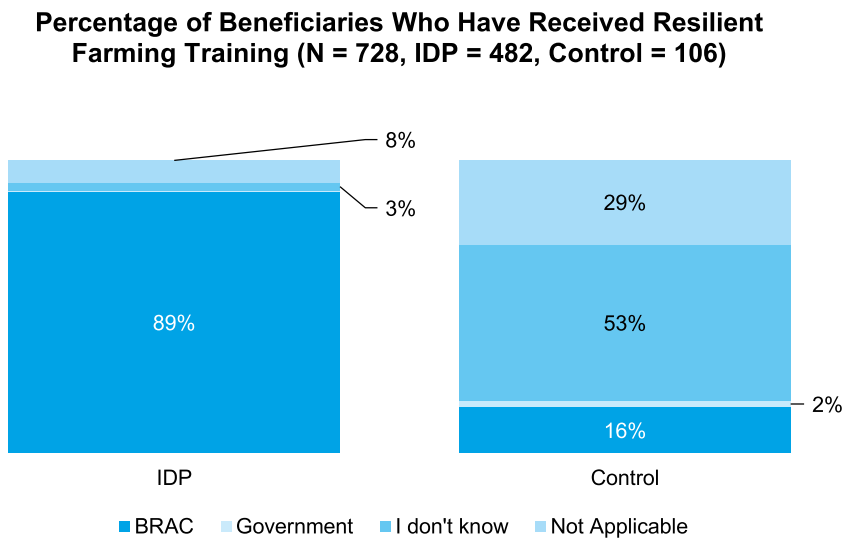

Figure 18: Homestead farming received

CHAPTER 6

ASSETS

CHAPTER 6

ASSETS

Summary

Financial literacy has facilitated the respondents in saving more and making a prudent financial decision. The respondents are saving more than their counterparts in other regions while also repaying most of the loans they have availed. On average, 97% of the households have some savings while 87% of the loan is repaid. They are also using formal financial institutions to keep their savings rather than keeping cash on hand. 95% of the respondents in the IDP regions had some savings in a formal financial institution, mostly with BRAC. This can be directly attributed to the financial lessons given by the BRAC staff regularly. There are scopes to improve in this area, people are still unaware of the monthly interest they earn on their savings.

A higher proportion of the IDP respondents owns productive assets as seen in chapter 3.8, though they own a lower quantity of the same asset. 37% of the respondents in the IDP region had 4 or more business assets while in the Non-IDP and Control region the respondents had only 18% each. The respondents in the IDP regions are mostly limited by their geographic location so it is difficult for them to own assets that take up space.

Even with this constraint, programme participants of the IDP regions have improved their business assets ownership from the Baseline Study and are currently faring better than the Control area residents.

6.1
Financial Asset Holding

In the IDP regions, the prevalence of chicken farming is quite evident. On average, a respondent in IDP area owns more than 8 chickens, which is higher than the other areas. IDP respondents have lower number of cows and goats than respondents in Control and Non-IDP areas. However, the proportion of respondents who own business assets is higher in the IDP regions, compared to Non-IDP and control. As shown in Table 31, 69% of the households own at least a cow, 77% of the households own at least one chicken, and 34% of the households owns at least one duck. This ownership has also improved significantly when compared to the Baseline.

Table 30: Average business assets owned

Asset	IDP	Control	Non–IDP
Cow	1.95	2.05	2.05
Goat	2.72	3.09	2.63
Duck	6.44	7.95	5.86
Chicken	8.16	4.89	5.91
Cow shed	1	1	1
Boat	1.02	1	1.03
Wood trees	4.36	3.5	3.51
Shop	1	1.3	1.1
Power pump	1.2	1	1.1
Total Number of Observation	**709**	**329**	**426**

Table 31: Business assets holding among households[1]

Asset	IDP	Control	Non–IDP	Baseline
Cow	69%	31%	36%	29%
Goat	7%	3%	6%	2%
Duck	34%	13%	16%	13%
Chicken	77%	45%	51%	54%[28]
Cow Shed	14%	5%	5%	22%
Boat	20%	10%	13%	21%
Wood Tree	30%	13%	19%	83%
Shop	3%	3%	5%	3%
Power Pump	1%	1%	2%	2%
Total Number of Observation	**709**	**329**	**426**	**3,315**

28 In the Baseline report it is referred to as Hen

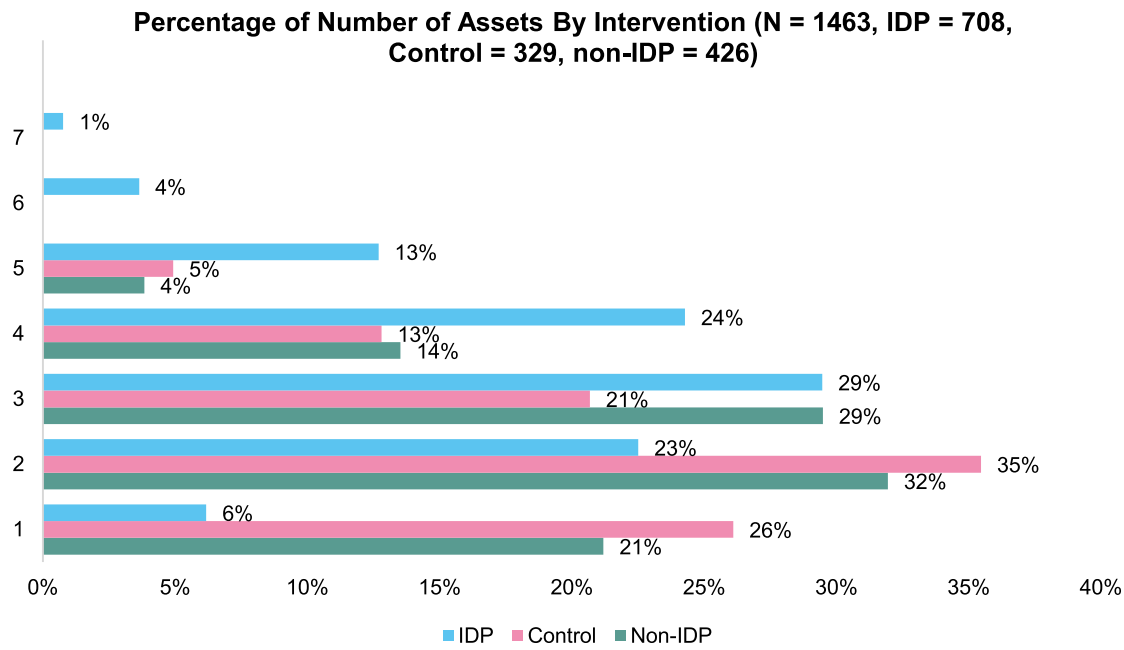

Figure 19: Number of Assets Owned

6.2
Credit Seeking Practice

On average, respondents in the IDP regions have taken fewer amount loan (BDT 28,689). In comparison to the respondents in the Non-IPD and Control regions who have taken BDT 9,561 and BDT 8,027 more on average. As seen in the table below, respondents in the IDP regions are also prompt in terms of repaying the loan amount with 87% of the loan being repaid on average.

Table 32: Average of loan taken by intervention area

Study Area	Average of Loan Taken (BDT)
IDP	28,689
Control	36,716
Non-IDP	38,250
Baseline	30,000-33,000

Table 33: Average loan repaid by intervention area

Study Area	Average of Loan Amount Repaid (BDT)
IDP	25,531
Control	32,574
Non-IDP	33,009

6.3
Savings

Figure 20 shows that the respondents in the IDP regions have a higher propensity to save when compared to the respondents in the Control area. While in both IDP and Non-IDP regions 97% of the respondents have mentioned that they save money, while in the Control region 18% of the respondents did not have any savings. From Table 34 respondents in both IDP and Non-IDP regions prefer saving with BRAC (95% and 96% respectively), though they do save cash at home. From Table 35 the respondents in the IDP and Non-IDP regions tend to save a higher amount on average compared to Control region respondents. On average, respondents in the IDP region saved BDT 15,359 while Non-IDP respondents save BDT 15,951 and Control region respondents saved BDT 11,108.

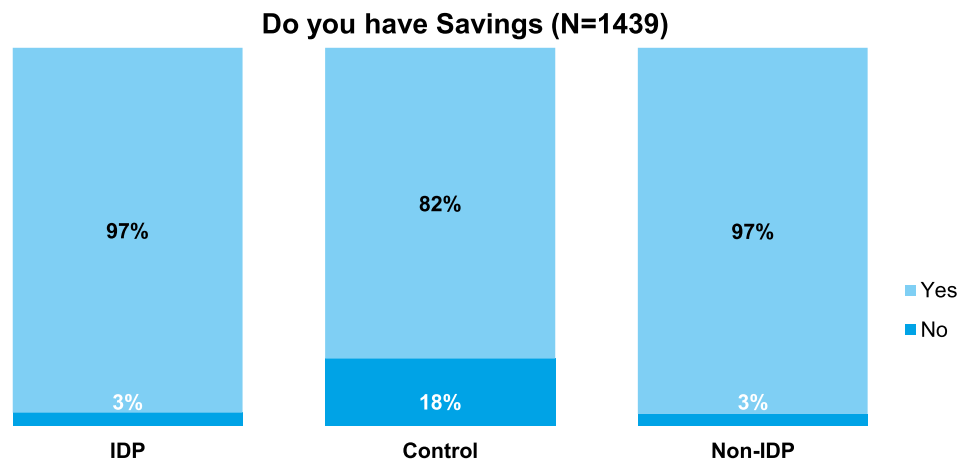

Figure 20: Savings by intervention area

Table 34: Household's savings

Study Variable	IDP	Non–IDP	Baseline
BRAC	95%	96%	18%
Cash in Hand (Home bank, home savings)	12%	9%	3%
Gram Committee	1%	2%	N/A
Other NGO	1%	1%	16%
Total Number of Observations (Households who have savings)	700	418	3,315

Table 35: Average amount of saving

Study Variable	IDP	Control	Non–IDP	Baseline
Average Amount of Savings	15,359	11,108	15,951	3,087
Total Number of Observations	686	290	406	3,315

CHAPTER 7

MATERNAL AND CHILD HEALTH IN HAOR AREAS

CHAPTER 7

MATERNAL AND CHILD HEALTH IN HAOR AREAS

Summary

The IDP programme participants demonstrate better performance in most areas of maternal and child health, compared to the Control, Non-IDP areas and the Baseline Study. IDP Programme participants have the highest proportion, 98%, of respondents who have breastfed their child. In addition, IDP Programme participants have the highest proportion of respondents who utilize all food groups for complementary feeding. As a result, IDP Programme participants, have the highest proportion of respondents, 52%, who have High DDS (more than 7 food groups) for complementary feeding, compared to 47% in Control and 38% in Non-IDP. The use of complementary feeding across all food groups has significantly improved since the Baseline Study.

Likewise, IDP programme participants also demonstrate much better vaccination practices than Control and Non-IDP. For example, 87% of parents responded that their children have been completely vaccinated compared to 67% in Control and 72% in Non-IDP. The vaccination statistics also demonstrate significant improvement from the Baseline Study, where only 59.1% of parents had completely vaccinated their children. A higher proportion of IDP respondents, 94%, use some form of the family planning method, compared to Control, 88% and Non-IDP, 87%. The proportion of eligible couples using some form of family planning is much higher than that of the Baseline Study in the IDP area, 63%. Similarly, IDP Programme participants have

much better access to ANC and PNC. For example, 60% of women who have had a child within the last one year have had access to ANC from a Medically Trained Provider (MTP), compared to 79% of Rural Bangladesh and 56% of Baseline. Therefore, IDP is lagging rural average access in terms of access to ANC. However, IDP is ahead of national rural averages in terms of PNC – 58% of the population had access to PNC, compared to 47% of rural Bangladesh and 21% in the Baseline.

IDP programme participants have a higher tendency to seek health care at formal institutions, including government hospitals and BRAC Healthcare centres. The higher complete vaccination rates, stronger complementary feeding practices, better access to healthcare, ANC, and PNC in IDP can be attributed to a combination of factors. IDP respondents have higher average annual household income, and therefore, can afford to spend more on healthcare. Furthermore, the presence of BRAC Health Centres and a strong network of BRAC SKs have significantly improved their access to healthcare services since the Baseline Study. In addition, IDP Programme participants, as inferred in the FGDs and KIIs, are more aware of the importance of the healthcare services, due to discussions with BRAC SKs and VDO members.

The reproductive health of women also shows improvements from that of the Baseline Study – respondents are getting married and having children at a much later age. However, the IDP area has the highest child death rates, ~11%, amongst all 3 areas, which calls for strengthening of interventions aimed at reducing infant mortality. In addition, although the proportion of IDP respondents, 41%, having access to skilled medical personnel during delivery is the highest amongst the 3 groups, more than 50% of respondents in all 3 areas do not have births attended by skilled personnel. Therefore, modifications to health interventions in the Haor areas will need to prioritise provisions to facilitate safer childbirths and reduce infant mortality.

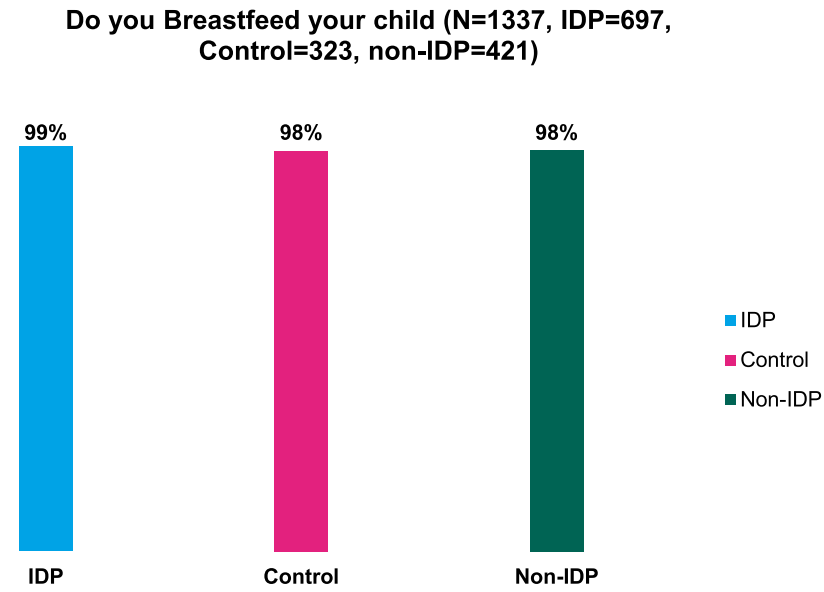

Figure 21: Breastfeeding Practices

7.1

Infant and Young Child Feeding (IYCF) Practice and Complementary Feeding

As shown in Table 36, 99% of IDP Programme participants breastfeed their children, compared to 98% in Control and Non-IDP. During interviews with the SKs, it was inferred that knowledge on the benefits of breastfeeding is disseminated to IDP Programme participants frequently. Awareness is also strengthened during VDO meetings. As a result, IDP has a slightly higher proportion of women who breastfeed. However, for children above 6 months old, breastfeeding is not enough – they must be provided with complementary feeding. As shown in Table 36, IDP programme participants demonstrate much better performance in complementary feeding compared to Non-IDP and Control. For example, almost 57% of eligible IDP households feed children aged 6 months-5 years with dairy products, compared to 46% in Control and 48% in Non-IDP. Likewise, a higher proportion of IDP households are utilizing all the food groups for complementary feeding, compared to Control and Non-IDP. Starchy foods, such as rice and wheat, are the most utilised item for complementary foods across all 3 groups, followed by vegetables and fruits. The use of Moni mix and packaged baby food is negligible in all 3 areas. In addition, compared to the Baseline Study, IDP Programme participants demonstrate a stark improvement in complementary feeding across all food groups. For example, 57% of eligible IDP households feed children aged 6 months to 5 years dairy products, compared to 13.2% in the Baseline Study. Families in the IDP region have more disposable income to spend on buying food for children and know what to feed young children due to the presence of multiple development programmes under one umbrella.

Table 36: Consumption of different types of food by children of 6 months-5 years of age

Study variable	IDP	Control	Non–IDP
Rice, wheat, and other cereals	90%	87%	87%
Potatoes and sweet potatoes, other tubers	80%	78%	76%
Vegetables and leaves	87%	86%	88%
Fruits	72%	66%	65%
Beef, Goat, Poultry, Eggs, and Fish	67%	61%	64%
Beans, Peas, and nuts	56%	56%	54%
Milk, yogurt, and other diary	57%	46%	48%
Powder Milk	17%	14%	15%
Oils, fats, and butter	42%	39%	37%
Sugar, honey, and sugar products	55%	45%	48%
Spices, tea, salt, small amounts of milk for tea	40%	35%	32%
Micronutrient Powder (Moni Mix)	2%	2%	2%
Packaged Baby Foods	5%	6%	7%
Number of Observations (Eligible Households with Children)	**664**	**288**	**395**

Respondents across all 3 study areas were assigned a Dietary Diversity Score (DDS) for their complementary feeding habits. As shown in Figure 22, IDP has the highest proportion of households with high DDS – 52%. The Control group has the highest proportion of participants with low DDS. Comparison with Baseline statistics demonstrate the success of IDP's Programme in complementary feeding – only 9% of IDP households had high DDS during Baseline, compared to 52% in 2020.

