



Market Assessment and Value Chain Analysis Report

for

Gender-inclusive Pathways out of Poverty for Vulnerable Households in Cox's Bazar, Bangladesh

Prepared for



INN©VISION
Research | Technical Assistance | Project Management

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Acronyms

BDT	Bangladeshi Taka
BGS	Bangla German Shompritee
DAE	Department of Agriculture Extension
DLS	Department of Livestock Services
FGD	Focused Group Discussions
FMD	Foot-and-Mouth Disease
GPOP	Gender Inclusive Pathways Out of Poverty
HYV	High Yielding Seeds
IDI	In Depth Interview
IGA	Income Generation Activities
KG	Kilo Grams
KII	Key Informant Interviews
MFI	Micro Finance Institutions
NGO	Non-Government Organization
RIC	Resource Integration Centre
SWOT	Strength, Weakness, Opportunities, Threats
ULO	Upazila Livestock Office
WV	World Vision
WVB	World Vision Bangladesh

Executive Summary

The project “Gender Inclusive Pathways out of poverty for vulnerable households in Cox’s Bazar” is a five-year project with the aim to ‘graduate’ ultra-poor households in Ukhiya and Teknaf Sub-Districts in Cox’s Bazar out of poverty. The main objective of this study was to generate a short list of profitable livelihood options based on priority criteria (as per the context assessment report), on-farm, off-farm options and technically feasible sub-sectors for ultra-poor households and ultra-poor youths in project target area. The study also aimed to identify and elaborate opportunities and constraints for enhancing the participation of ultra-poor families in market system to increase productivity, quality and strengthen household resilience.

The analysis conducted for this report also focused on identifying the potential barriers/obstacles of present and providing recommendations on IGA/interventions. Gender Sensitive Value Chain Assessment was conducted and produced a report with recommendations on the most promising production opportunities for ultra-poor families in Ukhiya and Teknaf, with emphasis on the positive inclusion and empowerment of women and ensuring no harm. In addition to market demand, profitability and pro-poor potential and other core criteria, this report also explored ‘Opportunities for women’ potentially in value chain activities, to identify most effective entry points for integration of women in potential value chains in target areas and recommend areas of positive engagement. This study especially taken the situation of women in consideration, particularly at the target locations and gender-based constraints within the short-listed value chains.

The study was conducted in line with the WV selection criteria and guidance for value chain analysis at every step. WVB proposed a series of criteria for value chain selection which was adopted by Innovision for the subsector selection exercise. Special considerations were made for choosing gender sensitive value chains for the project beneficiary who were already listed for inclusion.

In the first phase, we focused on inception activities such as, desk review, information gap analysis and inception plan. In the second phase we used the contextual assessment report which identified 9 value chains in which ultra-poor women were involved. Subsector selection workshops were arranged in Ukhiya and Teknaf where participants were given the list of these 9 value chains to score based on the selection criteria. The results were analysed by the study team and the top 5 ranked value chains were selected for further analysis. The selected value chains were vegetables, indigenous chicken rearing, marine dried fish, beef cattle rearing, and marine fish. Quantitative and qualitative data collection processes started simultaneously at the third phase. The quantitative survey was not done based on the selected value chains rather it focused on finding the actual ultra-poor households and analyse their current livelihoods and other factors of their lives which will help WVB to design their project further. The qualitative assessment was carried out with each of the value chain actors and stakeholders. In 4th phase, with the list of selected value chains, a team consisting of lead consultant, portfolio manager, research assistant and data analyst synthesized the data and prepared the market assessment report which covers both quantitative and qualitative assessment.

The livelihood analysis covered 393 households. The value chain analysis covered end market analysis, value chain mapping, constraints and opportunities analysis. The strategies to address the constraints and utilizing the opportunities were also explored in this report. In total 236 respondents of different type of actors of these five value chains were interviewed in this phase to have in-depth information about the selected value chains.

Homestead Vegetables

The vegetables that are grown in these regions include potato, eggplant, bitter gourd, snake gourd, spinach, pumpkin, okra, summer tomato, chili, etc. Based on the data collected, the total market size of vegetables in the project areas is around 60,000 tons, out of which there is at least scope for 30% production to be increased in order to meet the current market demand. Some of the major constraints identified include the lack of knowledge of farmers about using proper inputs and cultivation techniques. This can be addressed by ensuring that input suppliers in the region have better linkages with input companies so they can be trained to provide information about the right use of inputs and also give advice about cultivation techniques to the producers. Along with this, training and extension, financial support for leasing land, seeds, inputs, and credit support for vegetable cultivation will help to promote

vegetable cultivation and build the capacity of the producers. Facilitation of linkage between farmers and farmer groups with traders, and also traders with forward market actors can be done to ensure consistent demand for vegetables. Thus, the vegetable value chain can expand to meet the growing demand in the region and help the ultra-poor to have a secure livelihood.

Indigenous Chicken

In both Ukhiya and Teknaf Upazilas, indigenous chicken rearing was found to be a common practice among the villagers. Especially women are the ones to take care of the chicken in the households. However, majority of the households raise chicken mostly for household consumption. A few reported to sell to their neighbours. People in the study area seemed to have little knowledge on commercialisation of indigenous chicken rearing. Currently chickens are rather reared without proper vaccination and medication. There is a scarcity of poultry vaccines and drugs in Ukhiya Upazila. Villagers reported to collect medicines from local markets when needed. Our analysis suggests that there is a daily demand of approximately 1000kg-3000kg of indigenous chicken in the local markets of Ukhiya and Teknaf. Market traders have expressed that the demand of the indigenous chicken has increased over the past few years and the demand is still in rise. Overall the indigenous chicken value chain can be explored to meet the local demand in the project areas, which will help the ultra-poor to graduate over the project timeline.

Beef cattle

Cattle rearing in Ukhiya and Teknaf Upazila is very common for the villagers. Most of the farmers were observed to rear one or two indigenous cows. Mostly beef fattening sector is very promising. However, the higher investment compared to vegetable or chicken sector, acts as a barrier for the ultra-poor group to take this sector as their primary occupation. The farmers sell cattle directly to village cattle traders or middlemen who aggregate cattle and sell to large cattle traders who supplies to butcheries selling meat to consumers and restaurants. This study found that farmers mainly supply calves for fattening. Shops in the nearby market provide cow feed such as, rice bran, grass etc. Medicine and private veterinary support providers sell medicine and provide veterinary services through home visits to the farmers. There are some great opportunities for the project to explore in this particular sector, which will help the ultra-poor in the region to come out of poverty.

Dry Fish

Dry fish farming is a common livelihood option among the people from Teknaf Upazila. Even though a large number of people are engaged in fishing in both Ukhiya and Teknaf, dry fish farming was rather uncommon practice in Ukhiya Upazila. Because of the location of the Upazilas, the inhabitants have easy access to rivers, canals and the sea, making dry fish farming a very good opportunity for the villagers. There's plenty of fish harvested from the sea round the year, which is the essential input for this particular sector. The practice was observed to be widespread among the fishermen families who dry the harvested fishes in the courtyards for household consumption. Dried fish market is expanding every year, especially in the southern region of the country (Chittagong, Cox's Bazar districts). The supply of raw fish is also concentrated on the markets of Cox's Bazar and Chittagong districts. The analysis from this study shows this sector as a potential income generating activity for the ultra-poor, when supported by the project during the initial investment and training.

Marine Fish

Marine fishery is an important IGA in the study areas. It plays a crucial function in providing nutrition especially to the people residing in Ukhiya and Teknaf Upazila. Fish. The boat owners or Mahajan in Ukhiya and Teknaf, are the main input suppliers for fishers who uses different type of fishing gear for catching varieties of fishes. Marketing infrastructure is virtually non-existent on the island. Raw fish is sold on the beach or on the roadside. This sector, however, is predominantly male driven. Women has very little involvement in the value chain of Marine There are 1500 fry collectors are mostly women accompanied by their adolescent girls and boys. Fry collectors walk with the net while catching fry. There is a number of opportunities to improve the market system which can make marine fish more available to the end consumers.

