SAPLING HOUSEHOLD CENSUS AND WELLBEING ANALYSIS REPORT

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HELEN KELLER INTL

Sustainable Agriculture and Production Linked to Improved Nutrition Status, Resilience and Gender Equity (SAPLING)

SAPLING Household Census and Wellbeing Analysis Report

Helen Keller International

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Acronyms

CHT	Chittagong Hill Tracts
CRS	Catholic Relief Services
DFSA	Development Food Security Activity
DOB	Date of Birth
FF	Field Facilitator
FFP	Food for Peace
GPS	Global Positioning System
HH	Household
HHC	Household Census
HKI	Helen Keller International
M&E	Monitoring and Evaluation
MCHN	Maternal and Child Health and Nutrition
MOCHTA	Ministry of Chittagong Hill Tracts Affairs
NGO	Non-Governmental organization
PRA	Participatory Rural Appraisal
SAPLING	Sustainable Agriculture and Production Linked to Improved Nutrition Status, Resilience, and Gender Equity
UHC	Upazila Health Complex
UNO	Upazila Nirbahi Officer
USAID	United States Agency for International Development
VIPP	Visualisation in Participatory Programs

Executive Summary

On September 30, 2015, the United States Agency for International Development (USAID) awarded Helen Keller International (HKI) cooperative agreement No. AID-FFP-A-15-00010 to lead the pilot Development Food Security Activity (DFSA), Sustainable Agriculture and Production Linked to Improved Nutrition Status, Resilience, and Gender Equity (SAPLING) which is being implemented in collaboration with the Ministry of Chittagong Hill Tracts Affairs (MOCHTA). Under SAPLING, Helen Keller International (HKI), Catholic Relief Services (CRS), Caritas/Bangladesh, and three local implementing partners, GRAUS, Toymu and Tahzingdong, are addressing food insecurity through an integrated, multi-sectoral approach that aims to sustainably improve nutrition outcomes for vulnerable populations, including women and children, and increase the resilience of households (HH) and communities to human-induced and natural shocks that threaten these outcomes. SAPLING has targeted approximately 50,000 poor and extreme poor HHs and those with children under two and/or adolescent girls (for approximately 57,000 HHs) in all 24 unions and two pourashovas (municipalities) of five upazilas (sub-districts) of the Bandarban District. These are Thanchi, Ruma, Lama, Rowangchari, and Bandarban Sadar, all of which have a high proportion of people living in extreme poverty, combined with high rates of stunting and undernutrition.

SAPLING conducted several assessments as part of its formative research, including a household census (HHC) that was completed in November 2017. Specific HHC objectives were:

1) Generate a list of eligible SAPLING participant households
2) Develop a sampling frame for future studies
3) Generate a list of available service providers and education, health and market facilities
4) Prepare a list of available potable water facilities

The HHC collected information on basic demographics, economic participation and occupation, literacy and education levels, housing and household facilities, natural disaster experiences, village level administrative information, village level education, and health and market level information. Respondents were identified through a participatory rural appraisal (PRA) and included any adult household member with knowledge of the demographic, livelihood and asset information of the household. Participation in the survey was voluntary. The HHCs used qualitative and quantitative methods, including a survey, transect walks, social maps, wellbeing analysis, household lists/social mapping, and a registration questionnaire. SAPLING field facilitators (FF) and field supervisors who were from the Chittagong Hill Tracts (CHT), had past experience working in the local community and had appropriate language skills were recruited as enumerators. They received specific training on relevant quantitative research skills and data collection using a tablet. Survey data was collected via tablet.

A total of 57,004 households were surveyed from 1,577 paras, with 265,992 individuals in the five SAPLING upazilas (36 paras from the upazilas were excluded due to remoteness, security concerns, or they were considered too urban). The HHC found that Lama is the most populated upazila, with a population of 116,625. The total HHC population was 265,992, of which 49.48% were female, 50.5% male and .01% intersex. The average household size was 4.67, with the lowest average size of HHs (4.43) observed in Lama upazila and the highest (5.06) in Ruma upazila. Over ninety percent (90.6%) of the households reported that they have been living in

their respective upazila for more than five years, with 8.5% of the households living there for the past 1 to 5 years. Almost one-quarter of the sample (24.5%) was under five years of age. Adolescent girls (aged 10-19) also accounted for a significant percentage of the total population at 11.4%.

Bandarban has 12 ethnic communities within its area with their own diverse languages, although only 10 ethnic groups live within SAPLING paras. Bengali households (26,354 households) account for 46.2% of all households. The second biggest ethnic community is Marma, with 30.3% (17,278 households) of all households in the HHC. Mro represent the third largest ethnic community with 7.9% of all HHC households (4,516 households). A small proportion of households (1%, n=578) have members from more than one ethnic group. Language diversity is aligned with ethnicity in the area.

Eleven percent (6,320) of households have female heads-of-household, with Lama having the largest number (3,559), as well as the highest percentage (14.2%) among the upazilas. Fifty-five percent (117,341) of the HHC respondents were married. Literacy rate among household members is 46.7%. The literacy rate among the population aged 15 years and older is 49%, which is lower than the national rate of 72.76%. The most prevalent primary source of income is *jhum* farming (19.7%) followed by unskilled day laborers (18.6), paddy farming (13.4%), agriculture day labor (10.1%), farming other than paddy (6.2%), small businessmen (5.7%) and skilled day laborers (5.3%).

Almost 65.8% of households own a mobile phone (66.8% have access). Approximately one-quarter of households (27.6%) have consistent electricity, with 48.0% of households in Bandarban Sadar, compared to only 3.0% of households in Thanchi. Thirty-seven percent of households have access to limited electricity, such as solar facilities (often only viable for charging cell phones). Radio and/or television access is low, at only 13.8% of households, with urban areas reporting significantly higher access than remote areas.

Using a form of savings is low, with 31% of the households reported having any form. Of the households that have savings, the majority has savings in bank accounts (51% of households) and microfinance institutions (56% households) and only 15% save through a savings group. Twenty seven percent (27%) of all households reported experiencing some form of disaster in the last five years, with the most common disasters being loss of livestock due to diseases (29.6%) and excessive rainfall (24%). Poultry rearing is the most popular animal husbandry method (57.9% of households). Small ruminant and cows/buffalo rearing are also practiced, with 28% and 22% of households, respectively, being involved.

Overall, only 8.4% of households reported improved sanitation access (access to a covered toilet) and 58.2% households reported access to safe water. Improved sanitation access varied greatly across upazilas, unions and by subcategory. Almost 45% (44.8%) of households reported having engaged in agricultural production, using 185.92 decimals of land on average in the last year. The average amount of land owned by a household in the five upazilas is 33.21 decimals. On average, one-third (33.3%) of the households in the five upazilas reported having engaged in home gardening during the previous six months.

With a high percentage of adolescents and children in the population, SAPLING has an opportunity to make lasting changes in the CHT through targeted interventions. Low access to radio and television may make mass media behavior change communications difficult and various strategies can be used to overcome this. Poor WASH indicators show that there is much room for improvement in terms of access to safe water, clean latrines and other basic needs. With a relatively high percentage of respondents reporting having farmed or gardened before, many SAPLING participants will be entering the program with prior agriculture knowledge. Savings as part of a resilience strategy would help participants to bear the costs of repeated disasters. Finally, considering the significant ethnic and linguistic diversity of the area, there is need for sensitivity in culture, language and translations of messages to ensure their efficacy.

1. Introduction

Communities in the Chittagong Hill Tracts (CHT) region of southeast Bangladesh suffer from pervasive poverty brought on by a myriad of factors, including recurring human-induced and natural shocks and stressors that increase vulnerability and contribute to heightened food and nutrition insecurity. Conditions are exacerbated by inadequate systems, access to basic services and insufficient involvement of women, youth, people of differing abilities and minority ethnic communities in decision-making bodies. Social conflict, changing land-use practices and deforestation have accelerated environmental degradation, increasing soil erosion, landslides and loss of productive resources and assets. Water scarcity or limited access to clean water are consistent concerns, and hunger periods occur in both dry and rainy seasons. Lack of quality road and communication infrastructure limit availability of and access to health and nutrition services, education, skills training, and social safety net programs, as well as markets and opportunities for income generation. The poorest (often landless), are dependent on subsistence *jhum* (slash and burn/shifting agriculture) cultivation or day labor, have little capacity to withstand shocks of any type and lack belief in their own abilities to influence their circumstances.

On September 30, 2015, the United States Agency for International Development (USAID) awarded Helen Keller International (HKI) cooperative agreement No. AID-FFP-A-15-00010 to lead the pilot Development Food Security Activity (DFSA), Sustainable Agriculture and Production Linked to Improved Nutrition Status, Resilience, and Gender Equity (SAPLING) which is being implemented in collaboration with the Ministry of Chittagong Hill Tracts Affairs (MOCHTA). Under SAPLING, HKI, Catholic Relief Services (CRS), Caritas/Bangladesh, and three local implementing partners, GRAUS, Toymu and Tahzingdong, are addressing food insecurity through an integrated, multi-sectoral approach that aims to sustainably improve nutrition outcomes for vulnerable populations, including women and children, and increase the resilience of households (HH) and communities to human-induced and natural shocks that threaten these outcomes. SAPLING has targeted approximately 50,000 poor and extreme poor HHs and those with children under two and/or adolescent girls (approximately 57,000 total) in all 24 unions and two pourashovas (municipalities) of five upazilas (sub-districts) of the Bandarban District. These are Thanchi, Ruma, Lama, Rowangchari, and Bandarban Sadar, all of which have a high proportion of people living in extreme poverty, combined with high rates of stunting and undernutrition.

SAPLING has conducted several assessments as part of its formative research, including a household census (HHC) that was completed in November 2017. The HHC surveyed 57,004 HHs with 266,040 individuals in 1,609 paras (36 paras were excluded due to remoteness, security concerns, or they were considered too urban).

2. Objective of the Household Census

The data collected through the HHC provides the most detailed information available on the total population in villages across the five upazilas in Bandarban District, their geographic spread, socio-demographic and employment information, socio-economic background of HHs and families, as well as the conditions of community resources and dwellings. The most recent government HHC conducted in the area was done five years ago and there appear to be differences between data recorded and the situation on the ground. In order to obtain the most recent information and register key target participants such as pregnant and lactating women, SAPLING undertook a project HHC.

The HHC objectives were as follows:

1. Generate a list of eligible SAPLING participant HHs
2. Develop a sampling frame for future studies
3. Generate a list of available service providers and education, health and market facilities
4. Prepare a list of available potable water facilities

3. Methodology

3.1 Design

The HHC survey was conducted in all proposed SAPLING working areas. Initially, the area was identified through the 2011 HHC list conducted by the Bangladesh Bureau of Statistics. Through the para leaders (i.e. Karbari, Headman) and villagers, additional villages not included in the 2011 HHC list or newly created paras were identified so that all villages/paras in each union were included. SAPLING recruited indigenous and local field facilitators (FF) and field supervisors who had past experience working in the local community and had appropriate language skills who received specific training on relevant quantitative research skills in order to undertake the HHC.

Participation in this study was voluntary. Prior to each surveying in each community, community leaders, officials, and families were invited to hear an explanation about the components of the intervention as well as on the aims and objectives of the associated research, with an opportunity for potential participants to ask questions regarding the research. The FFs offered an oral explanation of the purpose and process of the study and provided a participant information sheet and informed consent document. FFs explained the personal risks and individual benefits, as well as the overall benefits that may arise from the study, in a culturally appropriate way using the relevant language. Both documents were read aloud to the respondents, who were then able to ask any questions. Due to the high prevalence of illiteracy, oral, witnessed consent forms were used. Participants were given the option to withdraw from the study at any time, without

discrimination or adverse consequences. Participants did not need to give any reason or justification to withdraw from the study. In case of withdrawal, individual consent permission was required to include already collected data into the analysis of the study. Identifying data such as name, date of birth and address were strictly confidential and handled under the regulations set out in the laws of the People's Republic of Bangladesh.

Respondents to the HHC included any adult HH member with knowledge of the demographic, livelihood and asset information of the HH. A HH was defined as a group of individuals (related or not) who live together and share the same eating and cooking arrangement. A participatory rural appraisal (PRA) was conducted as a part of the participant selection process before the quantitative HHC data collection with community members who were representative of the area in terms of gender, age, occupation and socioeconomic status. The group participated in discussions and drawing of maps of different parts of the village/para including the Karbari/ headman were the respondents for village level information. Any person within the community who had knowledge of structures, institutions, resources etc. found within the village/para was recruited to participate.

Criteria for Inclusion of Households in the HHC within paras/villages

- At least six months of residency within the community
- Intention to stay at the same locality for at least the next twelve months

Criteria for Inclusion of Institutions Within paras/villages

- Located within a registered para/villages of a SAPLING Union

3.2 Data Collection

SAPLING FFs were responsible for all data collection; there were two FFs per team and each team was responsible for interviewing 20-30 HHs each day. Each team first conducted the transact walk through the community, social mapping and well-being analysis (through PRA) and finally the quantitative HHC data collection. The FF was responsible for conducting interviews with all HHs, establishing a rapport with the respondents through the transect walk, and entering data into an automated system. Union Supervisors collected data from different institutions using a questionnaire and supervised the HH interviews.

Survey data were collected using a tablet-based data collection system. The study team also kept blank paper versions of the questionnaires as a backup in case of any emergency with the tablets, which ultimately were not needed. Once data collection was complete, the dataset was stored on a secured computer with an automated backup system at HKI's Dhaka office.