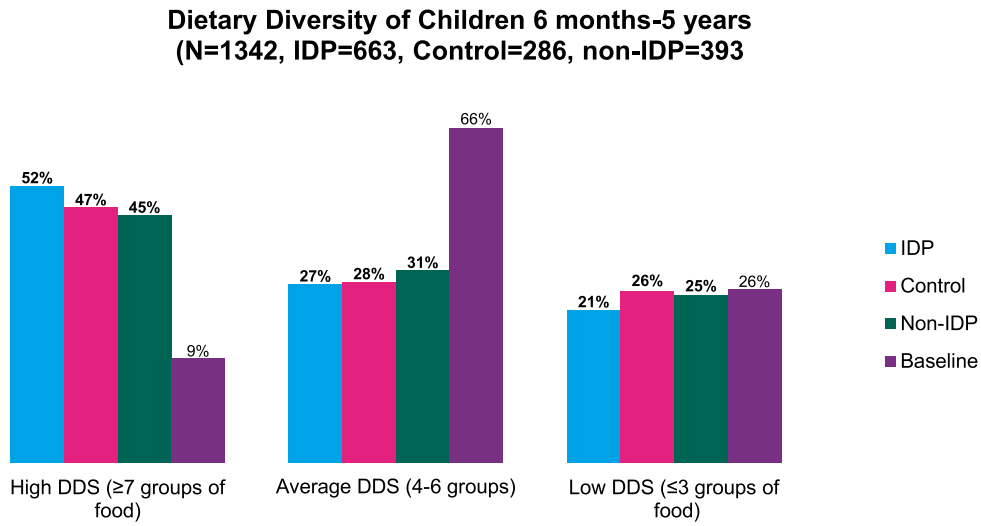

Figure 22: Dietary Diversity Score (DDS) of Children 6 months-5 years

7.2
Vaccination of Children

Although almost all respondents in all 3 areas have given some form of vaccination to their children, the proportion of parents who have made sure that their children have been completely vaccinated[29] is the highest in IDP. In the IDP area, 87% of parents responded that their children have been completely vaccinated compared to 67% in Control and 72% in Non-IDP. The vaccination statistics also demonstrate significant improvement from the Baseline Study, where only 59.1% of parents had completely vaccinated their children. The improvements in vaccination in IDP households, in comparison to Baseline, Control and Non-IDP, can once again be attributed to the regular follow up sessions by BRAC SKs, Field Staff, and health awareness by the VDO members. During a KII session with an SK, it was revealed that knowledge regarding vaccination during the initial phases of IDP was sparse amongst the programme participants. However, due to the combination of awareness and regular follow-ups from the SKs, the programme participants are now well-aware of the importance of complete vaccination, as demonstrated by the data.

Table 37: Vaccination of children

Did your child receive vaccination?	IDP	Control	Non–IDP
Yes	98%	97%	98%
No	2%	3%	2%
Number of Respondents (Parents)	**675**	**294**	**399**

Table 38: Number of doses

Study Variable	IDP	Control	Non–IDP
At least 1 dose of BCG	98%	98%	99%
At least 3 doses of Polio	92%	84%	92%
At least 3 doses of Pentavalent	87%	80%	83%
At least 2 doses of Measles	90%	92%	92%
At least 1 dose of Mumps	95%	92%	92%
Completed all Doses of the Vaccines	80%	67%	72%
Number of Respondents (Parents)	**661**	**285**	**391**

7.3
Reproductive Health of Women

The age of first marriage of the respondents is higher in IDP than in Control and Non-IDP. However, the age of having a first child is the highest in Non-IDP. Comparison with the Baseline data shows significant improvement in the age of mean age of first marriage and mean age of having a first child in the IDP area. For example, the mean age of first marriage in IDP was 16±2 in the Baseline Study and the mean age of having the first child was 18±3 in the Baseline Study. The increase in the mean age of first marriage, reiterates the increase in awareness of the legal age of marriage, due to the VDOs activities (also demonstrated by changes in the mean age of first marriage of all-female household members in section 3.2).

29 Complete vaccination defined by one dose of BCG, 3 doses of Pentavalent, 3 doses of polio, and 2 doses of measles. All these doses were completed by the age of 15 months.

Table 39: Reproductive history of women

Study Variable	IDP	Control	Non–IDP	Baseline
Mean Age at First Marriage of Respondent	18	17	17	16±2
Total Number of Observations	**665**	**306**	**401**	**924**
Mean Age of Having First Child	20	19	20	18±3
Total Number of Observations	**675**	**308**	**406**	**924**

In comparison with the Baseline, there has been a decrease in the proportion of respondents in the IDP areas who experienced stillbirth, from 3.7% during the Baseline to 3.3% in 2020. However, IDP has the highest proportion of respondents who experienced child death among the three groups – 11.1% compared to 9.2% in Control and 10% in Non-IDP. VDO and Health Programme activities from 2021-25 may prioritise new-born and infant health to reduce child death rates in the area.

Table 40: Child death statistics

Study Variable	IDP	Control	Non–IDP	Baseline
Experienced Stillbirth within the last 3 years	3.3%	3.6%	3.1%	4%
Experienced Abortion within the last 3 years	0.5%	0.3%	0.8%	13%
Experienced Child death within the last 3 years	11.1%	9.2%	10.0%	
Total Number of Observations	**664**	**305**	**389**	**924**

Table 41: Age of child at Child Death

Study Variable (Age of Child if Experienced Child Death)	IDP	Control	Non–IDP
0–6 months	18%	17%	23%
7–12 months	8%	4%	4%
1 year old	1%	1%	0%
2 years old	1%	1%	0%
3 years old	1%	0%	0%
4 years old	1%	0%	1%
5 years old	1%	1%	1%
Total Number of Observations	**344**	**193**	**209**

7.4
Use of Family Planning Methods

The proportion of eligible couples using some form of family planning methods, is the highest in IDP, 94%, compared to Control, 88% and Non-IDP, 87%. The statistics once again demonstrate the contribution of the VDO and SK activities over the past 4-5 years – only 63% of the families used some form of family planning method during the Baseline Study. Most eligible couples in all three areas use the pill, followed by the condom. The proportion of eligible couples who use different forms of birth control has also improved compared to the

Baseline Study. For example, only 48.1% of couples in the IDP area used the pill compared to 84% in 2020. Similarly, 2.4% of couples in the IDP areas used condoms during the Baseline Study compared to 35% in 2020. The improvement in the use of family planning demonstrates the need for a combination of awareness activities and regular check-ups with the programme participants, as done in the IDP areas. This is demonstrated in Table 43, where programme participants responded regarding the sources of family planning. As stated in the KIIs and FGD groups, the majority of IDP respondents, 79% receive family planning information from BRAC. Less than 30% of the programme participants in Control and Non-IDP get their family planning information from BRAC (some programme participants in the Control area do visit BRAC Health Centres).

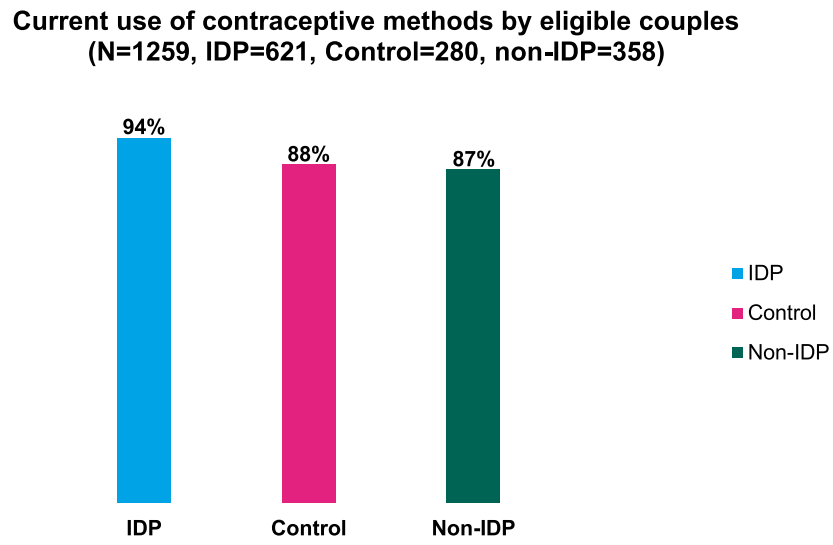

Figure 23: Use of Contraceptive

Table 42: Types of contraceptive methods used by eligible couples

Study Variable	IDP	Control	Non–IDP	Baseline
Pill	84%	77%	76%	48%
Condom	35%	21%	26%	2%
Injectable	13%	6%	11%	6%
Norplant	1%	1%	0%	1%
Ligation	3%	4%	2%	0.9%
Vasectomy	0%	0%	0%	0.3%
Experienced Menstrual Regulation (MR)	1%	0%	1%	
Total Number of Observations (married women of reproductive age 13–49)[30]	**621**	**280**	**358**	**924**

30 Childbearing Age and Pregnancy Outcomes in Bangladesh: A Multilevel Analysis of a Nationwide Population-Based Survey (iomcworld.org)

Table 43: Source of family planning methods

Study Variable	IDP	Control	Non–IDP	Baseline
BRAC service providers (SS, SK, Paramedics)	79%	28%	29%	0%
Government health workers, hospital	43%	54%	54%	5%
Local medicine shop	18%	32%	36%	37%
Other NGO	2%	1%	1%	3%
Total Number of Observations	**574**	**208**	**287**	**924**

7.5

Antenatal care (ANC)

IDP Programme participants, as shown in Table 44, have received much better Antenatal Care (ANC) than their counterparts in the Control and Non-IDP areas – 80% of IDP Respondents have received at least 1 ANC compared to 58% in Control and 63% in Non-IDP. The proportion of respondents who have received at least 1 ANC has increased from 62% in the Baseline Study to 80% in 2020, further demonstrating the success of BRAC's Health Programmes and IDP's Integrated approach. In addition, 68% of respondents in the IDP areas have received at least 1 ANC from a Trained Provider, compared to 48% in Control and 52% in Non-IDP. The IDP area also has a higher proportion of respondents who have received at least 1 ANC from a BRAC SK and 1 ANC from BRAC Health and Delivery Centres. This is also an improvement from the Baseline Study, contrasted with the current proportion of 61%, only 59% of IDP respondents had received at least 1 ANC from a trained provider. However, despite the strides made by the BRAC Health Programme, the woman in the IDP area still have lower access to ANC, compared to national figures. For example, according to the Bangladesh Demographic and Health Survey[31], 2017-18, 79% of rural women in Bangladesh had received at least 1 ANC from a Medically Trained Provider.

Table 44: Antenatal Care (ANC) practices in Haor

Study Variable[32]	IDP	Control	Non–IDP	Baseline
Received at least 1 ANC	80%	58%	63%	62%
Received at least 4 ANCs	25%	18%	19%	16%
Number of Observations	**167**	**60**	**69**	**577**

Table 45: Number of ANC and provider of ANC

Study Variable	IDP	Control	Non–IDP	Baseline
Received at least 1 ANC from MTP[33]	60%	47%	48%	56%
Received at least 1 ANC from BRAC SK	7%	2%	4%	7%
Received at least 1 ANC from BRAC Health and Delivery Centres	25%	-	3%	-
Received at least 1 ANC from Trained Provider	68%	48%	52%	59%
Received at least 4 ANCs from MTP	18%	13%	13%	
Received at least 4 ANCs from BRAC SK	5%	2%	3%	1.3%
Received at least 4 ANCs from BRAC Health and Delivery Centres	9%	-	-	-
Received at least 4 ANCs from Trained Provider	23%	15%	16%	14%
Eligible Households	**167**	**60**	**69**	**924**

31 National Institute of Population Research and Training (NIPORT), and ICF. 2020. Bangladesh Demographic and Health Survey 2017-18. Dhaka, Bangladesh, and Rockville, Maryland, USA: NIPORT and ICF.

32 The recipient had a child within the past year.

33 Medically Trained Provider (MTP) includes professionals from government and private hospitals, government community health worker, new-born health worker, BRAC Healthcare and Delivery Centres, Other NGO Clinics, and Pharmacies. Trained providers include MTPs and BRAC SKs.

7.6
Delivery Care

The proportion of IDP respondents who have undergone home delivery has increased from 86% during the Baseline Study to 90% in 2020. The proportion of home deliveries has also increased in the Control area from 84%. It must be noted, however, that 41% of IDP programme participants gave birth to children in the presence of skilled trained personnel, compared to 38% in Control and 15% Non-IDP. This demonstrates the contribution of both the BRAC Health Programme and the VDO activities for safe delivery. However, the number of respondents who are undergoing unskilled/traditional birth attendance is still high in IDP areas. The national proportion of rural women who undergo delivery with a skilled person is 63%.[31] Therefore, IDP activities from 2021 onwards could prioritise awareness-raising and facilitation of safe birth practices.

Table 46: Delivery location of the respondents

Study Variable	IDP	Control	Non–IDP	Baseline
At home	90%	89%	96%	86%
BRAC Health Centres	2%	-	-	-
Government Clinic/Hospital	6%	11%	4%	4%
Private / NGO clinic	2%	-	-	9%
Total Number of Respondents	**108**	**46**	**55**	**924**

Table 47: Delivery care practices of the respondents

Study Variable	IDP	Control	Non–IDP	Baseline
Skilled person (doctors, nurse, paramedics, CSBA, etc.)	41%	38%	15%	17%
Unskilled / traditional birth attendance	59%	62%	85%	82%
Total Number of Observations	**107**	**47**	**55**	**924**

7.7
Post-natal Care (PNC)

The IDP programme participants, as shown in Table 48, demonstrate better performance for post-natal care (PNC) than their counterparts in the Control and Non-IDP areas. In a comparison of 43% in Control and 42% in Non-IDP, 76% of respondents in IDP have received at least 1 PNC. This is much higher than the proportion of IDP respondents in the Baseline Study, 52%, who had received at least one PNC. As demonstrated below, the presence of BRAC Health Staff is one of the key factors responsible for the improvement in PNC in the IDP areas. More than half, 66%, of respondents in the IDP area received at least 1 PNC from a trained provider, compared to 32% in Control and 29% in Non-IDP. The proportion of respondents who received at least 1 PNC from a trained provider in 2020, 66%, is much higher than the proportion of respondents in the Baseline Study, 32%. The population who had access to PNC from a Medically Trained Provider (MTP) in the IDP area is 58%, which is higher than the national rural average, 47%.

Table 48: Postnatal Care (PNC) practices of the respondents

Study Variable	IDP	Control	Non–IDP	Baseline
Households who received at least 1 PNC	76%	58%	63%	52%
Households who received at least 3 PNCs	34%	18%	15%	18%
Total Number of Eligible Households	**151**	**56**	**65**	**924**

Table 49: Source of post-natal care (PNC) practices

Study Variable	IDP	Control	Non–IDP	Baseline
Received at least 1 PNC from BRAC Health Centre	27%	-	3%	-
Received at least 1 PNC from MTP	58%	30%	23%	21%
Received at least 1 PNC from BRAC SK	9%	2%	6%	2%
Received at least 1 PNC from Trained Provider	66%	32%	29%	22%
Received at least 3 PNCs from BRAC Health Centre	17%	-	-	-
Received at least 3 PNCs from MTP	28%	13%	6%	-
Received at least 3 PNCs from BRAC SK	5%	2%	5%	-
Received at least 3 PNCs from Trained Provider	32%	14%	11%	-
Total Number of Eligible Households	**151**	**56**	**65**	**924**

7.8

Health Seeking Behaviour Among Haor Households

Alongside better ANC and PNC care rates in IDP areas, the health-seeking behaviour of IDP respondents demonstrates the contribution of the BRAC Health Care Programme. For example, 39% of IDP programme participants visit the BRAC Health Centre, compared to 3% in Non-IDP and 1% in Control. IDP programme participants also have higher health-seeking behaviour at government hospitals and private hospitals, clinics and chambers and pharmacy/village doctors. This shows a strong improvement from the Baseline Study, where only 30% of respondents sought medical care from formal institutions. The increase and improvement in Health-Seeking Behaviour can be attributed to the presence of BRAC Health Care Centres in the IDP Areas, higher average annual household income, the strong networking of BRAC SKs in the IDP areas, and health awareness activities by the VDO.

Table 50: Health seeking behaviour

Study Variable	IDP	Control	Non–IDP
BRAC health Centre	39%	1%	3%
Govt. hospital	56%	28%	31%
Private hospital/Clinic/Chamber	46%	17%	27%
Pharmacy Sales staff	11%	6%	10%
Pharmacy/Village doctor	29%	10%	20%
Home treatment (self/ HH members/relatives)	1%	0%	0%
Homeopathic doctor	1%	0%	1%
No treatment	5%	3%	4%
Other	-	1%	-
Total Number of Observations	**666**	**281**	**357**

CHAPTER 8

FOOD CONSUMPTION, DIETARY PATTERN, AND FOOD SECURITY

CHAPTER 8

FOOD CONSUMPTION, DIETARY PATTERN, AND FOOD SECURITY

Summary

The increase in household incomes and nutritional awareness has led to improved food consumption patterns in the IDP area. In contrast to 42% of respondents in the IDP area, 66% of IDP programme participants have food security, and the proportion is higher than Non-IDP (61%) and Control (60%). The IDP area also has the highest percentage of programme participants who vegetables and leaves, animal products (beef, goat, poultry, chicken, fish, etc.), fruits, milk, oil, spices, and sugar every week. However, the interventions in the IDP area would be modified to raise awareness about the importance of consuming different food groups together. That is because the IDP is lagging Non-IDP in the percentage of respondents who consume 7 or more important food groups every week.

