

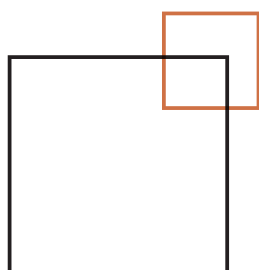


# POST PROJECT SUSTAINABILITY STUDY OF SETU

(SOCIAL AND ECONOMIC TRANSFORMATION OF  
THE ULTRA POOR)







**POST PROJECT SUSTAINABILITY STUDY**  
**SOCIAL AND ECONOMIC  
TRANSFORMATION  
OF THE ULTRA POOR (SETU)**

**December 2021**











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This study attempts to dig profound a question that many in the development business find challenging to answer: What impact, if any, is our work having on sustaining graduation? From the beginning to the end of the study finalization stage, we have consulted, and drawn insights from our internal expert team and nationally recognized poverty experts.

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# LIST OF ACRONYMS

ASA	Association for Social Advancement [Microfinance Institution founded in Bangladesh]
BDT	Bangladesh Taka
BRAC	Bangladesh Rural Advancement Committee [A non-government organization founded in Bangladesh]
CARE BD	CARE Bangladesh
CFPR	Challenging the Frontiers of Poverty Reduction
CSG	Community Support Group
DFID	Department for International Development
DPS	Deposit Pension Scheme
EEP/SHIREE	Economic Empowerment of the Poorest/Stimulating Household Investment in Resources for Economic Empowerment
EKATA	Empowerment, Knowledge, and Transformative Action
EPZ	Export Processing Zone
ESMPI	Essential and Supplementary Multidimensional Poverty Index
FGD	Focus Group Discussion
GoB	Government of Bangladesh
HH	House Hold
IGA	Income Generating Activities
KII	Key Informant Interviews
MIS	Management Information System
MDG	Millennium Development Goal
NGO	Non-Governmental Organisation
PEARL	Program Evidence Advocacy Research and Learning
PNGO	Partner Non-Government Organisation
PPS	Post Project Sustainability
REB	Rural Electrification Board
RDRS	Rangpur Dinajpur Rural Service [A non-governmental organization founded in Bangladesh]
SARPV	Social Assistance and Rehabilitation for the Physically Vulnerable [A non-government organization founded in Bangladesh]
SDC	Swiss Agency for Development and Cooperation
SETU	Social and Economic Transformation of the Ultra poor
TV	Television
UP	Union Parishad [an institution of local government]
VGD	Vulnerable Group Development
VGF	Vulnerable Groups Feeding







# EXECUTIVE SUMMARY

CARE Bangladesh implemented (2009-2015) Social and Economic Transformation of the Ultra Poor (SETU), under the EEP/SHiREE program funded by former UKaid from the Department for International and the Swiss Agency for Development Cooperation in four districts: Ranpur, Gaibandha, Lalmonirhat and Nilphamari of the Northwest region of the country that is severely affected by seasonal food insecurity.

The design of SETU was structured around CARE's Criteria and threshold of calculating multidimensional poverty livelihood opportunities; social inequalities playing out different forms of exploitation, dependence, discrimination, and marginalization; and weak governance at all levels resulting in lack of participation of extreme poor and poor people in Union Parishad and local development processes.

This PPS study of SETU aims to assess how and to what extent the graduation model sustains in later years; and the factors that determine sustainability or lack thereof in the same population group. The study followed the same area and sample (418) households of SETU's end evaluation study and included 95% of households who graduated and 5% of HH who have not graduated.





We have consulted the expertise of past evaluations in similar realms to align our assessment with comparable work. The study is deliberately built as a mosaic of data ranging from deeply qualitative to strictly quantitative, and methods spanning the routine to the reflective. For the quantitative survey, we visited same 418 households who participated in the project end evaluation study conducted in 2015; Besides, 16 Key informant interviews, focus group discussions with 40 project participants, and 8 life stories were undertaken to understand the process through which the program may have created a sustained impact on the lives of SETU participants.

Following the Criteria and threshold of calculating the multidimensional poverty method of classifying the graduated and non-graduated households, we have estimated the graduation rate. The results show that around 8% of the households are non-graduated households, implying that approximately 92% of the households satisfy the graduation threshold criteria and are considered graduated households.

The results show that the graduation rate is around 84.8% among the female household heads, whereas it is about 94% among the male-led households, nearly 9.3 percentage points different. The result suggests that graduation is lower among the female-led households than the male-led households, showing unequal movement toward graduation.

The graduation rate among households categorized according to the age bracket of the household heads varied slightly.

The results show that the maximum graduation is observed among the households led by heads aged between 30-40, and the second-highest graduation rate is observed among the households led by heads aged between 50-60. The households led by heads aged below 30 years have a graduation rate of 91.3 % and is around 96 % for the households led by heads aged between 30-40 years. Compared to the households led by relatively young heads aged below 30 years, the difference in graduation rate among the households led by fairly old heads aged 60+ is around 10 percentage points, and the difference is found insignificant even at a 10 % level of significance. The graduation rate is the lowest among the households led by heads employed as domestic maids, and the second-lowest graduation rate is among the households led by non-agriculture day labor heads.

The graduation rate is around 95 % among the households led by heads working as transport workers, and it is approximately 97.4 % among the households led by heads self-employed in business or petty trade. The results show no significant differences in graduation rate among the households led by heads employed as non-agriculture workers, industrial workers, self-employed in petty trade or business compared to those conducted by skilled heads.

Some household characteristics were selected to understand the nature of the graduation rates among the households possessing different characteristics. The graduation rate is the lowest among the proton family, around 72 %, whereas other households with more than one member have a graduation rate of over 92 %.

We also find that nearly three-fourth of graduated households have heads aged between 30 and 60 years whereas, among non-graduated households, around 39% of households are led by 60+ aged heads. About 23% of graduated households are dependent on day laboring in agriculture, 15 % on non-agriculture day labor, and 14% on driving vehicles by household heads. In general majority of SETU households have electricity connections, better housing access to sanitation, and safe drinking water facility;

The per average household income increased among both graduated and non-graduated households, but the rate of increase of monthly household income among the graduated households is higher than the non-graduated households. The average household size has slightly increased among the graduated households, whereas it was constant among the non-graduated households.

The results show that average consumption expenditure as a percentage of total spending has increased for both groups, but the rate of increase is higher among the graduated households than the non-graduated households. The graduated households spend around 60% of total consumption expenditure for food purposes, whereas it is about 78% among the non-graduated households.

The opportunity for multiple sources of income, multiple income-earning members in the household, asset level, and access to electricity improved the graduation score and assisted the households in graduating. It is observed that the graduation rate was 100 % among those households having scored in economic and social dimensions.

The study captures multiple dimensions for factors that contributed to sustained graduation and understands the extent of sustainability considering emic and etic perspectives. It captured thoroughly extreme poor people's journey of progression and challenges, adding value for future programming.



# 1. INTRODUCTION



## 1.1 Post Project Sustainability Study of SETU

CARE, globally, aims to deliver lasting impact at scale as part of its 2030 strategy. The effect is defined as positive, sustained changes in people's lives. CARE needs to invest in and deliver on programs whose impacts are sustained after our investment and support end to deliver lasting impact at scale. However, CARE has not systematically collected evidence on whether, how, and to what extent impacts have endured 3, 5, 10 years after a project ends.

Understanding these phenomena will help CARE to improve its programming and its investments by:

- 1) Knowing what works from a process standpoint during program implementation to set the stage for sustained impact
- 2) Knowing what works from a program standpoint, e.g., what processes contribute to ensuring the enabling environment to sustained impact and what approaches facilitate changes within people, communities, and lasting systems.

Thus, lasting impact, measured as sustainability, is an essential component of any project, yet true sustainability is usually not evidenced as the project ends. End-of-project evaluations may indicate that impacts have been reached and can continue, but they do not offer a window into the future and whether a project or program has made lasting change or impact. Change happens in a complex environment and what happens to that complex environment in the future is hard to predict.

Therefore, to know whether impacts have been sustained, you must look. In that way, PPS evaluations close that loop in the programming cycle by generating evidence and knowledge about what works to sustain an impact, how and why, e.g., they let us know whether what and how we have planned for sustaining impact has come to fruition.

A PSS must focus on examining which project activities are being sustained and which are not and documenting the causal mechanisms, processes, and channels that contribute to sustaining activities & the flow of services and outputs.

**IN SETU, TOTAL, 45,000 EXTREME POOR HOUSEHOLDS, TO SOME EXTENT THE LOWEST 10TH OR 20TH PERCENTILE EXTREME POOR HOUSEHOLDS, WERE SUPPORTED TO SUSTAINABLY GRADUATE OUT OF EXTREME POVERTY THROUGH THE TRIANGULATION OF ECONOMIC, SOCIAL AND POLITICAL EMPOWERMENT.**

## **Social and Economic Transformation of the ULTRA Poor (SETU)**

CARE Bangladesh, under the EEP/Shiree program funded by former UKaid from the Department for International Development (DFID) and the Swiss Agency for Development and Cooperation (SDC), implemented the Social and Economic Transformation of the Ultra-Poor (SETU) project in four districts: Rangpur, Gaibandha, Lalmonirhat, and Nilphamari of the Northwest region of the country that is severely affected by seasonal food insecurity locally known as Monga. The design of SETU was structured around CARE's programming experience and the analysis of the underlying causes of extreme poverty in the target region: (i) limited and fragile livelihood opportunities; (ii) social inequalities were playing out different forms of exploitation, dependence, discrimination and marginalization; and (iii) weak governance at all levels resulting in lack of participation of extreme poor and poor people in Union Parishad (UP) and local development processes. The community-led development approach was adopted and implemented holistically and sustainably to promote economic, social, and political empowerment of the extreme poor by ensuring the institutionalization of development processes within and beyond the community. The project's initial design, phase I, **focused on local**

**leadership and institutional development for the poor. In contrast, the second phase concentrated more on economic empowerment through relying on the already-developed community platforms and the UPs that were already sensitized in phase I. At the same time, efforts were taken to ensure effective usage of input supports and increasing usage of opportunities for private sector engagement.**

SETU's graduation model is based on CARE Bangladesh's understanding of extreme poverty as powerlessness. Graduation is achieved when an extremely poor person or household reaches a level of economic well-being sufficient to meet their basic needs (for nutrition, health, education, and shelter) along with the levels of social and political inclusion necessary to sustain that improved level of well-being over the longer term. This is a seven-year model (SETU, End Evaluation, 2015, p114).

## **GRADUATION**

**“Graduation is generally understood to mean the exit of an individual/household from extreme poverty by passing above a certain extreme poverty line or threshold. ‘Sustainable graduation’ is where this is combined with a strong probability that the individual/household will not fall below this line again in the future” (Sabates-Wheeler and Devereux, 2011)**





## 1.2 Objectives

The focus of this PPS study of SETU is to understand how and why 95% of the SETU project's participants successfully sustained graduation from extreme poverty, regardless of gender, in the most poverty-stricken regions; to assess how and to what extent the graduation model sustains in later years; and the factors that determine sustainability or lack thereof in the same population group. This study will thus contribute to testing CARE's poverty reduction hypothesis and support in reshaping programmatic strategies to foster the reduction of poverty and inequality more effectively.

### 1.2.1 General Objectives

Evaluate the sustainability of the SETU poverty graduation model by considering the three-pronged approach of SETU activities which included economic stability, social growth, and political involvement.

### 1.2.2. Specific Objectives

- 1) To determine what percentage of households participating in SETU's multidimensional empowerment program (social, economic, and political) maintained graduation out of extreme poverty
- 2) To explore the factors that contributed to households participating in the SETU program to maintain graduation out of extreme poverty
- 3) To identify intended and unintended impacts of SETU activities on the lives and livelihoods of SETU participant households and the occurrence of political and social change in their communities.

How do we define sustainable graduation from extreme poverty? This discussion has intensified in the past several years as various programs direct their goals towards achieving what is often referred to as "ultra-poor or extreme poor graduation." Sustainability is a contested topic in and of itself with varying criteria for achievement, often highly dependent on the context being evaluated.

Additionally, the concept of graduation depends on participant context and the social support program they are intended to graduate from. Devereux and Sabates-Wheeler present that most poverty graduation programs operate from similar logic models of program inputs (cash and asset transfers combined with improved savings and training or coaching) to facilitate graduation (Devereux & Sabates-Wheeler, 2015). However, the exact indicators examined, and the qualification of achieving graduation tend to differ across the growing body of work evaluating sustained ultra-poor graduation.

As CARE Bangladesh seeks to determine the sustainability of the SETU project facilitating ultra-poor graduation, we have consulted the expertise of past evaluations in similar realms to align our assessment with comparable work. This review considers how we define "graduation" from extreme poverty, measured domains, methods used for the evaluation, and how SETU's approach compares to existing literature. Though a wide variety is clear, context is crucial, and the SETU evaluation, therefore, seeks to learn from peers while maintaining careful design tailored to our specific participants in northwest Bangladesh.

### 1.3 Discussion

Despite utilizing various methods and criteria for “graduation,” a comparison of X models highlights several similarities in most approaches. Programs often use multi-faceted or multi-sectoral techniques to boost impact by addressing a broad scope of factors, including social, economic, health, political and educational components of households’ success. Therefore, all of these factors are considered in evaluating the program’s sustainability, though we see a wide variation in timelines from program initiation, completion, and sustainability evaluations. Amid our peers’ varying assessments, this study has learned those effective procedures and applied them in a manner tailored to our context.

#### 1.3.1 Defining Graduation

Across the studies reviewed, the definitions of “sustainable” and “graduation” varied considerably. This must be critically considered while comparing across studies, as overall study purposes varied. A further look at the domains measured for determining graduation is discussed in the next section, but defining what constitutes the sustainability of these criteria is also diverse.

In seeking to evaluate sustainable graduation, Banerjee asked, “Are participants earning more income and achieving stable improvements in their well-being?” (Banerjee et al., 2015). However, some studies evaluated more tangible activities, such as improved water systems, and sought to assess the percentage of new systems still in working order (Commons, 2016).

Other studies highlight the scope of evaluating sustainability, such as Sarriot’s Nepalese evaluation, which sought to test strengthened health systems while preventing collapse after external funding ends. The team emphasizes that defining the scope of the assessment is critical (Sarriot, Ricca, Ryan, Basnet, & Arscott-Mills, 2008). In the case of SETU, evaluation is done on the household level but within the context of Parishad, regional, national, and even global factors influencing sustainability.

Timing sustainability evaluations varied from 1 year (Banerjee et al. 2015) to 10 years after original intervention activity implementation. Some studies also discussed evaluation timing about asset transfer. For example, though 1 year after program activities ceased, Banerjee’s evaluation was also noted as 3 years after initial asset transfer, a primary activity of their program.

One major criticism of evaluations focusing on the sustainability of ultra-poor graduation is the occasional lack of systematic and scientific methods for defining graduation. It appears that some studies somewhat arbitrarily set the minimum threshold for graduation, sometimes not even specifying whether or not this threshold was formed before or after data analysis to calculate graduation rates, indicating their program’s achievement (Devereux & Sabates-Wheeler, 2015). Very few studies justify the criteria set for classifying a participant as “graduated” or “did not graduate” and why this was the chosen threshold.