3.3 Qualitative and Quantitative Methods

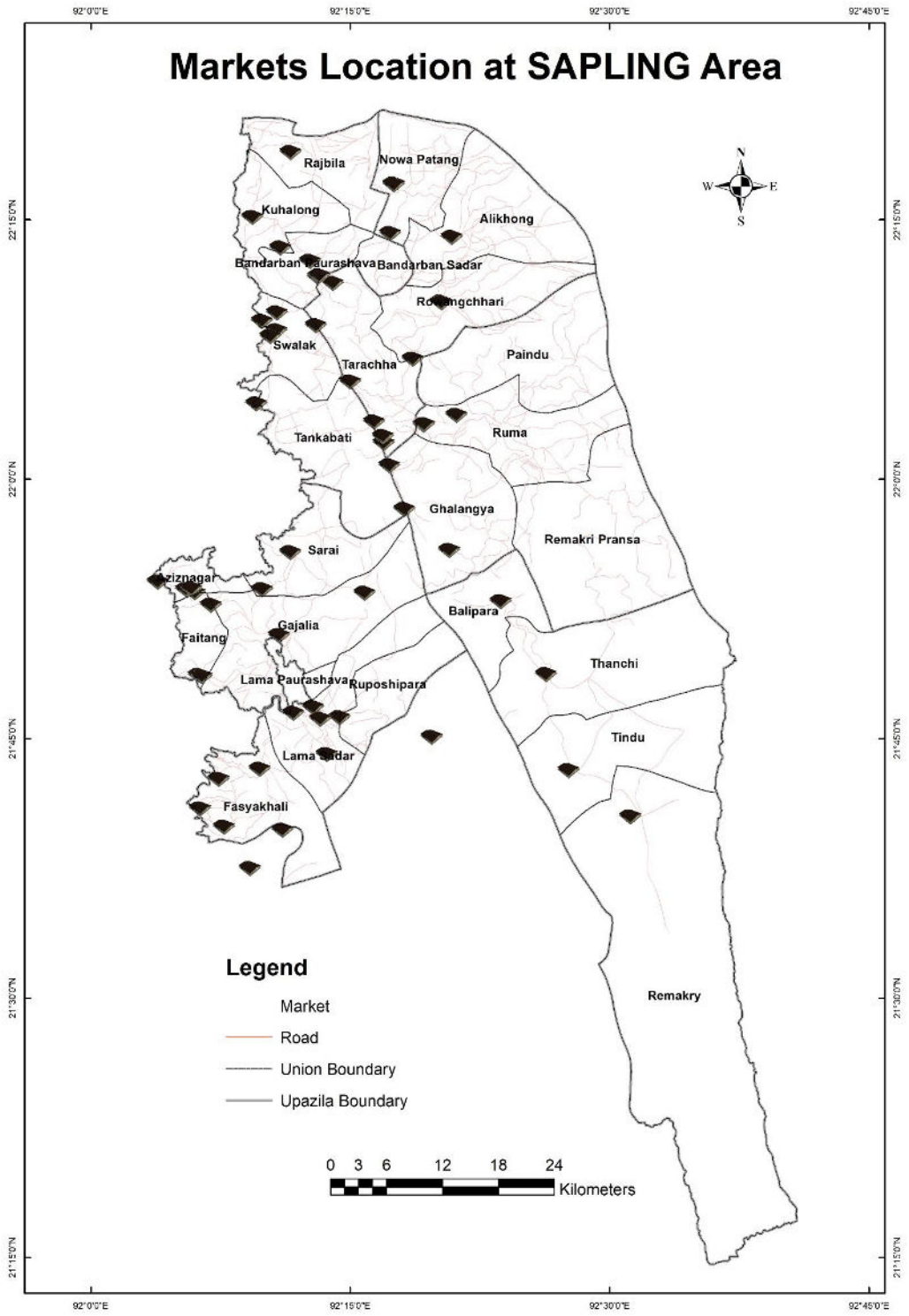
Each team visited assigned villages and followed the procedures below:

I. **Transect Walk:** The transect walk was used for building rapport between the community and the FF prior to the social mapping exercise, and it helped in drawing/preparing the social map needed to identify local institutions. During the transact walk, the team tried to get a clear understanding of the village boundaries, HH locations, institutions and other

important features. While conducting the walk, the teams talked with the inhabitants to understand the vulnerabilities and risks the villages face.

II. **Prepare a Social Map**: During the transect walk, the team invited community members from different parts of the village to sit and participate in preparing a social map for their village/para. On the day of mapping, FF gathered all community members in a common place, including local stakeholders and key informants. The study team provided a brief introduction about the project and the objective of the mapping activities. A map was drawn by the community members with the help of the study team with the following features clearly delineated using colored symbols:

- The boundary
- The locations of HHs
- Health centers (Community Clinic, Expanded Programme on Immunization center, Health & Family Welfare Center, Local doctors)
- Markets (Hat/Bazaar)
- Institutions (College, School, Mosque, Madrasa)
- Other important features



III. **Wellbeing Analysis:** After drawing the social map, the team conducted a "Wellbeing Analysis," which divides HHs into four separate categories (i.e. Extreme poor, poor, middle and rich). This was based on local community perception regarding ownership of

productive asset/resources, educational background, occupation, income, social status, religion, etc. The whole process was conducted with the help of local community members. HHs were categorized into rich, middle, poor and extreme poor using criteria set by the community members.

IV. HH lists were prepared based on the Social Mapping and the HHC was conducted using a structured questionnaire.

V. **Registration**: The Monitoring and Evaluation (M&E) unit developed a questionnaire format to conduct the population-based registration surveys in all targeted villages/para. The questionnaire included HH demographic information as well as geo-locations and basic SAPLING project purpose related indicators (Maternal and Child Health and Nutrition [MCHN], Livelihood and Disaster Risk Management) information (Annex 1). Registration data was collected through mobile-based apps. After the surveys were conducted, the program team selected project participants based on the selection criteria for a particular service under each purpose (Annex 3). During the Social Map activity, every HH was identified with a unique coded number for monitoring SAPLING indicators.

3.4 Outcome Measures

The primary outcome measures for the HHC were as follows**:**

- Population characteristics
- Economic participation and occupation
- Literacy and education levels
- Housing and HH facilities
- Natural Disaster experiences
- Village level administrative information
- Village level education, health and market level information

Subsequently, the institutional HHC was conducted. On an average, the team stayed in each para for seven days. The first three days they completed the PRA and during the remaining days they conducted the HHC using a semi-structured questionnaire. If a HH was not available during the first attempt, two additional attempts were made to capture HH information. In some cases, the main respondent from each HH was not available for the interview due to engagement of the respondents in Jhum cultivation in remote hills. To overcome this challenge, we collected information about their availability and prepared a follow up visit schedule for those HHs. For institutional surveys, we applied the same procedure if no respondents were available. One hundred percent of all HHs and institutions approached were ultimately reached.

3.5 Use of HHC Data

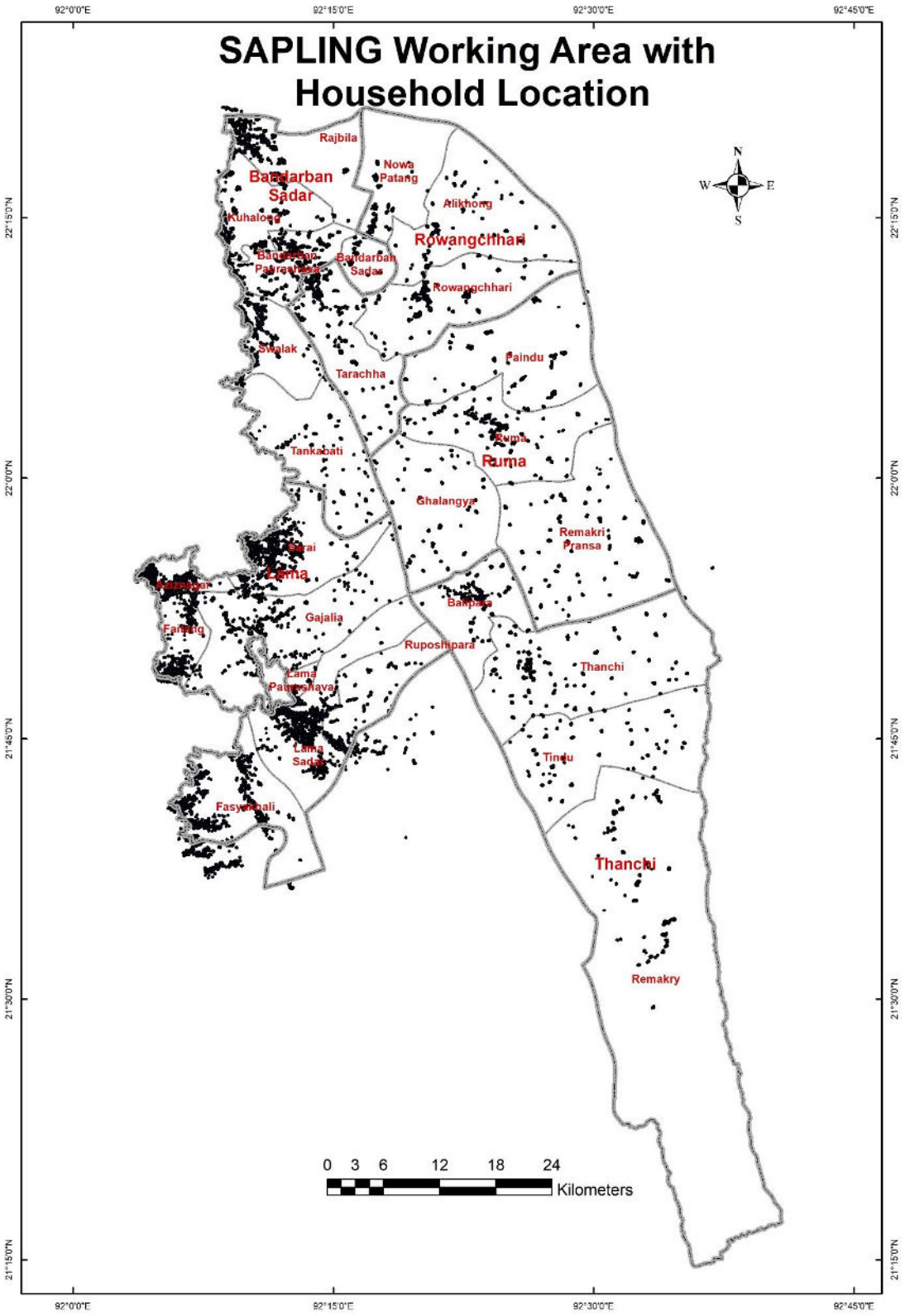
After completing the HH and institutional HHC, the M&E team selected participants for the project. Participants and their families received a unique identification number for registration and monitoring the direct and indirect benefits received from the project. Project participants received training on Essential Nutrition Actions (ENA) and Essential Hygiene Actions (EHA), Integrated Enhanced Homestead Food Production (IEHFP), Income Generating Activities (IGA)

(i.e. on farm and off farm economic activities), familiarization with multi crop production, natural resource management, group formation for disaster awareness raising, early warning and protection strategies and systems. They also received training on nutrition in emergencies, climate sensitive agriculture production, and formation of Disaster Management Committees for improved forest management practices.

3.6 Timeline

HHC activities took place over the course of 13 months, as there were two rounds of data collection. A team from each union including union supervisors, FFs and community health service workers received a 10-day training session on PRA and HHC questionnaire with field test. The first round of data collection began in August 2016 and continued until July 2017. Two additional months of data collection were needed from November to December 2017 to capture information from HHs not available during the first round, not reached due the seasonal deadlines for implementation in completed areas, and reconciliation of HH IDs in some areas where the PRA had been completed several months ago.

3.7 Sample Size



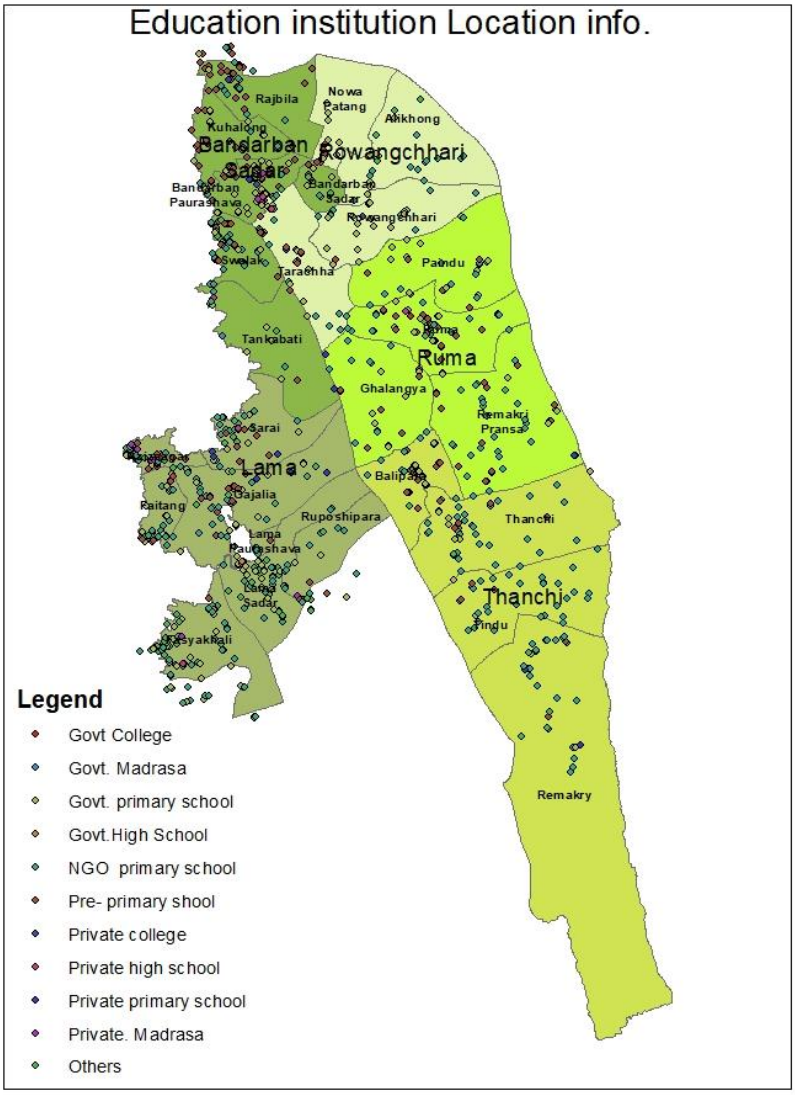
The SAPLING HHC reached a total of 57,004 HHs living in Bandarban District as per the Population and Housing HHC, Bangladesh Bureau of Statistics (2011). The HHC was conducted in 24 unions and two municipalities within five upazilas (Bandarban Sadar, Lama, Rowangchhari, Ruma, Thanchi). The majority of the HHC population was found in Bandarban Sadara and Lama Upazilas (70.7%). The population distribution across each upazila is as follows:

Upazila	Union	Total # of para surveyed	Total # of Households surveyed	% of Household
	Bandarban Shadar	83	2,240	15%
	Kuhalong	53	2,827	19%
	Rajbila	59	2,538	17%
	Suwalak	68	2,560	17%
	Tankabati	49	1,185	8%
	Bandarban Paurashava	64	3,813	25%
Bandarban Sadar	**Total**	**376**	**15,163**	**27%**
	Aziznagar	67	2,341	9%
	Faitang	53	2,728	11%
	Fasyakhali	100	6,531	26%
	Gajalia	85	2,674	11%
	Sadar	43	1,973	8%
	Rupshipara	61	2,898	12%
	Sarai	89	1,926	8%
	Lama Paurashava	67	4,031	16%
Lama	**Total**	**565**	**25,102**	**44%**
	Alikhong	48	1,174	19%
	Nowa Patang	32	1,133	19%
	Rowangchhari	49	1,816	30%
	Tarachha	58	2,001	33%
Rowangchhari	**Total**	**187**	**6,124**	**11%**
	Ghalangya	54	1,089	18%
	Paindu	39	1,350	23%
	Remakri Pransa	38	921	16%
	Ruma Sadar	101	2,540	43%
Ruma	**Total**	**232**	**5,900**	**10%**
	Balipara	36	1,222	26%
	Remakri	63	1,230	26%
	Thanchi	64	1,442	31%
	Tindu	54	821	17%
Thanchi	**Total**	**217**	**4,715**	**8%**
Total		**1,577**	**57,004**	**100%**