8.1 Daily Dietary Diversity

The effects of higher annual household income are also evident in the daily dietary practices of IDP Programme participants. Compared to the Control and Non-IDP Areas, a higher percentage of IDP programme participants consume vegetables and leaves, animal products (beef, goat, poultry, chicken, fish, etc.), fruits, milk, oil, spices, and sugar daily. For example, 30% of IDP programme participants consume animal products daily, compared to 30% in Control and 37% in Non-IDP. Awareness about the importance of consuming different nutrient groups must be increased in the IDP Area as the diversity has not increased from the Baseline.

Table 51: Daily consumption of different food groups

Study Variable	IDP	Control	Non–IDP
Daily Consumption of vegetables and leaves	76%	78%	84%
Daily Consumption of beans, peas, and nuts	31%	33%	36%
Daily Consumption of beef, goat, poultry, eggs, and fish	30%	30%	37%
Daily Consumption of potatoes and sweet potatoes, other tubers	52%	58%	63%
Daily Consumption of Fruits	30%	27%	30%
Daily Consumption of Milk	25%	16%	22%
Daily Consumption of Oil	40%	41%	40%
Daily Consumption of spices, tea, salt, small amounts of milk for tea	34%	29%	36%
Daily Consumption of sugar, honey, and sugar products	30%	26%	30%
Daily Consumption of rice, wheat, and other cereals	85%	88%	91%
Total Number of Respondents	**659**	**296**	**393**

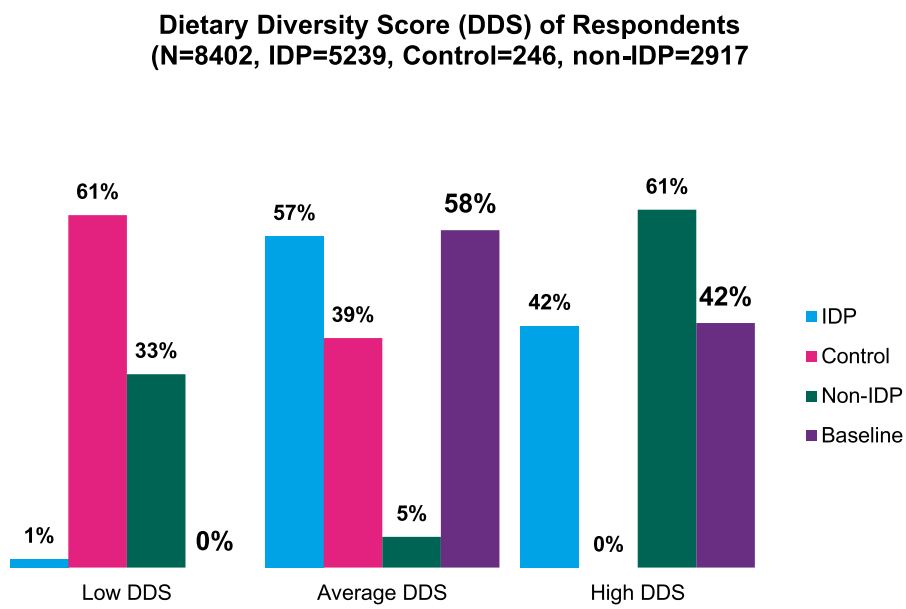

Figure 24: Dietary Diversity Scores (DDS)

8.2
Food Insufficiency

The IDP area has the highest number of programme participants, 66%, who consume the right amount of food, compared to the Control, 61%, and Non-IDP, 60%, areas. This is a substantial improvement from the Baseline Study, where only 42% of respondents in the IDP area had food security. The increase in food security can be attributed to an increase in income and awareness about the importance of better dietary habits. For example, the BRAC Health Staff and SKs, always stress the importance of proper nutrition during their visits.

Table 52: Food shortage status

Study Variable	IDP	Control	Non–IDP
Always shortage	1%	1%	1%
Excess	13%	9%	14%
Neither shortage nor excess	66%	61%	60%
Sometimes shortage	20%	29%	23%
Total Number of Observations	**708**	**329**	**426**

CHAPTER 9

STATUS OF VULNERABILITY AND EMPOWERMENT IN THE HAOR

CHAPTER 9

STATUS OF VULNERABILITY AND EMPOWERMENT IN THE HAOR

Summary

The combination of the strong support system from the VDO, the network of BRAC Field Staff, and the availability of integrated development services has significantly reduced the vulnerability of women and children in the IDP Area. The IDP Programme participants received a range of support services from the VDO. For example, 70% of IDP programme participants, have received counselling, and 62% have received assistance for applying for positions in community leadership positions. In addition, 38% have received assistance for receiving government services. These services have substantially empowered the IDP programme participants within the domestic sphere and the community. For example, among the 3 study areas, the IDP area also has the highest number of female respondents who have power in making decisions about family healthcare, family planning, education, and investment. In addition, 20% of respondents in the IDP area are included in local power structures, compared to 5% in Control and 8% in Non-IDP. It was observed during the FGDs and KIIs, that compared to women in the Non-IDP areas, women in the IDP areas are much more confident about their abilities. As a result, they can maximize their earning potential and can make critical decisions within their community to aid socio-economic development.

As seen in the previous chapters, the VDO's awareness-raising activities have yielded better performance of IDP recipients in areas such as vaccination, complementary feeding, and school enrolment rates for girls. The VDO has also played a critical

role in raising awareness about human and legal rights. As discussed in the sections below, 98% of IDP programme participants are aware of the legal age of marriage for boys and girls. As a result, the IDP area has the lowest percentage of females married under 18. Similarly, IDP programme participants are much more aware of the legal right to vote, punishment for taking dowry, etc. They are also more knowledgeable about social protection schemes. For example, 42% of respondents are now receiving some form of social protection, compared to 13% in Control, 15% in Non-IDP, and 8% in the Baseline Study. As a result of higher awareness regarding legal rights, only 6% of IDP programme participants have been affected by some form of community violence. IDP programme participants have more social acceptance as well. Compared to 34% in the Control Area and 45% in the Non-IDP Area, 63% of female programme participants in the IDP area were invited to Salish.

The presence of BRAC Services, especially Microfinance, in the Non-IDP and IDP areas, have severely reduced the dependency of programme participants on local lenders, who charge unreasonably high interest. BRAC is the most important source of support during a financial crisis for programme participants in the IDP area. For example, 72% of respondents in the IDP and 78% of respondents in the Non-IDP area would borrow from BRAC during a financial crisis. Since IDP recipients have been benefitted from BRAC's multitude of resources, a higher percentage of IDP programme participants have made their households more physically resilient to climate-change damages. For example, 58% of the IDP respondents have households that are moderately resilient to climate change. However, a high proportion of residents across all 3 study areas, are vulnerable to damage of crops due to climate change. The percentage is the highest in IDP, 51%, followed by Non-IDP, 41%, and Control, 35%. Many of the IDP areas are more waterlogged compared to villages in the Control Area. As seen in chapter 5.3, almost 90% of IDP programme participants are enrolled in climate-resistant agriculture training. However, the effectiveness of these programmes must be increased to mitigate crop loss by climate change.

9.1
Incidence of Crisis and Events

As shown in Table 53, a higher proportion of Haor residents in the IDP areas are vulnerable to the destruction of crops by climate change than in the Control and Non-IDP areas. For example, at least 51% of the respondents in the IDP area had crops destroyed by natural disasters, compared to 35% in Control and 41% in Non-IDP. The percentage of respondents in the IDP area who faced crop loss due to natural disasters is almost double that of the Baseline Study, 27%. The increase could be partially due to having a larger proportion of respondents employed in the agriculture sector (the Baseline Study had representation from more occupations, including more white-collar occupations). However, the proportion of respondents who faced crop destruction due to natural disasters has also increased in the Control area (from the Baseline Study) and is high in the Non-IDP Area as well. The percentage of respondents who faced the loss of animals due to climate change-induced problems is the highest in the IDP areas as well at 14%. However, this is much lower than that of the Baseline Study, where the proportion was 27.5%. As climate change becomes more of an imminent threat to the Haor areas, there is a need for the proliferation of climate-smart agriculture in the IDP area.

Table 53: Vulnerability faced by Haor population

Study Variable	IDP	Control	Non–IDP	Baseline
Crops Destroyed Due to Natural Disaster	51%	35%	41%	13%
Loss of Animals (e.g., cow) due to Natural Disaster	14%	9%	10%	28%
Total Number of Observations	**708**	**329**	**426**	**3,315**

The proliferation of climate-smart agriculture by BRAC in the IDP areas would be effective in reducing climate-change-induced crop damage. As shown in Figure 25, the percentage of respondents whose physical household (e.g., water supply, house structure, etc.) is very resilient to climate change is the highest in IDP and Non-IDP at 9%, compared to 6% in the Control Area. Furthermore, almost 58% of the IDP respondents have households that are moderately resilient to climate change. During the Focus Group Discussions with IDP and Non-IDP programme participants, it was inferred that many IDP recipients have utilised the higher income and increased access to credit (primarily due to the presence of BRAC's Microfinance Programme) to make the structure of their houses more resilient to damage by climate change.

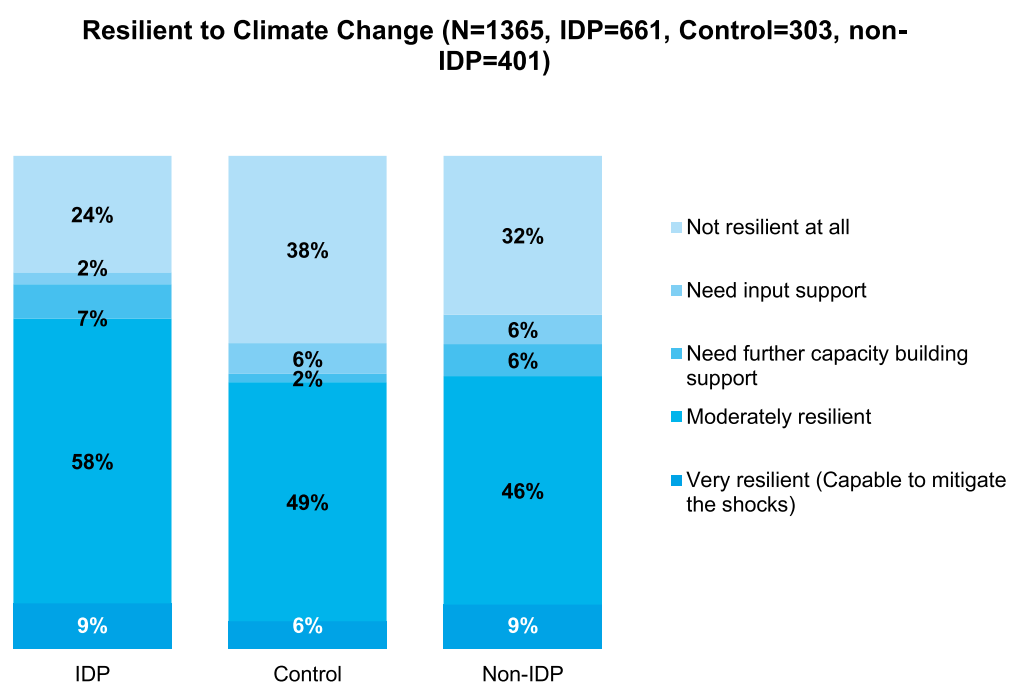

Figure 25: Resilience of house to climate change

In addition, as shown in Table 54, BRAC is the most important choice source of support during a financial crisis for programme participants in the BRAC Area. For example, 72% of respondents in the IDP and 78% of respondents in the Non-IDP area would borrow from BRAC during a financial crisis. More than half the respondents in all 3 areas would also borrow from neighbours, family, and friends, which may demonstrate the building of trust (i.e., neighbours and friends trust respondents enough to lend them money) in all 3 study areas. Less than 10% of respondents in the IDP area would borrow from banks. Only 2% in the IDP area would borrow from lenders with high interest.

The reliance on BRAC as a source of support during financial crises was stated several times during FGDs in both IDP and Non-IDP areas. In addition, BRAC recipients in both IDP and Non-IDP areas are aware of the challenges, e.g., unusually high-interest rates, associated with borrowing from local lenders and Mahajans. With the presence of BRAC's Microfinance Programme, reliance on local lenders has declined significantly. The data from this study demonstrates significant improvement in coping mechanisms during a financial crisis – compared to 0% of respondents in the IDP area, 40.8% of respondents in the same area during the Baseline Study stated they would have done nothing during a financial crisis.

Table 54: Choice of the coping mechanism of Haor people during a financial crisis

Study Variable	IDP	Control	Non–IDP
Borrow from BRAC	72%	57%	78%
Borrow from neighbours	68%	71%	59%
Borrow from family	57%	58%	58%
Borrow from friends	42%	45%	40%
Borrow from Banks	8%	11%	7%
Borrow from Local Lenders with High Interest	2%	1%	3%
Borrow from Microfinance banks	8%	4%	4%
Borrow from other NGOs	1%	2%	2%
Mortgage Assets	1%	1%	0%
Reduce expenditure	2%	3%	3%
Sell Assets	4%	3%	3%
Take products as credit from local shops	3%	1%	0%
Do nothing	0%	0%	0W%
Total Number of Observations	**708**	**329**	**426**

9.2

Early Marriage, Social Position, and Vulnerability of Women in the Haor

As shown in Table 55, almost one-fifth of respondents in the IDP area are included in local power structures, compared to 5% in Control and 8% in Non-IDP. The VDO group discussions, as inferred from the Focus Group Discussion, is to be credited for increased empowerment of women in the IDP areas. Programme participants in the IDP areas reported that after being VDO members and having support from other programme participants, they feel more confident to be part of local power structures. The IDP area, as discussed in section 3.3, has the lowest percentages of female members married before 18, and the VDO's empowerment activities are also primarily responsible. The percentage of women, who faced any form of community violence, is lowest in the Non-IDP area, 5%, followed by the IDP area 6%, and then Control, 8%.

Table 55: Social position and vulnerability to violence in Haor areas

Study Variable	IDP	Control	Non–IDP
Included in Local Power Structure	19%	5%	8%
Faced Any Community Violence	6%	8%	5%
Total Number of Observations	**673**	**299**	**389**
Percentage of Female Members Married before 18	22%	34%	31%
Total Number of Observations (All Household Members)	**718**	**344**	**399**

The IDP area also has the highest number of female respondents who have power in making decisions about the amount to save each month, contraceptives, having or not having children, reproductive health, working outside of the home for employment, taking and paying off loans, seeking treatment and household purchase of food and consumer durables. As seen in Chapter 3 and Chapter 7, IDP is a better performer in female employment rates, use of contraception, healthcare-seeking behaviour, etc., compared to Non-IDP and Control. Therefore, it can be concluded that women in the IDP areas are more aware of their potential and power within the domestic sphere and within and the community. Furthermore, they are utilizing their elevated socio-economic status (due to the rise in annual household income) to make critical decisions about healthcare, family planning, employment, etc., which is manifesting in better social outcomes for their families. As the women are empowered, they also have greater mobility within the 3 study areas – the percentage of women who can travel by themselves to nearby places is the highest in the IDP, followed by the Non-IDP areas. In addition, women in the IDP area also have more social acceptance within the community. Compared to 34% in the Control Area and 45% in the Non-IDP Area, 63% of female programme participants in the IDP area were invited to Salish.

Table 56: Decision-making in the Haor areas

Study Variable (Have Power in Decision Making)[34]	IDP	Control	Non–IDP
Purchasing land, other asset, and sales of assets	93%	94%	87%
Purchasing clothes	94%	96%	89%
Children's education	95%	96%	91%
Seeking treatment	97%	96%	90%
Household purchase (food and consumer durables)	97%	96%	89%
Taking and paying off loans	98%	97%	89%
Investment	94%	95%	89%
Amount to Save Each Month	95%	96%	90%
Contraceptives	98%	97%	92%
Having or not having Children	98%	97%	91%
Reproductive Health	98%	97%	90%
Working Outside (from home) for Employment	96%	95%	88%
Total Number of Observations	**652**	**293**	**389**

34 If the respondent has power in decision making, they took the decision using the following options: By themselves, Jointly with Husband (respectfully), Jointly with another Male household member, jointly with another Female household member.