Chapter 1: Introduction

1.1 Background of the Study

Cox's Bazar is one of the 20 'lagging districts' of Bangladesh, as identified by the Government of Bangladesh. The district lags behind in several development indicators including poverty, education, infant and under-5 child mortality rate, roads and electricity and water, sanitation and health. Ukhiya and Teknaf are two of the 8 Upazilas of Cox's Bazar district which are amongst the 50 most socially deprived sub-districts of Bangladesh. Insufficient infrastructure, exposure to natural diseases, lack of cultivable land etc. consequent dependence on markets contribute to poor living conditions of the inhabitants of these two sub-districts. In addition to the existing poor condition, the rapid arrival of 688,000 Rohingya refugees since August 2017 generated a significant shock to the Cox's Bazar community. Local ultra-poor families face significant challenges to income generation activities (IGA) compounded by risks of natural disasters. Social issues such as child marriage and child labour are also increasing as families seek to cope to the crippling effects of poverty.

To improve resilience and well-being of targeted ultra-poor households, World Vision initiated a project titled "Gender Inclusive Pathways out of poverty for vulnerable households in Cox's Bazar" in July 2018, in two sub-districts of Cox's Bazar district, namely- Ukhiya and Teknaf. The project will apply Ultra-poor graduation model to put ultra-poor households on a path towards sustainable livelihoods. The project will emphasize on the four pillars specially the Livelihoods, Food security, Financial inclusion and Social empowerment including gender inclusion. A gender-inclusive ultra-poor graduation model adapted to the emergency situation will be piloted by the project to reach to meet its objectives. The project will integrate disaster risk reduction and child protection considerations will also be integrated. 2880 households (15, 871 people) living in extreme poverty will be the direct beneficiaries of the project.

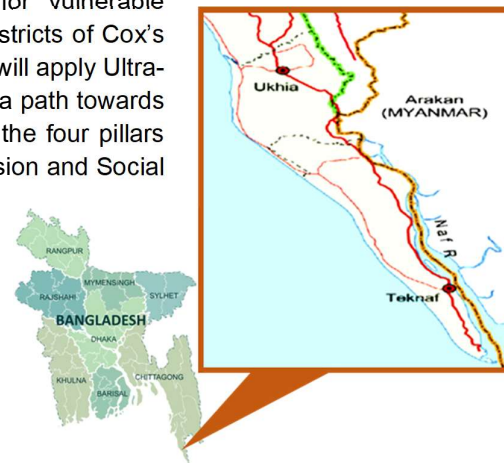


Figure 1 Geographic area of the study

The ultra-poor households are engaged with agriculture labour, fishery, salt farming, shrimp culture, firewood collection, porter, off-farm labour, rickshaw pulling, small businesses, extraction of forest resources etc. The largest occupations of the ultra-poor included day labour (27%), agri-labour (26%), fishery/aquaculture (11%) and household worker (16%). Both men and women worked in day labour, agri-labour and fishery/aquaculture, although men were much more likely to be involved in day labour work. Meanwhile, only women (from male led and female headed households) were involved in domestic work. In terms of interest, ultra-poor women were more interested in small livestock rearing (chicken/goat) (15%) compared to men (3%). Meanwhile, men were more interested in agricultural farming (20%) compared to women (6.5%). Both women and men were interested in cow-rearing for milk (10.5% women, 11% men) and beef fattening (7.5% women, 7% men). This market assessment study seeks to build on, rather than replicate, data collected in the contextual assessment. This market assessment and value chain analysis study was carried out in order to better understand the opportunities and constraints of the ultra-poor households in the existing market system and to establish the linkages between need-based sub-sectors and potential markets. The study aims help the project team to design market and value chain targeted interventions for the ultra-poor households of the project area.

1.2 Objective of the Study

The “Market Assessment and Value Chain analysis” study aims support the project “Gender Inclusive Pathways out of poverty for vulnerable households in Cox’s Bazar” to build linkages between need based sub-sector interventions and the potential markets. This study will contribute to the following outputs of the project:

- Identify and elaborate opportunities and constraints for enhancing the participation of ultra-poor in market system to increase quality, raise productivity, increase disposable income level and strengthen household resilience.
- Support the target groups to establish/upgrade enterprises as these have considerable potential to improve their ability and capacity for improved participants’ resilience.

The market assessment focuses on identifying appropriate Income Generating Activities (IGA)/ interventions for the ultra-poor households (especially women headed households) to help them achieve a sustainable pathway out of poverty. The specific objectives of the study are:

- To generate a short list of profitable livelihoods options based on priority criteria (as per context assessment report, on-farm, off-farm options are homestead gardening-1st, Poultry-2nd, Cattle rearing-3rd, Handicraft-4th, Small business-5th , Dry fish-6th , Goat rearing-7th , Rich cultivation-8th , Fishing-9th) and technically feasible sub-sectors with cost benefit analysis for ultra-poor households and ultra-poor youths in project target area. This should include a potential implementation plan including strategic approach, proposed partners and asset transfer options.
- To identify and elaborate opportunities and constraints for enhancing the participation of ultra-poor families in market system to increase productivity, quality and strengthen household resilience.
- To identify the potential barriers/obstacles of present and recommended IGA/interventions.
- Conduct Gender Sensitive Value Chain Assessment and produce a report with recommendations on the most promising production opportunities for ultra-poor families in Ukhiya and Teknaf, with emphasis on the positive inclusion and empowerment of women and ensuring no harm.
- In addition to market demand, profitability and pro-poor potential and other core criteria, this report should explore ‘Opportunities for women’ potentially in value chain activities, to identify most effective entry points for integration of women in potential value chains in target areas and recommend areas of positive engagement. This should consider the situation of women in target locations and gender-based constraints within the short-listed value chains.

This assessment is built on the findings from the context assessment, which was completed from August – October 2018 as part of the project design phase. From the context assessment, some major component of this study is designed, such as, the GPOP beneficiary selection criteria, graduation criteria, project detailed design as well as the geographic scope of the project at the union level. It also provided some valuable insights on the livelihood options for the ultra-poor in this particular region of the country.

1.3 Methodology

1.3.1 Overview

This study was conducted following the mix-method research methodology, which involved collecting, analysing and systematically integrating both quantitative and qualitative data. The triangulation in such research method permits a more complete and synergistic utilization of data than do separate quantitative and qualitative data collection and analysis. This study was divided into four phases as mentioned the figure 2. A description of each of these phases is provided later in this chapter.

Phase 1	Phase 2	Phase 3	Phase 4
Inception	Sub-Sector Selection	Data Collection	Analysis & Reporting
- Desk Review	- Sub-sector selection Workshop	- Quantitative: Survey	- Data synthesis
- Information Gap Analysis	- Result analysis	- Qualitative: KII, FGD, In-depth-Interview	- Data Integration
- Inception Report	- Shortlisting sub-sectors		- Final Report

Figure 2 Overview of the study methodology

1.3.2 Phase 1: Inception

Literature review of the secondary documents was the first step of this assessment. In this inception phase, relevant project documents were reviewed with thorough scrutiny to understand the project targets and to ensure that the assessment is designed to meet the requirements of the study purpose. The secondary data collection also helped to determine, information exists already compared to information gaps, to inform the focus of the primary data collection.

1.3.3 Phase 2: Sub-sector Selection

The second phase included a consultation session with various value chain actors from the targeted area in the form of a workshop. Review of the contextual assessment was conducted to trace the existing Value Chains of the targeted area. The participants of the consultation session were Value Chain actors of the Value Chains as identified in the contextual assessment and other relevant stakeholders. The team validated the findings of the contextual assessment as well as try to capture the potential of each of the Value Chains based on pre-set criteria of evaluation.

1.3.4 Phase 3: Data Collection (Qualitative & Quantitative)

In the Phase 3 of the study, both qualitative and quantitative data were collected.

Quantitative Survey:

The household survey was conducted with a sample size of 393 in the Ukhiya and Teknaf Upazilas. A detailed scenario of the opportunities and constraints of the Households on IGAs they are currently involved in was captured through the survey. Among 393 samples, 323 were females and 70 were male respondents, to specially focus on the gender-based constraints in the selected Upazilas. 4 Unions from each Upazilas were selected, as mentioned in table 1.