3.8 Study Population

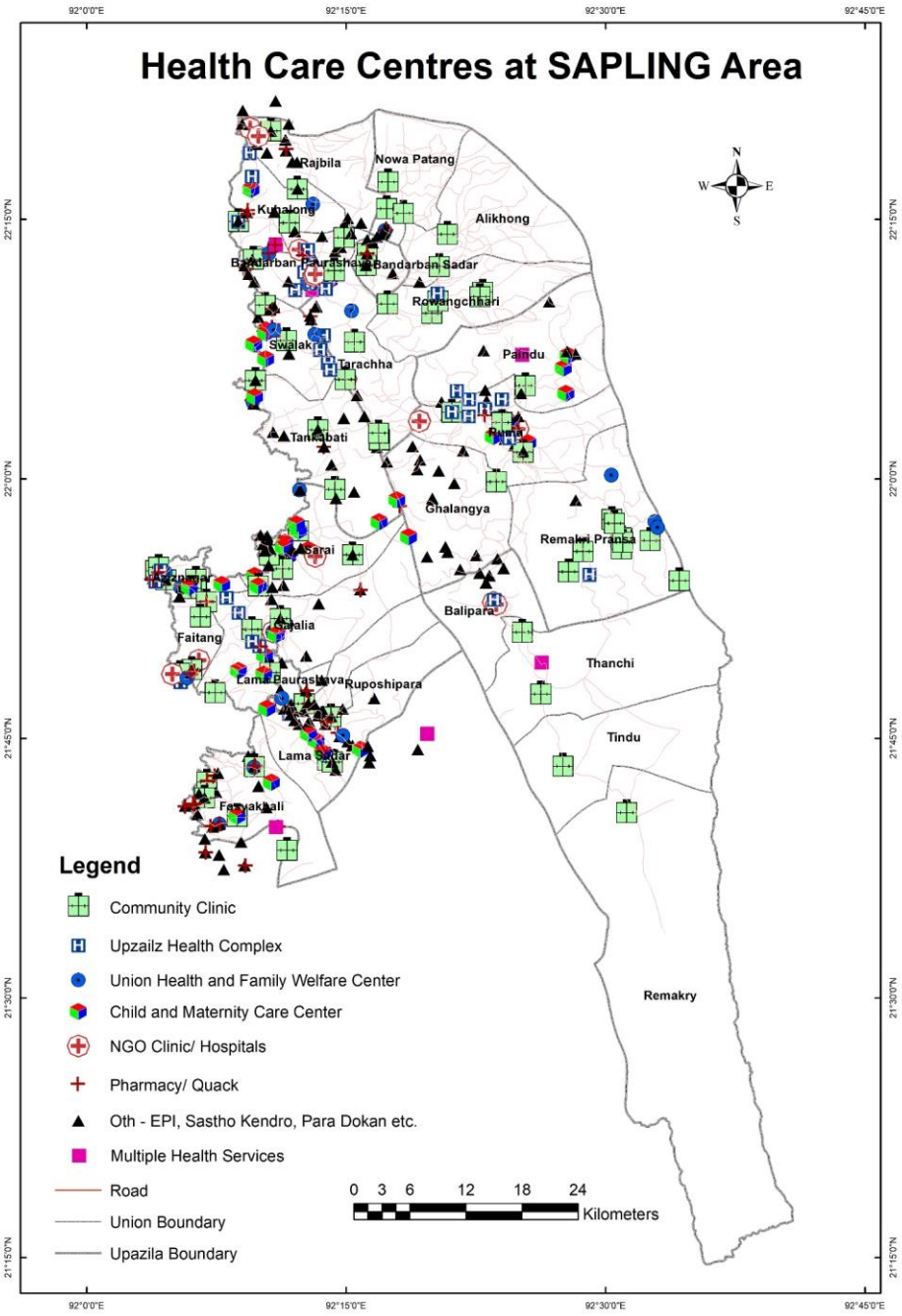
Institutions recorded in the social map were included in the HHC database. The services surveyed fell into the following categories:

- Any educational institutions such as pre- primary, government, non-governmental organization (NGO) primary, or private primary schools, government and private madrasas, government and private high schools, government and private colleges
- Any health institutions such as community clinics, upazila health complexes (UHC), Union health and family welfare centers, child and maternity care centers, NGO clinics/ hospitals, pharmacies/ traditional doctors.
- Markets such as local daily, weekly, and upazila markets



As can be seen from the maps, there are a greater number of services in urban areas and for many rural areas, these facilities are non-existent or require significant travel to access, such

as the one health facility and one market located in Thanchi Upazila.



3.9 Data Quality management

Questionnaire modules were pre-tested before conducting the HHC. Changes were made according to the findings of these pre-tests. Data were directly transferred from the FFs' tablets to a password protected online server and to computers dedicated for data handling and storage. Union Supervisors along with technical officers supervised the data collection process during the implementation of the HHC. Each supervisor directly observed approximately one fourth of the

FFs data collection each week. The M&E manager and M&E officers were also in the field to provide oversight and guidance. Union supervisors randomly selected FFs and observed all aspects of data collection including sample identification, informed consent, interview technique and also verified time spent with each HH. Union supervisors recorded all of their observations, discussed and shared their observation with the team at the end of the day. Union supervisors checked data in the tablets and cross-matched with PRA information before sending data to the server from tablets. The analysis team downloaded data from the secure website every fifteen days to run routine checks on outliers and duplicate entries. In addition, the analysis team also reviewed the data monthly to make any adjustments on the questionnaire (i.e. adding options to multiple choice questions) to increase the ease of data collection and accuracy of the data.

4. Limitation and Challenges

Reaching HHs was a major challenge during data collection. Respondents, particularly HH heads, were not available during the day due to Jhum cultivation, day labour and other HH income earning activities. Adult family members often return home late in the evening due to their work outside the homestead. It was not possible for data collectors to collect information during the evening due to safety and security issues. In many cases multiple visits were needed.

A total number of 35 paras were excluded from the HHC due to security reasons and these paras have been excluded from SAPLING interventions. Four paras from Lama, three from Ruma and seven from Thanchi Upazilas were excluded. These paras are located at border areas and are controlled by transboundary armed rebel groups. Twenty-one paras from Bandarban pourashava were also dropped as the vast majority of HHs in this area are well off.

SAPLING seed distribution in Bandarban Sadar, Lama and Rowangchhari sub-districts began while data collection was still ongoing in Thanchi and Ruma sub-districts, which represented a challenge for front line staff and supervisors to complete duties and supervision. The large volume of data, and modifications to the questionnaire during the HHC implementation also created challenges for the analytical team.

5. Observations and Findings

5.1. Socio-economic Profile: Information about respondents, households and household members

Upazila	Male	Female	Intersex	Male %	Female %	Intersex %	Total
Bandarban Sadar	34,664	34,184	15	50.34	49.64	0.02	68,863
Lama	58,970	57,641	14	50.56	49.43	0.01	116,625
Rowangchhari	13,628	13,484	2	50.26	49.73	0.01	27,114
Ruma	15,174	14,674	1	50.84	49.16	0.00	29,849
Thanchi	11,897	11,644	0	50.54	49.46	0.000	23,541
	134,333	131,627	32	**50.50**	**49.49**	**0.012**	265,992

The total HHC population was 265,992 of which 49.48% were female, 50.5% male and .01% intersex.

5.1.1 Size of Households

Upazila	Paras	Households	Household Members	Average Household Members
Bandarban Sadar	376	15,162	68,863	4.54
Lama	565	25,103	116,625	4.65
Rowangchhari	187	6,124	27,114	4.43
Ruma	232	5,900	29,849	5.06
Thanchi	217	4,715	23,541	4.99
	1577	**57,004**	265,992	**4.67**

A total of 57,004 HHs were surveyed from 1,577 paras in the five working upazilas: Bandarban Sadar, Lama, Ruma, Rowangchari and Thanchi, of Bandarban. Lama is the most populated upazila in terms of HHs (25,103) and HH members (116,625). Lama also has the largest number of paras at 565 while Rowangchari has the least (187). Thanchi is the least populated upazila in terms of HHs (4,715) and HH members (23,541). Overall, Lama and Bandarban Sadar accounted for 70.6% of total HHs. The average HH size obtained in the HHC was 4.67, which is close to the national HH size between 4.4 and 4.5 (HHC 2011, BDHS, 2014). The lowest average size of HHs (4.43) was observed in Lama upazila and the highest average size of HHs (5.06) was observed in Ruma upazila.

5.1.2 Residence in the Chittagong Hill Tracts

Upazila Name	Less than one year	1-5 years	More than 5 years	Total
Bandarban Sadar	181 (1.19%)	1598 (10.54%)	13383 (88.27%)	15162
Lama	197 (.78%)	2112 (8.41%)	22794 (90.8%)	25103
Rowangchhari	56 (.91%)	305 (4.98%)	5763 (94.11%)	6124
Ruma	19 (.32%)	439 (7.44%)	5442 (92.24%)	5900
Thanchi	52 (1.10%)	380 (8.06%)	4283 (90.84%	4715
	505 (.89%)	**4834 (8.48%)**	**51665 (90.63%)**	**57004**

Over ninety percent (90.6%) of the HHs reported that they have been living in their respective upazila for more than five years with 8.5% of the HHs have been living there for 1-5 years. Less than one percent (0.9%) reported having lived in the respective upazila for less than a year.

5.1.4 Age and Sex Distribution

All members of each HH were listed by the primary HH respondent.

Table: Distribution of population by age group and sex

	0-11 months	12-23 months	24-59 months	5-9 years	10-14 years	15-19 years	20-49 years	50-64 years	Above 64 years	Male	Female	Transgender	Total
Upazila													
Bandarban Sadar	1,638	1,372	4,145	8,153	8,244	6,995	29,219	6,372	2,725	34,664	34,184	15	**68,863**
Lama	2,964	2,756	8,346	15,728	15,762	12,708	45,877	8,470	4,014	58,970	57,641	14	**116,625**
Rowangchhari	605	568	1,593	3,232	3,282	2,698	10,963	2,703	1,470	13,628	13,484	2	**27,114**
Ruma	733	718	2,293	4,249	3,864	2,763	11,395	2,560	1,274	15,174	14,674	1	**29,849**
Thanchi	682	617	1,816	3,556	3,061	2,366	8,561	2,002	880	11,897	11,644	0	**23,541**
Sex													
Male	3,408	3,003	9,184	17,721	17,475	13,987	52,146	11,680	5,729				**134,333**
Female	3,213	3,028	9,008	17,192	16,732	13,540	53,856	10,424	4,634				**131,627**
Transgender	1	0	1	5	6	3	13	3	0				**32**
%	2.5%	2.3%	6.8%	13.1%	12.9%	10.3%	39.9%	8.3%	3.9%	50.5%	49.5%	0.0%	**100%**
Total	**6,622**	**6,031**	**18,193**	**34,918**	**34,213**	**27,530**	**106,015**	**22,107**	**10,363**	**134,333**	**131,627**	**32**	**265,992**

Almost one quarter of the sample (24.5%) was under five years of age, which is higher than national average of 9.6% for this age group (Unicef, 2013). Adolescent girls (aged 10-19) also accounted for a significant percentage of the total population at 11.4%, higher than the national average of 10% (BBS, 2011).

5.1.5 Ethnicity and Language

Bandarban has 12 ethnic communities within its area with their own diverse languages. Bengali HHs (26,354 HHs) account for 46.2% of all HHs. The second biggest ethnic community are the Marma, with 17,278 HHs and 30.3% of HHs across all five upazilas. Mro represents the third largest ethnic community with 4,516 HHs (7.9% of all HHs) in the five upazilas.

Language diversity is aligned with ethnicity in the area. Bengali is the most spoken language with 46.0% of HHs identifying it as first language in the HH. Marma is the second most practiced language within 30.0% HHs. Similar to the ethnicity data, Mro is the third most popular language with 7.9% of HHs practicing.

Within each upazila and pouroshova, there are different concentrations of different ethnic groups. The following lists out those differences:

Bandarban Sadar
Bengali are the biggest ethnic community (42.7%) and most popular language (42.9%) in the upazila. The second biggest community (35.1%) and language (34.6%) are the Marma. Tanchangya (7.4% and 7.1%) and Mro (7.3% and 7.2%) are the other significant ethnic communities and languages in the upazila respectively.

Lama
The Bengali comprise the biggest community (74.9%) and language (84%) in Lama. Marma (15.3% and 15.1%) and Mro (5.1% and 5.1%) also have a significant presence in terms of ethnicity and language in the upazila.

Rowangchari
Rowangchari is diverse in terms of language and ethnicity. The largest community and language is Marma (61.2% and 60.8%). Tanchangya (13.2% and 13.1%) is the second biggest community and language speakers in the upazila followed by Tripura (7.3% and 7.2%) and Bawm (6.1% and 6.0%).

Ruma
Marma (39.05% and 38.71%) and Bawm (23.63% and 23.69%) are the biggest communities and language respectively. Mro (16.24% and 16.17%) also have a significant presence in the upazila followed by Tripura (10.56% and 10.49%). Bengali make up only 6.66% of the HHs in the upazila.

Thanchi
Similar to Ruma and Rowangchari, Marma (43.8% and 43.2%) make up the largest community and language in Thanchi. Tripura (20.1% and 19.8%) have the second largest presence in the community followed by Mro (19.9% and 19.5%). Bengali (8.1% and 5.5%) and Khumi (5.8% and 5.7%) are the other significant communities and languages in the upazila.

5.1.7 Female-headed Households

Upazila	Total Households	Female Headed HHs	Female Headed HHs (%)
Bandarban Sadar	15,162	1634	10.78
Lama	25,103	3559	14.18
Rowangchari	6,124	543	8.87
Ruma	5,900	314	5.32
Thanchi	4,715	270	5.73
Overall	**57,004**	**6320**	**11.09**

Among the 57,004 HHs in the HHC, 11.1% (6,320 households) were female headed (HHs where women are the decision makers) Lama had the largest number of female-headed HHs (3,559) as well as the highest percentage (14.2%) among the upazilas. Thanchi had the fewest number of female-headed HHs (270) whereas Ruma had the lowest percentage (5.3%) of female-headed HHs in comparison with other upazilas.