Table 57: Location of marketplace

Study Variable (Travel to Local Market Place)	IDP	Control	Non–IDP
Yes, if it is nearby	68%	65%	66%
Yes, if I am accompanied by a friend	0%	0%	0%
Yes, if I am accompanied by a male member of my family	1%	1%	2%
Yes, if I am accompanied by my husband	10%	12%	14%
Total Number of Observations (Respondents)	**699**	**324**	**419**

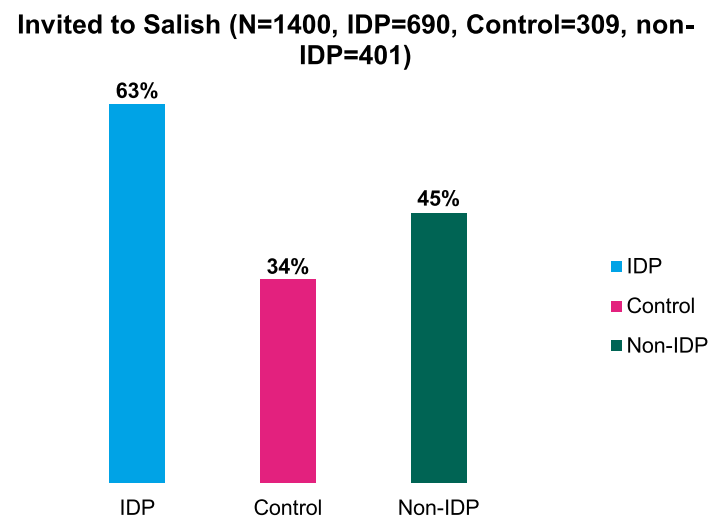

Figure 26: Invitation to Salish

9.3
Community and Legal Awareness

As discussed above, raising community and legal awareness*[35] is a key component of the VDO meetings and discussions in the IDP area. During the FGDs, the IDP programme participants stated that before implementation of the programme (IDP), most of them had scant legal awareness of issues, such as the correct age for marriage, punishment for taking dowry, etc. As a result of the VDO discussions, IDP programme participants are much more aware of their rights. As shown in Table 58, 98% of IDP programme participants are aware of the legal age of marriage for boys and girls, compared to 72% of female programme participants in the Control Area. In addition, 98% of IDP programme participants are aware of the eligible age for voting, compared to 72% in Control area. The high levels of awareness of IDP Programme participants demonstrate the effectiveness of the VDO activities.

35 HRLS programme is not in Non-IDP regions

Table 58: Awareness of legal rights

Study Variable	IDP	Control
Legal Age of Marriage for Girls	98%	72%
Legal Age of Marriage for Boys	98%	72%
Punishment for Taking Dowry	95%	63%
Prerequisite for Divorce	78%	46%
Eligible Age for Voting	98%	63%
Total Number of Observations	648	344

As the IDP programme participants are more aware of their legal and social rights, they are more informed to apply for eligible social protection schemes. Almost half, 42%, of respondents are now receiving some form of social protection (e.g., flood assistance, rice assistance, etc.). The proportion of respondents who received social protection in the Control area is 13% – approximately one-third of that of IDP.

Table 59: Coverage of state social safety programme in the Haor

Study Variable	IDP	Control
Received Some Form of Social Protection	42%	13%
Total Number of Observations	690	316

9.4
Role of VDO

The VDO is an integral part of the IDP, and as discussed in the previous chapters, has played a critical role in improving the socio-economic conditions of the IDP programme participants. The role and contribution of the VDO have been discussed and analysed several times during FGDs, and KIIs. As seen in Table 60, the VDO has provided a myriad of support services to the IDP programme participants. Almost three-quarters, 70%, of IDP programme participants have received counselling from the VDOs. In addition, 62% have received assistance for applying for positions in community leadership positions, while 38% have received assistance for receiving government services. Therefore, the high percentage of IDP programme participants who are being assisted by the VDO helps to justify the high levels of awareness and women empowerment in the IDP Areas.

Table 60: Assistance by VDO

Study Variables	IDP
Applying for position in community leadership positions (local power structure)	62%
Assistance for getting government services	38%
Assistance for getting relief	36%
Counselling (including marriage counselling, child education, sanitation, etc.)	70%
Protection from Violence	67%
Psychological counselling	49%
Sanitation	79%
Total Number of Observations	**691**

Alongside the VDO, IDP and Non-IDP programme participants can also seek help from the BRAC Legal Aid Clinic. As shown in Figure 27, 32% of IDP respondents think the legal aid clinic is effective, compared to only 3% in Control (some of them have available the Legal Aid Services outside their locality). It was deduced during the FGDs that IDP programme participants, due to the combination of VDO network, BRAC field staff, and availability of multiple services under one umbrella, can utilize the Legal Aid Clinic more effectively.

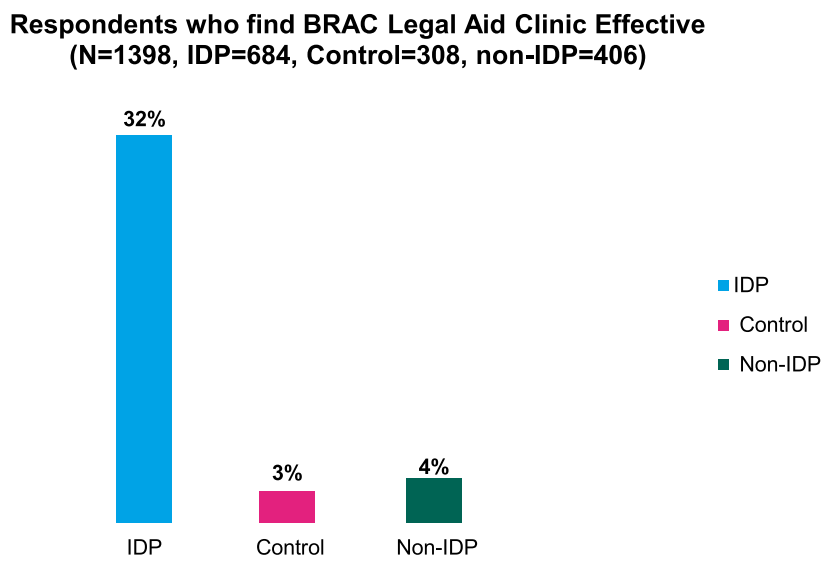

Figure 27: Effectiveness of BRAC legal aid clinic

CHAPTER 10

MIGRATION

CHAPTER 10

MIGRATION

Summary

The migration[36] loan amount taken by the respondents in the IDP regions is higher than the other two regions, however, they send back more in remittance. On average they send back BDT 3,000-5,000 more than their Non-IDP and Control region counterparts. This also helps their households back home as their monthly income is higher due to the added income source. BRAC has helped the residents in the area about safe migration by disseminating proper information and eliminating the use of middlemen in the area.

10.1 Loans and Remittance

Figure 28 indicates that the migrant workers from the IDP regions have, on average, take more loans for migratory reasons when compared to the migrant workers in the Control region. On average, the migrant workers in IDP regions have taken BDT 189,456 loan which is approximately BDT 40,000 more than the amount taken by the migrant workers in Control regions (BDT 140,000).

36 Safe Migration Programme is not present in the Non-IDP area.

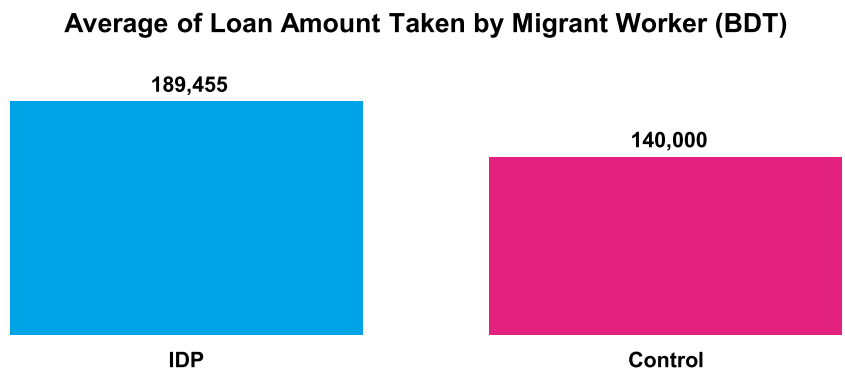

Figure 28: Average loan is taken by migrant worker

This higher amount does equate to more remittances sent back home. The figure (Figure 29) below shows that the remittance sent back home was the highest among the migrants from the IDP regions followed by Non-IDP and Control regions. On average, the migrant workers sent back BDT 14,842 per month which is approximately BDT 5,169 more than the Control region.

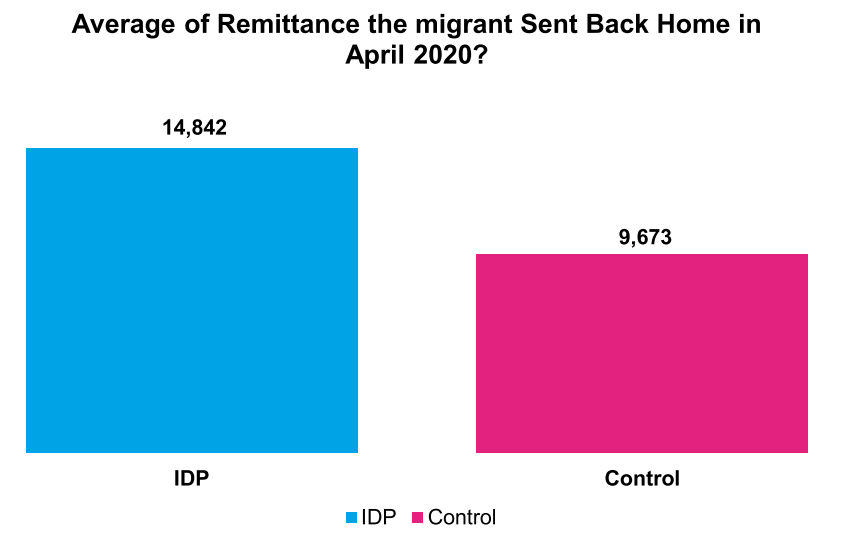

Figure 29: Remittance sent back by migrant workers

CHAPTER 11

WASH

CHAPTER 11

WASH

Summary

While the access to safe drinking water has always been good in the area, the respondents of the IDP region now enjoy access to safe cooking water compared to the Baseline. Access to a personal tube well can be credited to that. The IDP region respondents had the highest percentage with 49% having access to the personal tube well. The geographic region of a Haor is very isolated and the cost to install a sanitary tube well is quite expensive, with BRAC's effort more people have access to sanitary drinking sources.

The hygiene practices have also improved significantly, the respondents in the IDP region now use soap after defecation though some still use only water. Along with that IDP region, respondents had better access to a more sanitary latrine, as 91% have mentioned they do not share the latrine with anyone. Furthermore, 89% of the households have access to the sanitary latrine in the IDP region, which is a vast improvement from the baseline, which was 12%. This is due to the effort of BRAC to install latrines in many households.

11.1 Access to Safe Drinking and Cooking Water

The respondents have incredibly good access to both safe drinking water and safe cooking water with over 90% of the respondent having access to both in all three regions.

Table 61: Access to Safe drinking and cooking water

Access to Safe Drinking Water	IDP	Control	Non–IDP
Yes	99%	96%	97%
No	1%	4%	3%
Total Number of Observation	**702**	**327**	**422**
Access to Safe Cooking Water			
Yes	98%	94%	90%
No	2%	6%	10%
Total Number of Observation	**697**	**322**	**414**

The prevalence of personal tube well is the highest among the respondents in the IDP regions compared to the Non-IDP and Control regions. shows that a majority of 49% of the households in the IDP region have their tube well as the source of their household drinking water while 18% share a tube well with their neighbour and a further 33% use a communal tube. In the Non-IDP region, 42% of the households use a personal tube well while 27% share a tube well with their neighbour and 30% share the tube well with the community. 1/3rd (30%) of the Control area residents use a communal tube well while 31% of the respondents share a tube well with their neighbours while the remaining 39% use a personal tube well. The practise of good hygiene is prevalent in all three areas as residents do not consume water from Haor, Ponds, or rivers.

Table 62: Source of households drinking and cooking water

Type of Tube well	IDP	Control	Non–IDP
Community/Government Tube Well	33%	30%	30%
Tube Well (Neighbour)	18%	31%	28%
Tube Well (Personal)	49%	39%	42%
Haor	0%	0%	0%
Ponds	0%	0%	0%
River	0%	0%	0%
Total Number of Observation	**725**	**332**	**432**

11.2
Hygiene Practices

Regardless of the intervention type the hygiene practices in all three regions are impressive with almost all respondents washing hands after defecation as shown in the two tables (Table 63 and Table 64) below. While soap is the preferred material to wash hands within all three regions, almost 1/3rd of the respondent prefers washing with water only. This is a significant improvement from the Baseline where only 29% washed hands with soap after defecation and is higher than the average proportion of the rural population who have soap available at their handwashing facilities, 33%.[31]

Table 63: Hand washing after defecation

Washing Hands after Defecation	IDP	Control	Non–IDP
Yes	99%	97%	98%
No	1%	3%	2%
Total Number of Observation	**708**	**329**	**426**

Table 64: Materials used for hand washing

Material Used to Wash Hands After Defecation	IDP	Control	Non–IDP	Baseline
Ash	2%	0%	2%	65%
Mud	2%	1%	3%	
Soap	88%	88%	81%	29%
Water[37]	38%	44%	46%	
Total Number of Observation	**709**	**328**	**429**	**3,315**

Regardless of intervention type, all three regions had some form of sanitary latrine which can be seen in the figure (Figure 30) below. Only 1% of the respondents from each region reportedly had no form of sanitary latrine. In terms of access to sanitary latrine respondents in IDP, regions had better access than those in Non-IDP and Control regions. In the IDP region, 77% of the respondents have mentioned that they have access to Ring-slab/ offset latrine with a water seal, which prevents odour from leaking. Due to integrated programming IDP achieved (installed) 7,605 latrines through motivation by the staff to project programme participant. While Non-IDP and Control, regions had 43% and 41% respectively. While all the regions had some type of sanitary latrine, Control regions had the highest percentage of Pit latrine without a cover (17%), this is awful for the user as it leaks odour and other harmful chemical from human waste as there is no seal. However, residents in the IDP regions have complained that maintenance cost is high as the latrine breakdown.

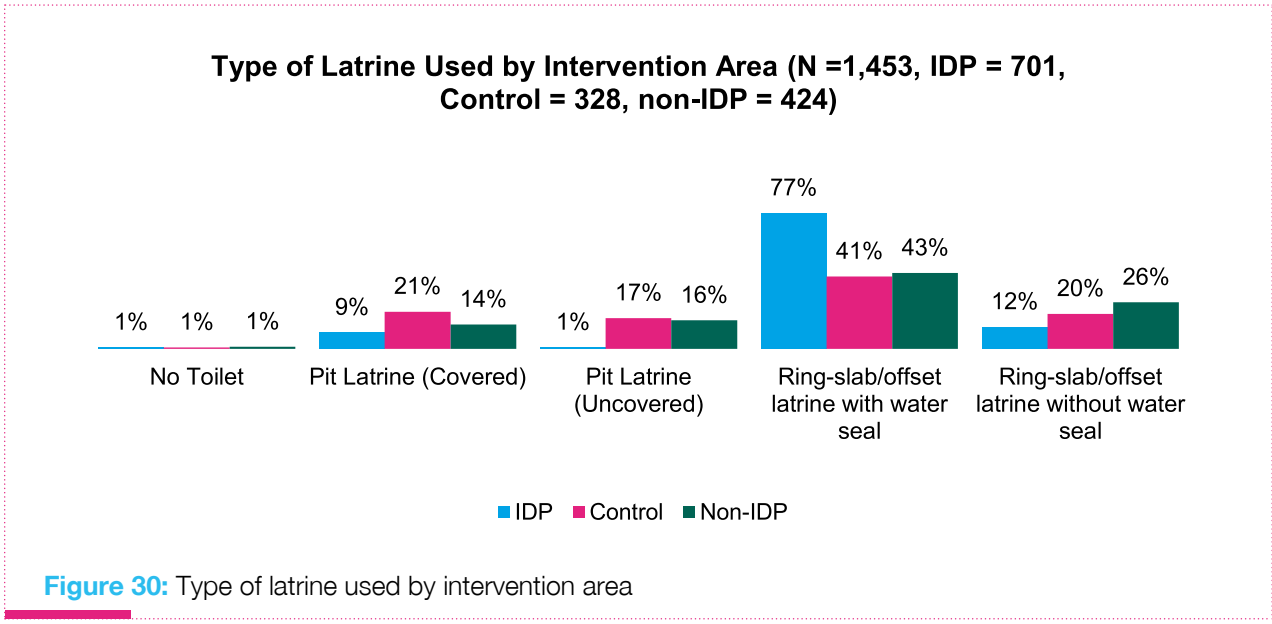

Figure 30: Type of latrine used by intervention area

37 Use of just water and no soap

Figure 31 shows that in all three regions majority of the households had their latrine. 91% of the respondents in the IDP regions do not share a latrine with other households, while in the Non-IDP and Control regions 82% and 73% do not share latrine, respectively. 13% of the respondents in the Control region share their latrine with 3 or more households which were the highest among the three regions.