#### 1.3.2 Domains Measured

Similar to SETU’s use of the SHIREE 13-criteria table (Appendix A) for determining whether or not a household graduated, many evaluations also employ some form of a scoring system, including a variety of social and economic dimensions. Some of these scorecards resemble a school report, with a set number out of the total criteria set as the passing, or graduation, cut-off score. For example, Sarriot graded localities against 53 indicators (Sarriot et al., 2008), while Das summarized households from the CFPR program in just 10 areas (Das & Misha, 2010). With such a wide variety in measurement scope, understandably, there was also a vast variety of factors considered by these different studies.





## 2. METHODOLOGY

### 2.1 Factors in Study

The major variables for this post project study are: demographic information including the project participant's household, income, expenditure, savings, assets, gender equality, and dietary practices. To understand sustainability and factors for retention or economic dwindling, the study will also consider exogenous variables such as environmental shocks, establishment of roads, embankments and markets.

The study is designed around the following conceptual framework:



## 2.2 Study Method

This study utilized a mixed-methods approach.

1. A structured questionnaire was administered at the household level. Respondents for the household questionnaire were heads of households participating in the SETU program. Respondents were individuals aged 18 or older. A total of 400 respondents completed the structured questionnaire.
2. Key informant interviews, focus group discussions, case studies, and life stories were conducted to understand the process through which the program may have created a sustained impact on the lives of SETU participants. The quantitative approach informed our understanding of the level of impact on households' sustained graduation out of extreme poverty. Complementing this, the participants' expertise was gathered via qualitative data collection about how and why they maintained sustainability, fell backward, or moved up from extreme poverty. We enacted this by applying the process-tracing method (George & Bennett, 2005) to unearth the dynamics of the process and the impact of contextual factors and validate and examine the coherence of quantitative findings. (see annex 1 for details)

## 2.3 Sampling Methods and Study Population

The study followed the same area and sample households of SETU's end evaluation study and included 95% of households who graduated and 5% of HH who have not graduated. SETU project was implemented in Rangpur, Nilphamari, Gaibandha, and Lalmonirhat – four districts of Northwest Bangladesh. The samples covered all four program districts.

In the end evaluation, one Upazila was randomly selected from each program district, and the selected Upazilas, one program union, was also chosen randomly. Furthermore, four program communities (hamlets) were chosen from the selected unions using a simple random sampling method.

The SETU project covered 45,000 extreme poor households, the finite population of the program. Following the sample size determination for a limited population, the simple random sampling technique gave 371 sample participants from the program village, around 20 participants from each program community.

$$n = \frac{NZ^2 pq}{e^2 (N-1) + Z^2 pq}$$

Where, N = Population Size = 45,000

n = Sample Size;

z = at 95% confidence level = 1.96

p = Proportion of population with desired attribute= 0.42

q = 1 – p = 1 – 0.42 = 0.58

e = Desired level of precision = 0.05

The contact details of each sub-sub district, i.e., all unions, were collected, and the PPS study team reached more than 50% of hamlet leaders (SETU's natural leader at community level) to understand the likelihood of tracing study respondents. The sample size and distribution of study respondents are detailed below.

Table 1: Number of PSUs & SSUs by District, Upazila, Union, and Community

Area type	Area	Units	Total	Number of Secondary Sample Units
	District	4	4	100
	Sample Upazila from each district	1	4	100
	Union from each Upazila	1	4	100
	Community from each union	5	20	100
	Community from each Upazila	5	20	
Total	20 participants from each community x 5 communities x 4 unions of four SETU project districts = 400 Households			400



## 2.4 Data Collection, Management, and Quality Control

The study applied the kobo toolbox to collect the SETU PPS study data. The study applied the Kobo Data Collection Tool Box for both web and mobile applications, allowing for the authoring of complex forms in data collection by using mobile devices and storing and analyzing online and offline data.

The current app was designed for the SETU PPS study to standardize data collection during mobile phone interviews. Local survey enumerators based in the target study locations were hired as part of the study team. The data collection team received two days of remote orientation training through zoom, facilitated by the Lead Researcher, Statistician, and MIS specialists. The orientation training covered the following topics:

- SETU-PPS study project and study design
- Use of each data collection tool, including pre-test and practice
- Research ethics and consent form
- Data management and expected data outputs

The survey questionnaires and Kobo Data Collection Tool Box were used and demonstrated to the enumerators. The MIS specialist provided practical support for uploading Kobo Tool Box to their mobile and tested the app during a demonstration. In addition, a user manual provided to the enumerators was used for troubleshooting issues. All enumerators collected data and entered it into the mobile app daily. Three Action Researchers based in the study sites and the MIS Specialist played the quality assurance role in collecting and generating data for the mobile apps. The Director and Research Coordinator of PEARL (Program Evidence Advocacy Research and Learning) provided overall guidance and leadership support to the team for on-time collection, storage, analysis, and reporting following the guideline. Qualitative data were transcribed in Bangla and documented right after fieldwork.

The SETU PPS study obtained ethical approval from Bangladesh Medical Research Council (BMRC), the registration number of this research proposal is 3612511202 and it has been approved by the National Research Ethics committee of BMRC.

## 2.5 Study Limitations

Limitations of this study must be acknowledged, and the findings interpreted accordingly. The quantitative component includes project participant households only. Since there is no good counterfactual or control group (households that are similar to project participants but do not engage in any project activities), observed outcomes over time cannot be formally attributed to project participation. The decision to this study only on project participants was intentionally made to focus project resources on obtaining information about project participants' changes in behaviors and outcomes.

## 2.6 Analysis

The current analysis was done based on data from two surveys. The first survey was conducted in 2015, and the second survey was in 2020. Both surveys had taken place in the same areas. The same households were visited twice. This created the opportunity to understand the dynamics of graduation patterns and the sustainability of the graduation. The analysis using these data keen aimed to analyze the pattern of graduation, the characteristics of the graduated households, and the key determinants of graduation.



### 2.6.1 Measuring Graduation

Poverty is a multidimensional concept, and poverty means deprivation in income, expenditure, nutrition, health, education, vulnerability to shocks, idiosyncratic or covariate, lack of empowerment, and limited access to various socioeconomic or political institutions. Therefore, the uni-dimensional measurement of graduation limits the concept of poverty, and the concept urges a multidimensional approach. EEP/SHIREE has developed a multidimensional poverty index (MPI) to measure the graduation score using essential and supplementary criteria.

The essential criterion includes the food security variable, and the supplementary criteria include nine indicators, mostly the multidimensional poverty indicators. It covers extreme poverty, livelihood indicators, health, sanitation, and assets (financial and physical assets). Suppose that  $g_i$  indicators the binary status of the respective criteria, and  $k$  represents the number of indicators used, then the graduation score is the summation of the concerning indicators of graduation, that is,

$$G_i = \frac{\sum g_i}{k}$$

Based on the threshold value (60% of the graduation score), the household is classified into two groups: (i) households having a graduation score less than 60 % of the overall score are considered as non-graduated households, and (ii) households having graduation score over 60 % (inclusive) are considered as graduated households. The households were under the lower poverty line and had limited access to improved water and sanitation facilities in the benchmark position. (For details of the description and the condition of the criteria used in measuring graduation are given in the table (in the appendix). The graduation is, symbolically, presented as follows:

$$dGi = \begin{cases} 0 & \text{if } Gi < 60\% \\ 1 & \text{if } Gi \geq 60\% \end{cases}$$

## 2.6.2 Analytical Methods

The analysis keenly focuses on the state of graduation and identifying some selective variables playing the push-pull factors or the factors that deter the graduation.

What determines the graduation score? We follow the ordinary least square method to model the graduation score as the continuous dependent variable. The specification of the regression model is given below:

$$G_i = X\beta + \epsilon$$

Here, the dependent variable is graduation score,  $X$  is the vector of explanatory variables representing the socioeconomic characteristics of the households,  $\beta_s$  represents the partial regression coefficient vector and  $\epsilon$  is the stochastic disturbance term. In estimating the model, we assume that the model is correctly specified; it does not suffer from multicollinearity, heteroscedasticity, or autocorrelation problems; and it also satisfies the other assumptions of the classical regression model.

To model the determinant of graduation status, we have generated a binary graduation status variable based on the measurement criteria – compulsory and supplementary criteria. Following Woolridge (2002), let assume that  $y_i$  denoted the graduation status of the household containing a value 0 for the non-graduated households (households having graduation score less than 60 % of the overall score) and 1 for the graduated households, the matrix  $X$  include a set of socioeconomic variables, and  $G$  gives the form of the binary response model  $(y=1|X)=G(X\beta)=p(X)$  where  $X$  is  $1 \times K$ ,  $\beta$  is  $K \times 1$ , and the first element of  $X$  with be unity. The density of  $y$  given  $X$  can be written as

$$f(x_i, \beta) = [G(x_i, \beta)]^{y_i} [1 - G(x_i, \beta)]^{1-y_i}, \quad y_i = 0, 1$$

The log-likelihood for observation  $i$  is a function of the  $K \times 1$  vector of parameters, and the data  $(x_i, y_i)$ :

$$L_i(\beta) = y_i \log[G(x_i, \beta)] + (1 - y_i) \log[1 - G(x_i, \beta)]$$

Assuming that  $G(\cdot)$  is the logistic cdf, then the maximum likelihood estimator  $\beta$  will be a logit estimator.







## 3. RESULTS/RESEARCH FINDINGS

### 3.1 Characteristics of the Household and Household Heads

The survey was conducted among 418 households, of which male heads lead 339 and 79 are led by female heads. The average age of a male household head is 46 years, whereas it is around 56 years for a female household head. The result shows that the female household heads are older than the male household heads by approximately 10 years. Around three-fourth of the heads of the households are aged between 30 and 60, 20% are aged 60+, and 5.5% are aged below 30 years. Nearly 55% of the household head are illiterate.

Although various types of labor (agriculture day labor, other day labor, industrial labor, and skilled labor) are the major occupations of the household heads, nearly half of the households are engaged in those activities. About 8% of household heads work in the industry as workers, around 14 % work as skilled labor in various sectors. Domestic maid is the principal occupation of approximately 16 % of the household heads.

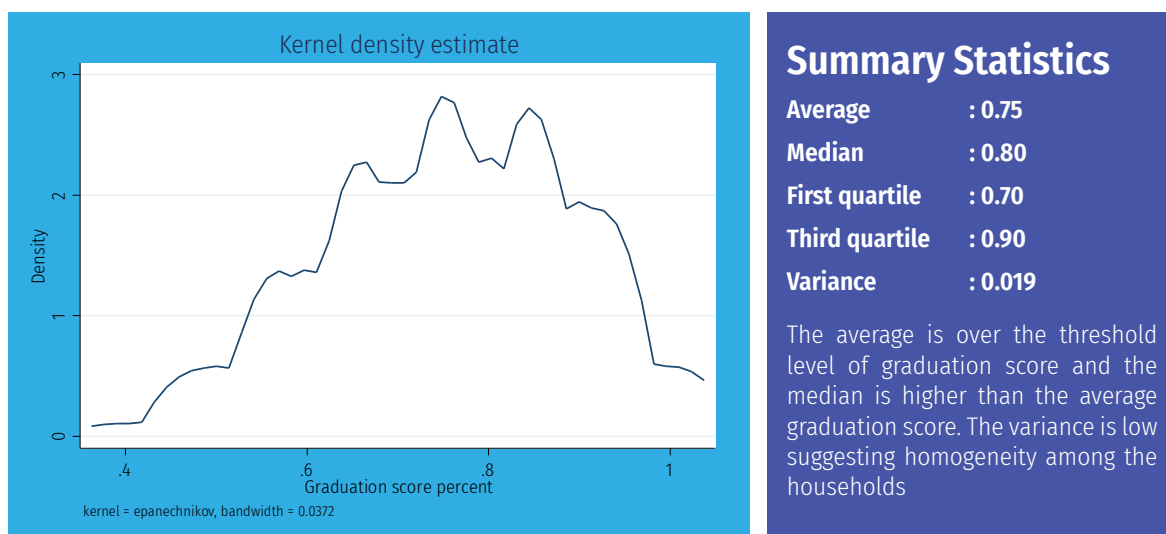
The survey results show that 8.61 % of the households are single-member (proton family), around 12 % have two members, 44.4 % have 3-4 members, 24 % have five members, and 13.4 % have 6+ members. We found that around 80 % of the households have houses of tin-roof and tin-wall, and 20 % have a different combination of roof and wall materials. Nearly 23 % of the surveyed households are landless (they do not own land) and 68.2 % have land up to 10 decimals, and only 6.5 % have land over 10 decimal.

The households have a better shelter facility. Nearly 91 % of the households use relatively improved sanitation (25 % use pit, 42 % use water seal rings slab without gooseneck, and 24 % water seal rings slab with gooseneck)—only around 6.5 % use open place/hanging latrine. About 89 % of households use electricity from the national grid/Rural Electricity Board.

### 3.2 Graduation Score

Following the measurement approach of graduation, the graduation score is estimated and is presented in the following kernel density plot.

**Figure 1:** The kernel density plot of the graduation score



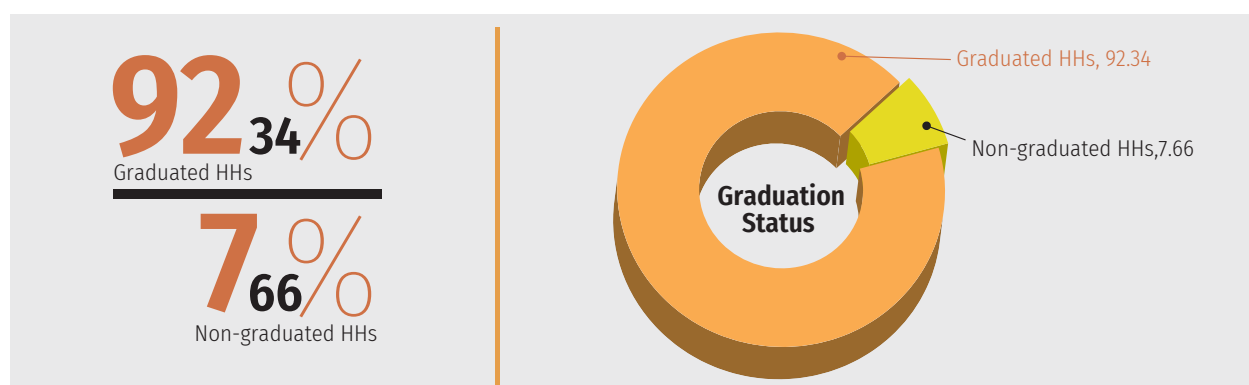
Source: SETU 2020

The result shows that the average graduation score is 0.75, higher than the graduation threshold level (0.6 or 60 %). The median is higher than the average graduation score suggesting a left-skewed pattern of the graduation variable. The first quartile value is estimated at 0.70, indicating that 25 % of the sample households have graduation scores under 0.70, and the third quartile value is estimated at 0.90, suggesting that 25 % of the upper households have graduation scores over 0.90.

### 3.3 Graduation Status

We have estimated the graduation rate by classifying the graduated and non-graduated households. The results show that around 8 % of the households are non-graduated households, implying that approximately 92 % of the households satisfy the graduation threshold criteria and are considered graduated households (Figure 2).