5.1.8 People living with disabilities

Upazila	Disability by category							Total (by Upazila)
	Mobility	Mental	Vision	Hearing	Difficulty with daily self care	Communication	Other	
Bandarban Sadar	359	261	147	112	67	113	151	**1210**
Lama	707	401	206	158	182	238	316	**2208**
Rowangchari	146	65	87	64	24	35	44	**465**
Ruma	174	65	67	42	25	46	100	**519**
Thanchi	98	46	52	38	22	37	72	**365**
Total (by disability)	**1484**	**838**	**559**	**414**	**320**	**469**	**683**	**4767**

Respondents self-reported that 99.9% of the population had no disabilities. A total of 4,767 disabled persons were documented from five upazilas, of which 44.4% were female HH members. The major disabilities among the 4,767 HHs were mobility and (31.1%) and mental disabilities (17.6%). Lama upazila had the highest number of disabled persons (2,208) whereas Thanchi upazila had the fewest numbers of disabled persons (365).

5.1.9 Marital Status

Fifty five percent (117,341) of the HHC reported being married. Additionally, the number of widowed, separated, and unmarried members is highest in Lama upazila (46%) and lowest in Rowangchari upazila (43%).

	Married	Unmarried	Widow	Divorced	Separated	Total
Age						
5-9 years	93	13,268	0	0	0	13,361
10-14 years	318	33,807	5	0	2	34,135
15-19 years	4,244	23,153	38	54	31	27,520
20-49 years	87,876	13,377	2,791	1,028	893	105,967
50-64 years	18,321	140	3,354	105	173	22,095
Above 64 years	6,489	82	3,662	26	72	10,331
Upazila						
Bandarban Sadar Upazila	31,531	21,648	2,876	290	314	56,661
Lama	50,310	37,295	4,029	577	715	92,929
Rowangchhari	12,666	8,373	1,133	101	54	22,327
Ruma	12,778	9,405	1,033	141	42	23,402
Thanchi	10,056	7,101	782	104	47	18,090
Gender						
Male	58,678	46,698	1,864	301	197	107,739
Female	58,652	37,107	7,989	912	975	105,642
%	55.0%	39.3%	4.6%	0.6%	0.5%	100.0%
Total	117,341	83,822	9,853	1,213	1,172	213,409

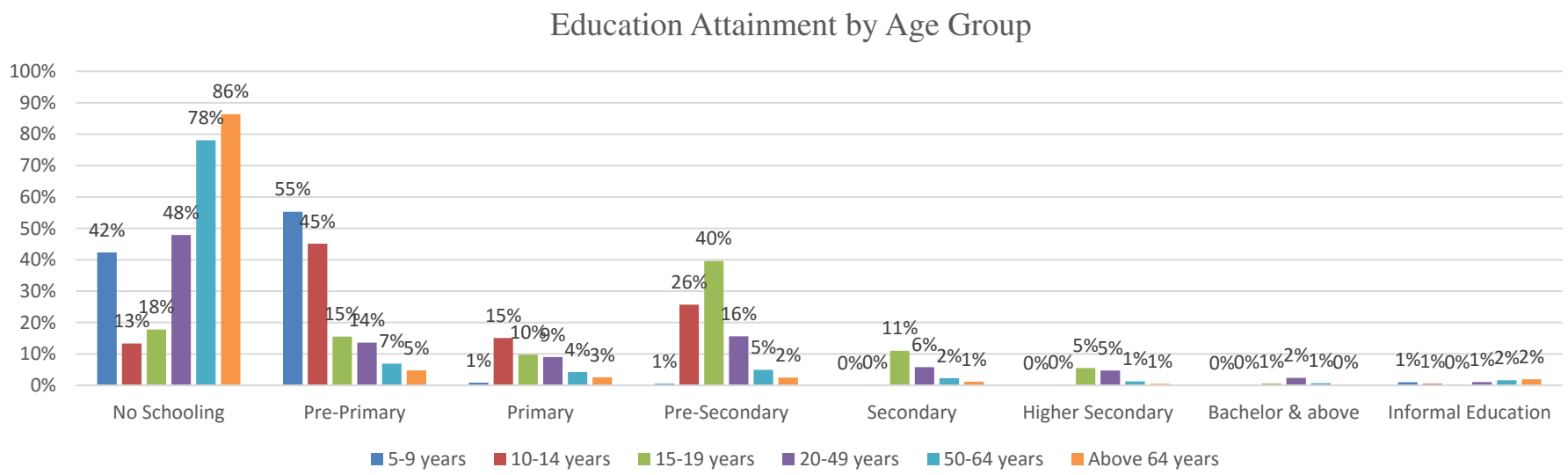
5.1.10 Education

Literacy rate among the HH members in the HHC is 46.7%. The literacy rate among the population aged 15 years and older is only 49% which is much lower compared to the national rate (72.76%).[1] Among the five upazilas, HH members from Bandarban Sadar upazila have the higher literacy rate at 63% whereas Thanchi upazila has the lowest literacy rate at 42%.

Education attainment is poor across all age groups although younger age groups seem to be more equally divided among education categories. Importantly, respondents in the 20-49 year old category and in their most productive years were predominately illiterate.

The gap between men and women widens considerably at higher secondary school, although few of either sex attend these grades or higher (7 % of women and 10% of men have completed high school or above).

[1] http://uis.unesco.org/country/BD



	No Schooling	Pre-Primary	Primary	Pre-Secondary	Secondary	Higher Secondary	Bachelor & above	Informal Education	Total
Upazila									
Bandarban Sadar	21,285	12,092	4,885	11,267	3,101	2,523	1,431	542	57,126
Lama	38,267	23,170	9,438	15,374	2,910	2,654	1037	507	93,357
Rowangchhari	10,863	4,740	1,514	3,805	1,377	604	129	607	23,639
Ruma	12,374	3,829	1,322	3,196	1,380	596	148	391	23,236
Thanchi	11,420	3,865	848	2,288	746	323	63	38	19,591
Gender									
Male	41,803	26,293	9,966	19,093	5,425	4,144	1,955	1,128	109,807
Female	52,397	21,397	8,038	16,829	4,088	2,555	852	957	107,113
%	**43.4%**	**22.0%**	**8.3%**	**16.6%**	**4.4%**	**3.1%**	**1.1%**	**1.0%**	**100%**
Total	94,209	47,696	18,007	35,930	9,514	6,700	2,408	2,085	216,949

5.2 Sources of Income

The biggest source of income in the five working upazilas of Bandarban is *jhum*[2] farming (19.7%) followed by unskilled day labourers (18.6) and paddy farming (13.4%). Other major sources of income included agriculture day labour (10.1%), farming (other than paddy at 6.2%), small businessmen (5.7%) and skilled day labourers (5.3%). Other professions had between 0%-4% of HHs reporting it as their sources of income. Fish cultivation was reported as the lowest source of income at 0.08% of all HHs.

However, the sources of income varied greatly within each upazila. Ruma, Thanchi and Rowangchari reported having jhum farming as the source of income for 65.6%, 47.9%, and 44.1% of HHs respectively. On the other hand, Bandarban Sadar and Lama upazilas reported only 8.7% and 4.2% of HHs having jhum cultivation as their source of income. Lama and Bandarban Sadar upazilas reported having 27.8% and 16.8% of HHs working as unskilled day laborers whereas Ruma, Thanchi, and Rowangchari reported only 4.3%, 6.9% and 8.3% of HHs.

Bandarban Sadar
HHs in Bandarban Sadar upazila reported working as unskilled day laborers (16.8%), paddy farmers (15.06%), and salaried workers (11.7%) as the top sources of income. Agriculture day labourer (9.5%), farmer (other than paddy at 7.8%) and jhum farming (8.7%) were some of the other significant sources of income in the upazila.

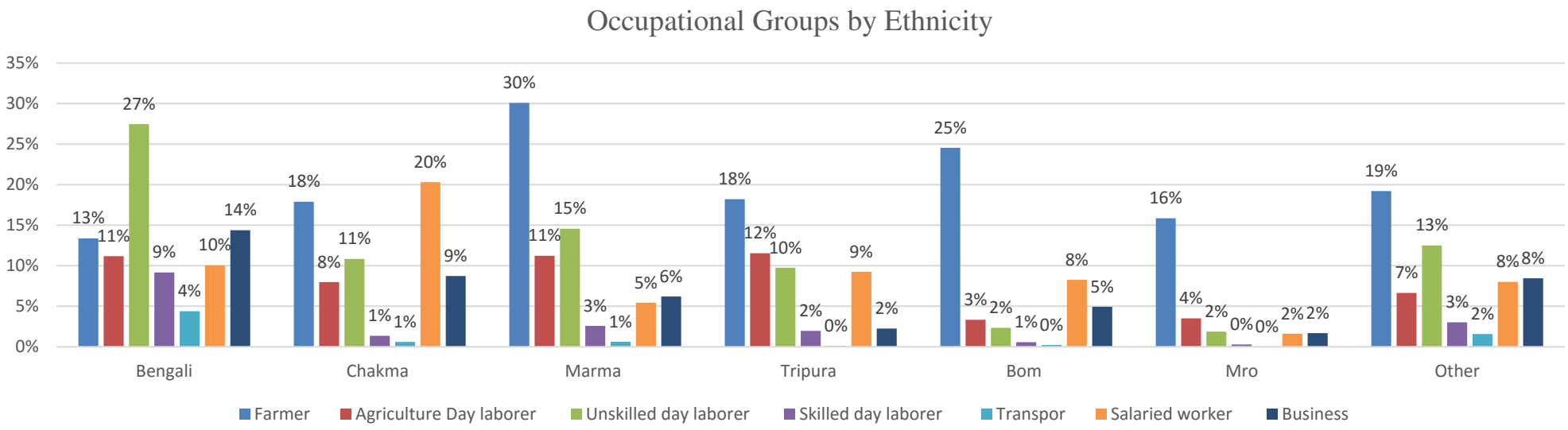
Lama
HHs in Lama Sadar upazila reported working as unskilled day laborers (27.8%), agriculture day laborers (15.1%) and paddy farmers (15.1%) as the top sources of income. Skilled day laborers (7.6%), salaried workers (7.4%), and small businessmen (6.2%) were other significant sources of income in the upazila.

Rowangchari
Jhum farming (44.1%) and paddy farming (19.9%) were reported as the major sources of income, making up more than 60% of the HHs in Rowangchari. Unskilled day laborers (8.3%) and farmers (other than paddy at 6.2%) were the other significant sources of income.

Ruma
In Ruma, a staggering 65.6% of HHs reported jhum farming as their major source of income. This is the highest percentage among the five upazilas. The second most prevalent source of income is working as a farmer (other than paddy) at 9.3%, less than one sixth the time of jhum farming.

Thanchi
For Thanchi, jhum farming accounted for almost half of the HHs' source of income at 47.9%. Paddy farming came in second at 14.9% of HHs followed by farming (other than paddy) at 8.0%, unskilled day laborers, (6.8%) and agriculture day labourer (5.2%).

Occupation Category	Bengali	Chakma	Marma	Tripura	Tanchanga	Mro	Lusai	Bom	Pankhoa	Khumi	Chak	Khyang	Rakhain
Farmer (Paddy)	2,431	78	3,858	445	303	458	0	32	0	37	1	82	1
Farmer (Other than paddy)	1,089	41	1,330	177	110	257	1	536	0	18	0	20	0
Agriculture Day laborer	2,942	53	1,935	394	169	158	0	77	0	1	0	27	1
Unskilled day laborer	7,228	72	2,511	333	288	84	0	54	0	7	1	75	2
Skilled day laborer	2,414	9	443	67	86	13	0	13	0	0	0	1	3
Rickshaw/van/cart puller/ baby taxi driver /boatman	1,153	4	106	4	47	0	0	5	0	0	0	0	0
Fisherman	94	0	1	0	0	0	0	0	0	0	0	0	0
Salaried worker	2,646	135	936	316	182	72	10	191	0	16	5	21	5
Professional	113	0	31	8	2	4	0	8	0	0	0	1	0
Businessman	1,629	27	317	24	60	32	1	35	0	2	1	2	8
Petty businessman	2,157	31	752	53	144	44	6	79	0	1	0	19	8
Household help	72	0	8	0	0	0	0	1	0	0	0	0	0
Jhum farmer	110	183	3,969	1,502	494	3,308	4	1,198	9	395	0	182	0
Poultry/ Livestock	92	0	32	6	6	9	0	19	0	0	0	0	0
Handicrafts	68	3	47	12	5	5	0	16	1	1	0	0	0
Vegetable Cultivation	330	6	251	7	43	4	0	0	0	0	0	1	0
Fish cultivation	26	1	13	3	1	0	0	0	0	0	0	1	0
Collecting resources from hill/lake	311	5	86	21	14	32	0	9	0	0	0	1	1
Others	1,419	17	617	45	39	33	0	41	0	3	1	6	1
Total	26,324	665	17,243	3,417	1,993	4,513	22	2,314	10	481	9	439	30


Occupational Groups by Ethnicity
35%
30%
25%
20%
15%
10%
5%
0%
13%
11%
27%
9%
4%
10%
14%
18%
8%
11%
1%
1%
20%
9%
30%
11%
15%
3%
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2%
19%
7%
13%
3%
2%
8%
8%
Bengali
Chakma
Marma
Tripura
Bom
Mro
Other
Farmer
Agriculture Day laborer
Unskilled day laborer
Skilled day laborer
Transpor
Salaried worker
Business

5.3 Access to Facilities

5.3.1 *Mobile Access*

According to the HHC findings, 66.8% of HHs have access to mobile/cellular devices and 65.8% of HHs own a mobile phone. Access to Mobile/cellular devices varied greatly among upazilas and unions. Lama and Bandarban Sadar Upazila have the highest prevalence of mobile/cellular devices access at 73.1% and 72.8% of HHs respectively. A majority of HHs in Rowangchari and Ruma have access to mobile/cellular devices, with ownership reaching 55.3% and 52.0% respectively. Thanchi, the most remote SAPLING implementation area, had the lowest rate of access to mobile/cellular devices at 47.1%.

Union data reveal further variation (within upazilas as well). In Bandarban, Bandarban Pourashova (Municipality) 87.8% of households had mobile/cellular access whereas only 35.4% of HHs in Tankabati union reported having connectivity. In Ruma upazila, Ghalangya and Ruma Sadar unions reported 76.5% and 60.6% of HHs have access to a network whereas the remaining two unions, Paindu and Remakri Pransa, reported only 31.6% and 29.2% HHs had access respectively. The starkest contrast can be seen in Thanchi upazila, where Balipara union reported 77.2% of HHs had access to mobile/cellular access while only 6.4% of HHs in Remakri union (lowest among all unions) reported having access to mobile/cellular devices.