A team of 12 were in charge of collecting data, who reported to the Innovision Field Officer and the study team. Enumerators' training was held on 3rd and 4th March in Ukhiya. A total of 10 enumerators worked in two teams for data collection through quantitative survey. Each team was led by a supervisor for quality assurance. Enumerators were trained on the whole

Table 1 Sample Distribution of Quantitative Survey

Upazila	Union	No of Sample	Total
Ukhiya (298)	Jaliapalong	51	393
	Palongkhali	44	
	Rajapalong	52	
	Rotnapalong	51	
Teknaf (195)	Teknaf	50	
	Whykong	46	
	Baharchara	49	
	Hnila	50	



questionnaire before commencement of the survey. Training was held in “Pulse, Bangladesh Office”, Navid Villa, Shahid Minar road, Ukhiya, Cox’s Bazar.

Qualitative Assessment:

The qualitative data was also collected in this phase through Key Informant Interviews, Focused Group Discussions, In-depth-Interviews and overall observations. The respondents of the assessments were ultra-poor Households of Ukhiya and Teknaf Upazilas who were engaged in at least one of the selected Value Chains. Special attention was given to understand the gender-based constraints and potential solutions recognizing that there might be differentiated solutions for male vs. female headed households, men and women.

Among 21 FGDs, 12 were conducted with female only groups. 15 in-depth interviews were conducted with females, among a total of 25 interviews. The study includes both self and wage employment opportunities within selected on-farm and off-farm value chain opportunities.

Table 2: Qualitative data collection

Data Collection Tool			Female	Male
Focused Group Discussion (FGD)	Value chains	Indigenous Chicken	3	2
		Homestead Vegetable	3	2
		Cattle rearing	3	2
		Dry Fish	1	1
		Fishing	2	2
	Total FGD		12	9
In-depth Interviews			15	10

1.3.5 Phase 4: Analysis and Reporting

During the Phase 4 of the study, the collected data was analysed both qualitatively and quantitatively. Qualitative analytical methods included the compilation and classification of the collected information while the quantitative analytical methods involved the use of enterprise budgets to compute gross margins.

Report developed incorporating all the findings from data collection from phase 1, 2 and 3. The team triangulated the collected data to reach to the conclusion. The final version of the report has been prepared by incorporating all the feedbacks from WV.

1.4 Limitations

This study was conducted as per approved outline from the project team. The study team have successfully captured all the aspects as agreed with WV team. However, there were some limitations which were unavoidable. Below list is a few limitations of this study.

- During field visits, Upazila officers were absent in some cases. Representatives of the Upazila Officers from respective departments were interviewed instead because of the time constraints.
- Ultra-poor household selection (based on the WV criteria) was difficult in some of the Unions. However, the field team managed to survey the target sample.
- Strong presence of training institutes was not found in the targeted Upazilas. Upazila Women Affairs office, Youth Development office, Agriculture Extension office have some provisions for training. NGOs invite Upazila officers to train the inhabitants. We tried to understand the training opportunities through the interviews with the Upazila officials.
- Dry fish business is not so prevalent in Ukhiya Upazila. FGDs with participants from the dry fishing industry in Ukhiya was not possible, as we proposed. FGDs in Teknaf Upazila provided enough data to analyse this sector as per the plan.
- Marine fish was selected though the subsector selection workshop, as a value chain to be analysed for this study. However, in reality, women involvement in this particular value chain is very limited. The study team has tried to capture all the aspects women can contribute to this sector and earn a living, and based on that, intervention recommendations has been proposed.

1.5 Structure of the report

This study report contains a total of ten chapters, starting with an introduction of study. The second chapter focuses on the selection of the sub-sector of this study. The selection process is discussed in this section, along with the results of the workshops, which shaped the findings of this study altogether. In the 3rd chapter of this report, the findings of the quantitative household survey are provided. With a detailed discussion on the findings of the research questions, this chapter focused on the overall livelihood of the ultra-poor in the study areas. The chapter four, five, six, seven and eight follow the same structure, focusing on different value chains, which are Homestead Vegetable, Indigenous Chicken, Cattle Rearing, Dry Fish and Marine Fish. Each of these chapters starts with an overview of the sub-sector, following with a value chain analysis. The value chain map along with a detailed discussion is provided. Each value chain is assessed through lens of the selection criteria i.e. Competitiveness, Partnerships and quick win potential, Impact on the ultra-poor, Gender and Youth inclusion and Climate change adaptation and environmental sustainability. After section on the SWOT analysis and existing constraints of each of these sub sectors, these chapters conclude with a section on recommendations for each of the selected value chains, where a number of intervention designs are provided. The lessons learnt in this study is shared in the 9th chapter of this report, with a conclusion in the final chapter. In the annexures, the tools and relevant documents on the quantitative and qualitative research is shared, along with some other necessary documents for this study.

Chapter 2: Subsector Selection Findings

In the 2nd phase of the study, two separate workshops were conducted to identify the core economic activities in which ultra-poor from the Ukhiya and Teknaf Upazilas were involved, especially focusing on women. These workshops were crucial for the overall success of this study, since the outcome of this workshop guided the direction of the assignment. The main objective of these workshops was to select five (05) the sub-sectors/value-chains among the nine (09) value-chains identified in the context assessment report.

In Ukhiya and Teknaf, two separate workshops have been arranged for selecting the sub-sectors/value chain. The participants for the workshops were invited from a wide range of stakeholders, who were able to give their valuable inputs regarding the livelihood options in their respective Upazilas. A complete list of the participants is included in the Annex. The stakeholder groups who participated in the workshop are listed below:

- Government Officials (Upazila- Agriculture Office, Women and Children Officer, Fisheries Officer Livestock Officer, Social Welfare Officer, Youth Development Officer, Co-operative officer)
- Local Market Associations (President, General Secretaries)
- Input Seller (Vegetable, Poultry, Cattle)
- Small Trader (Dry fish, Poultry, Cattle rearing, Vegetable, Handicraft)
- Large Trader (Dry fish, Vegetable, Rice)
- Day Labourer
- Large Businessman (Dry Fish, Marine Fish)
- Small Businessman (handicraft, Dry fish, Marine Fish, Vegetable)
- Partner Organizations of World Vision

The first workshop was conducted in Ukhiya Upazila, on 3 March 2019. During the introductory session, the purpose and the tasks of the workshop were discussed. The questionnaire was explained, and instructions were provided to the participants, which guided the rest of the workshop proceedings. The invited participants were then divided into 4 groups of 5-6 participants. Each group consist of at least one local government official, a few personnel involved in different pre-selected value-chains, local market association representatives etc. Moderators from Innovation were responsible for each of the groups, who thoroughly explained the task in hand and made sure to keep the discussion more focused on women. The same proceedings were followed in the 2nd workshop, which was held in Teknaf on the 04 March 2019. The following table shows the criteria which were considered in selecting the subsectors for this study which further shaped the overall study.

Table 3: Sub-sector selection criteria

Criteria	Weight
Market size and growth potential 1.Strong effective demand for product or services being produced/ Demand is increasing – unmet demand 2. Ready market for products/service but are unable to meet demand (Buyers of products (on-farm), Employers of a waged service (off-farm) 3. Profitability/Opportunities for value addition	15%
Criteria: Partnership and Quick Win Potential 1. Input/output market, service providers, potential employers 2. Potential training partners and/or apprenticeship programs for skills training in the target locations and/or ability of the program to provide the requisite skills 3. Linkages with government services, and favourable policies) or existing programs that can provide synergy and complementary activities. 4. Ability to have quick income generation potential for the ultra-poor target group (in light of the graduation model timeframe)	15%

Impact on the ultra-poor 1. Proportion of ultra-poor already participating in the livelihood option/value chain (self/waged employment)/ potential for household to be impacted 2. Ultra-poor interested in livelihood option 3. Ability of the selected livelihood option to provide regular and sufficient income to cover household expenses 4. Potential for the ultra-poor gain self-employment or wage employment 5. Low entry barriers and low level of risk for the ultra-poor	30%
Gender and Youth inclusion 1. High share of women employed in the livelihood option compared to the economy at large 2. Low entry barriers for women (E.g. low start-up costs, close to household, skills set required value addition/employment opportunities is possible, less restrictive gender norms barriers, less time barriers) 3. Women control equipment/assets/resources required to participate 4. The extent that women are/have potential to benefit from value chain/employment activities Please consider how are women remunerated for their labour & their decision-making ability in relation to income making activities. 5. Low entry barriers for youth 6. Youth already participating in the livelihood options 7. Youth can access the equipment/assets resources required to participate	30%
Cross-cutting issue: Climate change 1. Climate change adaptation prospect/Impact on climate change 2. Extent the livelihood option is safe, sustainable and legal, complementary with food security	10%

The participants were requested to score all the criteria out of 5, considering the variables mentioned under each of the criterion. After receiving results from all the groups, the scores were averaged to generate the final outcome of this selection exercise. The outcome of these workshops is presented in Table 4. Detailed scoring is attached in the Annex.