**Figure 2:** Graduation status



Source: SETU 2020

The graduation rate is estimated for various characteristics of the households. Four characteristics of the household heads were considered: (i) gender, (ii) age, (iii) literacy, and (iv) occupation. The gender variable includes two categories: male and female. The age variable has been categorized into five groups: (i) age below 30, (ii) age between 30-40, (iii) age between 40-50, (iv) age between 50-60, and (v) age 60+. The literacy status of the household head is either literate or illiterate. The estimated graduation rates against the categories are presented in Tables 2 and 3.



### 3.3.1 Graduation Status by Characteristics of the Household Head

The results show that the graduation rate is around 84.8 % among the female household heads, whereas it is about 94 % among the male-led households, nearly 9.3 percentage points different. The difference was statistically significant at a one % level of significance. The result suggests that graduation is lower among the female-led households than the male-led households, showing unequal movement toward graduation. Female-led households are behind male-led households. This could be because of lack of occupation, limited income sources, limited access to other opportunities, or social and economic discrimination in access to various options and services.

The graduation rate among households categorized according to the age bracket of the household heads varied slightly. The results show that the maximum graduation is observed among the households led by heads aged between 30-40, and the second-highest graduation rate is observed among the households led by heads aged between 50-60. The households led by heads below 30 years have a graduation rate of 91.3% and around 96% for those aged between 30-40 years. The graduation rate is 91.53% for the households led by heads aged between 40-50 and is 94.12% for the age group 50-60. The graduation rate among the households led by above 60 is 84.52%.

The results show that the households led by heads aged between 30-40 years have the highest graduation rate compared to other age groups. The graduation rate is the lowest among the households led by heads aged 60+. To understand the variation in the graduation rate by the classification of the age of household head, we have considered '60+' as the benchmark category. The result shows that all groups have a higher graduation rate than the benchmark category.

Compared to the households led by relatively young heads aged below 30 years, the difference in graduation rate among the households led by relatively old heads aged 60+ is around 10 percentage points, and the difference is found insignificant even at a 10 % level of significance.

Although there is a difference in graduation rate among various groups in this setting, the test statistics suggest that the differences between the benchmark category and 30-40 group, and benchmark category and 50-60 group are found statistically significant at a five % level of significance.

**Table 2:** Graduation rate in 2020 by characteristics of household head

Characteristics	N	%	Graduation status		Comparison	Test stat
			Non-Graduated	Graduated		
Sex of HH head (Both)	418		7.66 (32)	92.34 (386)		
Female	79	18.9	15.19 (122)	84.81 (67)	Base	
Male	339	81.1	5.90 (20)	94.10 (319)	9.29	2.82
Age of household head						
<30	23	5.5	8.7 (2)	91.3 (21)	9.94	1.62
30-40	122	29.2	4.1 (5)	95.9 (117)	11.01	2.97
40-50	118	28.2	8.47 (10)	91.53 (108)	5.81	1.56
50-60	68	16.3	5.88 (4)	94.12 (64)	8.40	1.97
60+	84	20.1	15.48 (13)	84.52 (71)	Base	
Literacy of household head						
Illiterate	229	54.8	7.86 (18)	92.14 (211)	Base	
Literate	189	45.2	8.99 (17)	91.01 (172)	-1.48	-0.56
Major Occupation						
Agri. Day Labour	20	4.8	3.30 (3)	96.7 (88)	-0.36	-1.44
Other day labor	91	21.8	14.93 (10)	85.07 (67)	-11.98	-1.63
Domestic maid	67	16.0	23.08 (3)	76.92 (10)	-20.14	-1.97
Rickshaw/Van Boat/oth	13	3.1	5.17 (3)	94.83 (55)	-2.23	-0.81
Skilled labour	34	8.1	2.94 (1)	97.06 (33)	Base	
Industrial labour	11	2.6	0 (0)	100 (11)	2.94	1.06
Petty trade/ business	39	9.3	2.94 (1)	97.44 (38)	0.38	1.25
Other business	28	6.7	0.00 (0)	100 (28)	2.94	1.58

Source: SETU 2020

Education, particularly the education of the household head, is an important factor in determining the overall well-being of the households. The household heads are grouped into (i) literate and (ii) illiterate. The results show that the graduation rate is almost similar among those two groups as the statistical test statistics suggest literacy of household heads does not affect graduation.

Occupation is another important factor determining the overall welfare of the household. The occupation structure determines the income flows of the household. A steady and stable occupation opportunity ensures better access to resources. The survey results show that the graduation rate is 100 % among labored industrial households dependent on businesses. The graduation rate is the lowest among the households led by heads employed as domestic maids, and the second-lowest graduation rate is among the households led by non-agriculture day labor heads.

The graduation rate is around 95 % among the households led by heads working as transport workers, and it is approximately 97.4 % among the households led by heads self-employed in business or petty trade. The results show variation in graduation rate among various occupation groups; we have considered skilled workers the base category. The results show no significant differences in graduation rate among the households led by heads employed as non-agriculture workers, industrial workers, self-employed in petty trade or business compared to those led by skilled heads.

### 3.3.2 Graduation Status by Characteristics of the Households

Some household characteristics were selected to understand the nature of the graduation rates among the households possessing different characteristics. We considered five indicators for this purpose: (i) dwelling condition, (ii) sanitation, (iii) lighting source, (iv) household size, and (v) landholding.

**Table 3:** Graduation rate in 2020 by household characteristics

Characteristics	N	%	Graduation status		Comparison	Test stat
			Non-Graduated	Graduated		
Dwelling						
Others	83	19.86	7.23	92.77	Base	
Tin-roof and tin-wall	335	80.14	7.76	92.24	-0.53	-0.16
Sanitation facility						
Open place/handling latrine	27	6.46	7.41	92.59	Base	
Pit	105	25.12	7.62	92.38	-0.21	-0.04
Water seal rings slab	176	42.11	7.95	92.05	-0.55	-0.10
Water seal ring slab	100	23.92	7.00	93.00	0.41	0.07
Others	10	2.39	10.00	90.00	-2.59	-0.26
Lighting source						
Others	47	11.24	21.28	78.72	Base	
Grid and REB	371	88.76	5.93	94.07	15.35	3.78
Household Size						
Proton	36	8.61	27.78	72.22	Base	
2	50	11.96	8.00	92.00	19.78	3.48
3	57	13.64	7.02	92.98	20.76	3.75
4	120	28.71	6.67	93.33	21.11	4.27
5	99	23.68	4.04	95.96	23.74	4.69
6 and above	56	13.40	3.57	96.43	24.21	4.36
Landholding						
Landless	96	22.97	11.32	88.68	Base	
Up to 10 decimal	285	68.18	6.32	93.68	5.00	1.65
Above 10 decimal	27	6.46	7.41	92.59	3.91	0.68

Source: SETU 2020



The results show that the graduation rate is similar across various dwelling types and characteristics of latrine facilities. There is a significant difference in graduation rates by the nature of access to electricity. The households with electricity connections have a higher graduation rate than the alternative groups.

The graduation rate by the composition of the household shows some distinct characteristics. The graduation rate is the lowest among the proton family, around 72%, whereas other households with more than one member have a graduation rate of over 92%. Compared to the proton family, the graduation rate is around 20% higher among the other households. The differences are significant at a one percent level of significance.

**Table 3:** Summary of graduation status and characteristics of graduated households

Maximum graduation rate among					
<b>Gender</b> Male headed Households (94.10)	<b>Age</b> 30-40 Years (95.90)	<b>Occupation</b> Industrial labor, business (100.00)	<b>Lighting</b> Grid/REB (94.07)	<b>Household size</b> 6+ (96.43)	<b>Land</b> Up to 10 decimal (93.68)
Characteristics of graduated households (maximum belongs to)					
<b>Gender</b> Male headed Households (82.64)	<b>Age</b> 30-40 Years (30.73)	<b>Occupation</b> Agri. Day labor (22.92)	<b>Lighting</b> Grid/REB (90.41)	<b>Household</b> Household size 4 (29.02)	<b>Land</b> Up to 10 decimal (68.18)

Source: SETU 2020

### 3.3.3 Distribution of Graduation Status by Various Characteristics

The distribution of graduation status has been analyzed. The result shows that male heads lead around 83%. We also find that nearly three-fourth of graduated households have heads aged between 30 and 60 years whereas, among non-graduated households, around 39 % of households are led by 60+ aged heads. About 23% of graduated households are dependent on day laboring in agriculture, 15% on non-agriculture day labor, and 14 % on driving vehicles by household heads.

The distribution of graduation status by nature of housing shows that, among both groups, around 80 % have better housing – tin-roof and tin-wall. The distribution of the graduation status by nature of sanitation facility shows that almost homogenous distribution pattern among graduated and non-graduated households. Over 90% of the graduated households have electricity connections, and only 69 % of non-graduated households have electricity connections. Among the non-graduated households, the proportion of proton households is the highest. The pattern is not the same among graduated households. The distribution of graduation status by household size shows an almost normal pattern. Among the graduated households, around 70% have land up to 10 decimals.

### 3.4 Determinants of Graduation Score

The previous description analysis shows that the nature of graduation varies by socioeconomic characteristics of the households. The classical mean tests show that some of the variations are significant and some are not. Since the overall outcome, the graduation here, for example, is hardly determined by a single factor, the bivariate analysis is insufficient to conclude the nature of variation by a single socioeconomic characteristic.

To control for the influence of some sets of explanatory variables, we have used regression analysis. This exercise helps to measure the marginal effect of the impact of the respective variable. First, we have used the OLS method to identify the significant and insignificant explanatory variables in determining the graduation score at the household level. The results are presented in Table 4.

Five separate models are estimated. Model 1 is simple, consisting mainly of the heads of the households and a dummy variable of proton household. In model 2, we have incorporated the characteristics of the households along with the characteristics used in model 1.

**Table 4:** Potential determinants of graduation score

Explanatory variables	Model 1	Model 2	Model 3	Model 4	Model 5
Age of household head	-0.010 (0.058)	-0.088** (0.043)	-0.082** (0.041)	-0.082* (0.043)	-0.077* (0.041)
Age of head*proton family	0.107 (0.128)	0.179* (0.095)	0.219** (0.092)	0.179* (0.096)	0.220** (0.092)
Is household head literate? Yes=1, No=0	-0.935 (1.371)	-0.810 (1.009)	-1.177 (0.968)	-1.003 (1.014)	-1.353 (0.972)
Single person household	-20.00*** (7.496)	-18.97*** (5.618)	-18.51*** (5.381)	-20.41*** (5.636)	-19.74*** (5.390)
Number of earners in the household		1.453*** (0.536)	1.259** (0.514)		
Number of income sources		4.169*** (0.594)	3.722*** (0.573)	4.636*** (0.572)	4.114*** (0.554)
Own landholding categories		0.261 (0.923)	-0.534 (0.893)	0.588 (0.922)	-0.271 (0.892)
Is grid or REB lighting source: Yes=1, No=0		5.220*** (1.547)	4.055*** (1.494)	4.791*** (1.551)	3.656** (1.494)
Tin-roof and tin-wall		-0.903 (1.228)	-0.597 (1.177)	-0.754 (1.236)	-0.461 (1.183)
Not poor		15.160*** (1.087)	14.730*** (1.044)	15.646*** (1.081)	15.139*** (1.036)
Log of asset value			2.202*** (0.359)		2.256*** (0.360)
Constant	77.716*** (3.042)	56.046*** (3.143)	36.821*** (4.343)	57.215*** (3.137)	37.357*** (4.364)
MSS	6,454.595	40,964.499	44,237.236	40,268.185	43,716.896
RSS	73,033.682	38,523.778	35,251.042	39,220.092	35,771.382
Adjusted R <sup>2</sup>	0.072	0.503	0.545	0.496	0.539
F	9.125	43.279	46.318	46.545	49.740

Note: \*\*\* for significance at 1 %; \*\* for significance at 5 %; \* for significance at 10 %  
Source: SETU 2020

The result shows that the proton variable is significant in all five models at a one percent significance level. The coefficient of the proton variable is negative, suggesting a lower graduation score compared to the benchmark category. In particular, the coefficient of the proton variable indicates that the graduation score is around 20 percentage points lower than the comparison group.

The result also shows that with an increase in the age of household head, the graduation score declines. We find that an additional number of income-earning family members significantly increase the graduation score. The opportunity of multiple income sources in the households increases the graduation score by nearly four percentage points, holding other things remaining the same. The coefficients of multiple income source variables are significant in all five models.

The volume of assets also influences the graduation score positively. The results show that a ten-% increase in asset value increases the graduation score by around 2.2 percentage points, holding other things the same.



### 3.5 Determinants of Graduation Status

The determinants of graduation status have been analyzed using the binary regression technique (the dependent variable is graduation status which is defined as 1 if the household is graduated and 0 otherwise). The results from the logit model are presented in the following table:

**Table 5:** Logit model-based regression results: determinants of graduation status

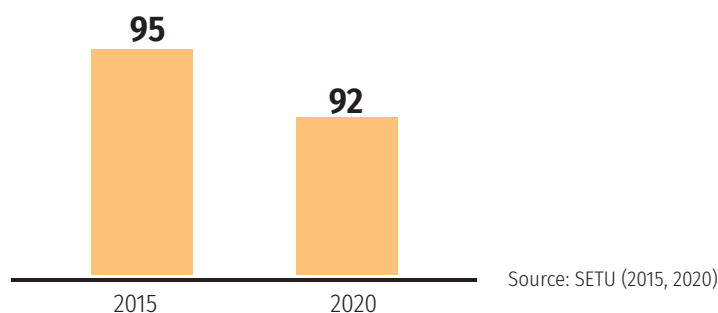
Explanatory variable	Model 6	Model 7	Model 8	Model 9
Age of household head	-0.027* (0.015)	-0.024* (0.015)	-0.023 (0.015)	-0.022 (0.015)
Is household head literate? Yes=1, No=0	-0.421 (0.387)	-0.677 (0.470)	-0.681 (0.472)	-0.682 (0.463)
Single person household		-0.969* (0.577)	-0.843 (0.595)	-1.465*** (0.540)
Number of earners in the household		0.662** (0.307)	0.620** (0.307)	
Number of income sources		1.811*** (0.517)	1.748*** (0.510)	1.951*** (0.513)
Category of land holding		1.084* (0.598)	1.123* (0.611)	0.901 (0.601)
Is grid or REB lighting source: Yes=1, No=0		1.097** (0.528)	1.061** (0.528)	0.909* (0.505)
Tin-roof and tin-wall		-0.244 (0.587)	-0.231 (0.589)	-0.136 (0.572)
Log of asset value			0.116 (0.138)	
Constant	4.035*** (0.852)	-1.076 (1.434)	-2.144 (1.927)	-0.163 (1.356)

Note: .01 - \*\*\*; .05 - \*\*; .1 - \*;

The logit results draw a similar direction of the effects of the respective variables. The models also show that the proton family has a lower probability of graduating, the households led by older people have a lower chance to graduate, and the other variables in the models show a positive direction of change.

### 3.6 Trends of Graduation Status

In 2015, the estimated graduation rate was 95%, whereas, in 2020, the graduation rate was 92%. Although the graduation rate declined slightly, mostly because of sickness or loss of primary income earner, over 90 % of the households have a graduation score of over 60%.