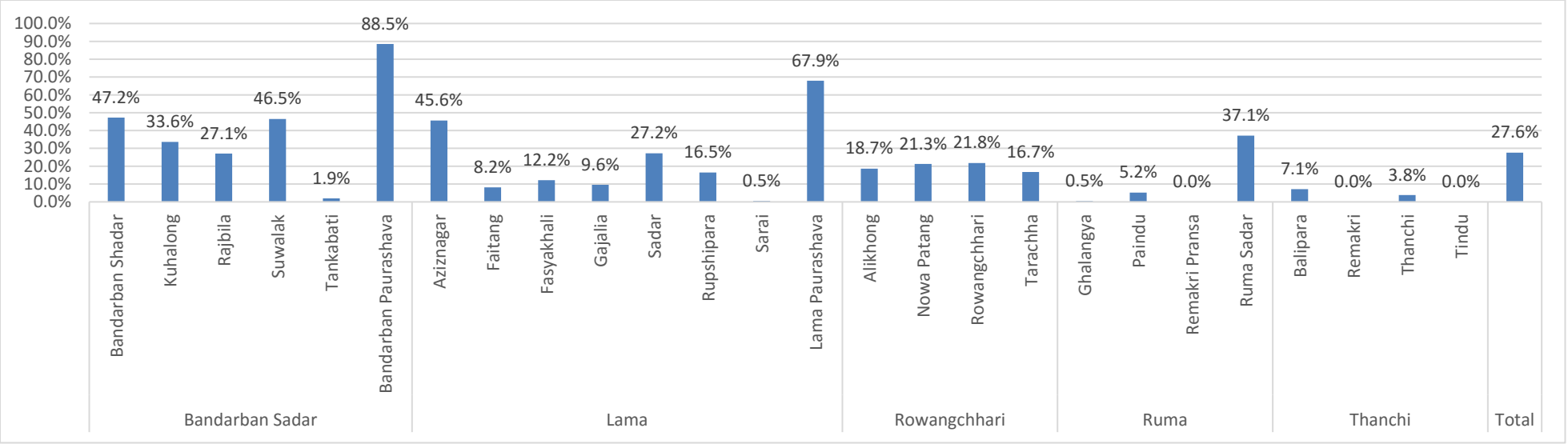
5.3.2 Access to electricity

Access to electricity was generally low among the five upazilas. Slightly more than one fourth of the HHs (27.6%) have access to electricity. Bandarban Sadar HHs reported having the highest access to electricity, at 48.0% of HHs. On the other hand, only 3.0% of HHs in Thanchi reported having access to electricity. Lama, Rowangchari, and Ruma reported having 24.3%, 19.5%, and 17.3% of HHs having access to electricity, respectively. By comparison, Bandarban Sadar has almost double the rate of access to electricity compared to the second highest upazila, Lama. Compared to the national average[3] of 75.9% population having access to electricity, the overall average of 27.6% is very low and indicates the overall lack of infrastructure in the CHT.

Union data were also varied with Bandarban Sadar Paurashava having the highest percentage of HHs with electricity (88.5%) whereas Tindu and Remakri in Thanchi upazila, and Remakri Pransa in Ruma upazila reported having no HHs (0.0%) with access to electricity. Sarai union in Lama upazila had only 0.5% of HHs with access. Out of the 26 unions and municipalities (paurashavas) only two municipalities (Bandarban Sadar and Lama) reported having more than 50% HHs (88.5% and 67.9% respectively) with access to electricity. Eleven unions, including seven out of eight unions of Ruma and Thanchi, reported having less than 10% HHs with access to electricity.

[3] World Bank, Sustainable Energy for All (SE4ALL) database from the SE4ALL Global Tracking Framework led jointly by the World Bank, International Energy Agency, and the Energy Sector Management Assistance Program. https://data.worldbank.org/indicator/EG.ELC.ACCS.ZS?locations=BD

Percentage of households with access to electricity by area of residence



5.3.3 Access to solar facilities

Almost 37% of HHs have access to limited electricity such as solar facilities (often only viable for charging cell phones). Those areas with lowest rates of traditional sources of electricity appear to have the highest coverage of solar powered electricity. On average, 36.9% of all HHs reported having access to solar power facilities. Thanchi and Ruma upazilas, which had the lowest access to electricity, reported having the highest percentage of solar facilities at 69.7% and 61.7% respectively. This trend holds true for the rest of the upazilas as well. Bandarban Sadar reported having the lowest percentage of HHs, 24.2%, with access to solar facilities.

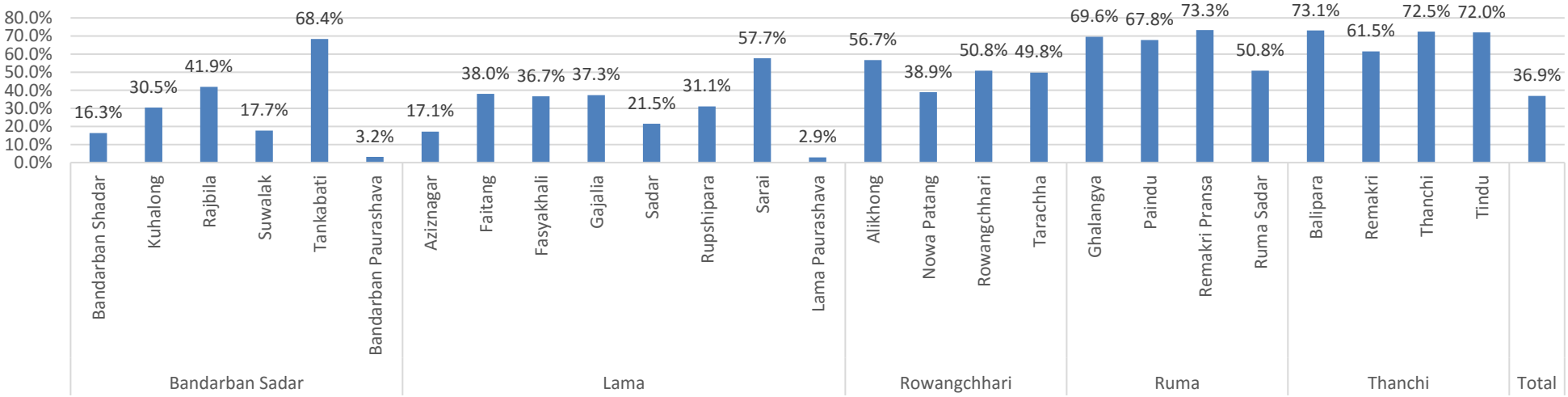
The trend follows when investigated from a union perspective. The unions with the lowest access to traditional sources of electricity (0.00%), Remakri Pransa, Remakri, Tindu, reported having higher percentages of HHs with access to solar facilities at 73.3% (highest among all unions), 61.5% and 72.0% respectively. Bandarban Sadar and Lama, which had the highest access to electricity, reported having the lowest access to solar facilities at 3.2% and 2.9% (lowest among all unions) respectively.

5.3.4 Radio and Television access

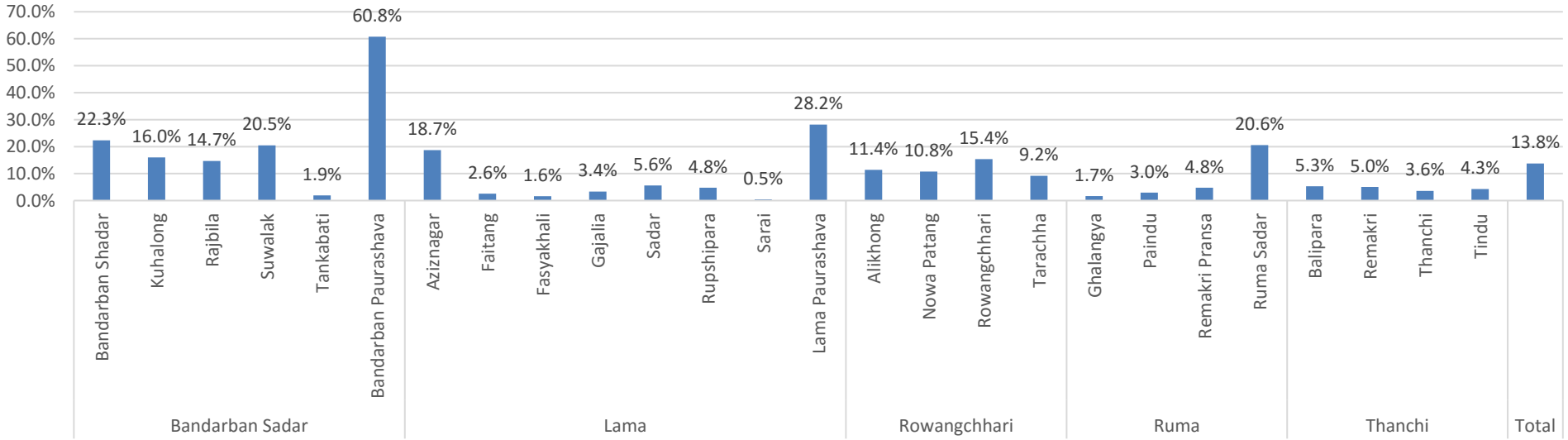
Slightly less than 14% (138%) of HHs reported having access to radio and/or television. Bandarban Sadar upazila had the highest percentage of HHs, 27.6%, with access whereas Thanchi upazila had the lowest at 4.5%.

As anticipated, urban areas had higher coverage with Bandarban Paurashava HHs reporting 60.8% of HHs with access and the lowest in more remote Sarai union at 0.5%. Fifteen of the 26 unions and municipalities reported having less than 10% of HHs with access to radio and/or television.

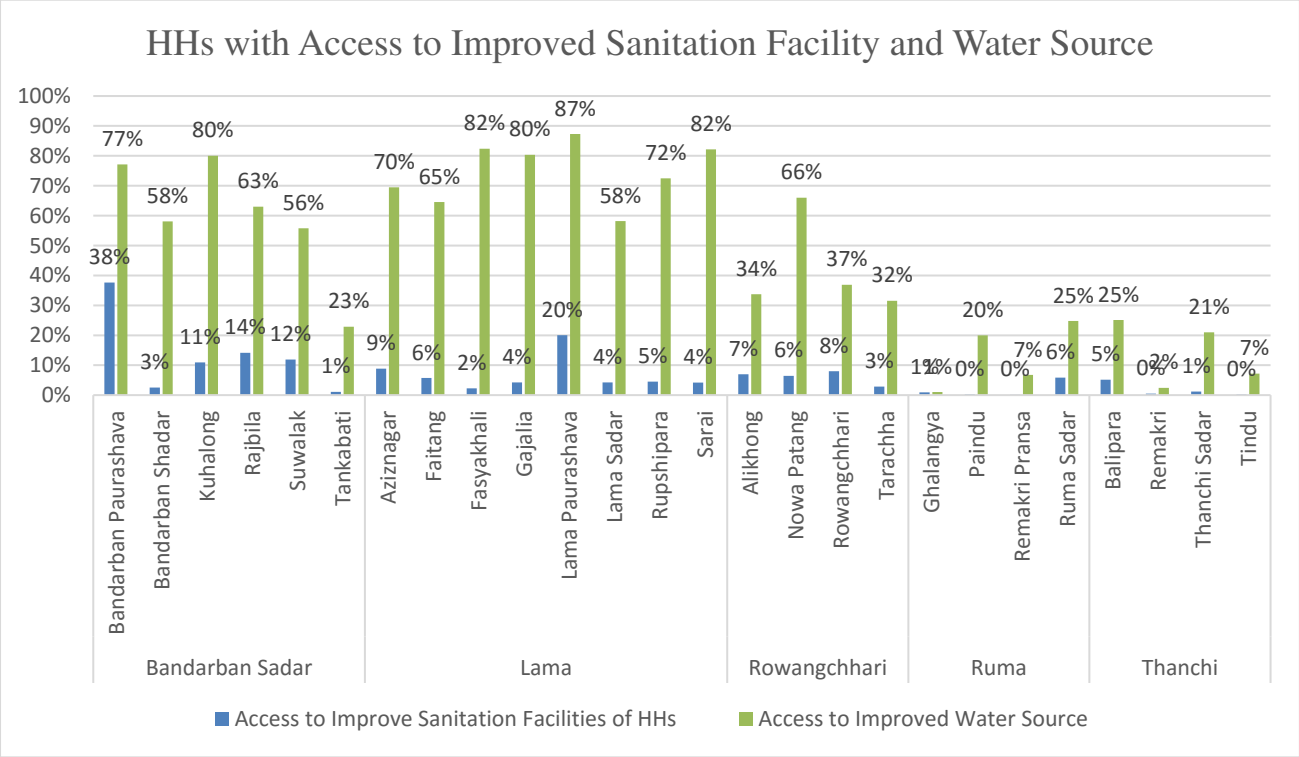
Percentage of households with access to solar facility by area of residence



Percentage of households with access to radio and television by area of residence



5.4 Source of drinking water

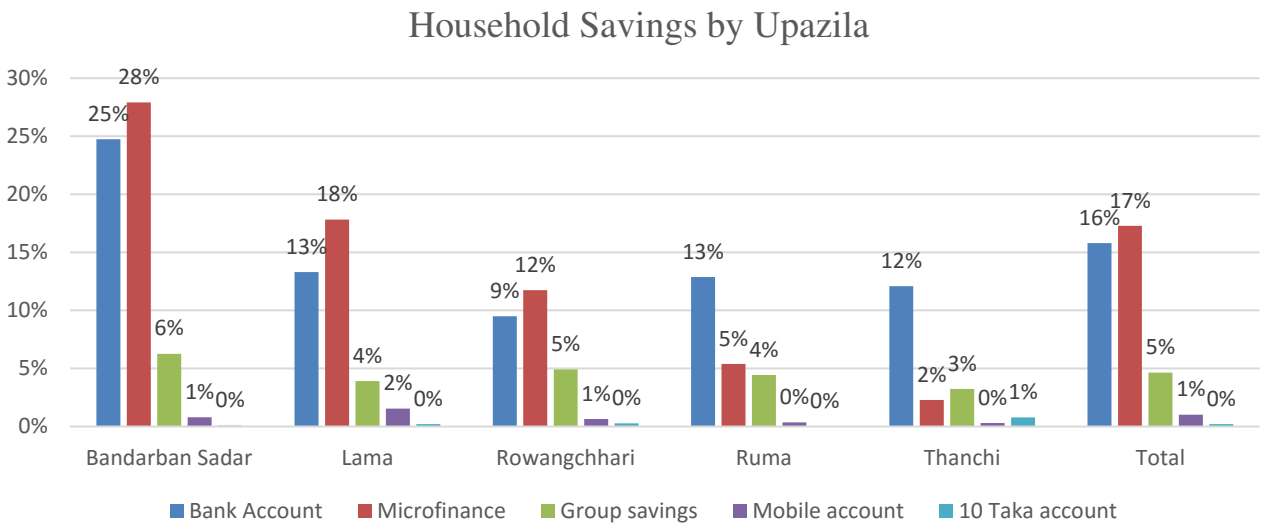


Overall, 8.4% HHs in the HHC reported improved sanitation access (access to covered toilet) and 58.2% HHs reported access to safe water. Improved sanitation access varied greatly across upazila, unions and by subcategory. Improved sanitation access was universally poor however, reaching over 15% only in Bandarban Sadar upazila. Other upazilas reported between 0 and 7% of HHs having improved sanitation access. Safe water access (access to either tubewells, boiled or piped water) was highest in Lama (76.7%) followed by Bandarban Sadar (64.6%) upazilas. Thanchi and Ruma upazilas had the worst access to safe water at 14.8% and 16.5% respectively.