Table 4: Sub-Sector Selection Workshop Results

Sub sectors	Weighted Average Score	Rank
Homestead Vegetable	4.2	1 st
Indigenous Chicken	3.8	2 nd
Cattle Rearing	3.3	3 rd
Dry fish	3.2	4 th
Marine Fish	3.1	5 th
Goat Rearing	3.0	6 th
Small business	3.0	7 th
Rice cultivation	2.9	8 th
Handicraft	1.8	9 th

From the above scoring results, the top 5 ranked subsectors were selected to further pursue for this study. Homestead vegetable was chosen as the most suitable sector for IGAs considering women involvement. Indigenous chicken was also considered high potential IGAs for women, as it can be easily done in the backyard or court yard of the houses. Cattle rearing was ranked 3rd as it is a profitable sector, and women usually take care of the cattle in the households we visited. Dry fish ranked 4th as a potential sector for IGAs. Even though Marine Fish was ranked 5th, which is understandable as there is a huge base of fishermen in the study area, but there are very little opportunities for women to get involved in this sector. On the other hand, goat rearing could have been better suited for women's IGA, which was ranked 6th during the workshop.

The selected sub-sectors for this study were the following ones:

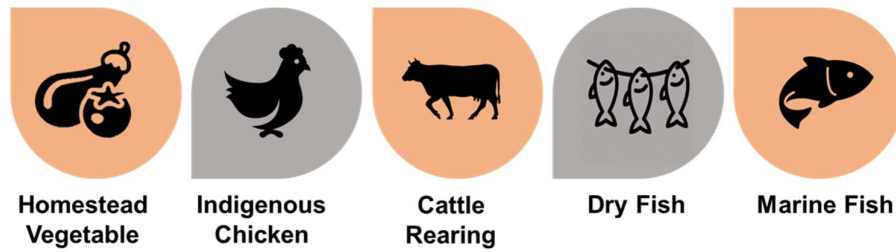


Figure 3 Selected Sub-Sectors

This value chain selection workshop was essential for this study to identify and elaborate opportunities and constraints of the existing market system of these selected value chains, and to find ways to enhance participation of the ultra-poor families in the market system. Key Informant Interviews were conducted further along the study with different stakeholders for each of the selected value chains to understand their prospects in the project area for ultra-poor households. Government officials and market actors of the selected value chains were also interviewed to design the interventions as per the project requirement.

Chapter 3: Findings of the Household Survey

This chapter will demonstrate the livelihood status of the ultra-poor inhabitants of Ukhiya and Teknaf Upazilas of Cox's Bazar district.

3.1 Profile of the Respondents

The following table demonstrates the demographic information of the respondents of the study:

Table 5: Profile of the respondents

Gender	Female- 82% Male- 18%	Education	No formal education- 11% No formal education but can sign- 50% Below Grade 8- 37% SSC or equivalent- 2%	Average no. of family members- 5
Marital status	Divorced- 2% Married- 80% Rejected by spouse- 7% Unmarried- 3% Widowed- 8%	Housing	Bamboo walls and polythene roof- 50% Wall and roof both are of C.I sheet- 1% Mud wall and entirely thatched- 11% Mud walls and tiled roof- 1% Mud wall and polythene roof- 15% Others- 22%	80% of the respondents have possession of homestead land/ cultivable land/water bodies. 20% of the respondents do not have possession of homestead land/ cultivable land/water bodies.
Age	>50 – 5% 36-50 – 30% 18-35 – 65%			

Mandatory and Exclusion criteria: Some mandatory and exclusion criteria were set to identify ultra-poor households of Ukhiya and Teknaf Upazilas. “Gender-inclusive pathway out of poverty for vulnerable households in Cox’s Bazar” project aims to work for betterment of the lives of the ultra-poor vulnerable households of the targeted regions through gender-sensitive interventions. As per project mandate, we set out some “mandatory” and “exclusion” criteria to identify ultra-poor households of Ukhiya and Teknaf Upazila. As can be seen in the tables presented below, majority of the respondents meet the pre-selected criteria. However, our primary objective was to identify ultra-poor households of the two Upazilas and enumerators were instructed to place greater emphasis on their observation while determining the ultra-poor households. 1% of the respondents have regular source of income and 5% of the respondents have a monthly income of above 5000 BDT. Despite the fact that few of the households did not meet the criteria, they were reported to be living in poor condition and thus were identified as ultra-poor households.

Table 6: Mandatory criteria to identify ultra-poor households

Mandatory Criteria	No	Yes
Are you interested in participating in this survey?	0%	100%
Less than <20 decimals of land (607.5 – 810sqm)	0%	100%
Irregular source (no regular work to earn income consistently) of income	1%	99%
Permanent residence one village (at least last one year)	0%	100%
Participant over 18 years of age (one participant per household)	0%	100%
Participant have National ID Card	0%	100%
Monthly income below 5000?	5%	95%
Is there at least one of the working people over the age of 15 years?	0%	100%

Table-3 demonstrates the response of the households to the exclusion criteria. 100% of the respondents meet the prerequisites as per the exclusion criteria to be selected as an appropriate respondent for the study.

Table 7: Exclusion criteria to identify ultra-poor households

Exclusion criteria	No
Similar type of support (cash or asset transfer) received by any of the government or non-government program	100%
Is involved with begging	100%
Living in far distance/in spread geographical area	100%

3.2 Livelihood and Markets

This section will explore the livelihood, ultra-poor inhabitants are currently engaged in and their opportunities and constraints based on the findings from the household survey conducted for this study. This section is divided into 6 sub-sections, namely- Respondents' possession of assets, Livelihood of the respondents, Food security, Women empowerment, Financial inclusion and Social limitations for women.

3.2.1 Respondents' possession of assets

Figure-4 illustrates the possession of assets of the respondents. As can be seen in the figure, 20% of the respondents do not have any ownership of lands while 80% of the respondents have ownership of lands as fixed assets. However, respondents were further asked regarding their ownership of lands.

99% of the respondents have reported that they have homestead land as their fixed asset while only 1% of the respondent own cultivable land. This represents the lack of opportunity of the ultra-poor residents to overcome their poverty. According to our assessment, the five selected value chains which best suit the ultra-poor graduation in the backdrop of the socio-economic context of Ukhiya and Teknaf Upazila (Dry fish farming, Indigenous chicken rearing, Cattle rearing, Fishing and Homestead vegetable cultivation) do not require cultivable land ownership. The interventions suggested for ultra-poor graduation in the targeted Upazilas do not require cultivable land ownership as well. The detailed value chain assessment is presented in the subsequent chapters.