### 3.7 Characteristics of the Graduated and Non-Graduated Households in 2015 and 2020

The following table shows the average number of earners, per monthly household income, per capita income, income per earner, and household size. The result shows that the average number of earners has increased among the graduated households but has decreased among the non-graduated households. The per average household income increased among both graduated and non-graduated households, but the rate of increase of monthly household income among the graduated households is higher than the non-graduated households.

A similar trend is found in per capita monthly income. The average household size has slightly increased among the graduated households, whereas it was constant among the non-graduated households.

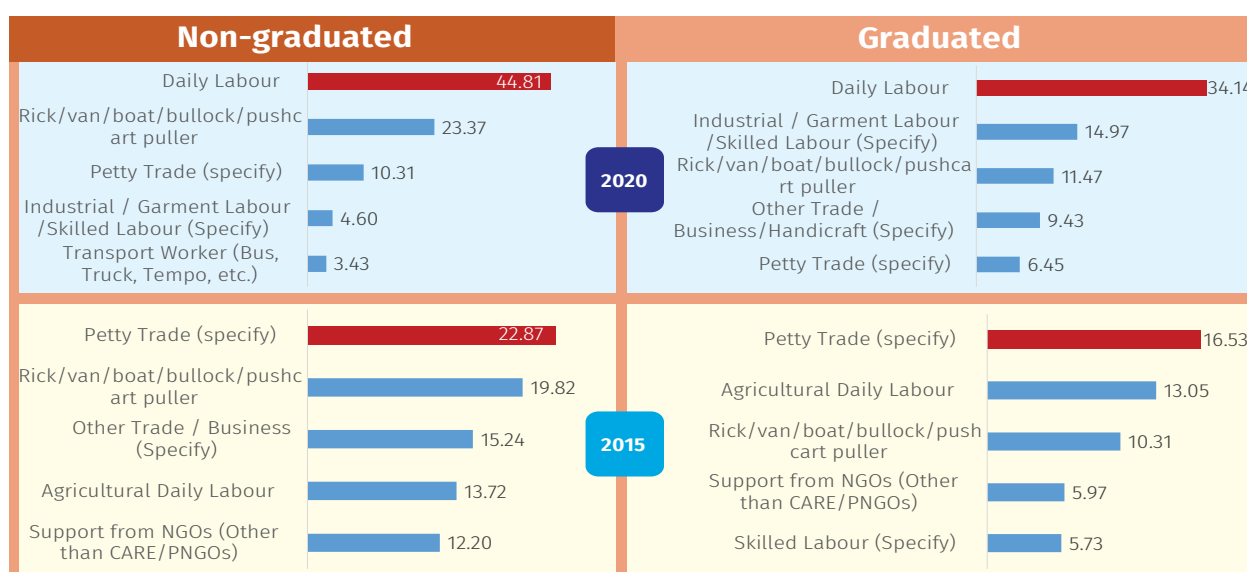
**Table 6:** Number of members, earners, household income, income per member, and earner by graduated and non-graduated household (BDT)

Survey Year and Residence Number of Member	Per Household Number of Earner	Per Household Monthly Household Income	Per Member Monthly Income	Per Earner	Household Size
Graduated Household					
2021	1.74	14,333.91	3,734.70	8,555.64	4.02
2015	1.68	10,522.26	2,908.02	6,728.44	3.94
Non-Graduated Household					
2021	1.03	4,388.24	1,671.52	4,233.33	2.94
2015	1.37	4,110.00	1,245.00	3,432.22	2.95

Source: SETU (2015, 2020)

Figure 4 lists the five major occupations of the graduated and non-graduated households in 2015 and 2020. The result shows that day labor is the major occupation of both the household heads of the graduated and non-graduated households. Driving vehicles and petty trade were the second and third most important occupations among the non-graduated households. The occupational structure among the graduated households has changed between 2015 and 2020.

**Figure 4:** Five major income sources of the households in 2015 and 2021



Source: SETU (2015, 2020)



Qualitative findings from four different Focus Group Discussion with 40 SETU participants also echo the occupational changes thus on their economic changes. FGD Participant says their business has expanded. According to respondents' self-assessment, over 90% of the SETU participants make a decent living. 'One family now has multiple earning members, and there are now opportunities for them to be able to earn throughout the year. Husband and wife are earning together, so the poverty has decreased' says, a 40 years old farmer, Badsha, Gaibandha district .

The FGD participants also added, now all the families can eat three meals a day throughout the year. Most of the families in the neighborhood were day laborers and agricultural day laborers. Now, most families have started cultivating leased lands and have been involved in various business ventures to increase the family income. The SETU participants no longer go to the village loan sharks when they need money. Borrowing from the loan sharks is almost non-existent as they borrow from the NGOs. (ASA, Grameen Bank, SARPV Bangladesh, and Bureau Bangladesh now lend money to the poor villagers. They also added interest-free loans, and relevant training encouraged us to participate in different small businesses. Five years ago, there were two shops in the neighborhood, but now there are 20 shops. In most shops, both the husband and wife run the business.

A 46 years, small businessman Moksedul, of Sarkarpara, Bothalagrai of Nilphamari districts, who was present at the FGD session, used to be a van driver, but now he trades in raw materials; a 52 years man, Mashiur, from carpenter to grocer, some went from being day laborer to the farmer, others have become seasonal fruits and vegetable trader. There are multiple sources of income in one family. For example, Monsur Ali-a graduation sustained household head, makes bamboo crafts. One of his sons is in EPZ, while another sells seasonal fruits and works as a farmer. This was not the case before. The extreme low-income families have come under various government safety nets and have better food security. Job opportunities available throughout the year have reduced the poverty of the families. They have their motorized rickshaws and vans. Older women who do not get hired as farm workers or cannot engage in labor-intensive tasks on their own now work in the shade of tobacco factories for a daily wage of Tk. 120.

As a result, older women from low-income families can increase the family's income.

**A 40 years old women participant at Nilphamari district says, since we have better connection and unity within and beyond our community, that helps us get the available opportunity. In EPZ and Syedpur, 15 of the 26 project participant families of the SETU Project now work in factories of Ventura, Deshbandhu, Evergreen Hardboard, and different hair and shoe factories and make a living throughout the year.**

### 3.8 Expenditure Pattern

The expenditure pattern of the graduated and non-graduated households in 2015 and 2020 has been presented in table 7.

**Table 7:** Expenditure pattern among graduated and non-graduated households in 2015 and 2020

Year	Average Expenditure per month	Average Consumption per month	Of total consumption	
			Food	Non-food
Non-graduated				
2021	1579	1344	1048	296
2015	804	800	788	12
Graduated				
2021	4650	2788	1692	1096
2015	1787	1544	1440	104

Source: SETU (2015, 2020)

The results show that average consumption expenditure as a percentage of total spending has increased for both groups, but the rate of increase is higher among the graduated households than the non-graduated households. The graduated households spend around 60% of total consumption expenditure for food purposes, whereas it is about 78% among the non-graduated households. The food expenditure elasticity shows that the elasticity has declined for both groups, but the rate of decline is much higher among the graduated households.

Figure 5 shows that in 2015, the estimated food elasticity was 0.803, which becomes 0.606 for the graduated households and for the non-graduated households that were 0.969 in 2015 and 0.866 in 2020. According to the Engel law, people spend more on non-food items than food items with an increase in income. This implies that improving living conditions allows people to access better shelter, better education, better health, and better equipment. The results confirm that the condition of the graduated households has improved compared to the non-graduated households.

**Figure 5:** Food expenditure elasticity among graduated and non-graduated households in 2015 and 2020



### 3.9 Well-Being Status

A consistency of improvement in the overall condition of the household can be obtained if the quantitative measure and the qualitative measure corroborate each other. Qualitative responses about the overall well-being of the households have been recorded in both surveys. The results are presented in figure 6.

In 2015, among the non-graduated households, 11.1% perceived that they were under the lower poverty line (subjective line), 66.7% thought they were moderately poor, and 22.2% thought they belonged to the lower middle category whereas, among the graduated households, nearly 99% perceived them as non-extreme poor.

In 2020, among the non-graduated households, 31.3% considered themselves extremely poor and 50% as moderately poor, whereas, among the graduated members, the incidences were 3.9% and 61.1%, respectively. The result completely supports the graduation status of the households. According to project participants, the changes that have come through the implementation of the SETU projects are:

All of the families use hygienic latrines. Everyone puts on sandals when going to the latrines and washes their hands after using the latrine. As a result, diarrheas have become rarer. The houses are better. For example, there are tin-roofs, tin-walls, and tin-shed buildings now; most have electricity at home. 'There is a hand pump almost at every home; now women do not have to leave home just to take a shower.'

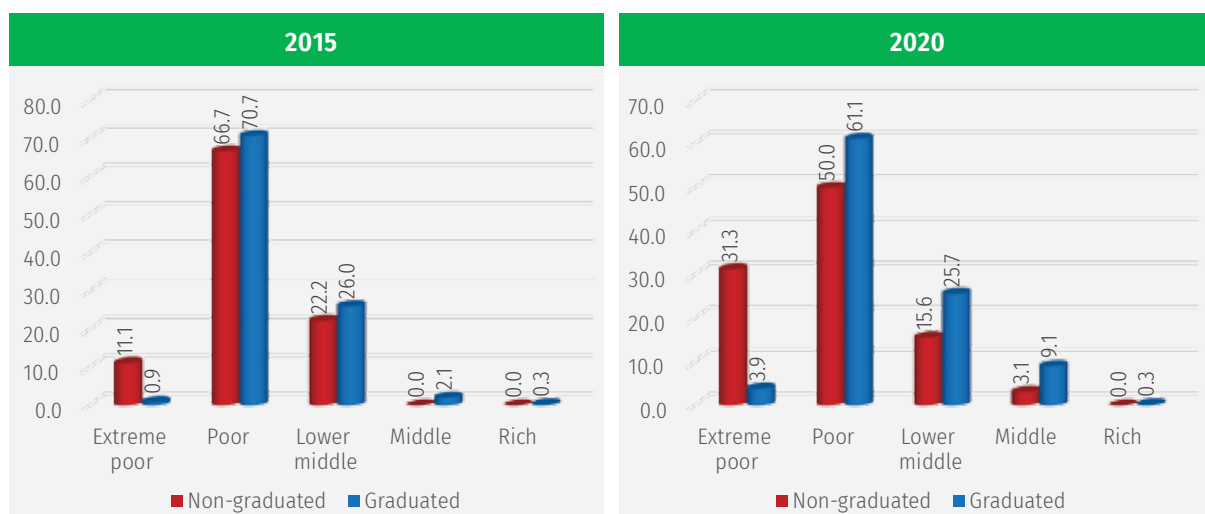
Every family has three meals now. Besides, vegetables, fish, meat, eggs, and lentils are more frequent. Increasing the family's income has increased the ability to buy food from the market. Fish or meat is eaten on weekdays. Members of various FGD groups who benefited have made some statements.

*"We used to eat 1 kg of rice for 5 people a day, now I am giving rice to cows too," says Moshedul (Nilphamari); "I attended nutrition class, I get to eat meat 1 day a week, I eat fish often, it has protein," says Jamshed, (Nilphamari); "I used to eat poor meals, but now I am eating ghee," says Dipali (Rangpur); "Now I purchase rice in sacks." - Farida, (Lalmonirhat); "Now 2-3 people (guests) can eat from our cooking pot." - Ershad, (Lalmonirhat); "I didn't know that vegetables were nutritious food. Now I know" - Jasim, (Lalmonirhat)*





**Figure 6:** Dynamics of well-being status of the households



In 2015, among the non-graduated households, 11.1 percent perceived that they were under the lower poverty line (subjective line), 66.7 percent were moderate poor, and 22.2 percent belonged to lower middle category whereas among the graduated households, nearly 99 percent perceived them as non-extreme poor. In 2020, among the non-graduated households, 31.3 percent considered them as extremely poor, and 50 percent as moderate poor whereas among the graduated member, the incidences were 3.9 percent and 61.1 percent respectively. The result completely support the graduation status of the households.

Source: SETU (2015, 2020)

### 3.10 Factors Contributed Change: Voices from Community People

The project SETU has brought positive changes in the family business or income-generating activities in the life of 95% of project participants. Women also got involved in financial activities like small business, agricultural production, handicrafts, company jobs, etc. The husbands get chances to work as daily wage earners while their wives manage the family business during the daytime. The key informants have stated that these changes are; creating social acceptance in receiving training from the project, achieving experiences on income-generating activities and business management, engaging the family members in income-generating activities, developing saving habits, and directly involving women in financial activities. Because of increased income, the families were involved in different types of alternative income-generating activities besides enhancing business practices. That resulted in less migration, ending creditors' loans, and advancing wage selling. NGOs are inspiring families to take small loans.



Mohubul, Purbia Bania Para, Mominpur, Rangpur Sadar

On the other hand, despite some families being financially harmed for the daughter's marriage, sickness, and legal cases, both husband and wife got involved in income-generating activities prevented them from falling back to their previous ultra-poor financial condition. Inclusion in social safety net programs with the help of local leaders and getting institutional loans also helped them keep improving.

Inclusion of all project participants of the SETU project in sharecropping/ mortgaging land/ yearly or seasonal contract increased the area of cultivation. Earlier, those known as agriculture wages earners now got recognition as farmers. As a result, the food security of these families is increased and creates income sources from this line item. On the other hand, supply for irrigation water for agriculture in Mominpur union from government facilities for the last 2 – 3 years, the people are availing the water supply facilities for agriculture in 75% fewer expenditures, and the accessibility to government assets is increased.

SETU project managed workplaces for the family members of the project participants in garment factories, rug units, Security Company, and other companies by providing training to them. SETU also connected its participants with locally growing job markets and industries, benefiting them. 500–700 families of the Barishal union (Gaibandha) are working in garments; one-third of them are the participants of the SETU project. Approximately 10,000 women and men of the Botlagari Union (Nilphamari) are working in EPZ, and some other chemical industries, 60% of them are women, and many are the project participants of the SETU project. Moreover, 9000 men and women of the Sarpukur union (Lalmonirhat) work in tobacco factories; 65% are female, and 35% are male. Having opportunities to work in these factories from Boishakh–Ashwin (these months are lean period), family income has increased remarkably, and migration has decreased comparatively.

After getting training from different government organizations with the help and communication of community development committees, local leaders, and Union Parishad, hundreds of SETU participants of Barishal, Sarpukur, and Mominpur had the opportunity to work in factories. The key informant of the Botlagari union thinks that at the beginning, people were less interested in creating work opportunities by having trained through the SETU project. However, the positive influence of family inspired others to seek work in companies later on.

The key informant participants from Mominpur and Botlagari claimed that the relationships formed between the community people and the Union Parishad through the project are still in place. They built bridges, culverts, and u-drains to solve the waterlogging and drinking water problems. Almost all SETU participants were included in the safety net services. The local leaders of the Barishal union are continuously helping SETU project participants' family members register online to be enlisted in different allowance services. Through the input support of the SETU project and safety net services of Union Parishad, the former beggars of Mominpur (Rangpur district) and Botlagari (Nilphamari district) have become able to stop begging.