From a union perspective, improved sanitation access reached more than 35% of HHs only in Bandarban Paurashava and 25% in Lama Paurashava. Other unions reported between 0 and 11% of HHs have been reached. Safe water access was highest in Kuhalong, Fasayakali, Gajalia, Lama Paurashava and Seraii, reaching over 80% of HHs. Galaynga and Remakri had the worst access to safe water, reaching only 1% and 2.4% respectively.

5.5 Savings

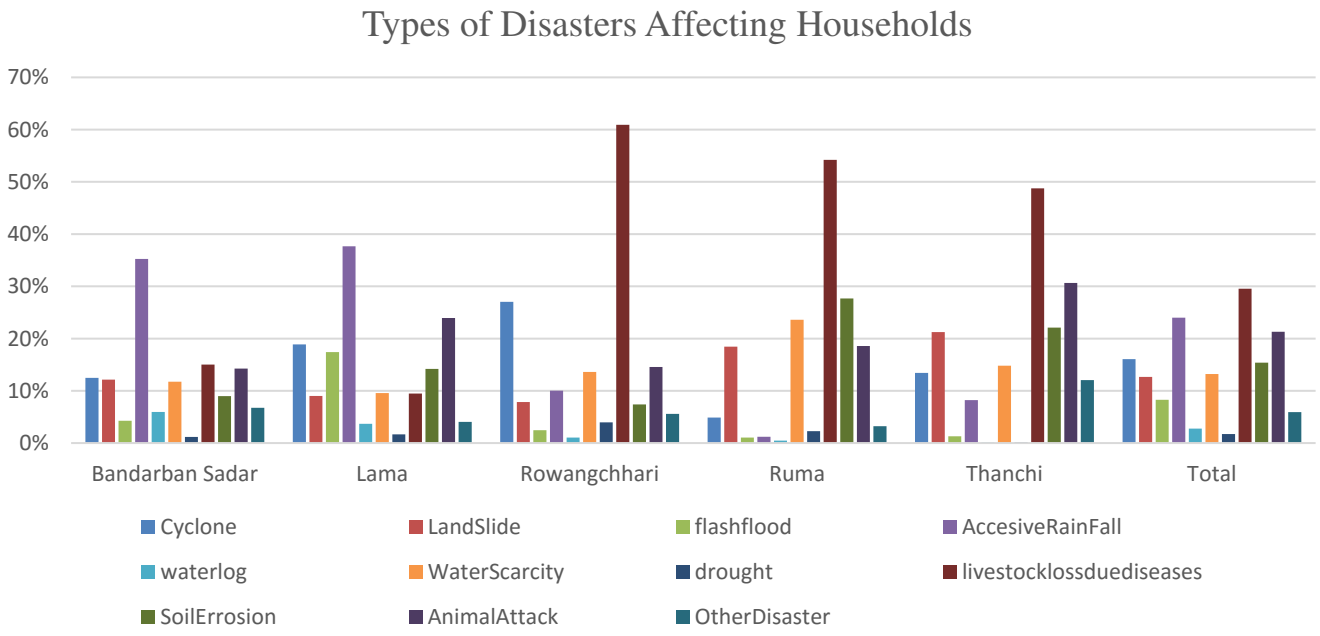
Only 31% of the HHs reported having any form of saving accounts. Of the HHs that have savings, the majority have savings in bank accounts (51% of HHs) and microfinance institutions (56% HHs). Another significant instrument/channel for saving is a savings group, with 15% of HHs that have savings reported participating in one. Other forms of savings such as mobile accounts, “ten taka” accounts, etc. have insignificant access (less than 3%) among the HHs that save. Bandarban Sadar upazila reported having the highest percentage (46%) of HHs with saving accounts whereas Thanchi upazila had the lowest percentage (17%).



5.6 Disasters

HHs were asked if they had experienced any disasters during the last five years and if so, what type of disasters. Twenty seven percent of all HHs reported having experienced some form of disaster in the last five years. The most common disaster among the HHs which had experienced disaster was livestock loss due to diseases at 29.6%. This was followed by excessive rainfall and animal attacks experienced by 24% and 21.3% HHs respectively. Thanchi upazila reported a majority of HHs (54%) having experienced disaster. Conversely, in Bandarban Sadar only 19% HHs experienced any type of disaster.

For HHs that experienced disasters the types of major disasters experienced across upazilas vary greatly. Twenty seven percent of HHs in Rowangchari experienced cyclones which affected fewer than 19% of participants in the other upazilas. Landslides and soil erosion were significant forms of disaster in Thanchi (21.2% and 22.1%) and Ruma (18.4% and 27.7%). Flash floods were experienced by 17.4% of HHs in Lama whereas less than 5% HHs in other upazilas had experienced this. Excessive rainfall was experienced in Lama (37.7%) and Bandarban Sadar (35.3%). Water scarcity is another significant disaster, which was experienced by 23.6% of HHs in Ruma. Livestock loss due to diseases was a major form of disaster in Rowangchari (60.9%), Ruma (54.2%), and Thanchi (48.8%); Bandarban Sadar (15.0%) and Lama (9.5%) had comparatively lower percentages of HHs experiencing this disaster. Animal attacks were significant among all five upazilas, ranging from 14.2% HHs in Bandarban Sadar to 30.6% HHs in Thanchi.



5.7 Land Productivity

5.7.1 Land Ownership

Ownership of land is indicative of greater socioeconomic status in the CHT. Regression analysis reveals home ownership of land has a positive and significant relationship with the presence of electricity in the HH (*p-value*=0.051) and small livestock rearing (*p-value*=0.055).

The average amount of land owned by a HH in the five upazilas is 33.21 decimals. Land ownership is highest in Thanchi at 97.03 decimals per HH and the lowest in Lama at 18.94 decimals per HH. The average land owned in Thanchi is more than double to that of Rowangchari, which has the second highest average land owned at 40.17 decimals (40 meters squared)

Tindu and Remakri unions in Thanchi upazila have the highest average land ownership among unions with 264.15 and 137.39 decimals respectively. Nowapatang union (75.93 decimals) is the only other union where HHs have an average land ownership of more than 50 decimals. Remakri Pransa union has the lowest average land ownership at 41.56 among the 26 unions and municipalities.

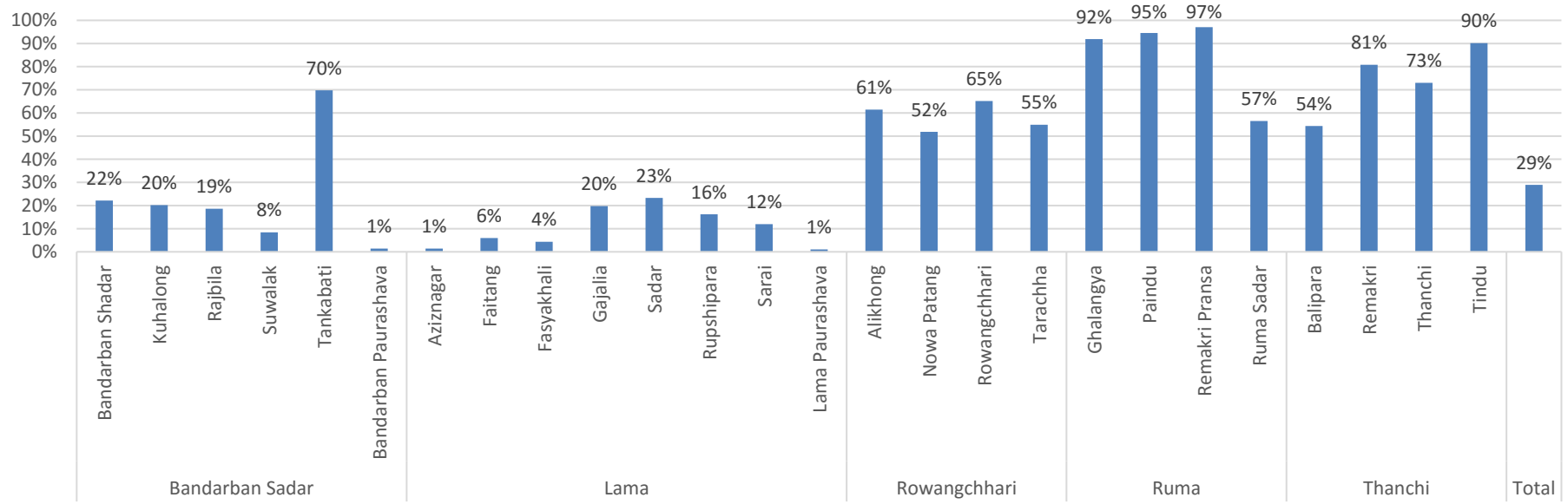
5.7.2 Homestead Production

On average, one third (33.3%) of the HHs in the five upazilas reported having engaged in home gardening during the previous six months. Lama had the highest number of HHs (11,473) engaged in homestead food production and the highest percentage of HHs (45.7%). Ruma, conversely, had the lowest number of HHs (912) and lowest percent of HHs (15.5%) engaging in homestead food production.

5.7.3 Jhum Cultivation

Jhum cultivation is one of the most significant sources of income for the HHs. Jhum cultivation is a slash and burn method of regeneration of land. In the CHT, jhum also involves cultivating plots which may be located far from the HH, or wherever communal land has been granted to the HH. Twenty nine percent of all HHs are engaged in jhum cultivation. In Ruma (78.1%), Thanchi (73.2%) and Rowangchari (58.6%), a majority of HHs are engaged in jhum cultivation. However, in Lama and Bandarban Sadar, only 8.8% and 17.4% of HHs respectively are engaged in jhum cultivation. On average, jhum cultivation takes place using 124.02 decimals of land; Ruma had the highest average land usage at 164.52 decimals per HH and Bandarban Sadar the lowest at 78.97 decimals per HH.

Percentage of households practicing Jhum cultivation in past year by area of residence

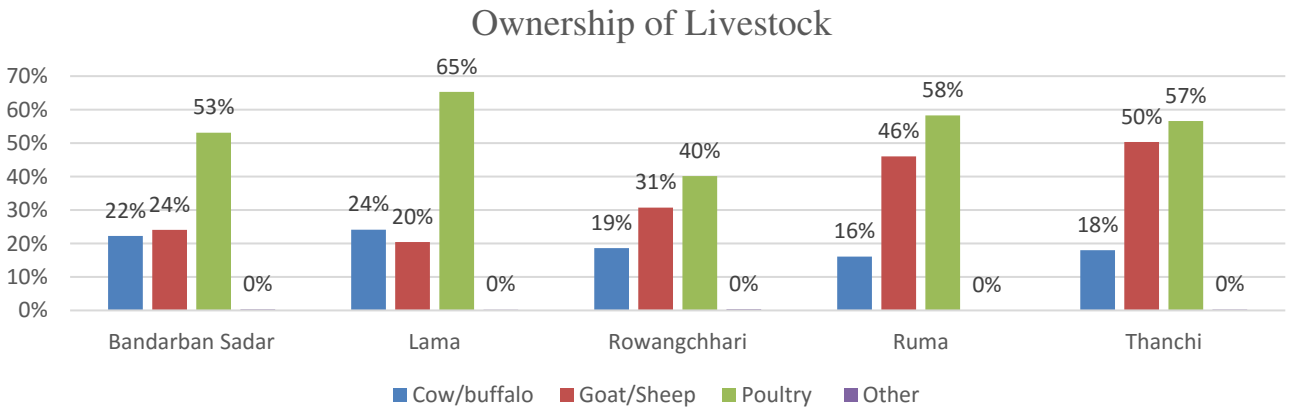


5.7.4 Agricultural Land Holdings

Another major use of land is commercial agricultural production. In the five upazilas, 44.8% of HHs reported having engaged in agricultural production using 185.92 decimals of land on average in the last year. It was highest in Ruma, with 71.0% of HHs involved in agricultural production while Rowangchari reported the lowest at 34.8% HHs. The highest usage of land was in Thanchi at 350.09 decimals on average.

5.7.5 Livestock rearing

Poultry, cow and small ruminant rearing is also a major activity for many HHs. Poultry rearing is the most popular, with 57.9% HHs engaging in production. Small ruminant and cows/buffalo rearing were also significant activities, with 28% and 22% of HHs being involved. Poultry rearing was most significant in Lama upazila (65.3%) and the least popular in Rowangchari upazila (40.1%). Lama upazila also had the highest number of HH engaged in cow/buffalo rearing (24%). Thanchi upazila had half of its HHs (50%) engaged in small ruminant rearing.



Conclusion

The HHC has revealed that several indicators in the SAPLING catchment area have much room for improvement, include avenues for intervention. Access to television and radio, potable water, and sanitation are far below the national average. With a high percentage of adolescents and children in the population, there is great opportunity to make lasting changes in the CHT through targeted interventions. Programs that reach adolescents can make intergenerational improvements in a host of indicators, and programs targeting parents and other key family members can ensure immediately healthier environments for infants and children. Poor WASH indicators show that there is much room for improvement in terms of access to safe water, clean latrines and other amenities. Incorporating WASH strategies into interventions and communication messages is key to facilitate lasting change in health and nutrition indicators in SAPLING program areas.

With over a quarter of HHs report being affected by disasters, building resilience of HHs through increased savings and income, nutritious food sources, and gender and social equity will mean the ability to mitigate and recover faster for all HHs impacted.

Given the relatively high percentage of respondents reporting having farmed or gardened before, many SAPLING participants will be entering the program with some prior agriculture knowledge. This may aid in reaching program objectives, as participants will be able to garden more efficiently and share knowledge with neighbors and community members.

Low access to radio and television and electricity may make mass media behavior change communications difficult and interpersonal communication strategies will need to be used to overcome this, both in aiding to increase access to communications messaging and using different methods to reach individuals. Considering the significant ethnic and linguistic diversity of the area, there is also need for sensitivity in culture, language and translations of messages to ensure their efficacy.