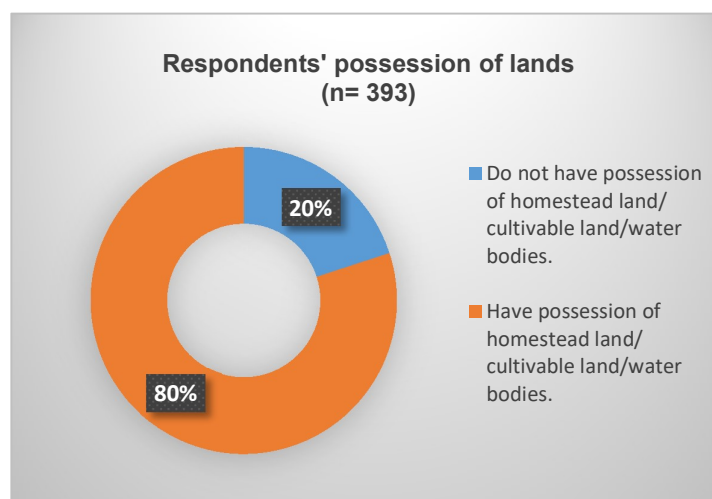


Figure 4: Respondents' possession of lands

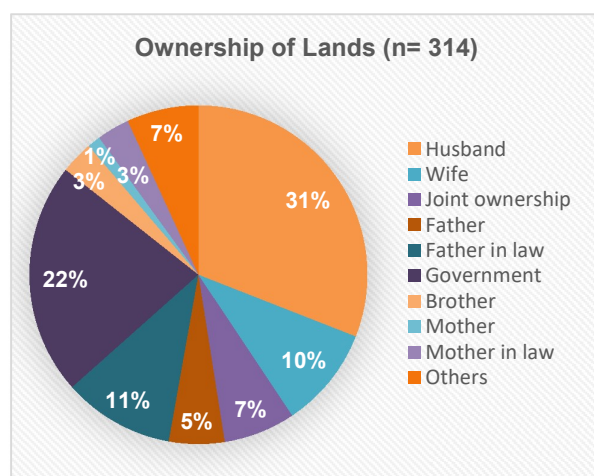


Figure 5: Ownership of lands of the respondents

According to the survey the average homestead land, owned by the respondents is 6.8 decimal and average cultivable land is of 36.8 decimal. Respondents were further asked on the ownership of the lands. The survey results show that, 25% of the respondents' land is owned by their husbands, 22% of the respondents' land is owned by the Government and 13% of the respondents' land is owned by

the respondents themselves. Figure- 5 illustrates the ownership of lands owned by the respondents.

As can be seen from the figure, only 13% of the respondents reported that land ownership belongs to themselves. Given that the majority of the respondents of this study is female, the data shows that majority of the women do not have any land ownership in the targeted Upazilas. Consequently, this obstructs women from being in the decision-making position in the family.

3.2.2 Livelihood of the Respondents

From the quantitative survey, 88% of the respondents reported that they depend on a single source of income. The dependency on a single source of income brings forward the vulnerability of the ultra-poor households in the region. A single source of income can get affected by seasonality, disaster etc. Our assessment suggests that involvement with more than one livelihood can ensure better security and can lead to ultra-poor graduation. We investigated further on livelihood of the ultra-poor inhabitants.

Figure- 6 demonstrates the primary sources of income of the respondents. As can be seen from the figure, 63% of the respondents work as day labourers. 31% of the respondents work as a non-agricultural day labour and other 32% work as a day labour in agricultural (farming) sector. This represents that working as a day labour is one of the prevalent occupations of the ultra-poor inhabitants of the region.

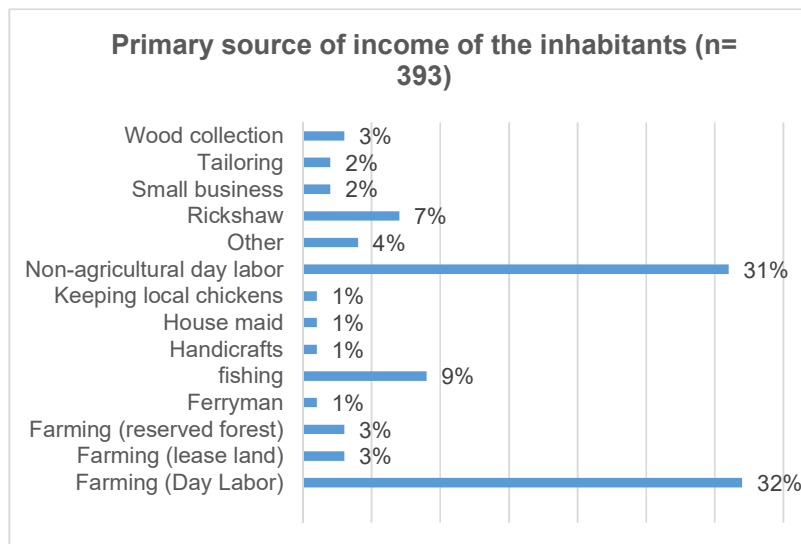


Figure 6: Primary source of income of the inhabitants

Daily wage rate of male and female inhabitants differs by a significant margin. While a male wage earner earns an average of BDT 347 (without food) for one day of work, a female wage earner is paid an average of BDT 207 (without food) for one day of work. The discrimination is due to the volume of work expected from a male worker in a day is much higher than that of a female worker. Respondents were asked whether they are satisfied with their current occupation or not. 84% of the respondents were reported to be satisfied with their current occupation while only 16% of the respondents expressed their satisfaction with their current occupation.

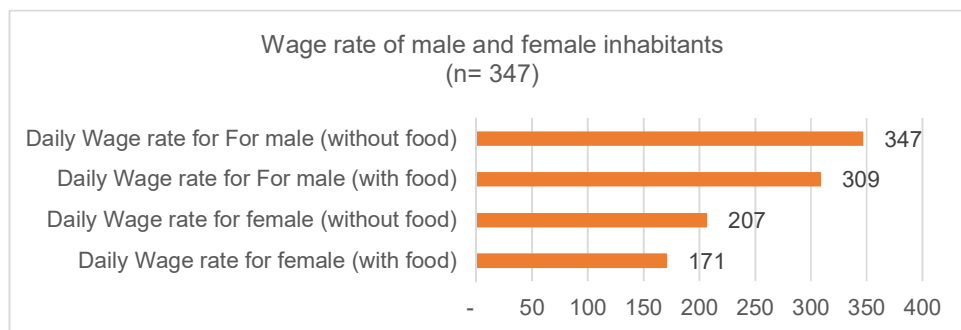


Figure 7: Wage rate of male and female inhabitants

81% of the respondents were reported not to be engaged in secondary occupations, while only 19% of the respondents were found out to be engaged in secondary occupations (figure-8). 88% of the respondents had previously stated that they are dependent on a single source of income. Our observation suggests that 19% of the respondents agreed to the fact that they have secondary sources of income, some of them do not depend on the income generated through the secondary occupations.

Respondents were asked about the challenges they face in their current livelihood activities. 83% of the respondents mentioned irregular work opportunities as their main challenge of

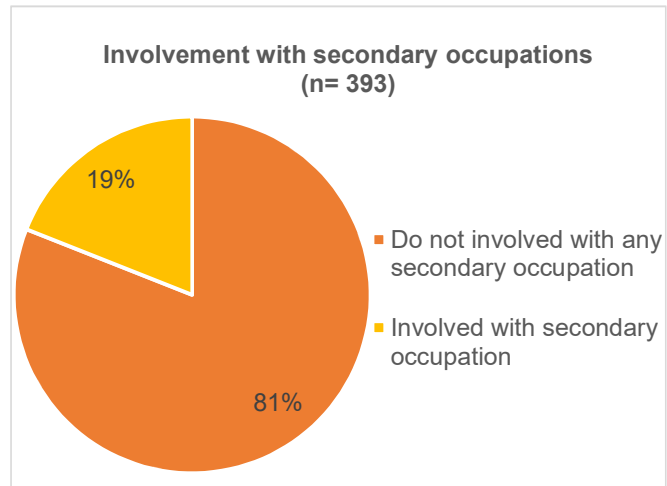


Figure 8: Inhabitants' involvement with secondary occupations

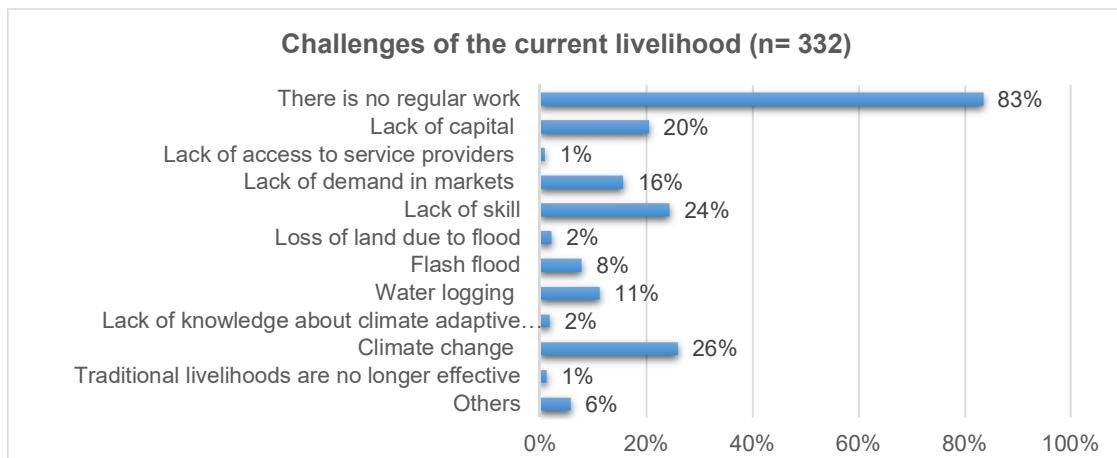


Figure 9: Challenges of the current livelihood

the current livelihood engagement. 26% of the respondents identified climate change as a challenge to their livelihood activities while 24% and 20% of the respondents identified lack of skills and lack of capital as their main challenge of current livelihood engagement respectively (figure-9).