Under different housing projects, 235 families of the Botlagari union who had a house but no land to cultivate were supported by building latrines and different rooms; most project participants are from the SETU project. There are families with members with disabilities and those who had to beg. Five families from Barishal got new rooms. For the increasing income and the loans from the project, the SETU project participants of the Sarpukur union got half-concrete or concrete-tin made rooms.

Child marriage is stopped in Botlagari, Mominpur, and Sarpukur unions. This achievement involves the local leaders in the child marriage prevention committee, working in factories after having rallies in the community, and continuing girls' education. Having a hotline number written at the back of the textbooks for preventing child marriage allowed students to call by themselves. Now people know where and how to communicate for help to prevent child marriage.

The practice of sharing opinions for income generation has increased in the Botlagari union; women are also participating in decision-making processes now, and being busy with work reduced clashes. The respondent from Mominpur also thought that the relationship between men and women has developed from Ekata center's activities.

Because the SETU project provided training on network linkage, communication with different organizations like Union Parishad, the Department of Agricultural Extension, the social welfare department, community clinics, and the Department of Women Affairs is still ongoing. The project participants are included in the standing committee, child marriage prevention committee, CSG of community clinics, project implementing/ monitoring committee, etc. They still use the social safety net's socio-economic classification list.

### **3.11 Comparisons between Factors that Contributed Sustaining Graduation**

#### **3.11.1 Economic growth**

Under the SETU project, households received cash support starting from BDT 1300 with a median amount of support of BDT 7700 and average support of BDT 9490. The study shows that the average per year growth of accrued benefit from the income support was around 58%, generally higher than the average per household income growth at the national level. To measure the economic status of the households in terms of the growth rate of the accrued benefit, we constructed a binary indicator having a value of 1 if the average accrued growth exceeds the national level per household income growth.



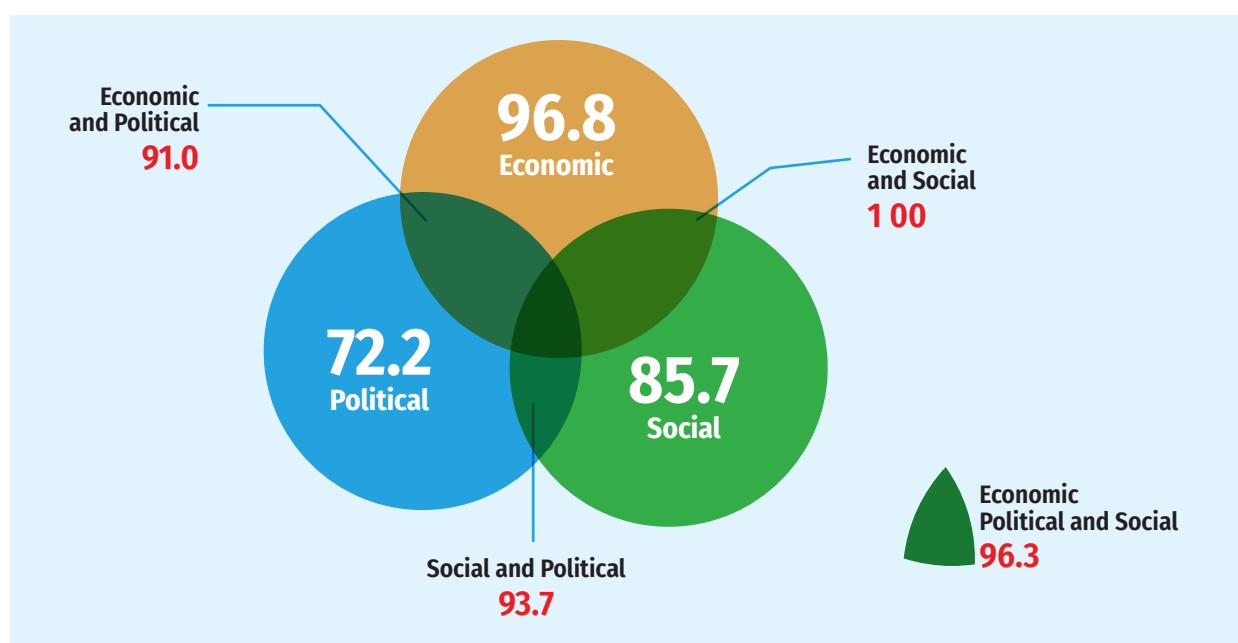
#### **3.11.2 Political engagement**

Two indicators were used to construct the status of the political engagement of the households, such as (i) the access to government social safety net and (ii) participation in community organizations. Based on the median political score, a binary indicator was generated.

#### **3.11.3 Social empowerment**

A set of social and women empowerment indicators were used to construct an overall social score for the households. The households were categorized into households with the above median level social score and those with a social score below the median level value.

**Figure 8:** Graduation status in light of economic growth, political, and social empowerment



Source: SETU (2020)

Based on the three indicators, we identified eight types of households: (i) households having no score in the three dimensions, (ii) households having the score in economic dimension only, (iii) households having the score in social dimension only, (iv) households having the score in political dimension only, (v) households having the score in economic and social dimension only, (vi) households having the score in political and social dimensions, (vii) households having the score in economic and political dimensions, and (viii) households having the score in all the three dimensions.

The results showed that the graduation rate is the highest among households, with the score in the economic dimension only compared to other dimensions. It is observed that the graduation rate was 100% among those households having scored in economic and social dimensions only. The graduation rate was around 86% among the households having the score in social dimension only, while the corresponding figure was 72.2% among the households having the score in political dimension only. The graduation rate was around 96% among the households with three dimensions. The results showed that the accrued benefit has substantially contributed to graduating from extreme poverty, and social engagement contributed to this graduation path compared to the political path.

### 3.11.4 Increased Social Capital

People of the neighborhood get together and engage in activities like preventing open defecation, farming vegetables and spices, and creating savings in groups. This has improved the relationship among the people of the community. The relationship between the rich and the poor has improved. There is less rich-poor discrimination now. For example, if one person faces a crisis, everyone, regardless of their financial status, steps forward to help. The extremely low-income families now get invited to social events. Fazila, a resident of Sarkarpara, Nilphamari, a project participant of the SETU project, said, "I used to go to such events as a worker. Now I go there to attend like the others."

Talking about social changes, a project participant named Jamshed said, "People now give us the dignity. If they see us, they stop for small talks." (Nilphamari); "I used to be asked to go to weddings to do the chores. Now I get invited." (Nilphamari) "The road in our neighborhood was in bad shape. We have accomplished these things by allying. All of us got together and repaired the road with soil." (Lalmonirhat)

From the qualitative discussion with 40 project participants of the SETU project in four districts, it is revealed the significant activities they had done are: preventing open defecation by constructing hygienic latrines, creating awareness in the neighborhood about regularly feeding iron and deworming tablets to adolescent pregnant girls and children as per the advice of nutrition workers; They are meeting nutritional needs by planting vegetables along roadsides and canals, as well as contributing to household income by selling them, reported both in Rangpur and Nilphamari districts.



Project participants are much aware, and they are planting vegetables, fruits trees at the homestead throughout the year, Farming vegetables in groups by the roads (Nilphamari), Beekeeping, vaccinating chickens, ducks, cattle, and goats in groups; Growing vegetables and spices around the homestead in consultation with the Department of Agricultural Extension (Lalmonirhat); The women and men of the neighborhood have joined various school committees, mosque committees, and standing committees, and as a result, they get much information about the government service.

Forming Savings groups; getting engaged in or accelerating different means of earning; those with leadership qualities worked together to present the problems faced by the residents of the neighborhood in ward and budget meetings of the Union Parishad so that the impoverished and destitute families can be brought under different safety nets; Improving the communications with different government and private offices and receiving the services from a community clinic, agriculture office, livestock office, and social welfare office.



### 3.12 Case Study: The Journey to Overcome Poverty, “God of Small Things”

Habijar – a 45 aged man, his main occupation is a small business; however, he also worked as a seasonal agriculture wage earner, which was his main economic activity before joining the SETU project. He lives with his wife, mother, and two sons.

After getting BDT 7,000 from the SETU project, he sold earthen pots and utensils. Slowly he began to grow his business. He started a shop of beetle leaf and cigarettes nearby by the side. His wife used to take care of the pottery shop, and he used to take care of the beetle nut shop.

Sometimes the seller gives him products on credit. Still, the money he received from the SETU project played an important role in his development. “After getting this money, I became tension-free.” Besides business, he also works as a wage earner during season time and earns 26,000 to 30,000 BDT. This income adds extra financial support for his business. When he works as a wage earner, his wife takes care of his business.

During project tenure, he made a savings group of 30 people from his community. He took a 2,000 BDT loan for his wife's treatment and 3 other loans without any interest from this group. That was a big assistance for him. Besides, after starting a business with the financial assistance of the SETU project, he bought a plastic lock Bank and saved money in it, where he saved 200 BDT every day. Whenever he is in crisis, he breaks his bank and uses this money instead of taking a loan from the creditors. Moreover, he saved some money and opened a Deposit Pension Scheme of 100 BDT monthly.

Earlier, he had a room with a tin roof and bamboo fences. In 2011, he bought a tin and built space of 11 yards. *“I have mended my broken rooms and made another room over there”* – says his wife, Hazara Begum. During having a running business, an NGO provided a loan. Habizar's mother received a Ration Card in 2017 from Union Parishad. From there, he made a free card for us,” says, Hazara Begum. During the crisis and when there is a high price of rice in the market, we can buy 30 kg of rice at the rate of 10 BDT three times a year; we have started sharecropping in 2017—presently cultivating 24 decimal of lands. As a result, we have food all through the year. This year, we cultivated 3 decimal of land as a sharecropper. Have a plan to increase sharecropping in the future.

They think the reasons behind the sustaining situation have income throughout the year. Both husband and wife are engaged in income-generating activities. Enthusiasm; Never sits idle; remain engaged in income-generating activities. Get own grown crops over the year for being involved in agriculture.

They don't need to take a loan from creditors now as they have developed the ability to face the crisis/shock. If required, can lend others. *"Earlier, we were not invited to any community or social occasion. We were told that we would get food. Now they invite because they know that we can give gifts"* – Hajera, wife of SETU participants;

*"Neither cloth nor food. We ate one night and the next night went without food. Now we have three meals. What we could not eat earlier, now eating them. Eat fish 2-3 days a week, an egg every day, meat 2-3 days in a week, vegetables every day during lunch. Spend 20-50 BDT per day for grand-children"* – Habizar a head of graduation sustained household.

### 3.12.1 SETU's influences to retain changes:

#### 3.12.1.1 Socially

According to the graduation sustained copules, having a hygienic latrine at home and in the community has no odor, and people do not get sick like before. Earlier diarrhea was a typical case, but now it does not happen. For treatment purposes, we used to take a loan from the creditors on 150 BDT interest against 1000 BDT, and now we don't need to do that.

*"We used to go door to door for loans during a crisis or treatment. One could have responded after requesting 5 of the creditors/landowner. SETU freed us from this credit, and now the creditors say that you people are rich now."* – Hazera. Now each of the family has got savings.

Society does not have any opposing view on women getting involved in income-generating activities. For this reason, women can move freely now.

Participation in the discussion, sharing opinions, and even decision-making have increased. For this reason, women are participating in income-generating activities enthusiastically. For example, managing the beetle leaf shop to earn wages during the monsoon was his wife's role. Besides, men's participation has increased in household chores. Earlier it was not like that. *"Wearing dresses of own choice from the year 2014, earlier we wore whether we like it or not."* – Hazera

#### 3.12.1.2 Financially

The months of Bhadro, Ashwin, Kartik, and Choitra (four months from summer to autumn) were the month of crisis. We had no alternative but to take loans from creditors. Presently we don't have that crisis for having different income sources. SETU project gave a non-refundable fund of 7000 BDT. This money was a great help. Though, small but by that support he owns two shops now. Earlier, he was dependent on wage-earning for the whole year, but now he works to earn extra income during the off season. SETU project trained up him how to do business, made him mentally enthusiastic. It made him accumulative. Now he saves 100-200 BDT every day beyond his thoughts.

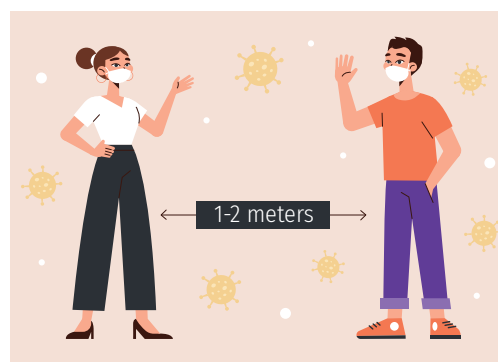
#### 3.12.1.3 Access to government services

Increased awareness about rights and improved linkages, 'we obtained ration card, Old Ageed Allowance for elderly persons of the my family; can avail services from Community clinic as and when necessary. Have received assistance during COVID 19 from Union Parishad' says Habizer.

### 3.14 COVID-19 Outbreak and Its Effects on SETU Households

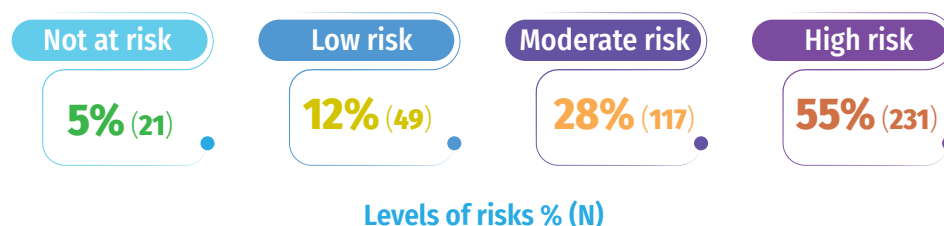
Bangladesh went into a countrywide lockdown towards the end of March 2020; the study only covered the effect of COVID 19 on economic vulnerability focusing on livelihood opportunities. The overall COVID 19 trends in the study districts are not in line with the national context. During the first wave of (2020 to Feb 2021) COVID 19, identified cases in the study districts were very low; the containment measures and movement restriction were not severe like Metropolitan city area ;

In the time of the survey, research participants faced challenges in having a regular income, especially those who were involved in salaried job -informal-formal industry, though they have received financial assistance from industry to meet the crisis, which was less than their regular salary; households are closer to urban area suffered most than those are in rural settings because of closure of markets and blockage to transport routes have affected livelihoods of transport worker and small scale traders and suppliers. Households having homestead land or cultivated land and involved in agricultural wage faced less challenge since the agricultural work continued during the lockdown.



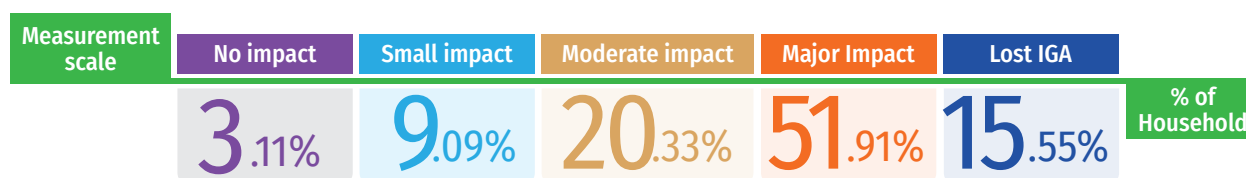
<sup>1</sup> Changes in the Rural Economy in Bangladesh under COVID-19 Lockdown Measures: Evidence from a Phone Survey of Mahub Hossain Sample Households (adb.org)

## Household's livelihood at risk because of COVID-19



Data shows that 45% of the SETU participants think their livelihoods are low to moderate risk due to pandemics, whereas the rest think they are high risk. From the qualitative interview, those working at large factories, households with returnee migrants from larger districts, and working in the Export Processing Zone (EPZ) are more vulnerable and fear losing their job if the shutdown or movement restriction continues for longer or longer next few months.