In conclusion, the HHC revealed important areas for SAPLING to focus on and provided information to help focus and target interventions. It helped to identify program participants and important facility- based data and will serve as a basis for drawing sampling frames for future studies. The HHC also serves as a living document, with new HHs with pregnant women entering the database over the life of the project and provides important information regarding the program area for the development community as a whole.

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Annex 1: Household HHC Questionnaire

<table>
<tr><th>No</th><th>Questions</th><th>Coding categories</th><th>Skip</th></tr>
<tr><td>Q1</td><td>District-</td><td>Select from drop down list</td><td></td></tr>
<tr><td>Q2</td><td>Upazila-</td><td>Select from drop down list</td><td></td></tr>
<tr><td>Q3</td><td>Union</td><td>Select from drop down list</td><td></td></tr>
<tr><td>Q4</td><td>Ward Name</td><td>Select from drop down list</td><td></td></tr>
<tr><td>Q5</td><td>Mouza Name</td><td>Select from drop down list</td><td></td></tr>
<tr><td>Q6</td><td>Village name (HHC)</td><td>Select from drop down list</td><td></td></tr>
<tr><td>Q7</td><td>Village name (local)</td><td>Text</td><td></td></tr>
<tr><td>Q8</td><td>Para name/ Bari name (for locating the HH)</td><td>Text</td><td></td></tr>
<tr><td>Q9</td><td>Ethnicity
(Select all that apply)</td><td><table><tr><th>Ethnicity</th><th>Ethnic ID</th></tr><tr><td>Bangla</td><td>01</td></tr><tr><td>Bawm</td><td>02</td></tr><tr><td>Chakma</td><td>03</td></tr><tr><td>Kheyang</td><td>04</td></tr><tr><td>Khumi</td><td>05</td></tr><tr><td>Marma</td><td>06</td></tr><tr><td>Mro</td><td>07</td></tr><tr><td>Tanchanggya</td><td>08</td></tr><tr><td>Tripura</td><td>09</td></tr><tr><td>Chak</td><td>10</td></tr><tr><td>Lusai</td><td>11</td></tr><tr><td>Pankhaya</td><td>12</td></tr><tr><td>Others (Please specify)</td><td>13</td></tr></table></td><td></td></tr>
<tr><td>Q10</td><td>Well-being category</td><td>Extreme Poor/Poor/Middle/Rich</td><td></td></tr>
<tr><td>Q11</td><td>HH ID from Wellbeing analysis</td><td>Sequential serials from Social map</td><td></td></tr>
<tr><td>Q12</td><td>Does the household have a holding number?</td><td>No----------0
Yes----------1</td><td>If “0” skip Q12a</td></tr>
<tr><td>Q12a</td><td>What is the number?</td><td></td><td></td></tr>
<tr><td>Q13</td><td>GPS location</td><td></td><td></td></tr>
<tr><td>Q14</td><td>Name of household head</td><td>Text</td><td></td></tr>
</table>

Q15	Does your HH or outside HH (as on request) have any Mobile Number to reach you?	No----------0 Yes----------1	If "0" skip Q16 and Q17
Q16	Is this your own mobile?	No, On request----------0 Yes, the HH head/spouse ----------1 Yes, Other member in the HH----------2	
Q17	Could you please mention the Mobile number		

Q18 **HH Roster**

Household Member line #	**a. Name of HH member**	**b. Relation to HH head** 01 = HH head 02 = Spouse 03 = Son/ daughter 04 = Brother/ sister 05 = Brother/ sister in law 06 = Niece/ nephew 07 = Father/ mother 08 = Father/mother in law 09 = Daughter/son in law 10 =Grandson/daughter 11=Other relative	**c. Sex** 1= Male 2=Female	**d.NID no [if available]**	**e. Age on last birthday**	**f. DOB Source** O=No documents 1=NID 2=Birth certificate 3=Medical document 4=Verbal (<5 years) 5=EPI card 6=others (please specify)	**g. Date of birth**	**h. Education** [each class passed 1, 88-NA No institutionalised 99]	**i. Are you/member of your household currently involved in any GO/NGO program? If yes, please mention the program** **(Select all that apply)** 1=Nutrition support for pregnant, 2=Nutrition support for Lactating	**j. Marital status** 1= Married 2=Unmarried 3 = Widow 4= Divorced 5=Separated	**k. Currently does he/she goes to school**? 1=Yes 0=No	**l. If no, what does he/she currently doing?**	**m. Did he/she take the allopathic deworming medicine on the last 6 months? 1=Yes, 0=No**	**n. If yes, from where he/she took the allopathic deworming medicine last time?** 1. National deworming week 2.National Immunisation Day 3.National vitamin A campaign 4.EPI 5.Community clinic 6.UHC 7.Union Health and family welfare center 8.Child and maternity care center	**o. Earning last one year** **1=Yes** **0=No**	**p. Pregnant/ Lactating Women** **1= Yes** **0= No** **NA =88**	**q. Disabled status: If yes, types of disability (Select all that apply)** 0=No disability 1=Physical Disability (difficulty for walking or climbing) 2= Difficulty remembering or concentrating 3=Vision Disability (difficulty for seeing, even if he/she is wearing glasses) 4=Hearing Impairment (difficulty hearing, even if he/she is wearing a hearing aid)

		12=Other non-relative 13= Servant							, 3=Nutrition support for <5 children, 4=VGD/ VGF, 5= Widow 6= DAP, 7=Others (Specify)					9.NGO clinic/ hospital 10.Pharmacy 77. Others (Please specify)			5= Difficulty (with self-care such as) washing all over or dressing, feeding, toileting etc 6= Difficulty communicating ; for example, understanding or being under-stood Disability

1.Farmer (Paddy) 2.Farmer (Other than paddy) 3.Agriculture Day laborer 4.Unskilled day laborer 5.Skilled day laborer 6.Works in Workshop/Garage 7.Helps in HH works 8.Rickshaw/van/cart puller /baby taxi driver /boatman 9.Fisherman 10.Salaried worker 11.Businessman 12.Petty businessman 13.Household help 14.Jhumfarmer 15.Poultry/ Livestock 16.Handicrafts 17.Vegetable Cultivation18.Fish cultivation 19.Collecting resources from hill/lake 20.No engagement with any types of work 77.Others (Specify……)

Q19	Total number of people living in the household	----------	
Q20	What is the religion of this household? **(Select all that apply)** (If household having members from more than one religion, select all of religion they follow)	Islam_____1 Hindu/Shonaton_____2 Buddhist_____3 Christian_____4 Others (Please specify)_____5	
Q21	What are the languages spoken by the household members? (select as many as are spoken by at least one household member) **(Select all that apply)**	Bangla_____1 Chakma_____2 Marma_____3 Tripura_____4 Bawm_____5 Rakhain_____6 Pankhu_____7 Lusai_____8 Murong_____9 Mro_____10 Kheyang_____11 Tanchangya_____12 Others (Please specify)_____13	
Q22	What is language that the household members speak most often?	Bangla_____1 Chakma_____2 Marma_____3 Tripura_____4 Bawm_____5 Rakhain_____6 Pankhu_____7 Lusai_____8 Murong_____9 Mro_____10 Kheyang_____11 Tanchangya_____12 Others (Please specify)_____13	
Q23	How long has the HH been living in this union?	Less than a year_____0	

<table>
<tr><td></td><td></td><td>Please mention exact
Number of years if 1 to 20 years
More than 20 years_____21</td><td></td></tr>
<tr><td>Q24</td><td>What is main source of income for this household in the last one year?</td><td>Farmer (Paddy)_____1
Farmer (Other than paddy)_____2
Agriculture day laborer_____3
Unskilled day laborer_____4
Skilled day labourer _____ 5
Rickshaw/van/cart puller /baby taxi driver /boatman_____6
Fisherman _____7
Salaried worker_____8
Professional _____9
Businessman _____10
Petty businessman_____11
Household help_____12
Jhum farmer_____13
Poultry/ Livestock _____14
Handicrafts _____15
Vegetable Cultivation_____16
Fish cultivation_____17
Collecting resources from hill/lake _____18
Others (Specify……)_____19
Don’t know_____20</td><td></td></tr>
<tr><td>Q25</td><td>Which of the following financial accounts are held by a member of your household?
(Select all that apply)</td><td><table><tr><td></td><td>No</td><td>Yes</td></tr><tr><td>Bank account</td><td>0</td><td>1</td></tr><tr><td>MFI account</td><td>0</td><td>1</td></tr><tr><td>Savings group account</td><td>0</td><td>1</td></tr><tr><td>Mobile money account</td><td>0</td><td>1</td></tr><tr><td>10 taka account</td><td>0</td><td>1</td></tr><tr><td>Others (Please specify)</td><td>0</td><td>1</td></tr></table></td><td></td></tr>
<tr><td>Q26</td><td>Did your household involve in agricultural production in the last one year?</td><td>No_____0
Yes_____1</td><td></td></tr>
</table>

Q27	How much agricultural land does your household have access in last year decimal? (Excluding Jhum land)	☐☐☐☐	
Q28	Do you have any ownership documents for agricultural land?	No documents_____0 Partial of land_____1 All of your land _____2	
Q29	How much agricultural land does your household have own in decimal?	☐☐☐☐	
Q30	Which types of documents do you have? **(Select all that apply)**	Ownership deed_____1 Lease deed _____2 Headman report _____3 Others (Please specify)_____4	
Q31	How much homestead land does your household access in decimal?	☐☐☐☐	
Q32	Did your household have access to Jhum land? (in last one year)	No----------0 Yes----------1	
Q32a	How much jhum land did your household access to in the last one year in decimal?	☐☐☐☐	

Q33	Does the household currently use/ own any of these items in functional condition? **(Select all that apply)**		No	Yes	
		Electricity	0		
		Solar Panel	0	1	
		Radio/TV	0	1	

Q34a	What is the main source of drinking water of your household?		No	Yes	
		Piped to dwelling	0	1	
		Piped to yard/plot	0	1	
		Public tap	0	1	
		Shared (Tube well)	0	1	
		Household (Tube well)	0	1	
		Protected (Dug well)	0	1	
		Unprotected (Dug well)	0	1	
		Rainwater	0	1	
		Surface Water (Pond/ River/	0	1	
		Canal/Hawar)	0	1	

		Water Tanker	0	1	
		Protected (Spring/Jhora)	0	1	
		Gravity follow System (GFS)	0	1	
		Unprotected (Spring/jhora)	0	1	
		Others (Specify)			
Q34b	What type of latrine does your household use?		No	Yes	
		Piped sewer system	0	1	
		Septic tank	0	1	
		Ring slab with water seal	0	1	
		Ring slab without water seal	0	1	
		Pit latrine with slab	0	1	
		Pit latrine without slab	0	1	
		Hanging toilet	0	1	
		No facility (Bush/open field/river pond side)	0	1	
		Other, specify	0	1	
Q35	Does your household have the livestock or poultry? **(Select all that apply)**		No	Yes	
		Cow/Buffalo	0	1	
		Sheep/Goat/pig	0	1	
		Chickens/ Duck/Geese/ Pigeons/ Small game (rabbits) etc.	0	1	
		Others (Specify)	0	1	
Q36	During the last six-months of the year, did your household grow vegetables?	No_____0 Yes_____1			
Q37	In the last 5 years, did your household face any natural disasters or any other adverse events (shocks), if yes what natural disasters/adverse events (shocks)did your household experience during the period?	No disaster _____0 Cyclone and tidal surge_____1 Landslide_____2 Flashflood_____3 Flooding from excessive rainfall_____4 Water logging_____5 Water scarcity_____6 Drought_____7 Loss of small livestock (due to diseases) ____8			

		Soil erosion_____9 Deforestation, lack of access to forest resources_____10 Wild animal attack (crop destruction)_____11 Others (please specify)_____12	
Q38	HFP group Number		
Q39	MCHN group number		
Q40	Please select the Name of the HHP group member	Please select	
Q41	Please select the Name of the MCHN group member/members	Please select	
Q42	Please select the name of the major respondent from below	Please select	
Q43	Name of Data Collection Officer		
Q44	Are there any officials from SAPLING or Donor present during your interview?		
Q45	Who was present?	Please select	
Q45ot	Please specify		

Annex-2
Village level information format

No	Questions	Coding categories	Skip
Q1	Upazila Name		
Q2	Union/ ward		
Q3	Mouza Name		
Q4	Village/Mahalla name (HHC)	Text	
Q5	Village/Mahalla name (local)	Text	
Q6	GPS location (at the middle village)	GPS coordinate	
Q7	Name of the headman of the village	Text	
Q8	Mobile number of the headman		
Q9	Total time to get the upazila HQ		
Q10	Main mode of transport to get to the upazila HQ/UNO office	Bicycle _____1 Van_____2 Nosimon _____3 Motor Cycle _____4 Easy bike_____5 Baby taxi_____6 Bus/jeep_____7 Boat _____8 Walking_____9 Others (specify)_____10	
Q11	Please describe the location of the village and direction to get there	Text	
Q12	Please describe security issues **(Select all that apply)**	No insecurity problem _____0 Demanding toll_____1 Abduction _____2 Exchange of gunfire in the border _____3 Frequent political turmoil_____4 Armed robbery_____5 Others (specify)_____6	

Annex-2 **School level information format**			
No	**Questions**	**Coding categories**	**Skip**
Q1	Name of the educational institution	Text	
Q2	Upazila Name		
Q3	Union/ ward		
Q4	Mouza Name		
Q5	Village/Mahalla name (HHC)	Text	
Q6	Village/Mahalla name (local)	Text	
Q7	GPS location	GPS coordinate	
Q8	Type of the institution	Pre-primary school_____0 Govt. primary school_____1 NGO primary school_____2 Private primary school_____3 Govt. Madrasa _____4 Private. Madrasa _____5 Govt. High School_____6 Private high school_____7 Govt. College_____8 Private college_____9 Others (Please specify)_____10	
Q9	Number of teachers allocated in the institute		
Q10	Number of teachers currently in the institute		
Q11	Which classes are taught?	Text	
Q12	Number of students in the institute		
Q13	Number of classrooms in the institute		
Q14	Type of school buildings	Pucca_____1 Semi Pucca _____2 Kacha _____3 Others (Please specify)_____4	
Q15	Is the school functional	No_____0	

		Yes, regular basis _____1 Yes, irregular_____2	
Q16	Please mention types of irregularities	_____ _____	
Q17	What type of latrine does institute's of students/teachers use?	Piped sewer system_____1 Septic tank_____2 Ring slab with water seal_____3 Ring slab without water seal_____4 Pit latrine with slab_____5 Pit latrine without slab_____6 Hanging toilet_____7 No facility (Bush/open field/river pond side)_____9 Other, specify_____88	
Q18	Are there separate sanitary facilities for girls and boys?	0=No, 1=Yes	
Q19	What is the main source of drinking water of students/teachers of your institution?	Piped to dwelling_____1 Piped to yard/plot_____2 Public tap_____3 Shared (Tube well)_____4 Household (Tube well)_____5 Protected (Dug well)_____6 Unprotected (Dug well)_____7 RAINWATER (Protected)_____8 RAINWATER (Unprotected)_____9 SURFACE WATER (Pond/ River/ Canal/Hawar)_____10 WATER TANKER_____11 Protected (Spring/jhorna)/Gravity follow system (GFS) with filtration system_____12 Protected (Spring/jhorna)/Gravity follow system (GFS) without filtration system_____13 Others (Specify)_____88	