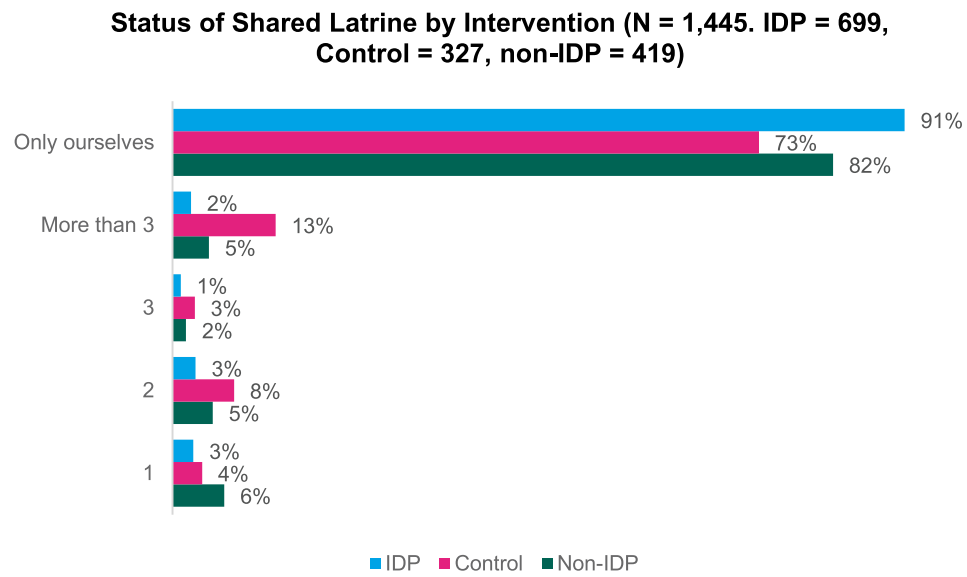

Figure 31: Status of shared latrine

CHAPTER 12

IMPACT OF COVID 19

CHAPTER 12

IMPACT OF COVID 19

Summary

The respondents in all three regions were harshly impacted by COVID about income. On average they lost 20% or more of their income when compared to the same period in 2019. To mitigate the unforeseen financial burden the respondents had to decrease their expenditure, though it was challenging as medical expenses and transportation expenses increased since the COVID lockdown started.

Expenses such as medical and transportation rose by the highest amount, while Control area, in general, has seen the highest increase in expenditure. They have seen an increase of 20% with regards to transportation and 19% in medical bills. Household expenditure such as rent and utility payment only had a slight increase, in all three regions the increase was less than 3%. In the Non-IDP regions farming inputs such as agricultural input and livestock, input increased significantly.

12.1 Impact of COVID on Income and Expenditure

The impact of COVID-19 has been analysed in Table 65 and Table 66. In all three regions, average monthly income has fallen considerably. However, respondents in the IDP regions fared better than the others. The average monthly expenditure has also fallen in all three regions. The Non-IDP region residents have experienced the most significant decline in expenses due to COVID.

Table 65: Impact of COVID on income

	Average of Monthly Income in August 2019	Average of Monthly Income in August 2020	Percentage Change in Income
IDP	15,116	11,869	-21%
Control	12,142	9,722	-20%
Non–IDP	18,146	14,126	-22%

Table 66: Impact of COVID to Expense

	Average of Monthly Expenditure in August 2019	Average of Monthly Expenditure in August 2020	Percentage Change in Expenditure
IDP	13,823	11,390	-18%
Control	11,142	10,465	-6%
Non-IDP	15,766	12,666	-20%

Although average monthly expenditure declined in August 2020, in comparison to the previous year, some respondents faced increase in expenditure in some categories, e.g., medical expenditure. Due to the ongoing pandemic, it is expected that medical expenses will increase due to people facing more health complications. In the IDP area, 15% of respondents also faced an increase in food expenditure.

Table 67: Increase of expenditure due to COVID

Study Variable	IDP	Control	Non–IDP
Increase in Medical Bills	18%	19%	18%
My expenditure did not increase due to COVID–19	18%	19%	17%
Increase in Household Food Expenditure	15%	14%	14%
Increase in Transportation Costs	15%	20%	18%
Increase in Agricultural Input Costs	12%	10%	11%
Increase in Livestock Production Input Cost	9%	7%	10%
Increase in Fish Farming Input Costs	7%	6%	6%
Increase in Utility Cost	3%	3%	3%
Increase in Rent	2%	2%	3%
Total Number of Observations	**683**	**324**	**414**

12.2

Impact of COVID on Consumption

More than 1/3rd of respondents in the IDP regions have reduced their monthly consumption due to the pandemic. While around 33% of the respondents have increased their consumption, the remaining 1/3 have mentioned there has been no change in the consumption. In the Control regions, only 29% of the respondents increased their consumption.

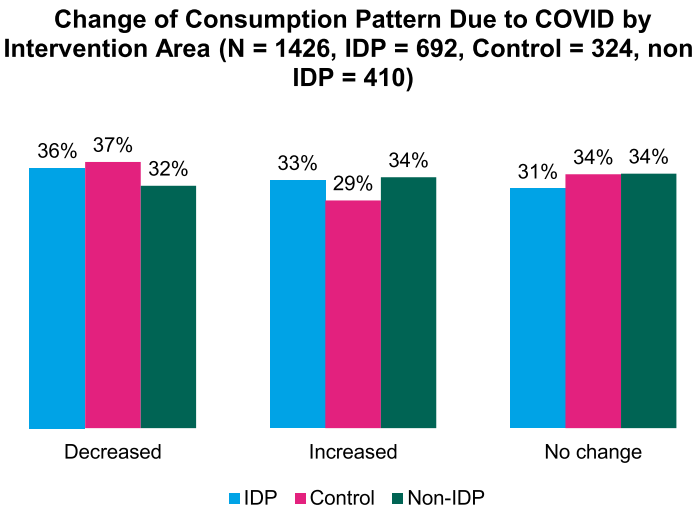

Figure 32: Consumption pattern due to COVID

12.3

Percentage of people face difficulty to access healthcare: Including access to healthcare, facility delivery, and Domestic Violence

Most of the respondents in all three regions have mentioned they have not faced any issues while accessing healthcare.

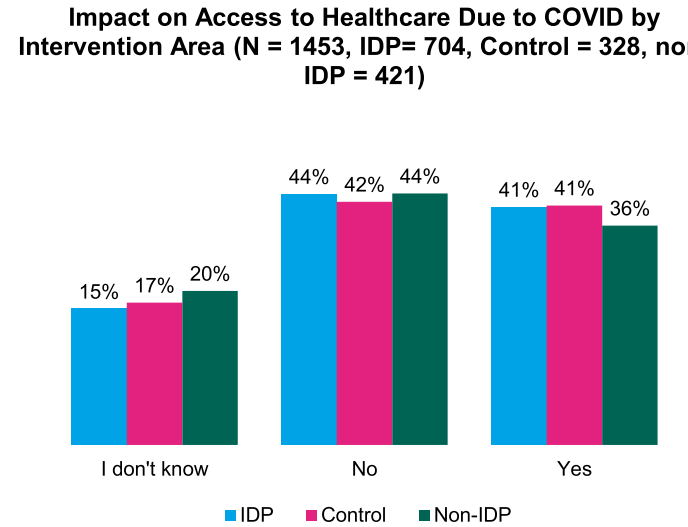

Figure 33: Access to healthcare

From the table (Table 68) below, 82% of the children in the IDP region stopped attending school during COVID lockdown which was the highest compared to Non-IDP (74%) and Control (73%) regions. Though IDP regions have more children attending classes as only 10% of the children have never attended any classes. In the Non-IDP and Control regions, it is much higher at 16% and 17% respectively.

Table 68: Impact of COVID-adjusted education on children

Study Variable	IDP	Control	Non–IDP
No, they are still attending school	2%	0%	1%
They never went to school	10%	17%	16%
Yes, they stopped attending school	82%	73%	74%
I do not have any children	6%	9%	9%
Total Number of Observations	**658**	**309**	**387**

Almost a quarter of the respondents in the IDP regions perceive COVID-adjusted education to be highly effective, while in the Non-IDP and Control regions only 10% and 11% perceive it to be effective. However, many of the respondents are not aware of the effectiveness of COVID adjusted education. It could be due to the lack of education the parents had or their lack of understanding regarding education.

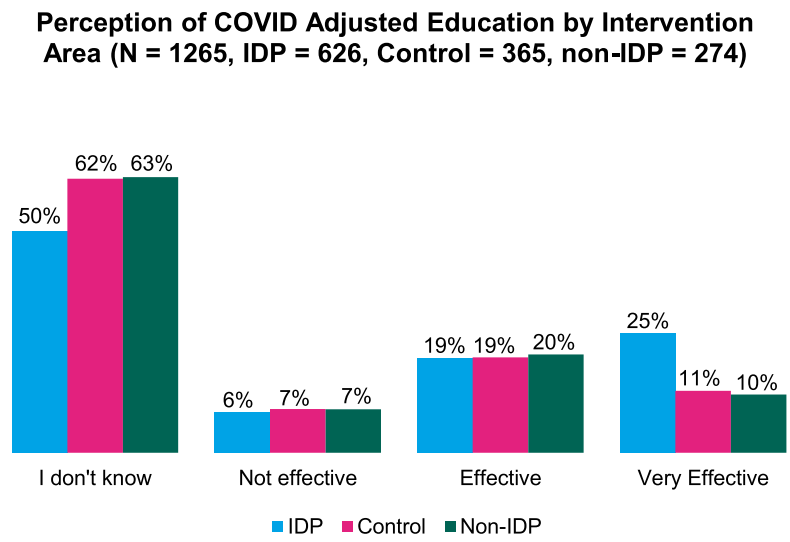

Figure 34: Perception of COVID adjusted education

In all three regions, domestic violence has risen by nearly 30% since the COVID lockdown. The IDP region had the lowest percentage of increased domestic abuse with 29%, though it is marginally lower than Non-IDP and Control regions with 31% and 30% respectively.

Table 69: Percentage of women who face violence in the last 4 months

Study Variable	IDP	Control	Non–IDP
Increase in Domestic Abuse due to COVID	29%	30%	31%
Total Number of Observations (Respondents)	**699**	**325**	**414**

CHAPTER 13

COST-BENEFIT ANALYSIS

CHAPTER 13

COST-BENEFIT ANALYSIS

13.1 Approach to Cost-Benefit Analysis

To compare the programme participant-level impact and carry out cost-benefit analysis (per-programme participant and per-service) of IDP against the BRAC mainstream approach, we will adopt a custom context-built framework.

Traditional methods of financial analyses do not consider the divergence between private and social costs resulting from market failures.[38] As a result, marginal social costs and benefits are not reflected in the final projections from traditional methods of Financial Analyses.

LightCastle's rigorous Cost-Benefit Analysis (CBA) Framework, on the contrary, by accounting for marginal social costs and benefits, will be a critical tool for assessing the impact of BRAC's IDP and Non-IDPs. The cost-benefit approach will compare the total monetary costs of the IDP and Non-IDP approach programmes with all their associated benefits, using a monetary metric. Household and programme participant status, and social capital improvements as identified from the surveys, KIIs and FGDs will form the basis of quantifying the project benefits, enabling the calculation of the net cost or benefit associated with the programme.

LightCastle's CBA framework has been influenced by geographically relevant well-published literature in the Development Field, such as Cost-Benefit Analysis for Development: A Practical Guide by Asian Developmen Bank (2013),[38] as well as previously

38 Asian Development Bank. (2013). *Cost Benefit Analysis for Development: A Practical Guide*.

applied approaches, such as Cost-Benefit Analysis of Strategies To Reduce Child Marriage in Bangladesh[39] and Cost-Benefit Analysis of Adaptation Strategy in Bangladesh[40], both of which were conducted as joint programmes between BRAC and Copenhagen Consensus Centre. Development Interventions, such as that of IDP and Non-IDP, can be evaluated from the use of a Benefit-Cost Ratio (BCR)[40], which can be expressed as:

$$\mathbf{BCR} = \frac{\mathbf{E(D_0) - E(D_R)}}{\mathbf{Z}}$$

Z is the cost of introducing any of 10 programme components (IDP or Non-IDP)

D_O is the initial damage without the absence of intervention (base case)

D_R is the reduced damage without the absence of intervention

$E (D_O – D_R)_{is}$ the expected residual damage (or benefit) of introducing the intervention

The BCR allows us to estimate the benefit per unit per BDT spent in target areas of both BRAC IDP and Non-IDP interventions, and hence, compare the effectiveness of the different programmes using an all-encompassing monetary measure.

To do a comprehensive cost-benefit analysis of IDP and Non-IDPs, we will be comparing the Benefit-Cost Ratio of Education, Health, and Microfinance Programmes. The calculations look at the annualised cost per programme participant data over 2 years – 2018 and 2019. We have chosen this period because it matches with the time of our findings – we have analysed income and expenditure for 2019. In addition, we have chosen to use annualised programme cost data over 2 years, instead of only 2019, as benefits of development programmes take time to create an impact in programme participants' lives. For example, a healthcare programme introduced in 2018 might not show results in 2018 immediately and may start showing impact in 2019.

39 Field, E. et. al (2016). *Cost-Benefit Analysis of Strategies to Reduce Child Marriage in Bangladesh*, Copenhagen Consensus Centre and BRAC Research and Evaluation Department

40 Golub, A. (2016). Cost-benefit analysis of adaptation strategy in Bangladesh. Copenhagen Consensus Centre.

The sections below delineate the calculations for the above-mentioned IDPs: Cost of Individual Programmes to BRAC, Cost of Individual IDPs to Programme participants, Benefits of Individual IDPs to Programme participants and Benefit Per Taka of Individual IDPs to Programme participants.

13.2

Cost per Programme Participant of Individual Programmes

As discussed above, a rigorous cost calculation includes financial cost to the provider (BRAC) and opportunity cost to the programme participants. Therefore, the total cost per programme participant is a summation of financial cost and opportunity cost.

The financial cost of the programme per programme participant, or Programme Cost Per Programme participant, is calculated by dividing the total expenses (cost borne by BRAC) by the number of programme participants covered. The opportunity cost of the programme is calculated, where applicable, as the income programme participants could have earned if they had not attended the programme. All monetary amounts are recorded as Bangladesh Taka (BDT), unless otherwise specified. Therefore, the cost is calculated using the following formula:

Total Cost Per Programme participant = Programme Cost Per Programme participant (BDT) + Opportunity Cost of Programme Per Programme participant (BDT)

The methodology and assumptions used to calculate the cost of the following programmes are explained in the sections below. As discussed above, except for Microfinance, we will be looking at annualised programme cost per programme participant over 2018 and 2019 – the ratio of the sum of programme expenses in 2018 and 2019 to the sum of programme participants in 2018 and 2019.

The cost data and number of programme participants for IDP and Non-IDP has been provided by the BRAC Finance Department. The methodology for calculating annualised programme cost per programme participant has also been verified by the Finance Department.

Health, Nutrition and Population Programme (HNPP)

Programme Cost per Programme Participant

The total programme cost for 2018 and 2019 is a summation of the programme cost for the 2 years for both IDP and Non-IDP. To render a fair comparison, the programme cost for IDP HNPP does not include the cost of the IDP Health Centres. This is because Non-IDP HNPP does not offer any health centre in the programme participant areas, and therefore no cost for health centres is included in the Non-IDP HNPP Programme Cost. The common services accounted for by the Health Programmes in both IDP and Non-IDP are: Coverage through SK and SS, ANC Coverage, PNC Coverage, and Family Planning Services. Likewise, the cost of Non-IDP HNPP does not include Reading Glass for Improved Livelihoods Project, and TB Care and Prevention in Bangladesh. This is because these services are not included in the IDP HNPP. The programme cost for IDP HNPP does not include the staff salary and common cost and Management, Logistics, and Overhead costs.

The annualised programme cost per programme participant is a ratio of total costs for 2018 and 2019 and the total number of programme participants for 2018 and 2019. The programme cost per programme participant has increased more for the Non-IDP, compared to the IDP.

Study Area	Programme Cost for 2018	Total Number of Programme participants for 2018	Programme Cost Per Programme participant for 2018 (BDT)
IDP	7,987,831	136,797	58
Non–IDP	2,261,757	46,023	49

Study Area	Programme Cost for 2019	Total Number of Programme participants for 2019	Programme Cost Per Programme participant for 2019 (BDT)
IDP	8,603,271	137,768	62
Non–IDP	4,390,940	46,023	95

Study Area	Programme Cost for 2018 and 2019 (BDT)	Total Number of Programme participants for 2018 and 2019	Annualised Programme Cost Per Programme participant for 2018 and 2019 (BDT)
IDP	16,591,102	274,565	60
Non-IDP	6,652,697	92,046	72

Opportunity Cost per Programme Participant

The opportunity cost of the Health Programme is the wages that could have been earned by the participants if they had not attended the programme. To calculate the wages forgone, we calculate the product of the total number of hours spent in 2019 in the Health programme and the average hourly wages for a single programme participant. As shown in the table below, IDP programme participants on average have to spend less time in the Health Programme, as many of the public health messages are communicated in VDO meetings.