## Percentage distribution of SETU household's income-generating activities affected by the COVID-19



Due to lock down and movement restrictions, livelihood activities have not impacted equally within the same income group of respondents. The vulnerability was especially apparent in households with a female head or casual labor. People in remote rural areas could continue small-scale business by running grocery shops, selling vegetables, pulling Rickshaws/van within proximity.

Households involved in agri-wages have not been heavily affected by this crisis. They can continue their work, and some groups of the agri-laborer of study districts migrated with special government arrangements to harvest paddy in the haor area. On the other hand, households involved in considerable industry/factory work and transport business are affected by the crisis due to the temporary closure of the industry. However, the worker who works in nearby factory shed could continue their work.

## Coping Strategies during COVID-19

Measurement Scales	% of Household by districts				Total
	Rangpur	Nilphamari	Gaibandha	Lalmonirhat	
Savings	3.55	3.83	3.83	3.83	14.35
Loan	1.67	2.63	0.72	0.72	5.98
Alternative sources of earnings	9.57	6.46	6.94	6.94	32.06
Support from others	9.33	9.33	11.48	11.48	40.43
Others	1.67	1.67	1.44	1.44	7.18
Total	25.60	23.92	24.40	26.06	100.00



SETU PPS study findings show that a small portion of households is incurring new debts and exhausting their savings due to pandemics. The study respondents used livelihoods-based coping strategies are taking a loan (5%) and spending savings (14.35%); and a large number (40.43%) of households are managing foods, crops, and financial assistance from relatives, friends, and neighborhoods as benevolent or as the total transaction with a mutual agreement to get back the same amount of products (both food and non-food item) or cash when they can afford. Findings also show, as coping strategies, many (32.06) have temporarily shifted their occupation and adopted alternative sources of earnings such as, carpenter started selling firewood, shopkeepers began catching fish and selling in the market, some started selling door to door poultry and household essentials than selling it in the store to increase their sales, since customers mobility has restricted.

### Percentage of HH received government assistance during COVID-19 by districts

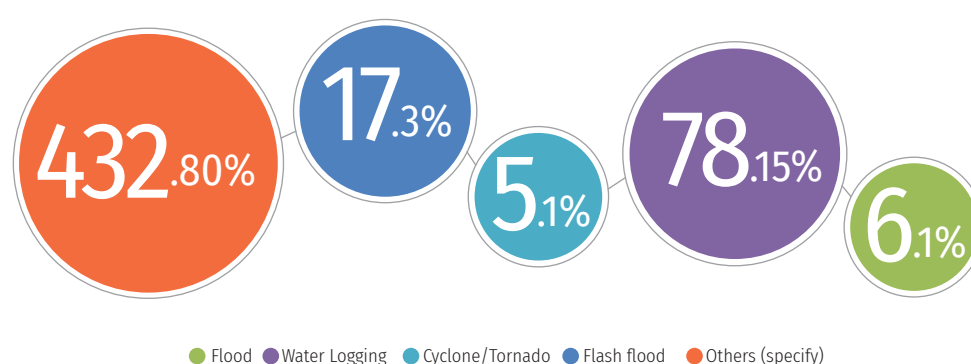
Yes/No	% of Household by districts				Total
	Rangpur	Nilphamari	Gaibandha	Lalmonirhat	
Yes	7.89	9.81	5.26	8.85	31.82
No	17.70	14.11	19.14	17.22	68.18
Total	25.60	23.92	24.40	26.08	100.00

In response to government assistant to ease COVID 19 induced economic burden, 30% of the study population responded that they have received government safety net support during COVID 19; the support includes cash assistance, allowance, and food voucher or both; From the Key informant interviews, with local government officials revealed, that government are taking measures to reduce the spread of COVID 19 as well as increased testing facilities and awareness activities among the communities about COVID 19.

Besides all these measures, the local government also increased their coverage in distributing food and non-food support to vulnerable households. During the survey, it is also noticed that apart from government supports, local NGOs has started mass campaign and awareness activities regarding COVID 19 and distributing hand wash devices, hand sanitizer, and face mask among the community.

### 3.15 Disaster Resilience

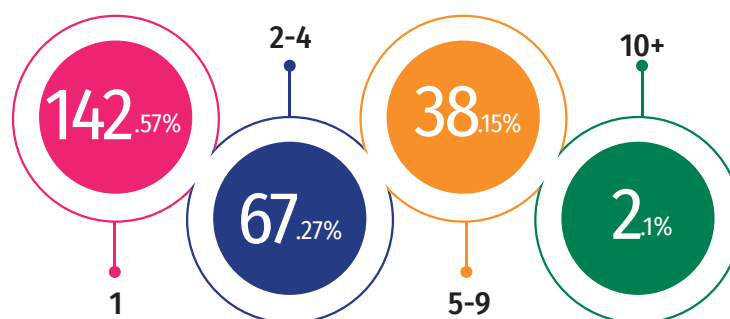
The four study districts have been frequently affected by natural calamities in the last five years, which caused adverse consequences for the local communities. Data shows that SETU households have been exposed to natural disasters such as floods, cyclones, waterlogging, flash floods, droughts, and tropical storms during this period.



The majority of households (80%) were affected by waterlogging, as floodwater entered the low-lying unions and char villages running along the Dharla and Brahmaputra river; Households living on the banks of the river have affected mostly both in a flash flood and waterlogged due to water level rise in the nearby river. In the last five years, 15% of households have been affected by a flash flood;

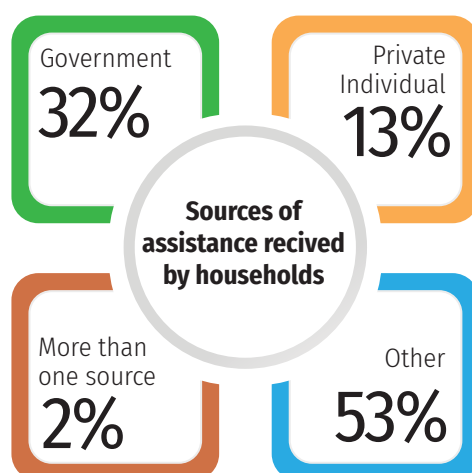
Between the years of 2015-2020, in terms of disaster frequency, SETU households (1%) experienced natural disasters more than 10 times, 15% of households exposed to disaster 5-9 times, 27% of households experienced 2-4 time disaster and 57% household have undergone a natural disaster at least once in the last five years.

## Household experienced number of disaster during last five Year



Survey data shows that the respondent (32%) has received government assistance to restore livelihood in different disaster events in the last five years. However, most of the respondents (53%) rely on other sources for shock absorption, including support from local NGOs, relatives, local committees, and elite, influential local people since now they have better linkage and relation within and beyond their community. Increased social capital, disaster preparedness education, and savings for future crisis management played important roles in coping with natural vulnerabilities.

Dipali Rani, a 50 years old shopkeeper in the Rangpur district, says, “I hardly ever saw Tk 10, but nowadays I count Tk 50,000.” While most project participant families raised other cattle, they now have cows and bulls. They have not only can afford food round the year but also have something to save. Even if they don’t have savings as a team, they have schemes with NGOs or put money in piggy banks. Everyone owns a growing number of chickens, cows, and goats that they can sell in a crisis. Almost all of them have savings with NGOs. Women of every family have savings in the piggy banks that come in handy on rainy days or in flood”.



Four members of Union Parishad stated in their Key Informant Interviews (KII) and discussion that ‘the approach of SETU project to aware poor people about existing services and building linkages was excellent. They [SETU] engaged the representatives from different organizations in the community poverty analysis process and us- this was eye-opening for us. The representatives of different organizations came to know about the problems/demands and the skill and capacities of the community people.

Accordingly, planned the type of activities for the indigent project participants’. All four local representatives stated, ‘community people and we jointly prepared a union wise list for poor and extreme poor and made use of it in Union Parishad; not only that, SETU project provided training to the Union Parishad members, that enhanced the reliabilities of the Union Parishad members. **As a result, the project participants and the Union Parishad share a harmonious relationship even after the project is over and provide all types of services and supports, any crisis or disaster happens in the community.**

When the roads are damaged, we do what can be done by ourselves and the neighborhood residents. We ask the Union Parishad for help when we can’t fix the problem ourselves. The UP assisted in building a U-drain during floods this year, says FGD participants of Barishal, Gaibandha.

The linkage established with the project participants and various organizations (government and non-government) with the help of natural leaders is still there. Ward meetings and budget meetings are not as restricted as before. The natural leaders of the neighborhood go there and highlight the problems of their respective neighborhoods. They now know when any of the services in the Safety Net programs are coming, and when they are allocated, the natural leaders express their opinion. ***"I don't speak about my problems when I go to the Parishad, rather I speak about my locality's issues," says Abbas Ali, Nilphamari.***

Developing acquaintances and relationships with the community clinic, agriculture office, livestock office, and social services office have made it easier for them to get the services they need.

***"We used to cope with poverty by taking loans at high interest. We no longer do that," says Taiyab, a shopkeeper of Adidmari, Lalmonirhat. "We are now free from having to pay the interests, "previously, we didn't know which office was where. SETU held a meeting and told us where the services can be availed and what we are entitled to. SETU taught us that we can strongly demand what is ours. We now have a voice to raise the issues and bring changes" says Ershadul, a 32 years man of ex SETU participant of Lalmonirhat District.***

### 3.15.1 Resilience: How Sustainable is This Impact?

'.....a sustainable society cannot only withstand shocks emanating from hazards but the ability to recover, adapt, innovate and grow. Thus, an essential characteristic of a society or a system that aspires to create and maintain a state of sustainability is that the society or system is indeed resilient. Typical poverty implications of disasters in most developing countries are familiar: the poorest households were found to be the most vulnerable, as they lacked the resources to cope with the requirements during and after the disasters.

SETU PPS findings show that despite repeated exposure to adverse natural events, SETU households (92%) have managed to cover losses, retained their graduation status, and not fallen back to extreme poverty, indicating their increased resilience. It means that households can recover or "bounce back" even after exposing recurring disasters.

Nonetheless, by protecting these un-intended losses over income and human capital, households could be moved up further with expanded capability. In the recent COVID 19 crisis, it is also observed, SETU households have been putting effort to absorb shocks by diversifying their occupation (32%) and optimizing community risk (40%) management system through utilizing social capital; thus, this types of risk mitigation have longer-term effect of household welfare and consumption;

Both quantitative and qualitative findings show SETU graduated households have higher levels of livelihood opportunities, multiple income sources, women's participation in social-economic activities, better savings, fewer dependents on informal loans, and improved access to government services-indicate that households moved up into a lower vulnerability bracket. From four elements of vulnerability, data shows (Table.5) enhanced capacity of SETU households/community to absorb shocks and sustain livelihoods for advance further;

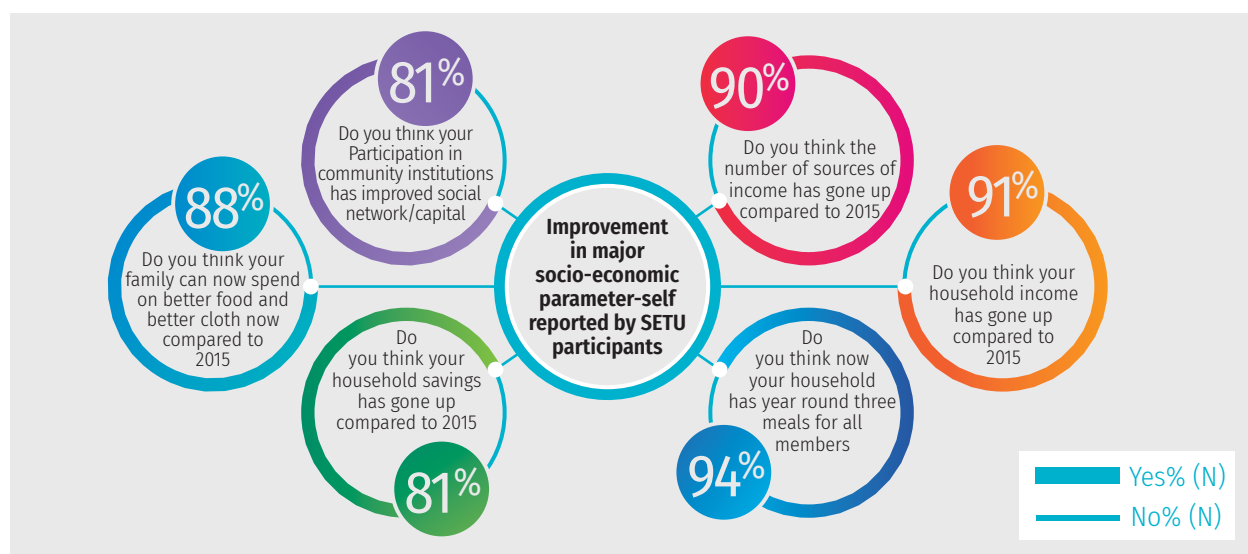
<sup>2</sup> Resilience: A Sustainability Prerequisite? - Ramboll Group

<sup>3</sup><https://d1wtqxts1xzle7.cloudfront.net/37233103/CannonTwiggRowellDfidSocialVulnerabilityLivelihoods-with-cover-page-v2.pdf?Expires=1635664443&Signature=WbVvE5z8Mif-1KY1h-DPY8TcVnyuJcuDw-6U8Ak>





**A relationship of dependency has been replaced by self-resilience, says, 40 years SETU Participants man, in FGD, Barishal**



***“I do not beg now. I am respected in the community now;*** I do not use others’ latrines. I have my hygienic latrine. Do not remain empty stomach. I know the services available around me if there is a new scheme from govt. – non-govt. Offices, they inform me, or I communicate them: a 60 years old woman, Adarshwpara, Lalmonirhat.