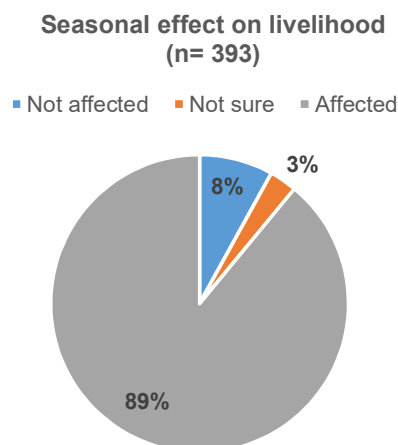


Figure 10: Seasonal effect on livelihood

Majority of the respondents (89%) reported that there have been seasonal effects on their current livelihood engagements while 8% of the respondents expressed that there is no seasonal effect on their livelihood and the rest 3% were reported to be not sure about seasonal effects on their livelihood (figure-10).

Respondents were further asked how the seasonal effect affects their livelihood. As majority of the respondents are wage earners as day labourers, the seasonal effect mostly affects the work opportunities. 83% of the respondents reported that their work opportunities decreased in some of the seasons (mostly in the rainy season) and 64% of the respondents reported that their income is decreased due to seasonal effect (figure-11).

Apart from the seasonal effect, respondents' livelihood also gets affected by disasters. Cox's bazar district is prone to cyclones and inhabitants' livelihood also gets affected by the disasters. 65% of the respondents reported that their livelihood is affected by disasters while 30% of the respondents reported that disasters has no effect on their livelihood.

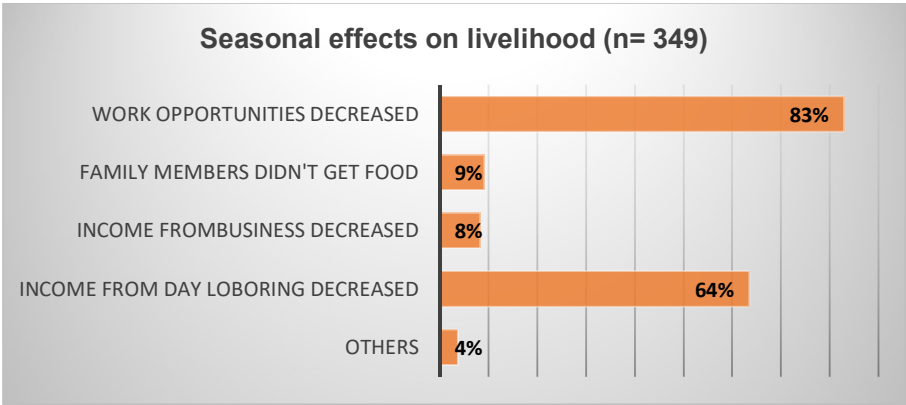


Figure 11: Seasonal effects on livelihood

Recent Rohingya influx also has an impact on the livelihood of the inhabitants. Our findings suggest that many of the Rohingya refugees seek for work in the villages and they tend to work at a much lower price than the local inhabitants. As a result, the labour market experienced a significant shift in the last few years. 96% of the respondents reported that their livelihood is affected by the recent Roahingya influx while 4% of the respondents expressed that their livelihood did not get affected by the Rohingya influx (figure-12).

Respondents were further asked how the Rohingya influx had impacted on their livelihood. As can be seen in figure-13, 94% of the respondents emphasized the price hike of the commodities in the region, 89% of the respondents reported that the daily wage has significantly decreased over the last few years. 64% of the respondents had reported that the transportation cost has significantly increased after the Rohingya influx and another 48% of the respondents reported that the number of employment days has decreased over the past few years.

Respondents were asked about their preferred livelihood options. 58% of the respondents view cattle rearing for dairy as their preferred livelihood while 51% of the respondents identified Indigenous chicken rearing as their preferred livelihood. Other preferred livelihoods, as identified by the respondents are- goat rearing (47%) and small business (34%). Table-5 illustrates the preferred livelihood, as identified by the respondents of this study.

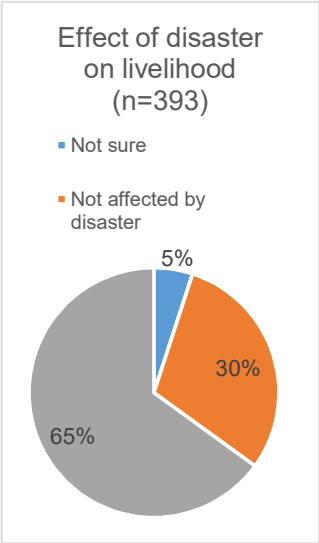


Figure 12: Effect of disaster on livelihood

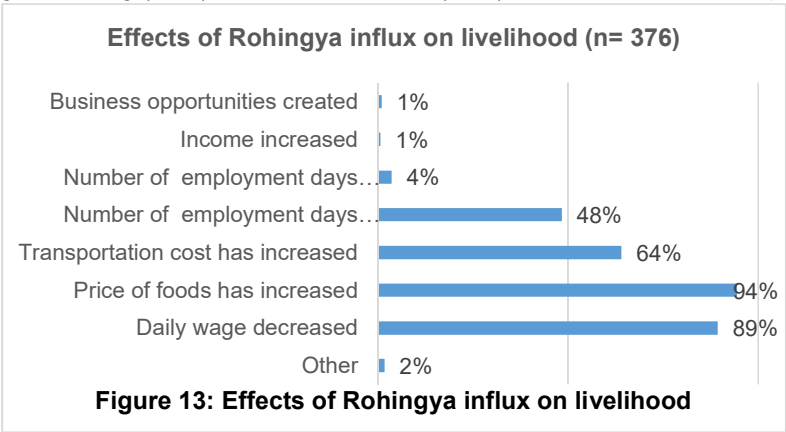


Figure 13: Effects of Rohingya influx on livelihood

Our assessment suggests that the women prefer to work from home as they have household responsibilities which are traditionally vested upon the female members of the household. Women were observed to be looking for suitable livelihood in which they can be involved in alongside their household

chores. The preference is reflected upon the responses from the respondents. As can be seen in the following table, the top 3 preferred livelihoods include cattle rearing (dairy), indigenous chicken rearing and goat rearing which can be done from within the households.

Table 8: Preferred livelihoods of the respondents

Livelihood	% of respondents
Agriculture (Agriculture day labour)	2%
Agriculture (Own land)	8%
Agriculture (Leased land)	18%
Agriculture (Reserve forest)	4%
Homestead Vegetable cultivation	10%
Dairy (Own)	58%
Dairy (Of other owner)	4%
Fishing	4%
Beef fattening (Own)	8%
Beef fattening (Of other owner)	1%
Small business	34%
Indigenous chicken rearing	51%
Goat rearing (Own)	47%
Tailoring	12%
Handicraft	5%
Dry fish processing	1%
Wood collection	1%
Rickshaw pulling	4%
Hawker	2%
Other	11%
Base	393

3.2.3 Food Security

Ultra-poor inhabitants of Ukhiya and Teknaf Upazilas were observed to be facing food shortages due to their low income. According to the survey, 97% of the respondents reported that their household had faced food shortage in the last 12 months while only 3% of the respondents did not face any food shortage. Our assessment suggests less income opportunities alongside the price hike of the essential commodities have resulted in food shortages in the last 12 months.