Study Area	Hours Spent in a Day	Days Spent in a Year	Number of Years	Total Number of Hours Spent in 2019	Notes
IDP	2	12	1	24	1. The data comes from the Household Survey.
Non–IDP	2	14	1	28	

Study Area	Total Number of Hours Spent in 2018 and 2019	Average Hourly Wages (BDT)	Wages Forgone/Opportunity Cost Per Programme participant (BDT) in 2019	Notes
IDP	24	62	1,488	1. The data comes from the Household Survey.
Non–IDP	28	54	1,512	

The total cost to the programme participant is the sum of opportunity cost and programme cost.

Study Area	Annualised Programme Cost Per Programme participant for 2018 and 2019 (BDT)	Opportunity Cost Per Programme participant (BDT) in 2019	Total Cost Per Programme participant (BDT)
IDP	60	1,488	1,548
Non–IDP	72	1,327	1,399

BRAC Education programme (BEP)

Programme Cost per Programme Participant

The programme cost for education programme is a summation of costs pre-primary and primary schools for both IDP and Non-IDP. We do not consider the cost and programme participants of other programmes, e.g., adolescent clubs, as such data is not available for Non-IDP. The cost for both programmes include expenses related to Head Office with additional overhead charged on those expenses as well.[41]

The programme cost per programme participant is a ratio of total costs for 2018 and 2019 and the total number of programme participants for 2018 and 2019. The programme cost per programme participant has increased from 2018-19 for IDP but decreased for Non-IDP.

Study Area	Programme Cost for 2018 (BDT)	Total Number of Programme participants for 2018	Programme Cost Per Programme participant for 2018 (BDT)
IDP	13,304,873	9,364	1,421
Non–IDP	17,754,619	4,060	4,373

Study Area	Programme Cost for 2019 (BDT)	Total Number of Programme participants for 2019	Programme Cost Per Programme participant for 2019 (BDT)
IDP	13,898,104	8,281	1,678
Non–IDP	22,556,461	8,770	2,572

41 This has been verified by the BRAC Finance Department.

Study Area	Annualised Programme Cost for 2018 and 2019 (BDT)	Total Number of Programme participants for 2018 and 2019	Programme Cost Per Programme participant for 2018 and 2019 (BDT)	Notes
IDP	27,202,977	17,645	1,542	The cost includes cost of Pre-primary school and Primary schools. The programme participants include programme participants of Pre-primary school and Primary schools to make a fair comparison with the Non-IDP.
Non–IDP	40,311,080	12,830	3,142	The cost includes the cost Pre-primary school and Primary schools. The programme participants include number of students covered under Pre-Primary and Primary Schools to make a fair comparison with IDP.

Opportunity Cost per Programme Participant

The opportunity cost of the Education Programme is calculated as the wages that could have been earned by the children if they had not attended the education programme – a hypothetical situation. Although the percentage of children who do not attend school in the IDP Area has been reduced significantly, and children are not engaged in income-generating activities instead of education, we calculate the opportunity cost using a hypothetical situation – where children are not attending school.

Therefore, the following tables below demonstrated data – hours spent, days spent, and wages earned – in a hypothetical situation where children may be engaged in income-generating activities instead of education.

Opportunity Cost/Expected Wages Forgone = (Probability of Being Engaged in Income-Generating Activities) *(Income Earned from Income Generating Activities)

IDP – Opportunity Cost

Probability of Being Engaged in Income–Generating Activities	Income Earned from Income–Generating Activities	Opportunity Cost – BDT
0.5	((300*4*10) +(325*5*4))	=0.5*((300*4*10) +(325*5*4)) =9,250

Explanation

- Data collected from the household survey shows that if children had not attended school in the IDP area, they would have earned worked in cow herding for the first 6 months and fish farming for the next 6 months.
- The number of weeks they would have worked in each occupation has also been determined from the household survey.
- Children work in cow herding the first 6 months of the year. They work 4 days a week and earn 300 BDT per day. On average, they work 10 weeks in 6 months. Therefore, in 6 months the children earn (300*4*10) BDT by cow herding.
- Children work in fish farming for the next 6 months of the year. They work 5 days a week and earn 300 BDT per day. On average, they work 5 weeks in 6 months. Therefore, in the next 6 months the children earn (300*5*4).
- Therefore, in the area, children who engaged in cow herding and fish farming can earn ((300*4*10) +(325*5*4)) in a year.
- However, not all children who do not go to school are engaged in income generating activities. 50% of respondents answered that if their children had not gone to school, they would have been engaged in Income-Generating Activities.

Non-IDP – Opportunity Cost

Probability of Being Engaged in Income–Generating Activities	Income Earned from Income–Generating Activities	Opportunity Cost – BDT
0.28	0.33*((300*4*26.07) +(300*3*26.07)) + 0.33((75*6*26.07)) +0.33((3000*6)) = 27,878	=0.28*27,878 = 7,806

- Data collected from the household survey shows that if children had not attended school in the Non-IDP area, children who do not attend school have 3 income-generating options: 1) they can either herd cows for 6 months or fish for 6 months 2) they can work in tea stalls or 3) they can sell vegetables at the grocery or marketplace.
- Children work in cow herding the first 6 months of the year. They work 3 days a week and earn 300 BDT per day. There are 4.345 weeks in a month and 26.07 weeks in 6 months. Therefore, in 6 months the children earn (300*3*26.07) BDT by cow herding.
- Children work in fish farming for the next 6 months of the year. They work 4 days a week and earn 300 BDT per day. There are There are 4.345 weeks in a month and 26.07 weeks in 6 months. Therefore, in the next 6 months the children earn (300*4*26.07).
- Therefore, in the area, children who engaged in cow herding and fish farming combination can earn (300*4*26.07) +(300*3*26.07). We assume that children who work in this combination work all year round.
- Children can also work in tea stalls. They work 6 days a week, and an average of 6 months in a year. These children earn 75 BDT per day. Therefore, the money earned from tea stalls is (75*6*26.07) BDT.
- Children can also work in markets selling vegetables and agricultural commodities. They work 6 days a week and an average of 6 months in a year. They earn 3000 per month. Therefore, these children earn (3000*6) in a year.
- We assume that a child who is engaged in income generating activity has equal probability (33%) of engaging in the 3 activities: 1) Cow herding and Fish Farming 2) Tea Stall Work 3) Selling Vegetables and Agricultural Commodities in the marketplace.
- Therefore, the expected annual earnings for a child engaged in income generating activity in the area is as follows:
- 0.33*((300*4*26.07) +(300*3*26.07)) + 0.33((75*6*26.07)) +0.33((3000*6))
- However, not all children who do not go to school are engaged in income generating activities. 28% of respondents answered that if their children had not gone to school, they would have been engaged in Income-Generating Activities. Therefore, the expected opportunity cost of school = (Probability of Being Engaged in Income-Generating Activities) *(Income Earned).

The total cost to the programme participant is the sum of opportunity cost and programme cost.

Study Area	Annualised Programme Cost Per Programme participant for 2018 and 2019 (BDT)	Opportunity Cost Per Pro–gramme participant (BDT) for 2018 and 2019	Total Cost Per Programme participant (BDT) for 2018 and 2019
IDP	1,542	9,250	10,792
Non–IDP	3,142	7,806	10,948

Microfinance Programme (MF)

Programme Cost per Programme Participant

The Microfinance cost programme was only provided for IDP. The Microfinance programme has 2 types of programme participants (Members) – who borrow and save (borrowers) and those who save only.

The Cost-Benefit Analysis will only be conducted for borrowers. The following tables below show programme cost per programme participant (borrower) in 2019. For Non-IDP, cost data was only provided for 2019, and therefore programme cost per programme participant is calculated for 2019 for both programmes to render a fair comparison between both IDP and Non-IDP. We have left Austagram out of Non-IDP calculations, as it is an anomaly in terms of cost.

Study Area	Total Cost for 2019	Programme participants for 2019	Programme Cost Per Programme participant for 2019 (BDT)
IDP – Borrower	112,833,664	71,134	1,586
Non–IDP – Borrower	23,828,508	7,704	3,093

Opportunity Cost per Programme Participant

The opportunity cost of Microfinance is the wages that could have been earned by the participants if they had not attended the programme. To calculate the wages forgone, we calculate the product of the total number of hours spent in 2018 and 2019 in the programme and the average hourly wages for a single programme participant. The total cost of the programme is a summation of programme and opportunity cost.

Study Area	Programme Cost Per Programme participant for 2019 (BDT)	Opportunity Cost Per Programme participant (BDT) in 2019	Total Cost Per Programme participant (BDT) for 2019
IDP – Borrower	1,502	1,364	2,866
Non–IDP Borrower	3,693	1,080	4,773

Ultra-Poor Graduation (UPG)

Programme Cost per Programme Participant

The Cost-Benefit Analysis for UPG was conducted for the IDP, as few households in Madan[42] are covered by Non-IDP's UPG. As with the other programmes, the programme cost per programme participant is a ratio of the total cost to total programme participants. The cost-benefit analysis is conducted for programme participants who had graduated in 2019, as described in Section 3.6. These programme participants had been part of IDP's UPG for 2 years before graduating in December 2019.

The following tables show the programme cost per programme participants for 2018, 2019 and both years combined. The programme cost also includes the staff cost. The programme cost for UPG decreased from 2018-19. The programme Cost Per Programme participant is BDT 10,468 for 2018 and BDT 9,987 for 2019. Since UPG is a 2-year cycle, the total cost per programme participant over 2 years is a summation of programme cost per year – BDT 20,455. The annualised programme cost per year is BDT 10,217. The cost for UPG includes the cost for both STUP (Special Targeting Ultra Poor) and OTUP (Others Targeting Ultra Poor).

42 Data provided by BRAC staff.

Study Area	Total Cost for 2018	Programme participants for 2018	Programme Cost Per Programme participant for 2018 (BDT)
IDP	105,202,541	10,000	10,241

Study Area	Total Cost for 2019	Programme participants for 2019	Programme Cost Per Programme participant for 2019 (BDT)
IDP	109,862,042	11,000	9,987

Study Area	Total Cost for 2018 & 2019	Programme participants for 2018 and 2019	Annualised Programme Cost Per Programme participant for 2018 and 2019 (BDT)
IDP	215,064,583	21,050	10,217

Opportunity Cost per Programme Participants

The opportunity cost per programme participant is the wages that were forgone while attending UPG programmes. To calculate the wages forgone, we calculate the product of the total number of hours spent in 2018 and 2019 in the programme and the average hourly wages for a single programme participant.

Study Area	Hours Spent in a Day	Days Spent in a Year	Number of Years	Total Number of Hours Spent in 2019	Notes
IDP	2	14	1	28	The data comes from the Household Survey.

Study Area	Total Number of Hours Spent in 2019	Average Hourly Wages (BDT)	Wages Forgone/Op–portunity Cost Per Programme participant (BDT) in 2019	Notes
IDP	28	62	1,736	The data comes from the Household Survey.

Total Cost Per Programme Participants

The total cost of the programme is a summation of programme and opportunity cost.

Study Area	Programme Cost Per Programme participant for 2018 and 2019 (BDT)	Opportunity Cost Per Programme participant (BDT) in 2019	Total Cost Per Programme participant (BDT) for 2018 and 2019
IDP	10,217	1,736	11,953

13.3

Benefits of Programmes to Programme Participants

Health, Nutrition and Population Programme

The HNPP programme has multiple benefits, as was demonstrated in Chapters 7 and 8. However, the quantifiable benefit, which can be verified with data available, is the savings in healthcare expenditure. Due to the presence of HNPP, programme participants spend less on services from different government and private hospitals. Their health has also improved due to the presence of HNPP, reducing their medical expenses. Therefore, the benefits of HNPP are calculated by measuring the difference in healthcare expenditures between Programme participants who do not use BRAC Healthcare and those who do. The data for annual average healthcare expenditure was calculated from the data of the quantitative surveys. BRAC Education Programme (BEP)

The benefits of the education programme for each area are calculated as the increase in wages that occurs because of primary and/or secondary school education. This can be calculated as the difference between the expected wages of a school (primary and/or secondary) graduate and the salary of a worker who does not go to school. The benefits of education are calculated as the difference between the returns from BEP and the return from having no education. Therefore, the benefit of BEP in IDP is calculated as:

Benefits of BEP = ((PGPS*PGSS*WSSG) + (PGPS*PNGSS*WPS)) - Annual Wage of Non-School Attendee

Where:

PGPS = Probability of Graduating Primary School

PGSS = Probability of Graduating Secondary School

WSSG = Wage for Secondary School Graduate

PNGSS = Probability of Not Graduating Secondary School

WPS = Wage for Primary School

This considers 2 scenarios: a person going to primary school and not continuing Secondary school, and a person finishing school from Primary to Secondary School.[43]

43 Boadway, R. B. (2016). Principles Of Cost-Benefit Analysis (No. 1). Public Policy Review. https://core.ac.uk/download/pdf/6257223.pdf

BRAC Education programme

IDP: BEP

Avg. Annual Wage of Non-School Attendee	47,449
Probability of Graduating Primary School	86%
Probability of Graduating Secondary School	79%
Wage for Primary School Graduate	51,469
Wage for Secondary School Graduate	79,572
Benefits	= (Probability of Graduating Primary School*Probability of Graduating Secondary School*Wage for Secondary School Graduate) + (Probability of Graduating Primary School*Probability of Not Graduating Secondary School*Wage for Primary School) – Avg. Annual Wage of Non-School Attendee = (0.86*0.79*79,572) + (0.86*0.21*51,469) - 47,449 =**15,908**
Assumptions and Explanations: • An Economic Analysis by ADB[44] shows that the annual wages in 2018 for a primary school graduate is BDT 49,471. Inflating those wages by 2%[19] over the last 2 years gives us the annual wages in 2020 for a primary school graduate, which is 51,469 BDT. • The same economic analysis shows that annual wages for a secondary school graduate in 2018 was BDT 76,483. Inflating those wages by 2% over the last 2 years gives us the annual wages in 2020 for a secondary school graduate, which is 79,572 BDT. • We use enrolment rates as a proxy for graduation rates as we have limited data on secondary school graduation rates. • Using data from HIES 2016, we find wages of men and women who never went to schools (national basis). Using the average of 2 genders, the wage rate for a person in Bangladesh who never went to school in 2016 was BDT 43,836. We inflate the wages over 4 years – in 2020, the average wage for a person who never went to school is 47,449.	

44 Supporting Fourth Primary Education Development Programme: Report and Recommendation of the President. Asian Development Bank. https://www.adb.org/projects/documents/ban-50192-002-rrp

Non-IDP: BEP

Avg. Annual Wage of Non-School Attendee	47,449
Probability of Graduating Primary School	81%
Probability of Graduating Secondary School	78%
Wage for Primary School Graduate	51,469
Wage for Secondary School Graduate	79,572
Benefits	= (Probability of Graduating Primary School*Probability of Graduating Secondary School*Wage for Secondary School Graduate) + (Probability of Graduating Primary School*Probability of Not Graduating Secondary School*Wage for Primary School) – Avg. Annual Wage of Non-School Attendee = (0.81*0.78*79,572) +(0.81*0.22*51,469) -47,449 = **11,996**

Assumptions and Explanations:

- An Economic Analysis by ADB[44] shows that the annual wages in 2018 for a primary school graduate is BDT 49,471. Inflating those wages by 2%[18] over the last 2 years gives us the annual wages in 2020 for a primary school graduate, which is 51,469 BDT.
- The same economic analysis shows that annual wages for a secondary school graduate in 2018 was BDT 76,483. Inflating those wages by 2% over the last 2 years gives us the annual wages in 2020 for a secondary school graduate, which is 79,572 BDT.
- We use enrolment rates as a proxy for graduation rates as we have limited data on secondary school graduation rates.
- Using data from HIES 2016, we find wages of men and women who never went to schools (national basis). Using the average of 2 genders, the wage rate for a person in Bangladesh who never went to school in 2016 was BDT 43,836. We inflate the wages over 4 years – in 2020, the average wage for a person who never went to school is 47,449.

Microfinance Programme

The most common income-generating uses of microfinance in the IDP and Non-IDP areas are Agriculture and Entrepreneurship.[45] Since borrowers save and borrow money from the microfinance programme, their benefits will be a summation of interest earned from savings, savings by borrowing from BRAC, and income from agriculture and entrepreneurship that can be attributed to microfinance.