### 3.15.1.1 Economic resilience

The econometric analysis (Table 2) shows that the average number of earners has increased among the graduated households. The per average household income increased among both graduated and non-graduated households, but the rate of increase of monthly household income among the graduated households is higher than the non-graduated households. A similar trend is found in per capita monthly income. The number of members, earners, household income, income per member, and earner by graduated are more significant than 5 years before. While the narrating change Key informant and SETU participants stated,

*“SETU project has arranged training for participants according to their necessities and interest by creating linkage with different organizations. For example, Department of Social welfare, Youth development Corporation (Jubo Unnoyon), Rangpur Sotoronji, G4 security agent, Rug unit, and local NGOs (RDRS, Shushilon). They received training on tailoring, got the job in garment factories, and received training on jute materials; and got the job on jute material crafting companies. After training in security guard jobs, they work in different security companies. They, who received training on rug knitting, work in Rug unit and Sweater knitting in EPZ. The participants also added that we used to do puffed rice business, produce cane products, make brooms, and do embroidery or karchupi works have been segmented into different groups. In this way, income-generating/profit-making groups were formed according to the relevant experiences of the project participants. The project did not force any work on the participants, which is why they could work freely”.*

### 3.16 Cultural Change, Changes in Women’s Participation in Public Sphere and Girls’ Education

Both quantitative and qualitative data show that women at SETU households now have a say in the significant decisions of the family as they can contribute to the development of the family by being involved in income generation. For example, women now play a role in spending, saving, and earning. They make decisions concerning the finance of the family. Women’s wage has increased, they now have better bargaining capacity. In the FGD session at Nilphamari, participants say, ‘oppression of women has become less common, thanks to the EKATA Centre’s initiative of training the male family members (husband, father-in-law) who are counterparts of the female members on women rights and benefits of gender equality. Whenever there are a couple of fights and domestic violence, the villagers go there in groups and settle the issue by counseling the family members.

Husbands are giving more importance to their wives’ opinions on using their money and how to earn more. Especially in the case of running a business, husbands and wives work together in consultation. Besides giving feedback on society’s activities and various organizations, women also play a role in decision-making. For example, they are now participating in the development of health and nutrition committee, community clinic meetings, union council, and ward meetings.

The standing committee of the union, the school management committee, the community support group of the community clinic have the women leaders and project participants as members. They can raise the issue of neighborhoods in those committees and give opinions so that the neighborhood's people benefit. The people of the community now value them.

Education of the boys used to be preferred over girls' education. This has changed dramatically as the parents' outlook has transformed. There is no child labor in the area. No one sends their children to work instead of school. There are fewer child marriages nowadays. If such a marriage is arranged, someone secretly informs the Parishad. Community people believe that the EKATA Kendro played the main role in implementing the programs of the coaching center for children. SETU project participant Jashim said, "There was a time we didn't get the kids admitted to a school even when they were 10 years old. Now we send them to school when they are six. My son is in a KG school".

The sustainability perspective study also explored the capacity of asset accumulation and changes in the aspiration of building the future. According to the Engel law, people spend more on non-food items than food items with an increase in income. This implies that an improvement of the living condition allows people to access better shelter, better education, better health, and better equipment. The study results confirm that the condition of the graduated households has improved compared to the non-graduated households.

The below case study presents a nuance of the sustainable change process of SETU participants.



### 3.17 Graduated, Sustained Graduation, and Future Aspirations - A ten years Journey of Progress (2011-2020)

Malek Mia, a 55 years married man, lived with his wife and two children in Adarsha Para, Gaibandha district. Malek Mia doesn't own land. He lives on the Khas land of govt. That is of 4 decimal. Before starting the SETU project, his occupation was a daily wage earner, and he worked as a night guard in the community's market. He used to earn 4000 BDT monthly by working as a night guard and as an agricultural wage earner, could manage to work 10 to 12 days and earn 2500 BDT At the rate of 200 BDT per day. His wife used to work in a Tobacco Company and earned 800 BDT per month. At that time, his social-economic condition was in the poor category. After joining the SETU group, he started a confectionery business in 2011, getting 7,700 BDT from the SETU project.

After paying the labor cost and buying the raw materials for the business, the profit was 8,000 to 10,000 BDT in one month. The bakery business was going on very well for 2 years. He understood that in this competitive market, to be sustainable in this business will be a challenge. Because the other bakeries with better quality are available in the market, this business depends on others. Discuss with his wife, project facilitator, and decide to change the business. He was setting a mechanical shop (TV, mobile and fan repairing) after having training on repairing in 2013.

He did not own land, lived in Khas land of government, and established a mechanic improving shop of TV, mobile and fan there. He sells some parts also in the shop. From this work, he used to earn up to 15,000 BDT. His wife started the tailoring and clothing business in the year 2014. His wife received training of 1 month on sewing and started tailoring work spent 5,000 BDT to buy a sewing machine for his wife; then made two rooms in (to give in rent for shops) during the year 2015 to 2020 half concrete shop in his living place to use it as his wife's showroom. He had to spend 30,000 BDT for it.

Besides, he brought different necessary materials for his wife's business, for example, showcase table chairs, etc. I had a 20,000 BDT from Grameen Bank and used this money to make the shop. His wife has started a business to sell dresses for women besides sewing. His wife, Shapla, used to buy the dresses from outer districts and sell them in her shop. She used to sell 15 to 23 pieces of dresses in a month and have a profit of up to 5,000 BDT. They sold dresses are sewed from her shop. Gets orders from the community as well. His wife's income is 11,000 BDT monthly after deducting all expenditures.

Besides this, they are also involved in Biri (local cigarettes) making work. Because the shops of servicing and tailoring are both in his home, whenever they are free, they sometimes make cigarettes. They earn 1,500 BDT from this work in a month; So the total income of his family is 34,200 BDT monthly; ***"the SETU project provided me and my wife training on tailoring, mobile and TV servicing, I have got seed money from the project to start the business; we also have got training on business management and accounting, and we are continuing business; From SETU managed EKATA Centre we learned about women's decision capacity."***

There were sessions on creating awareness, showing the husband and other male family members as a counterpart, women's rights, and the importance of women's mobility. By attending, the sessions there are changes in the views of the family and the community people. In this case, Malek Mia stated that 'my wife is running the tailoring business. The men of the community do not take this thing negatively. Earlier they never thought that women were working in the shops'.

According to the social well-being categories of the community, now he is in the middle-class category. Because he has earned for the whole year in the family, they have the cash to face other crises and savings, and community people come to them to ask for help and support. They have no food crisis. This family can share their opinions in social activities and get invitations on different occasions. Their children are getting educated.

His future aspiration is ***"to get my daughter graduated and have a job, expand the shop and keep spare parts of the products like mobile fan and amplifier (soundbox) and making my wife's tailoring shop bigger and make a showroom."***



## 4. Concluding Recommendations

*The current analysis aims to understand the status of SETU members in two periods: 2015 and 2020. The data was analyzed using both the descriptive approach and the quantitative approach. In 2015, the graduation rate was 95% which became 92% in 2020. Although the graduation rate declined in 2020, over 90% still now have a graduation score of over 60%. The descriptive and the econometric analyses show that most proton families failed to graduate, a problem intensified with the increasing age of household heads.*

*However, the opportunity for multiple sources of income, numerous income-earning members in the household, asset level, and access to electricity improved the graduation score and assisted the households in graduating. One family now has multiple earning members, and there are now opportunities for them to earn throughout the year. With the financial support of the project, the project participants' family income has increased as they are now involved in various income-generating activities. For example, most of the members were day laborers and van pullers in the past. They are engaged in farming, rearing sheep, cattle and goats, masonry, carpentry, cottage industries, stocking farm produce, trading in raw material, running grocery stores and tea stalls, selling clothes, and weaving.*



With the money from the project, they bought materials and equipment for their businesses. After receiving various skills development training, SETU participants have used the lessons learned to improve their quality of life through small businesses, healthy habits, proper sanitation, and growing vegetables around homes. Necessary services are provided because of the villagers' ongoing communication with different organizations. It has become easier for them to get various allowances from the Union Parishad.



Sujon, Dangapara, Botlagari, Saidpur, Nilphamari

The per average household income increased among both graduated and non-graduated households, but the rate of increase of monthly household income among the graduated households is higher than the non-graduated households. The average household size has slightly increased among the graduated households, whereas it was constant among the non-graduated households. The results showed that the graduation rate is the highest among households, with the score in the economic dimension only compared to other dimensions. However, it is observed that the graduation rate was 100 % among those households having the scores in economic and social dimensions;

The result suggests that graduation is lower among the female-led households than the male-led households, showing unequal movement toward graduation. Female-led households are behind male-led households. This could be because of lack of occupation, limited income sources, limited access to other opportunities, or social and economic discrimination in access to various options and services. To make women and women-headed households be better empowered to rise out of poverty and make progress sustainable, needs to rethink to multiply women's and girls' social and economic empowerment through enhancing their capabilities, ensuring equal access and control over resources by transforming power relations and altering social norms that perpetuate gender inequality.

Poverty is manipulated hardest by the elderly population group socially and economically vulnerable within the extreme poor category. Hardship inflicted more for households with aged-women. To engage with low graduation families and households, better targeting is essential with identifying key drivers/factors for achieving sustainable change; to address those challenges, needs to revisit the existing Social Safety Net (SSN) program and need to influence for to broaden government Old Age Allowance(OAA) including health and shelter coverage for this segment of the population.

While defining sustainability needs to consider multiple aspects, from sustainability lens, it is much easier to measure changes or retention of better well-being over the period in people's lives, later years of the project completions but, identifying interlink between pathways of changes and measuring projects attribution in regards to sustainability, require rigor methodology and analysis; multi-phase research program can give a window of opportunity to build solid evidence to understand the causality of the change process.

Thinking sustainability from the project design stage increases propensity of sustaining impact; sustainability should not end; instead, the elements of sustainability should be means of progress. Projects built with clear Theory of Change (ToC), selecting activities for transformational change could create multiplying impact; as SETU has spread its contribution to forming collective action, strengthening local government system, transferring assets with increased skills, enduring flexibility within the project: offering customized solutions align with root cause analysis.

To address social inequalities linked to ultra-poverty requires working with multiple actors to act together. For this, ownership of the project, not only by the project participants but at a different level through Participatory Analysis and Action, can generate strong social cohesion thus, increased potentiality of best practices for sustaining impact among the community; it has been observed in each SETU project area and has been coming out in all discussions that communities are still maintaining acquaintances and relationships with the community clinic, agriculture office, livestock office, and social services office have made it easier for them to get the services they need.



## APPENDIX

In summary, the following methods drew the answers to the research questions based on the study objectives:

Study Objectives	Research Questions	Types and Number of Respondents	Data Sources
To determine whether households participating in SETU's multidimensional empowerment program (social, economic and political) maintained graduation out of extreme poverty	Does CARE BD's graduation model create long-term impact on extreme poverty?	Quantitative Survey: 400 SETU project participants (both graduated and non- graduated)	Survey results
	Is gender equality within a household a contributing factor in sustaining graduation?	Quantitative Survey: 400 SETU project participants (both graduated and non- graduated) Life Stories: (4X4area=16) SETU participants from four different well-being categories	Life stories documentation Survey results
To explore how and why households participating in the SETU program have maintained graduation out of extreme poverty	Is community-led total development through building solidarity effective in contributing to sustainable graduation out of extreme poverty? How and why?	4 FGDs in each sites with 8-10 SETU participants from four different well-being categories;	FGD, KII documentation
	Does pro-poor leadership effectively reduce exploitation and enable sustained graduation? How and why?	Quantitative Survey 4 FGDs in each sites with 8-10 SETU participants from four different well-being categories;	FGD, KII, Life stories documentation Survey results
	Does expansion of capabilities and access to economic opportunities through sequenced interventions result in lasting impact? How and why?	FGDs: in each 4 sites with 8-10 SETU participants from four different well-being categories; Life Stories: (4X4area=16) SETU participants from four different well-being categories	FGD, Life stories
To identify intended and unintended impacts of SETU activities on the lives and livelihoods of SETU participant households and occurrence of political and social change in their communities	Does CARE BD's graduation model create long-term impact on extreme poverty? Which factors of the graduation model contributed most to reducing extreme poverty?	KII: (2 KII x 5 community=10)with local government and non-sate actors; 4 case studies from each study unions on issues/event with both SETU & Non SETU people	Case studies, FGD, KII, Life stories Survey results

**Table 8:** Criteria and threshold of calculating multidimensional poverty

SL	Criteria	Value
1	<b>ESSENTIAL CRITERIA</b> Food security of household – households having three meals all time: during normal time and crisis time	<=2 strategies = 0 >2 strategies = 1
2	<b>SUPPLEMENTARY CRITERIA</b> <ol style="list-style-type: none"> <li>1. Poverty line - using the mean income and standard deviation in the HIES 2010 report for urban and rural areas, the poverty line corresponding to the lowest 10% was calculated separately for urban and rural areas as Taka per person per day. Government of Bangladesh inflation rates were used to generate new poverty lines for 2020. The income included both cash and in-kind sources</li> <li>2. Number of sources of income – number of income sources (earned income or social protection transfers) of all household members</li> <li>3. Cash savings – the amount of reported cash savings in Taka/household</li> <li>4. Value of productive assets – defined as value of cattle, calves, goats, poultry, pigs, fishing nets, rickshaw, boat, sewing machine, cottage industry, agricultural equipment, mobile phone, bicycle, permanent shop, temporary shop, other permanent assets, and another temporary shop asset</li> <li>5. Food diversity of household - rice, flour, pulse, potato, green leafy and other vegetables, fruit, milk, eggs, fresh/dried fish, poultry, and meat</li> <li>6. Health - prevalence of fever OR diarrhea over the last 30 days of the head of household</li> <li>7. Access to the safe drinking water of household - defined as meeting the MDG guidelines</li> <li>8. Access to hygienic sanitation of household - defined as meeting the MDG guidelines</li> <li>9. Access to cultivable land of household - all land comprising homestead, cultivable, temporary lease, sharecrop and use free of charge</li> </ol>	2010 <42.6 = 0, ≥42.6 = 1 2014 <59.2 = 0, ≥59.2 = 1  <2 income sources in household=0 ≥2 income sources in household = 1  ≥30000  ≥4  ≥4  No diarrhea (Yes=1, No=0)  Tube-well water (Yes=1, No=0)  Hygienic sanitation (Yes=1, No=0) Have access to land (Yes=1, No=0)
	Maximum score	10
	Graduation threshold	60%

Source: Taylor and Goto (2014)

“BRAC used 10 indicators to determine whether a household has “graduated” from extreme poverty. These include having cash savings, three income sources, sandals or shoes, a sanitary latrine, and a solid roof. When six of the 10 indicators are satisfied, a household is deemed to have graduated (Das and Misra, 2010)”.