Respondents were asked whether their current income is sufficient to fight the food shortage or not. 92% of the respondents reported that their current income is not at all sufficient to prevent food shortages. 4% of the respondents were not sure whether their income is sufficient and another 4% of the respondents expressed that their income is sufficient to prevent food shortages (figure-14).

As can be seen in figure-15, 88% of the respondents reported that they borrow money in times of food shortage. 66% of the respondents borrow food from others to prevent food shortage and other 17% reduce their number of meals in a day.

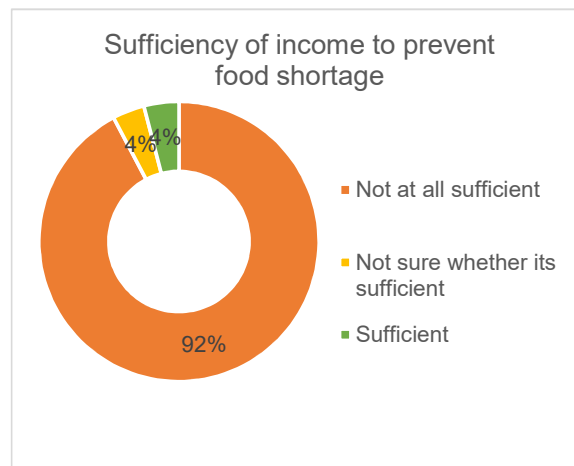


Figure 14: Sufficiency of income to prevent food shortage

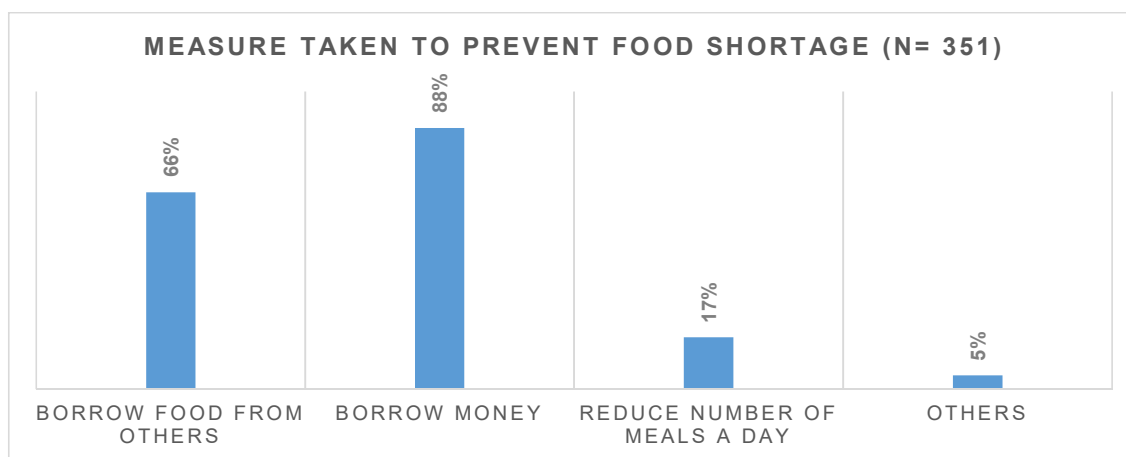


Figure 15: Measure taken to prevent food shortage

As majority of the respondents reported that their income is not sufficient to prevent food shortages, the households' dependency on external food assistance becomes imminent. Our findings suggest accordingly. As can be seen in figure-16, 89% of the respondents expressed that they are dependent on external food assistance to ensure food security.

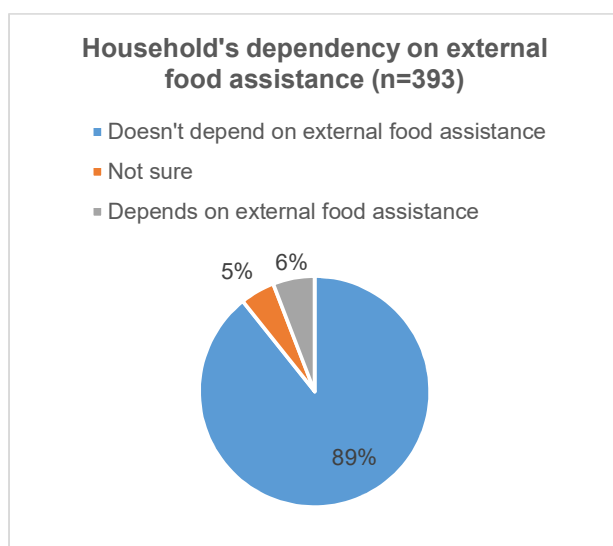


Figure 16: Household's dependency on external food assistance

round the year or in particular seasons, respondents were asked about the seasonal effect on food shortages. As can be seen in figure-17, 94% of the respondents face food shortage in the monsoon. One reason behind this could be the lack of work opportunities for the day labourers in monsoon.

Respondents were asked about their coping strategies in times of food shortages. It has been found out that majority of the respondents borrow money to prevent food shortage. While 87% of the respondents reported that they borrow money, 50% of the respondents procure food on credit and 33% of the respondents pursue assistance from relatives or neighbours in times of food shortage.

Respondents were further asked on what types of food assistance they rely on in times of food shortage. 65% of the respondents rely on ration, 39% of the respondents rely on relief and 26% of the respondents reported they rely on other types of external assistance in times of food shortages. However, majority of the respondents do not rely on any external sources of external assistance to prevent food shortage.

In order to determine whether the food shortage is experienced by the respondents

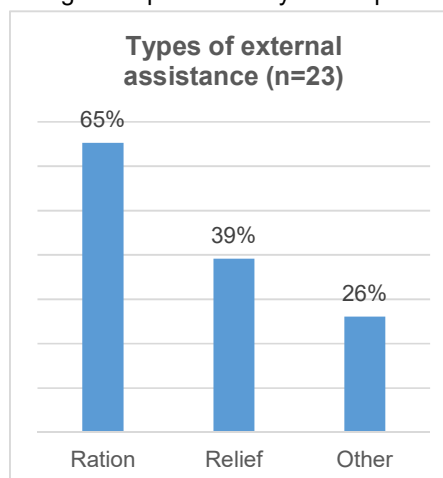


Figure 17: Types of external assistance

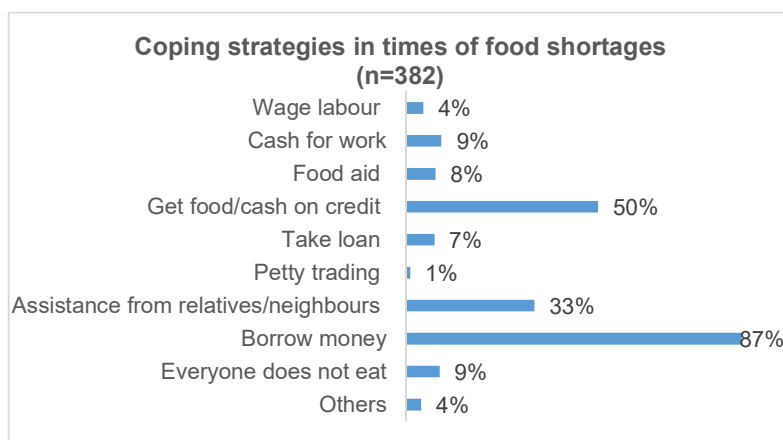


Figure 18: Coping strategies in times of food shortages

Female household members get most affected in times of food shortage. 59% of the respondents reported that wife of the household gets most affected in times of food shortage. 30% of the respondents reported that they themselves get most affected when the family is in food crisis (figure-19).

Respondents were asked how they decide on what measures to be taken to tackle food shortage. 67% of the respondents reported

that husband of the family usually takes the decision on strategies to be taken to tackle food shortage (figure-20). This represents that women still do not have the decision-making capacity in their households. Further discussion on women's position in society is presented in subsequent sections.