Benefits of Borrowers = Savings from Borrowing from BRAC + Interest Earned from Savings + Additional Earnings in Agriculture which can be attributed to Microfinance + Additional Earnings in Entrepreneurship which can be attributed to Microfinance

45 Bairagi, S. B., & Shadat, W. S. (2016). Cost Benefit Analysis of Traditional Versus Flexible Microfinance in Bangladesh: Bangladesh Priorities. Copenhagen Consensus Centre. https://doi.org/10.13140/RG.2.2.20663.11683

IDP: Microfinance

Benefits of Borrowers – Formula	Savings from Borrowing from BRAC + Interest Earned from Savings + Additional Earnings in Agriculture which can be attributed to Microfinance+ Additional Earnings in Entrepreneurship which can be attributed to Microfinance
Average Loan Size (BDT)	29,086
Average Savings Size (BDT)	15,909
Reduction in Interest Rate due to saving with BRAC	5%
Average Interest Rate on BRAC Savings Scheme	6%
Earnings from Agriculture that can be attributed to Microfinance	8,560
Earnings from Business/Entrepreneurship that can be attributed to Microfinance	3,307
Benefits from Borrowers	Savings from Borrowing from BRAC + Interest Earned from Savings + Additional Earnings in Agriculture which can be attributed to Microfinance = (0.05*29,086) +(0.06*15,909) +8,502+3,307 = **14,218**

Assumptions and Explanations:

- The average value of loans in the IDP area was BDT 29,086.
- On average, programme participants availed a reduction of 5% in interest due to BRAC's Microfinance Services.
- The average amount of savings for households who use Microfinance in the IDP Area BDT 15,909 and interest on savings is 6%.
- The average annual agricultural expenditure in the IDP area (for those who take Microfinance Services) is BDT 34,666.
- The household survey reveals that out of 787 observations, 36% reported using loans for agriculture. The average amount borrowed for agriculture is 36% of BDT 29,086, which is BDT 10,471.
- This means that out of average annual agricultural expenditure, BDT 34,666, 10,471 or 30% is financed by BRAC Microfinance.
- Therefore, 30% of total earnings from agriculture should be attributed to Microfinance.
- The total earnings from agriculture, livestock, and poultry in the IDP area, for those who take Microfinance Services is BDT 28,340. 30% of that amount, BDT 8,502.
- The average operating entrepreneurship expenditure in the IDP area (for those who take Microfinance Services) is BDT 15,522.
- The household survey reveals that out of 787 observations, 28% reported borrowing for entrepreneurship and business.
- The average amount borrowed for entrepreneurship is therefore 28% of 29,086 which is BDT 8,144.
- Therefore, out of BDT 15,522, 52% or BDT 8,144 is finance by BRAC Microfinance. Therefore, 52% of Net Business Profit can be attributed to Microfinance in IDP Areas.
- Net Profit in IDP areas from Business/Entrepreneurship is BDT 6,322. 52% of that is BDT 3,307.

Non-IDP: Microfinance

Benefits of Borrowers – Formula	Savings from Borrowing from BRAC + Interest Earned from Savings + Additional Earnings in Agriculture which can be attributed to Microfinance+ Additional Earnings in Entrepreneurship which can be attributed to Microfinance
Average Loan Size (BDT)	38,250
Average Savings Size (BDT)	15,951
Reduction in Interest Rate due to saving with BRAC	5%
Average Interest Rate on BRAC Savings Scheme	6%
Earnings from Agriculture that can be attributed to Microfinance	5,863
Earnings from Business/Entrepreneurship that can be attributed to Microfinance	2,231
Benefits from Borrowers	Savings from Borrowing from BRAC + Interest Earned from Savings + Additional Earnings in Agriculture which can be attributed to Microfinance = (0.05) *38,250+5,863+(0.06*15,951) +2,231 = **10,964**

Assumptions and Explanations:

- The average value of loans in the Non-IDP area was BDT 38,250.
- On average, programme participants availed a reduction of 5% in interest due to BRAC's Microfinance Services.
- The average amount of savings for households who use Microfinance in the Non-IDP Area BDT is 15,951and interest on savings is 6%.
- The average annual agricultural expenditure in the Non-IDP area (for those who take Microfinance Services) is BDT 38,136.
- The household survey reveals that out of 497 observations, 24% reveal using loans for agriculture. The average amount borrowed for agriculture is therefore 24% of 38,250 which is BDT 9,180.
- Therefore, out of BDT 38,136, BDT 9,241 is finance by BRAC Microfinance, which is 24%.
- As a result, 24% of earnings from agriculture, livestock and poultry should be attributed to Microfinance Services.
- The total earnings from agriculture, livestock, and poultry in the Non-IDP area, for those who take Microfinance Services is BDT 24,430. 24% of that amount is BDT 5,863.
- The average operating entrepreneurship expenditure in the Non-IDP area (for those who take Microfinance Services) is BDT 19,171.
- The average loan size in the Non-IDP area is BDT 38,250 and 30% of loans can be attributed to Entrepreneurship/ Business (out of 497 respondents, 30% reported using loans for Entrepreneurship).
- The average amount borrowed for agriculture is therefore 30% of BDT 38,250 which is BDT 11, 475.
- Out of BDT 19,171, BDT 11,475, or 60% is financed by BRAC Microfinance. Therefore, 60% of Net Entrepreneurship or Business Revenue should be attributed to BRAC Microfinance.
- The Net Profit for Business and Entrepreneurship is BDT 3,727. 60% of that amount is BDT 2,231.

Ultra-Poor Graduation

The cost-benefit analysis is conducted for programme participants who had graduated in 2019, as described in Section 3.6. These programme participants had been part of IDP's UPG for 2 years before graduating in December 2019.

The UPG programme is a multi-dimensional poverty solution – for example, participants are provided training on diversifying income sources, improving their housing conditions, WASH conditions, etc. Participation in the UPG programme not only results in an increase in income but also increased social status, increased ability to borrow, better health and WASH conditions, etc.

However, to calculate the Benefit-Cost Ratio, monetary benefits need to be calculated. An increase in income is a direct measure of monetary benefits. Therefore, the average increase in annual income for the 2-year cycle is calculated for UPG participants who finished the programme in 2019 (as programme cost for 2018 and 2019 is used to calculate cost per programme participant for 2018 and 2019). Annual Incomes of UPG graduates were collected for 2017, 2018 and 2019 to measure the average increase in annual income over the 2-year cycle.

Study Area	Average Annual Increase in Income Per Programme participant from 2–year cycle ending in 2019 (BDT)	Assumptions
IDP	21,667	The average annual increase in income per year for UPG participants who finished the programme in 2019 was calculated from the Household Survey Data.

13.4

Benefit per Taka of Individual IDPs to Programme Participants

As mentioned in the sections above, the Benefit Per Taka of Individual IDPs is calculated by dividing the benefit per programme participant by the total cost (financial and opportunity cost) per programme participant of the programme.

Health, Nutrition and Population Programme

The benefit-cost ratio of HNPP in IDP and Non-IDP areas is more than one. For example, in the IDP area, each unit of BDT spent generates 3.6 BDT worth of benefits. The Benefit-Cost Ratio in the IDP Area is higher, compared to the Non-IDP area, compared to its efficacy.

Study Area	Total Cost Per Programme participant (BDT) for 2018 and 2019	Benefits due to presence of HNPP (BDT)	Benefit Cost Ratio
IDP	1,548	5,647	3.6
Non–IDP	1,399	4,331	3.1

BRAC Education Programme

As with the case of HNPP, the Benefit-Cost Ratio of BEP in the IDP areas are higher since the students have higher chances of attending primary and secondary school. For example, in the IDP area, one unit of BDT spent, generates 1.5 BDT worth of benefits. Therefore, BEP in the IDP area is also more cost-effective.

Study Area	Total Cost Per Programme par–ticipant (BDT) for 2018 and 2019	Benefits of BEP (BDT)	Benefit Cost Ratio
IDP	10,792	15,908	1.5
Non–IDP	10,948	11,996	1.1

Microfinance Programme

Each unit of BDT spent on the borrower generates 5.0 BDT worth of benefits in the IDP area and 2.3 BDT worth of Benefits in the Non-IDP area. Total Cost Per Programme participant (BDT) for 2019 is the sum of programme and opportunity cost.

Study Area	Total Cost Per Programme participant (BDT) for 2019	Total Benefits (BDT)	Benefit Cost Ratio
IDP – Borrower	2,950	14,218	4.8
Non–IDP Borrower	4,173	10,964	2.6

Ultra-Poor Graduation

The benefit-cost ratio of UPG is calculated as the ratio of benefits to the cost of the programme as shown in the table below.

Study Area	Total Cost Per Programme participant (BDT) for 2018 and 2019	Total Benefits (BDT)	Benefit Cost Ratio
IDP	11,977	21,667	1.8

The Cost-Benefit Analysis shows that among 2 comparable programmes for IDP and Non-IDP – Education and HNPP – the IDPs are the most effective. In addition, Microfinance has the highest Benefit-Cost Ratio for all IDPs. One unit of BDT invested in Microfinance results in Benefits worth 4.8 BDT.

Study Area	IDP	Non–IDP
HNPP	3.6	3.1
Education	1.5	1.1
Microfinance – Borrower	4.8	2.6
Ultra–Poor Graduation	1.8	

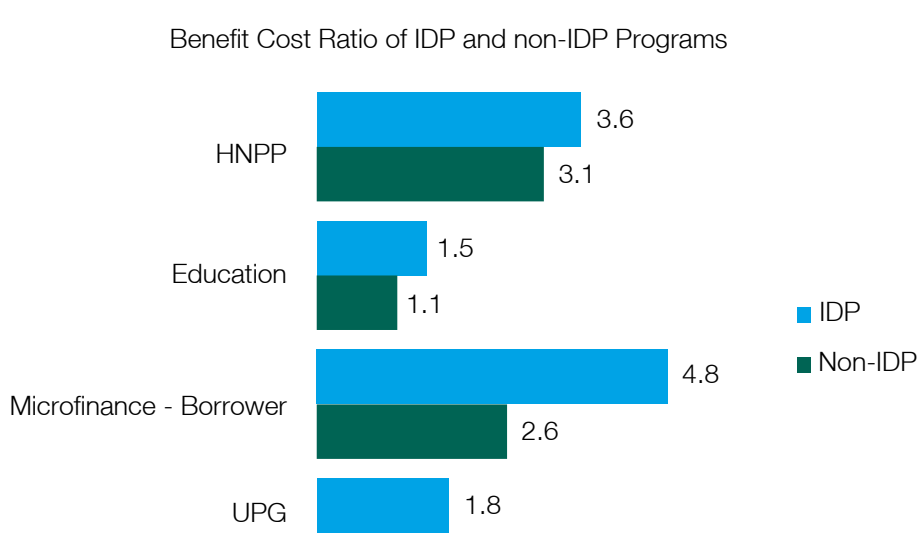

Figure 34: Benefit-Cost Ratio of IDP and Non-IDPs

13.5

Evolution of Costs for the IDP

Analysis of per household and participant cost of the IDP shows declining costs per programme participant and household. Both per household and participant costs include the cost of all services, health, education, UPG, Gender, community empowerment, agriculture, livelihoods, climate resilience, Microfinance, WASH, Human rights & legal services, migration, COVID awareness 2020, etc. Since the cost per programme participant and households have been declining over the last 5 years, the IDP is set to be even more cost-effective in the long run.

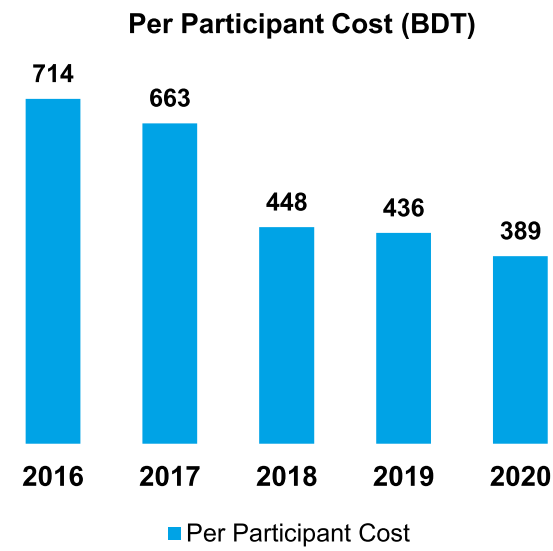

Figure 36: Per Participant Cost (BDT) of IDP

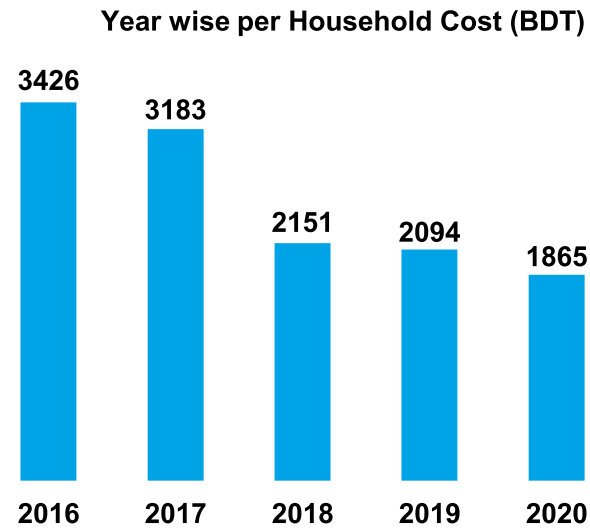

Figure 37: Per Household Cost (BDT) of IDP

13.6

Cost-Effectiveness of the Integrated Approach

As seen in section 13.5, IDP has a lower Cost Per Programme participant for all component programmes, higher benefits, and a higher Benefit-Cost Ratio. This is because IDP takes an integrated, multi-dimensional approach to poverty alleviation. For example, Cost Per Programme participant in the IDP area is lower, compared to Non-IDP, as a single PO oversees delivering multiple services, e.g., healthcare, education, microfinance, etc. This ultimately results in lower Cost Per Programme participant for each IDP component, compared to that of Non-IDP. In addition, the benefits of the IDP components are higher. This can be explained by the spill over Effect of different IDP components. For example, programme participants in the IDP programme need to spend less time in healthcare, as many public health communications are done through VDO meetings. As a result, their opportunity cost is lower, and the health care interventions are more effective and reinforced, due to similar interventions from other components. Likewise, the IDP area has better school enrolment rates as the need for attending school is stressed upon during the VDO meetings. As a result, Cost Per Programme participant in IDP programmes is lower, benefits are higher, and Benefit-Cost Ratios are higher.

CHAPTER 14

RECOMMENDATIONS

CHAPTER 14

RECOMMENDATIONS

The recommendations for the IDP can be broadly categorised into 2 groups – Programmatic Recommendations and Individual Component-Wise Recommendations. Programmatic recommendations should be implemented by IDP as a whole and can be incorporated into BRAC's development strategies and policies for the upcoming year. Individual component-wise recommendations have been formulated for the individual development programmes, such as Education, Agriculture, etc., and can be incorporated in the programme modifications for the upcoming years.

Programmatic recommendations

Advocate the success of the IDP to key stakeholders

Timeframe: Medium- to Long-Term

As demonstrated by the impact and cost analysis, the IDP has effectively tackled poverty and development challenges in the Haor area. The IDP delivers more components, but the Benefit-Cost Ratio of 2 comparable programmes – Education and Health – is lower than that of Non-IDP. In addition, the IDP is increasing coverage, while attaining lower cost per participant, which will increase cost-efficiency. IDP's efforts have been appreciated by international donors, government stakeholders in the IDP area, and programme participants and their families.

The statistics that demonstrate the effectiveness and cost-efficacy of the IDP must be shared within BRAC and with policymakers and international donors. Therefore, the BRAC IDP Management must advocate the success of the IDP to stakeholders within BRAC and

the international donor community. Advocacy efforts will be highly beneficial in resource mobilization, continuation, and expansion of the IDP. As discussed in IDP Strategy[8], a separate team can be formulated for advocacy purposes.

Continuation and expansion of IDP for poverty alleviation in poverty-stricken areas of Bangladesh

Timeframe: Medium- to Long-Term

As demonstrated through data analysis of socio-economic indicators, the IDP has been successful in reducing poverty rates, improving household incomes, and improving women employment rates in the Haor Areas Bangladesh. The success of IDP can be attributed to a combination of support from the VDO and the availability of multiple development services under one umbrella. IDP Programme participants reap numerous benefits from the different BRAC Programmes in areas such as Healthcare, Education, Agricultural Training, Income, and Financial Support, etc. Simultaneously, the VDO maintains a robust support system for the programme participants, empowering them through social and legal awareness. As a result, among all three study areas (groups), IDP Programme participants have higher annual household income and the highest female labour force participation rates. Simultaneously, due to heightened social awareness, IDP Programme participants spend more money on food, healthcare, and education. Among all three groups, IDP Programme participants also spend the least amount on loan payments, as they can rely more on the BRAC Microfinance Programme than local lenders. The Ultra-Poor Graduation Rates, as a result, are the highest in the IDP Areas – 88% of IDP programme participants meet all six criteria of Ultra-Poor Graduation Rates. Given the success of IDP in reducing poverty rates in the Haor Area, continuation, and expansion of IDP services must be considered. At the very least, the VDO model should be replicated in Non-IDP and Control areas and certain pockets, such as coastal belts, with a high concentration of Ultra-Poor.

As discussed in KII with one of BRAC's donors, the benefit of the IDP is that the programme can be customised, given its integrated nature. For example, several modifications must be made before the programme can be expanded to other areas. For example, the Hill Tracks area, which can be one of the potential pockets of expansion, suffers from problems related to water supply, as opposed to flash floods in the Haor. Indigenous residents in the Hill Tracks are often not landowners or victims of land grabbing[3]. The demographics of the Char areas, which can be another potential area for expansion, are also quite different from that of the Haor area. As a result, different components of the IDP must be customised before expansion to other poverty-stricken areas of Bangladesh. Therefore, BRAC should calibrate programmes according to lessons learned from previous programmes in the programme participant areas before expansion.