**Table 9:** Summary statistics of the components of graduation (Percent of household)

Component of Graduation	Gender of Household Head		Weighted Average
	Female	Male	
Not extreme poor	65.82	72.27	71.05
Multiple income source	53.16	60.77	59.33
Holding of asset (value >= 3000)	48.10	83.48	76.79
Household have savings	32.91	51.92	48.33
Can eat more than 4 types of food	91.14	97.94	96.65
Food Security (Yes=1)	30.38	30.68	30.62
School Dropped	97.47	88.79	90.43
Child Mortality	100.00	96.17	96.89
Diarrhea	87.34	90.56	89.95
Have own land	96.15	99.09	98.53

**Table 10:** Distribution of graduation by characteristics of household head

Characteristics	N	Graduation status		Weighted Average
		Non-Graduated	Graduated	
Sex of HH head (Both)	418			
Female	79	37.5	17.36	37.5
Male	339	62.5	82.64	62.5
Age of household head				
<30	23	3.23	5.73	5.54
30-40	122	12.9	30.73	29.4
40-50	118	32.26	28.13	28.43
50-60	68	12.9	16.67	16.39
60+	84	38.71	18.75	20.24
Literacy of household head				
Illiterate	229	50.00	55.18	54.78
Literate	189	50.00	44.82	45.22
Major Occupation				
Agri. Day Labour	20	10.34	22.92	22.03
Other day labor	91	34.48	14.84	16.22
Domestic maid	67	10.34	2.6	3.15
Rickshaw/Van Boat/oth	13	10.34	14.32	14.04
Skilled labour	34	3.45	8.59	8.23
Industrial labour	11	0	2.86	2.66
Petty trade/ business	39	3.45	9.9	9.44
Other business	28	0	7.29	6.78
Others	58	17.24	12.24	12.59

Source: SETU 2020

**Table 11:** Distribution of graduation in 2020 by household characteristics

Characteristics	N	Graduation status		Weighted Average
		Non-Graduated	Graduated	
Dwelling				
Others	83	18.75	19.95	19.86
Tin-roof and tin-wall	335	81.25	80.05	80.14
Sanitation facility				
Open place/handling latrine	27	6.25	6.48	6.46
Pit	105	25.00	25.13	25.12
Water seal rings slab	176	43.75	41.97	42.11
Water seal ring slab	100	21.88	24.09	23.92
Others	10	3.13	2.33	2.39
Lighting source				
Others	47	31.25	9.59	11.24
Grid and REB	371	68.75	90.41	88.76
Household Size				
Proton	36	31.25	6.74	8.61
2	50	12.50	11.92	11.96
3	57	12.50	13.73	13.64
4	120	25.00	29.02	28.71
5	99	12.50	24.61	23.68
6 and above	56	6.25	13.99	13.40
Landholding (Own)				
Landless	96	37.5	24.35	25.36
Up to 10 decimal	285	56.25	69.17	68.18
Above 10 decimal	27	6.25	6.48	6.46

Source: SETU 2020

**Table 12:** Characteristics of the dwelling (Roof and Wall Material)

	Non-graduated Households			Graduated Households		
	Materials of roof			Materials of roof		
Materials of wall	Others	Tin	Total	Others	Tin	Total
Others	0.00	20.59	20.59	0.52	18.49	19.01
Tin	2.94	76.47	79.41	0.52	80.47	80.99
Total	2.94	97.06	100.00	1.04	98.96	100.00

**Table 13:** Occupation of the household head in 2015

Sources of Income	Average			Share		
	Non- graduated HH	Graduated HH	Total	Non- graduated HH	Graduated HH	Total
Agricultural Daily Labour	225	1,164	1,118	13.72	13.05	13.05
Day labour in sea fishing	0	4	4	0.00	0.04	0.05
Day labour in Ghar/fish farm/dry fish business	0	132	126	0.00	1.48	1.47
Other Daily Labour (minti, Kuli etc)	0	397	378	0.00	4.45	4.41
Child labour	0	36	34	0.00	0.40	0.40
Working as domestic support	180	167	168	10.98	1.87	1.96
Rick/van/boat/bullock/pushcart puller	325	919	890	19.82	10.31	10.39
Drive Motorised Van/nasimen/tomtom etc.	0	24	23	0.00	0.27	0.27
Transport Worker (Bus, Truck, Tempo, etc.)	0	292	278	0.00	3.27	3.25
Skilled Labour (Specify)	0	511	487	0.00	5.73	5.68
Own Agricultural Produce	0	433	412	0.00	4.86	4.81
Fishing	0	155	147	0.00	1.74	1.72
Fish farming/ Aquaculture	0	132	125	0.00	1.48	1.46
Livestock / Poultry / Pig rearing/ Ducks	0	318	303	0.00	3.57	3.54
Industrial / Garment Labour	0	343	327	0.00	3.85	3.82
Petty Trade (specify)	375	1474	1421	22.87	16.53	16.59
Petty Trade without proper authorization (Specify)	0	73	69	0.00	0.82	0.81
Other Trade / Business (Specify)	250	398	391	15.24	4.46	4.56
Cottage Industry / Handicraft	0	212	202	0.00	2.38	2.36
Service / Job (Specify)	60	106	104	3.66	1.19	1.21
Rag picking / Scavenging	0	0	0	0.00	0.00	0.00
Begging	25	77	74	1.52	0.86	0.86
Resource collection from forest/hills (fuel wood etc.) and selling/use	0	3	2	0.00	0.03	0.02
Collection of fish fry/ immature crab/oyster etc.	0	19	18	0.00	0.21	0.21
Cash for work	0	219	208	0.00	2.46	2.43
Food for work	0	0	0	0.00	0.00	0.00
Government Allowance under social safety net program and others (disability allowance; VGD/VGF; widows allowance; old age allowance; freedom fighter allowance; education allowances.)	0	85	81	0.00	0.95	0.95
Support from NGOs (Other than CARE/PNGOs)	200	532	516	12.20	5.97	6.02
Training Allowance from GoB/NGO	0	192	183	0.00	2.15	2.14
Fitra/Zakat	0	13	12	0.00	0.15	0.14
Donation from Relatives, political leaders and others line department	0	4	4	0.00	0.04	0.05
Savings Withdrawal	0	4	4	0.00	0.04	0.05
Loan Taken	0	74	70	0.00	0.83	0.82
Residual crop collection	0	0	0	0.00	0.00	0.00
Rice wine sell	0	0	0	0.00	0.00	0.00
Physical asset sale	0	9	9	0.00	0.10	0.11
Special Input Support From CARE/PNGOs	0	203	193	0.00	2.28	2.25
Other (specify)	0	194	185	0.00	2.18	2.16
Household average monthly income	1640	8918	8567	100.00	100.00	100.00



**Table 14:** Occupation of the household head in 2020

Sources of Income	Average			Share		
	Non- graduated HH	Graduated HH	Total	Non- graduated HH	Graduated HH	Total
Agricultural Daily Labour	225	1164	1118	13.72	13.05	13.05
Day labour in sea fishing	0	4	4	0.00	0.04	0.05
Day labour in Ghar/fish farm/dry fish business	0	132	126	0.00	1.48	1.47
Other Daily Labour (minti, Kuli etc)	0	397	378	0.00	4.45	4.41
Daily Labour	2038	4598	4401	45.95	34.56	34.87
Child labour	0	54	50	0.00	0.41	0.40
Working as domestic support	156	382	365	3.52	2.87	2.89
Rick/van/boat/bullock/pushcart puller	1063	1545	1508	23.97	11.61	11.95
Drive Motorized Van/nasimon/tomtom etc	0	204	189	0.00	1.53	1.50
Transport Worker (Bus, Truck, Tempo, etc.)	156	16	27	3.52	0.12	0.21
Own Agricultural Produce	0	410	378	0.00	3.08	2.99
Fishing	0	279	258	0.00	2.10	2.04
Livestock /Poultry / Pig rearing/ Ducks	0	172	158	0.00	1.29	1.25
Industrial/Garment Labour/Skilled Labour (Specify)	209	2016	1876	4.71	15.15	14.86
Petty Trade (specify)	469	869	838	10.57	6.53	6.64
Petty Trade without proper authorization (Specify)	0	131	120	0.00	0.98	0.95
Service / Job (Specify)	0	636	587	0.00	4.78	4.65
Begging	119	42	48	2.68	0.32	0.38
Resource collection from forest/hills/river (fuel wood etc.) and selling/use	78	0	6	1.76	0.00	0.05
Other Trade / Business/Handicraft (Specify)	0	1270	1173	0.00	9.55	9.29
Cash for work	0	13	12	0.00	0.10	0.10
Food for work	0	27	25	0.00	0.20	0.20
and others (disability allowance; VGD / VGF; widows allowance; old age allowance; freedom fighter allowance; education allowances)	147	140	140	3.31	1.05	1.11
Support from NGOs (Other than CARE/PNGOs)	0	5	5	0.00	0.04	0.04
Training Allowance from GoB / NGO	0	8	7	0.00	0.06	0.06
Zakat/Donation from Relatives, political leaders and others line department	0	70	65	0.00	0.53	0.51
Loan Taken	0	418	386	0.00	3.14	3.06
Other (specify)	113	163	159	2.55	1.23	1.26
Average monthly income	4435	13305	12622	100.00	100.00	100.00

**Table 15:** Food expenditure pattern

Food item	2020			2015		
	Non- graduated	Graduated	Total	Non- graduated	Graduated	Total
Rice	50.87	46.35	46.56	38.81	28.89	29.15
Paddy	0.00	0.03	0.03	0.00	0.00	0.00
Wheat	1.81	1.15	1.18	2.85	1.06	1.11
Potato	3.94	4.63	4.60	14.12	8.31	8.47
Pulses	3.16	3.03	3.03	7.87	10.41	10.34
Fish (Dried & Fresh)	12.51	12.69	12.68	20.59	19.54	19.56
Meat	12.53	16.82	16.61	3.20	7.54	7.42
Eggs	3.20	3.42	3.41	2.09	4.55	4.48
Milk	1.28	0.73	0.75	0.83	2.94	2.88
Green Vegetables (Leafy)	3.15	2.07	2.12	1.04	4.97	4.87
Other Vegetables	4.31	4.39	4.38	5.01	5.14	5.14
Fruit	0.37	1.65	1.59	0.83	4.81	4.70
Sugar/molasses	2.88	3.07	3.06	2.75	1.85	1.87

Source: SETU (2015, 2020)

**Table 16:** Food expenditure Elasticity

	2020 coef/se	2015 coef/se
Log of total expenditure	0.866*** (0.098)	0.969*** (0.132)
Graduated: Yes=1, No=0)	1.906*** (0.720)	-0.049 (0.629)
Log of total expenditure*graduation	-0.260*** (0.100)	-0.166 (0.135)
Constant	0.573 (0.697)	-0.145 (0.612)
MSS	159.210	4,231.560
RSS	79.569	1,870.511
Adjusted R <sup>2</sup>	0.664	0.691
F	276.126	309.174

Note: \*\*\* for significance at 1 percent; \*\* for significance at 5 percent; \* for significance at 10 percent.  
The results are obtained by using OLS method.

Source: SETU (2015, 2020)

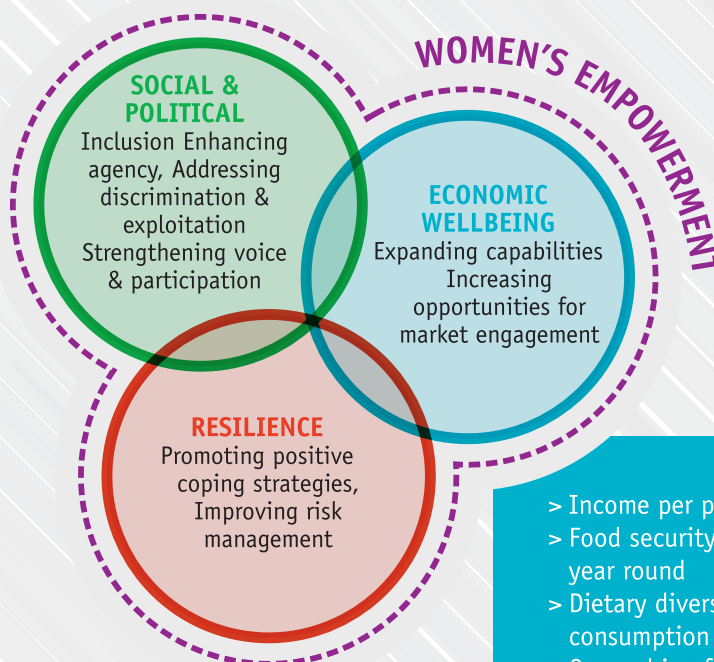
# GRADUATION MODEL



## THEMATIC GRADUATION MODEL

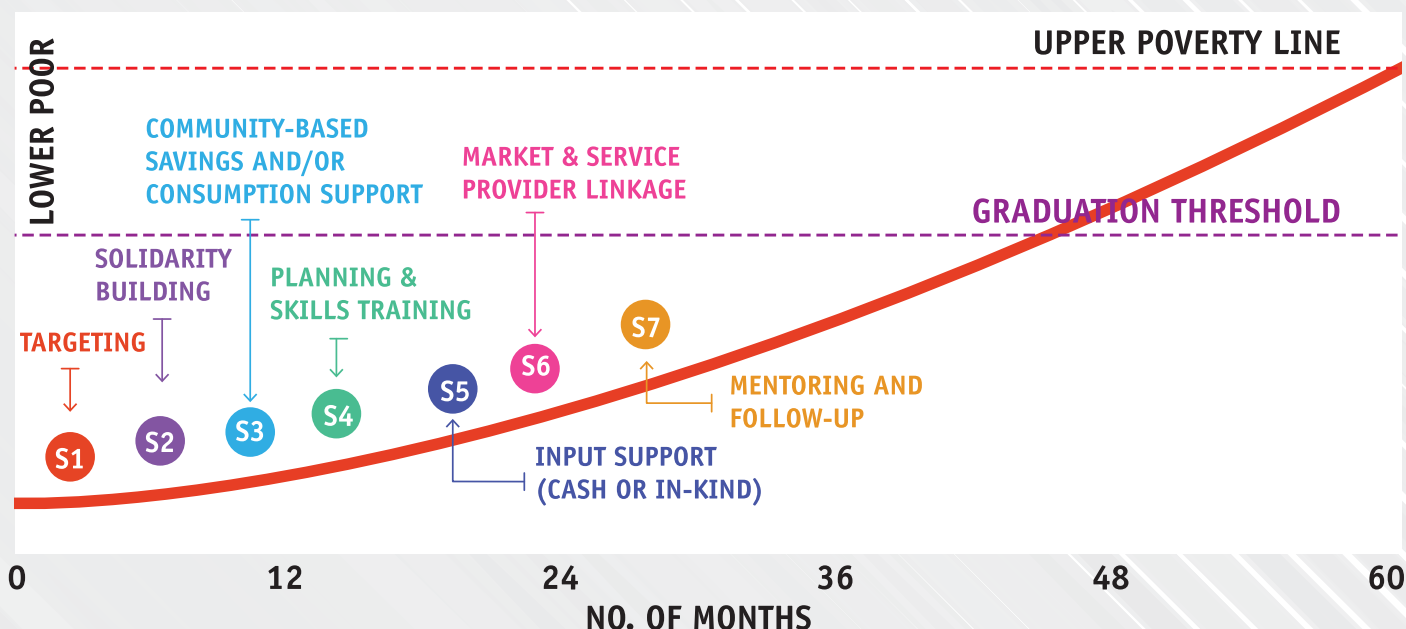
- > Index of women's empowerment
- > Non-engagement in discriminatory and/or exploitative practices
- > Membership of community-based platforms and/or engagement in collective actions
- > Access to services (including social safety net)
- > Index of participation in community & Local Governance decision-making
- > Perceived responsiveness of LG

- > Number of income sources
- > Access to financial services or savings
- > Access to sanitary latrine & safe water source
- > Value of productive assets.



- > Income per person per day
- > Food security: 3 meals/day year round
- > Dietary diversity: food consumption scores
- > Ownership of HH goods
- > Children attending school

## GRADUATION LADDER





## a SETU graduation sustained household



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Founded in 1945 with the CARE Package®, CARE is a leading humanitarian organization fighting global poverty. CARE places special focus on working alongside women and girls. Equipped with the proper resources, women and girls have the power to lift whole families and entire communities out of poverty. In 2020, CARE worked in over 100 countries, reaching more than 90 million people through 1,300 projects.

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