Annex-2

Format for Market Information

No	Questions	Coding categories	Skip
Q1	Name of the market	Text	
Q2	Upazila Name		
Q3	Union/ ward		
Q4	Mouza Name		
Q5	Village/Mahalla name (HHC)	Text	
Q6	Village/Mahalla name (local)	Text	
Q7	GPS location	GPS coordinate	
Q8	Type of market **(Select all that apply)**	Daily market_____1 Weekly market/hat_____2 Upazilla market/permanent market_____3	
Q9	Type of retailer **(Select all that apply)**	Wholesale_____1 Retail sale_____2 Both_____3	
Q10	Number of permanent shops in the market		
Q11	What commodities are available in the market **(Select all that apply)**	Food_____1 Cash crops_____2 Clothing_____3 Agriculture inputs_____4 Fuels_____5 Stationeries _____6 Local (production/made)_____7 Medicine _____8 Others (Please specify)_____9	

Annex-2

Information on Health facilities

No	Questions	Coding categories	Skip
Q1	Name of facility (local)	Text	
Q2	Upazila Name		
Q3	Union/ ward		
Q4	Mouza Name		
Q5	Village/Mahalla name (HHC)	Text	
Q6	Village/Mahalla name (local)	Text	
Q7	Type of facility	Community clinic_____1 UHC_____2 Union Health and family welfare center_____3 Child and maternity care center_____4 NGO clinic/ hospital_____5 Pharmacy/quack _____6 Others (Please specify)_____7	
Q8	GPS location	GPS coordinate	
Q9	Is the facility functioning?	No_____0 Yes, regular basis _____1 Yes, irregular_____2	
Q10	What are the services available at the facility? **(Select all that apply)**	Medicine_____1 Advice _____2 Diagnostic tests_____3 First Aid_____4 Anti-natal check-ups_____5 Minor surgery/ Cesar for delivery_____6 Treatment for specific disease_____7 Others (Please specify)_____8	

(All institutions (health, market, education) in the area will be listed to develop detail data collection plan and to make sure none of the institute is missed from data collection)

Union wise listing of the institutions

District Name:

Upazila Name:

Union Name:

List all the educational intuitions in the union

Sl	Name of the educational institution	Location
1		
2		
3		
4		

List all the health facilities in the union

Sl	Name of the health facilities	Location
1		
2		
3		
4		
5		

List all the markets in the union

Sl	Name of the market places	Location
1		
2		
3		
4		

Annex 3: SAPLING Program Participant Selection Criteria and Process

Introduction

This project will directly work with 47,000 poor and extreme poor households in five upazilas of Bandarban District, plus an additional 8,925 households with PLW, giving preference to women-headed households, households with a disabled and elderly member, households with adolescent girls and children age two to five years. SAPLING will apply a community led poverty criteria and selection process to identify these households from 26 unions from five upazila of Bandarban district. Some broader steps of targeting criteria and the selection process are described below.

Targeting criteria:

Primary/Mandatory criteria:

SAPLING is focusing on improving nutrition outcomes for households directly targeting:

- All households with pregnant and lactating women with children under two years of age
- All poor and extreme poor households with children two to five years old, adolescent girls, elderly, disabled, and female-headed households
- All adolescents for youth action and learning groups

Purpose 1: Potential criteria for Purpose 1 household:

- Homestead land
- Cultivable/ productive land (own, lease, mortgage, rental, share cropping- in and out)
- Number of food insecure months
- Occupation, source of income and income level (Both Primary, Secondary source need to consider)
- Number of livestock owned (pig, cattle, goat, poultry)
- HH Assets: Rickshaw/Van/Bicycle/Auto Rickshaw/ Boat, Motor cycle, Own TV, Irrigation machine (STW), Solar electricity power
- Poor, widow/separated, women and child headed households
- Leasing land with contract (agro-land) every year/ season
- Money lending (In/out), NGO credit
- Access to health and other services
- Seasonal migration
- Day laborers / advance labor sell
- Participate in arbitration/shalish
- Children's education
- Production and sale of on and off-farm production item
- Others that are very much specific to the local context and vulnerability pattern

"Poor & extreme poor" will be defined initially by the following criteria, then will be adjusted to the local context and finalized through community consultation.

Potential criteria for poor:

- Ownership of homestead land – 10-20 decimal
- Ownership or access to cultivable land – 50-149 decimal.
- Sources of income/livelihood options – Does not have regular source of income/ dependent on seasonal work

- Household food security status – Cannot afford three full meals per day for all family members throughout the year (nine months with adequate food provision)
- Priority should be given the most vulnerable, including female-headed households, the disabled, the elderly, and households with adolescent girls and children age two to five years.

Potential criteria for extreme poor:

- Ownership of homestead land – less than 10 decimals
- Ownership of or access to cultivable land - 50 decimal
- Sources of income/livelihood options – Does not have any sustainable source of income/ predominantly dependent on seasonal work (agricultural day labor)
- Household food security status – Cannot afford three full meals per day for all family members throughout the year (six months with adequate food provision)
- Apply adverse coping mechanism (child labor, selling of productive assets) during lean season
- Priority should be given to the most vulnerable, including female-headed households, the disabled, the elderly, and households with adolescent girls and children age two to five years
- Access to or member of formal financial network or MFI
- Dependency on day laborers / advance labor commitments
- Production and sell opportunities are limited
- Productive assets such as goat, pig, poultry, rickshaw van, etc.

Purpose 2: Potential criteria for Pregnant and Lactating mother:

- Women post three months/first trimester of pregnancy completed, certified by health worker/ community skilled birth attendant/any other skilled person in the community
- Lactating mother with children under two years of age (as per immunization card/birth registration/hospital record/ certified by community leader)
- Priority will be given to
    - Children under five years old,
    - Adolescent girls,
    - Elderly,
    - Disabled, and
    - Female-headed households.

Purpose 3: Vulnerable Households

All vulnerable households that are identified through the community risk assessment process using the Food for Peace (FFP) definition of vulnerable households. FFP defines vulnerable people/households as "people/households who are at risk of food insecurity because of their physiological status, socioeconomic status or physical security; or whose ability to cope has been temporarily overcome by a shock." (See Performance Indicator Reference Sheets for FFP annual monitoring indicator number 34).

Annex 4: PRA Implementation Guidelines

Each team will visit assigned villages and follow the procedures below:

1. **Transect Walk:**
   The transect walk will be used for building rapport between the community and FF before the social map exercise and to help the draw social map. During the transact walk, the team will try to get a clear understanding of the village boundaries, household locations, and institutions and other important features. While conducting the walk, the teams will talk with the inhabitants to understand the vulnerabilities and risks the villages face. These discussions will be recorded.

   Steps for the Transect Walk:
   a. Find community people who are knowledgeable and willing to participate in a walk through their village and surrounding areas.
   b. Discuss with them the different factors to be drawn in the social map (village boundary, household location, and institutions and other important features) and which route to take.
   c. Walk the route, noting different characteristics found on the way. This might involve the village boundary, socioeconomic status of the households, location of institutions, and other important features.
   d. Observe, ask, listen. Do not lecture.
   e. Discuss problems and opportunities for change. Try to understand the vulnerabilities and risks the villages face.
   f. Record what is being said and what you see, but do not add your own interpretation.
   g. Try to create an environment where people can more effectively participate and identify and address their own situation.
   h. Find a place where you can draw the social map on the ground.

2. **Prepare a Social Map**: During the transect walk, the team will invite community members from different parts of the village to sit and participate in preparing a social map for their village/para. On the day of the mapping, FF will gather all community members, including local stakeholders and key informants, in a common place. The study team will provide a brief introduction of the project and objective of the mapping activities. A map will be drawn by the community members with the help of the study team to clearly delineate the following features using colored symbols:
   - The boundary
   - Locations of HHs
   - Health centers (Community Clinic, EPI center, H&FWC, local doctors)
   - Markets (Hat/Bazaar/Shop)
   - Institutions (College, School, Mosque, Madrasa)
   - Other important features

   Steps for drawing the Social Map:
   a. Before visiting the village/para you can obtain map and/or area from your union map, which is available in the project office.
   b. Give an overview about the social map and overall mapping activities to participants.

c. Ask the participants to select a suitable place and medium, such as on the ground using objects like stones, seeds, sticks, leavers and colored powder.
d. Prepare a simple outline map on the ground showing key feature and landmarks.
e. Mark the roads, rivers, health care centers, schools and other remarkable social places.
f. Identify the HHs of the community and put a unique number (start with 1, 2, 3, 4…. preferably) for individual HHs.
g. Try to ensure consistency in how the pictures are drawn.
h. Throughout the drawing of the map, discuss project related issues that SAPLING is trying to address in the social map by asking *who, what, why, where, when, and how* questions, and take notes.
i. Once the map is completely drawn on the ground, ask the participants if it is accurate. If it is not, as them which parts are not, and update/correct those points in the drawing.
j. Once the participants agree on the completed map on the ground, take a large piece of flipchart/brown/manila paper and transfer the map to the paper.
k. While copying the map, ask participants, if this is an accurate copy of what they constructed before on the ground.
l. Mention the participants' names, date of the social mapping, and name of the community in the social map.
m. After completing the copy, prepare a HH list with head of HH names, and make sure the name and HH number are identified on the social map.

3. **Wellbeing Analysis:** After creating the social map, the team will conduct a "Wellbeing Analysis," which will divide the HHs into four different categories. This categorization will be done based on the perception of local community members regarding the ownership of productive asset/resources, educational background, occupation, income, social status, religion, etc. The whole process will be conducted with the help of local community members. The criteria for each of the categories below will be set after discussion with the community members:
    - Rich
    - Middle
    - Poor
    - Extreme Poor

    Steps for the Wellbeing Analysis:
    a. Give an overview of the Wellbeing Analysis and the usefulness of this tool for the project.
    b. Ask participants to select a suitable place to discuss and complete the analysis comfortably.
    c. Ask participants to define the categories according to their own point of view.
    d. Request one participant to write down the definitions on a large brown or manila paper, and then hang the paper in a suitable place where the paper is visible to the participants.
    e. Ask the participants to write the HH name/number in Visualization in Participatory Programs (VIPP) cards.
    f. Ask the participants to identify the category of each HH from the HH list, which was prepared from the social map, on the basis of the categories previously defined.

g. Use local kits like small pieces of stones and/or seeds as an indicator of categories.
h. Ask every participant whether they agree or not on the categories suggest for every HH.
i. After completion of these activities, get consensus on the categorization of each HH.
j. Transfer the Wellbeing Analysis list to another manila or brown paper and finalize it.

Annex 5: Variables List

Data on the following variables were collected:

Characteristics	Items Included	Justification
HH HHC	• HH locations (Geo-location) • National Identity number of HH members • Date of Birth (DOB), Age and Sex of HH family members • Contact information of HH • HH size • Religion • Ethnicity • Language • Well-being category (Wealth Status) • Engagement in Safety net program • Pregnant and lactating mothers' status • Income sources for HH • Financial account info • Access to jhum land information • Land ownership documentation • HH assets • Source of drinking water • Livestock and poultry • Shocks and stress within the last five years	• Registration of project participants/ volunteers/ groups would be completed from the HH HHC data • Geo tagging allows participants to be track through tablet data collection • Date of birth is required for children and will use to select safety nets project participant
Village level information	• Village administrative information • Name of village • Global positioning system (GPS) location • Name and contact information of the Headman • Mode of transportation used to reach the Upazila HQ/Upazila Nirbahi Officer (UNO) office • Security issues	Identify key persons as stakeholders to ensure the successful achievement and sustainability of project results
School level information	• GPS location • Total number of teachers • Highest level of education available at the school • Total number of classrooms • Type of school buildings • Functionality of school	Registering educational institutions due to education based intervention

Market level information	• Name of market GPS location • Type of market • Number of shops in market • Commodities available in market	Registering the market
Health institute level information	• Name of health institute • GPS location • Type of health institution • Functionality of institution • Service availability at the health institution	Registering health institutions
Listing of all institutions in the area	• List all health institutions in the union • List all markets in the union • List all educational institutions in the union	All institutions (health, market, education) in the area will be listed to develop a detailed data collection plan and to make sure none of the institutes are missed during the data collection phase

Annex 6: Sample Size (according to the 2011 HHC)

The population distribution across five upazilas (Bandarban Sadar, Lama, Rowangchhari, Ruma and Thanchi) according to the Population and Housing HHC, Bangladesh Bureau of Statistics (2011).

Upazila	**Union**	**HHC 2011**		**SAPLING HHC**	
		Total # of paras	**Total # of households**	**Total # of paras**	**Total # of households**
Bandarban Sadar Upazila	Bandarban Paurashava	69	8699	83	2,240
	Bandarban Union	52	2023	53	2,827
	Kuhalong Union	57	2594	59	2,538
	Rajbila Union	41	2257	68	2,560
	Swalak Union	41	2293	49	1,185
	Tankabati Union	48	1068	64	3,813
	Total	**308**	**18934**	376	15,163
Lama Upazila	Lama Paurashava	34	3996	67	2,341
	Aziznagar Union	50	2368	53	2,728
	Faitang Union	40	2279	100	6,531
	Fasyakhali Union	57	4771	85	2,674
	Gajalia Union	38	2684	43	1,973
	Lama Union	34	1711	61	2,898
	Rupshipara Union	47	2457	89	1,926
	Sarai Union	55	2181	67	4,031
	Total	**355**	**22447**	565	25,102
Rowangchhari Upazila	Alikhong Union	45	1246	48	1,174
	Nowapatang Union	36	1069	32	1,133
	Rowangchhari Union	47	1988	49	1,816
	Tarachha Union	60	1989	58	2,001
	Total	188	**6292**	187	6,124
Ruma Upazila	Ghalangya Union	61	1034	54	1,089
	Paindu Union	40	1267	39	1,350
	Remakri Pransa Union	42	949	38	921
	Ruma Union	94	2667	101	2,540
	Total	237	**5917**	232	5,900
Thanchi Upazila	Balipara Union	31	1204	36	1,222
	Remakry Union	60	1281	63	1,230
	Thanchi Union	58	1547	64	1,442
	Tindu Union	40	840	54	821
	Total	189	**4872**	217	4,715
		1,277	**58,462**	1,577	57,004