Collaboration with Government of Bangladesh (GoB) programmes for accelerating development of the haor area

Timeframe: Medium- to Long-Term

Development of the Haor Area has been emphasised in several GoB's Eight Fifth Year Plan strategies. One strategy is listed as 'Protecting Agriculture and Vulnerable Communities in Haor and Flash Flood Areas'.[46] One of the key pillars of this strategy is a reduction of agricultural output damage in Haor areas. The government explicitly recommends the proliferation of public and private sector initiatives to increase returns on homestead gardening and livestock production investment. In addition, the strategy also recommends raising agricultural productivity and reducing output loss through increased mechanization or the introduction of more sophisticated farming and livestock rearing methods, for example, cultivating vegetables on raised platforms. IDP strategy may incorporate collaboration with projects that are implemented under this strategy. The IDP team, for example, may collaborate with the government to increase the use of advanced technology that will mitigate crop damage due to national disasters. Cooperation with GoB's programmes will also aid in the sustainability of IDP's successes.

In addition, the Master Plan of the Haor area, developed by the Bangladesh Haor and Wetland Development Board in 2012[3], outlines multiple short-term (FY 2012-13 to FY 2016-17), medium-term (FY 2017-18 to FY 2021-22) and long-term (FY 2022-23 to FY 2031-32) projects in areas such as Agriculture, Livestock,

46 The Eighth Five Year Plan (8th FYP). Ministry of Finance. p. 329

Fisheries, Education, and Health. Therefore, the BRAC Management could collaborate with medium-term and long-term projects to accelerate development in the IDP Area. A list of projects in the specific areas is listed in Section Annex 11: List of Projects from Haor Masterplan.

Skill Development of IDP Staff

Timeframe: Medium- to Long-term

As discussed in the report, the strong support system of the BRAC Field Staff and the VDO members is a key factor in the success of the IDPs. During the KIIs and FGDs, it was established that BRAC IDP Staff and VDO members have a strong relationship with the IDP Programme participants. However, to maintain the success of the IDPs in existing or new areas (if applicable), BRAC must rigorously invest in the skill development of IDP Staff Members. BRAC must provide staff with organisational skills training, i.e., more efficient management of programme participants and programmes, accurate data reporting and recording techniques, etc. In addition, IDP Staff must be provided with annual or bi-annual technology training, e.g., methods of digitizing data entry, record management, interest collection, etc. This will also streamline the monitoring and evaluation of the IDP. The IDP team must also develop an annual plan for hiring more women staff and measure progress against annual targets.

Digitising Development

Timeframe: Short to Medium-Term

Development in the IDP area can be accelerated by incorporating digital components into each programme. For example, programme participants can be encouraged to use digital payment platforms to pay loan instalments. Similarly, since a high percentage of the IDP programme participants find COVID-adjusted education effective, school lessons or mentoring for homework can also be deployed through radio and television. Telemedicine, such as giving medical advice through phone, could also be incorporated in HNPP. Therefore, the BRAC IDP team should discuss these areas of collaboration with BRAC's ICT Department.

Individual component-wise recommendations

Incentivise students to attend school

Timeframe: Short to Medium-Term

The primary reason for dropping out of school or not continuing education for students in the IDP area is the lack of motivation to study or attend school. Due to the waterlogged situation, many families in the IDP area have limited exposure, and often children are not aware of the opportunities that come with graduating from school. For example, 14% of children aged between 3 and 13 years in the IDP area did not go to primary school, and 21% of children aged between 13 to 20 years did not go to secondary school. Therefore, education programmes for the Haor area need to incentivise students to continue education. Incentivizing students to continue education will require robust programme-level changes. The VDO members, for example, can raise awareness of the socio-economic benefits of school education in their meetings. VDO members can raise awareness about the difference in earnings between secondary and primary school graduates. According to a 2018 report by ADB[23], the average annual earning of primary education completers, 49,471 BDT, is 54.6% lower than that of secondary education completers, 76,483 BDT. This will ensure that parents can encourage children to continue or enrol in school.

The government also has several education programmes planned as part of the Haor Masterplan, such as Establishment of Community-based Multigrade Learning Centres, Community based School Feeding Programme, Establishment of Primary Schools, School Boat Facilities for Inaccessible Area, Awareness Generation Programmes on Gender Discrimination, and Establishment of High Schools, Colleges, and Madrasa. Linkage with the School Boat Facilities for Inaccessible Area Programme may ease travel for students during the wet season. BRAC could also establish mentorship programmes for students who are struggling or lacking the motivation to stay in school. Mentorship programmes can include teachers who provide education counselling or former students who have successfully graduated from BRAC Pre-Primary or Primary Schools and are continuing education.

BRAC education programmes should support students beyond primary school

Timeframe: Medium to Long-Term

The IDP has significantly reduced the proportion of school-aged household members who are not

seeking education. The ratio of school-aged members enrolled in secondary school, and university-level needs to increase. The BRAC Education Programme only operates schools up to the primary level; however, the provision of a strong support system for students in secondary school would improve literacy rates and quality of education in the Haor area. For example, BRAC Field Staff and VDO members may raise awareness of government stipends or scholarships at the school level. Teachers in BRAC Schools may also provide training on applying for scholarships and stipends. BRAC Pre-Primary and Primary School teachers can also have bi-annual meetings with students who have graduated and provide guidance and encouragement for continuing education.

The VDO and HNPP should collaborate to advocate the use of the delivery centres and skilled medical staff

Timeframe: Short to Medium-Term

Programme participants in the IDP area have more access to ANC, family planning and PNC than Control and Non-IDP. IDP Programme participants also have more access to skilled medical personnel during birth than programme participants in the other group. However, the proportion of women in the IDP area who have access to qualified medical personnel during birth is still low – 41%. Therefore, the VDO and BRAC Health Services should collaborate to encourage women to come to BRAC Health Centres for delivery and/or give birth in the presence of skilled medical personnel. Women must be informed about the advantages of using BRAC's Delivery Centres. In addition, collaboration with government programmes, such as the Maternal and Reproductive Health Development Programme and Child Mortality Reduction Programme, will improve child and maternal health in the Haor area.

Programme participants need more awareness of dietary diversity

Timeframe: Short to Medium-Term

Only 1% of IDP Programme participants suffer from a shortage of food. However, IDP programme participants are lagging Non-IDP programme participants in daily dietary diversity. Since IDP programme participants can afford to spend more money on food items, they must be more aware of the importance of dietary diversity. This awareness training can be delivered through the VDO staff and the BRAC Field Staff. Training on nutrition can be incorporated into the BRAC School curriculum as well. This will ensure that programme participants are consuming the important food groups daily. Encouraging more women to participate in homestead farming may aid these initiatives.

VDO must continue to encourage women to seek employment

Timeframe: Short to Medium-Term

Female labour force participation rates in the IDP areas have substantially improved since the Baseline Study and are significantly higher than Non-IDP and Control. Therefore, women empowerment and social and legal awareness activities by the VDO must continue in the Haor area. In addition, strategies to diversity occupations of females may also reap socio-economic benefits. Most of the women in the IDP area are primarily involved in agriculture or entrepreneurship. Given that the IDP area has a high proportion of household members of working age, technical training programmes may encourage more women to move into occupations other than agriculture and entrepreneurship. The Haor Area has a unique characteristic – during the dry season when the water levels are low, vegetables can be grown in the once-submerged soil, and fish can also be easily caught. However, most men prioritise aquaculture due to higher financial returns. Women can, therefore, be encouraged to grow vegetables on homestead soil. VDO members can be provided with training on climate-smart homestead farming methods, and they can, in turn, train other women. The Haor Masterplan has several industry development programmes that can be potential areas of collaboration. For example, BRAC IDP can collaborate with Small and Cottage Industries Development programme for impoverished women's in Haor areas to diversify employment options for women.

Emphasise climate-resilient farming practices with customised solutions

Timeframe: Short to Medium-Term

The IDP regions are particularly vulnerable to climate change and thus face a higher rate of crop loss. BRAC should focus on customised training for disaster management and crop loss, while engaging the farmers to understand the specific problems. BRAC

can also help with market linkages, as it would help the farmers connect with the bigger markets outside of their locality. BRAC can also engage private-sector firms by encouraging them to buy from farmers in the Haor regions.

Additionally, a database of the farmers can also help them get linked with super shops. This database will encourage the super shops to buy more from the farmers, reach a new target audience, and encourage them to follow BRAC's training practices to enhance their products. The BRAC management could specifically collaborate with programmes that are part of the Haor Masterplan. For example, collaboration with programmes which are part of the Haor Masterplan, such as Mechanization of Agriculture through Combined Harvester, Improvement of Quality of Crop Grain through Dryer system, Intensive Cultivation of homestead vegetables and horticulture, Development of climate-resilient High Yielding Varieties of rice and Non-rice crops, Changing Cropping Pattern to increase cropping intensity in Haor area, Extension of Integrated Pest Management Training Project, Assistance to Landless, Marginal and Small Farmers to overcome soaring input, and food prices in impoverished Haor area, etc., will be beneficial in improving agriculture productivity rates.

Greater Integration of agriculture, aquaculture and livestock technology

Timeframe: Medium to Long-Term

Given the dependency of the IDP population on aquaculture and livestock for livelihood, aquaculture and livestock technology will aid development efforts in the IDP Areas. Efforts to proliferate animal vaccination, increase access to inputs for livestock rearing, and create market linkages for sale of output must be prioritised. There is a range of livestock and aquaculture programmes in the Haor Masterplan that BRAC IDP can collaborate with. Programmes, such as Promotion of Small and Mini Poultry and Duck Farms, and Promotion of small and mini dairy farms would be appropriate, given the small size of livestock farms in the IDP area. Other programmes that BRAC can collaborate within the Haor Master plan include Good Fisheries Management Practices following the Mohanganj Experience, Floodplain Aquaculture under the Community Enterprise Approach, Community and Household-based Net-pen Fish Culture in the Haor/Floodplain, Capacity Development and Alternate Income Generating Activities (AIGAS) for Fisher Community, Renovation of Hatcheries for Conserving Quality Brood Stock and Production of Fish, Improvement of fodder availability for livestock development, Integration of livestock in the traditional farming system, Farmers training programmes for capacity, Establishment of a pilot breeding programme for cattle development, Extension of Livestock Services through the establishment of Union Livestock Service Centre (ULSC), Development of Livestock Products through the involvement of Community Organisation, etc.

Prioritise installation of higher quality latrines and access to WASH financing

Timeframe: Short to Medium-Term

BRAC has increased access to sanitary latrines through the IDP project, with 91% surveyed households using their latrine. Now, the focus should be on the quality of the latrine installed rather than the quantity. BRAC can also collaborate with local WASH-related manufacturers (e.g., latrine makers, pipe makers, etc.) and improve the future WASH foundations. This would help boost the local economy and enable BRAC to provide the best materials at an affordable rate. BRAC can also show proper latrine maintenance techniques to alleviate the problem, as many programme participants could be unaware of the proper maintenance methods. It would also be beneficial if BRAC introduced WASH-based financial loans. In this way, the programme participants will be encouraged to maintain their latrines and water sources.

Focus on the migration of seasonal worker

Timeframe: Medium to Long-Term

BRAC should continue raising awareness of the dangers of using middlemen. BRAC can also focus on the migration of seasonal workers and support them when needed, adding more income sources for a household. BRAC can cooperate with private sector firms to assist the migratory workers in finding jobs during the off-season in the Haor regions. A database with the willing migratory worker can be created to find a suitable worker for their roles easily; additionally, BRAC can train the workers and equip them with the required skillset.

Key Lessons Learnt

The key lessons learnt from this study are as follows:

1. **Need for multiple development services:** The ten service components, delivered through a community-led mechanism, work in synergy to tackle the multi-dimensional poverty of the Haor area. As a result, programme participants demonstrate significant improvement in multiple socio-economic indicators.

2. **Robust network critical for success:** The strong network of VDO members, technical team, field operation staff, etc., have played a fundamental role in promoting the behavioural change of programme participants. For example, IDP participants have experienced income growth and are also aware of the importance of dedicating income to education, nutrition, or setting aside income for savings.

3. **Village Development Organisation (VDO) support is essential for women empowerment:** Women in the IDP areas have more representation in local power structures, increased labour force participation, are more aware of their legal rights, and have greater decision-making power within the domestic sphere. The increase in women's confidence, awareness, and social standing can be credited to the support of the VDO.

4. **Increase in the social status of programme participants:** Programme participants have experienced an increase in social standing, in addition to a growth in income and ownership of productive assets. More than half the women programme participants in the IDP area were invited to Salish (Village court).

5. **Education programmes have been more successful for girl students:** Emphasis on women empowerment and provision of BRAC Primary and Pre-Primary Schools has led to higher literacy rates for school-aged girl household members.

6. **Microfinance programme has reduced dependency on informal lenders:** The availability of BRAC's microfinance programme has increased the savings rate and reduced exploitation by informal lenders who charge high-interest rates.

7. **Programme participants are more aware of the importance of healthcare and hygiene:** Public health communication through VDO meetings, Shasthya Kormis (SK), and Shasthya Shebikas (SS) led to increased rates of healthcare access, vaccination, high dietary diversity of children, and consequently lower neo-natal deaths.

8. **Safe migration has reduced dependency on middlemen:** Migrant members of the households are more aware of proper migration procedures and do not have to bear the high cost of paying informal migration agents.

9. **Cost-effectiveness of IDP will increase:** Benefit-to-Cost Ratios of 4 IDP Components are greater than 1 – Microfinance (3.1), Ultra-Poor Graduation (2.6), Health (1.9), and Education (1.5). This means that one unit of investment in the Microfinance Programme, for example, will yield 3.1 units of benefits. Cost-Effectiveness of IDPs is set to increase as the programme scales up and programme costs per programme participant fall.

10. **COVID-19-adjusted education programmes need to continue:** Almost a quarter of IDP Households surveyed found the COVID-19-adjusted school programmes highly effective. These programmes need to be continued throughout the COVID-19 lockdown to maintain and improve literacy rates in the IDP area.

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12. Understanding the challenges to development: Insights from the Baseline Findings of Integrated Development Programme in Itna and Khaliajhuri
13. In the Baseline, this was measured as Married for 5 years and above.
14. Central Intelligence Agency (CIA). 2020. The World Factbook – Bangladesh. Accessible at: https://www.cia.gov/the-world-factbook/countries/bangladesh/
15. Health Programme Coverage for IDP Areas is as follows: Baniachong 94%, Derai 76%, Itna 54%, Khaliajuri 60%.
16. Health Programme Coverage for Non-IDP Areas is as follows: Sulla 48%, Mithamain 18%, Madan 52%, Austagram 22%.

17. There are no GJ&D interventions and few HHs coverage through HRLS in Non-IDP areas.

18. The Baseline Study shows that only 12%/9% of males were married before the age of 21, yet the mean age is 19. The data from the Baseline Study needs to be evaluated for this indicator.

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22. It must be noted that in the Baseline Study the International Poverty Line was calculated using US Dollar to BDT equivalent – the poverty line was defined at BDT 142.5 per day.

23. Respondent could not recall what grade the household member was enrolled in.

24. HIES (2016). Bangladesh Bureau of Statistics. https://drive.google.com/file/d/1TmUmC-0M3wC5IN6_tUxZUvTW2rmUxMce/view

25. A family member can have multiple reasons for dropping out.

26. One household may have members studying in different schools.

27. A Household member may have multiple responses for ways in which children travel to school.

28. The agricultural programme is not present in the Non-IDP areas.

29. In the Baseline report, it is referred to as Hen

30. Complete vaccination is defined by one dose of BCG, 3 doses of Pentavalent, 3 doses of polio, and 2 doses of measles. All these doses were completed by the age of 15 months.

31. Childbearing Age and Pregnancy Outcomes in Bangladesh: A Multilevel Analysis of a Nationwide Population-Based Survey (iomcworld.org)

32. National Institute of Population Research and Training (NIPORT), and ICF. 2020. Bangladesh Demographic and Health Survey 2017-18. Dhaka, Bangladesh, and Rockville, Maryland, USA: NIPORT and ICF.

33. The recipient had a child within the past year.

34. Medically Trained Provider (MTP) includes professionals from government and private hospitals, government community health workers, new-born health workers, BRAC Healthcare and Delivery Centres, Other NGO Clinics, and Pharmacies. Trained providers include MTPs and BRAC SKs.

35. If the respondent has power in decision making, they took the decision using the following options: By themselves, Jointly with Husband (respectfully), Jointly with another Male household member, jointly with another Female household member.

36. HRLS programme is not in Non-IDP regions

37. Safe Migration Programme is not present in the Non-IDP area.

38. Use of just water and no soap

39. Asian Development Bank. (2013). Cost-Benefit Analysis for Development: A Practical Guide.

40. Field, E. et. al (2016). Cost-Benefit Analysis of Strategies to Reduce Child Marriage in Bangladesh, Copenhagen Consensus Centre and BRAC Research and Evaluation Department

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42. This has been verified by the BRAC Finance Department.

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48. Names and Phone Numbers of Respondents have been collected with consent

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