Respondents were asked whether they are prepared to tackle food crisis in future. As can be seen in figure-21, 88% of the respondents reported that their household is not at all prepared to tackle future food crisis. Only 4% of the respondents expressed that they are a little prepared to tackle future food crisis. 8% of the respondents were not sure whether they will be able to tackle future food crisis.

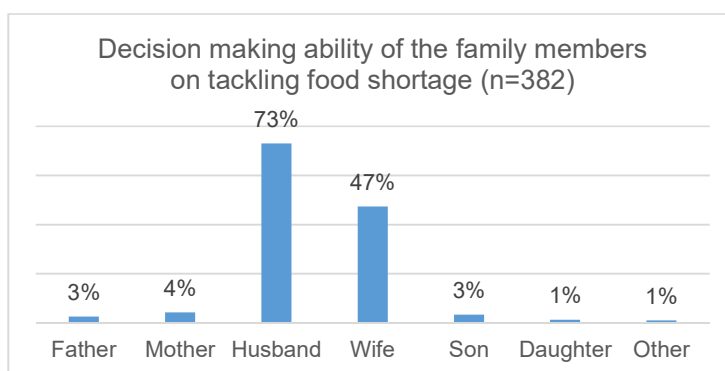


Figure 19: Decision making ability of the family members on tackling food shortage

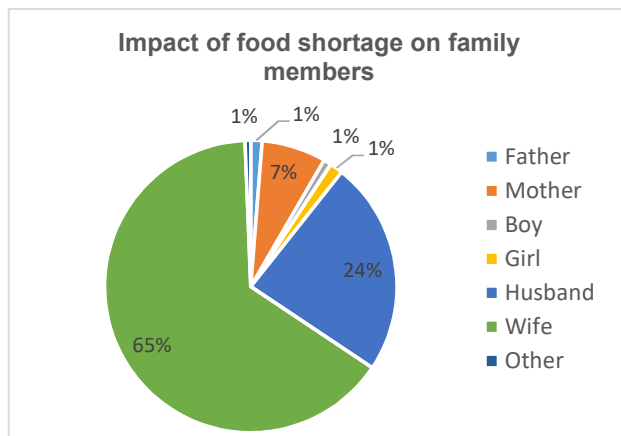


Figure 20: Impact of food shortage on family members

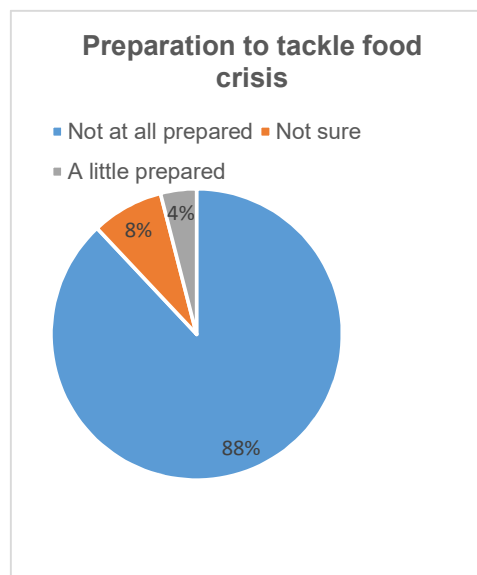


Figure 21: Household preparation to tackle food crisis

3.2.4 Women empowerment

Respondents were asked whether they face any obstacles in their current livelihood. Respondents identified some obstacles in the livelihood they are engaged in. Figure-22 illustrates the barriers for women in their livelihood practices. 76% of the respondents identified lack of access to resources/finance as an obstacle in their current livelihood. Other obstacles, as identified by the respondents include lack of capacity to run IGA (41%), lack of decision-making ability (22%) and lack of opportunities to build skills (22%).

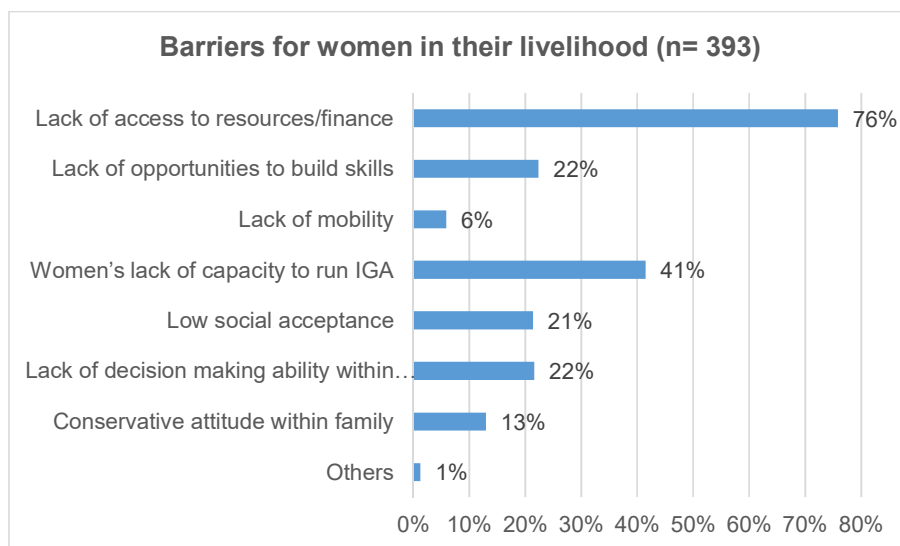


Figure 22: Barriers for women in their livelihood

To investigate further on opportunities for women in livelihood, we asked the respondents on their perception on women involvement in IGAs. 81% of the respondents expressed that women should get involved in the IGAs in contrast to 19% of the respondents who thinks women should not get involved in IGAs.

Respondents were further asked on the main reasons behind their/women household members' involvement in IGAs. 97% of the respondents reported that women can supplement family income while 54% of the respondents expressed that women should get involved in IGAs to assist their husband's/son's work. Another 43% of the respondents reported that they are good at some activities like food processing. This suggests that women still can't view themselves as the primary

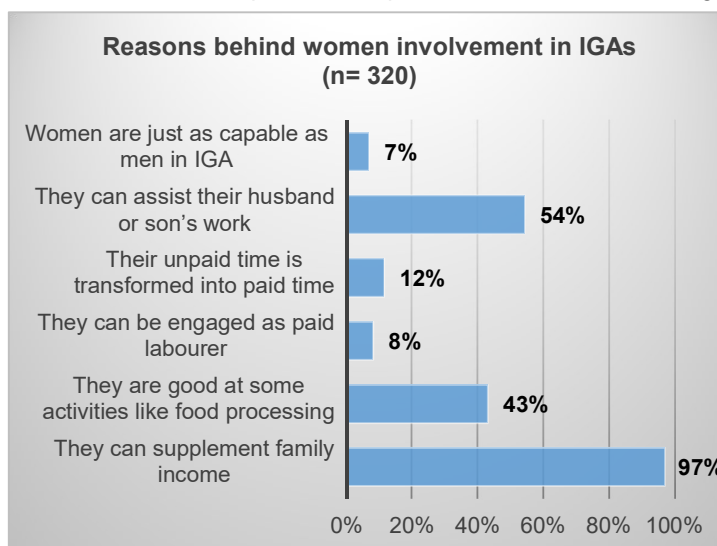


Figure 23: Reasons behind women involvement in IGAs

earner of the family and they prefer working from home. Our selected value chains best suit the perception of the inhabitants of the region. For gender-sensitive ultra-poor graduation women need to be presented with opportunities that they can avail from home. While only 13% of the respondents identified conservative attitude to women as a key barrier to women's empowerment, only 7% of respondents noted that women are just as

Table 9 Suitable IGAs for women

IGA	% of respondents
Agriculture (Agriculture day labour)	1%
Agriculture (Own land)	2%
Agriculture (Leased land)	4%
Agriculture (Reserve forest)	1%
Homestead Vegetable cultivation	18%
Dairy (Own)	53%
Dairy (different owner)	3%
Beef fattening (Own)	4%
Beef fattening (different owner)	1%
Small business	3%
Indigenous chicken rearing	75%
Goat rearing (Own)	55%
Tailoring	30%
Handicraft	7%
Pottery	0%
Dry fish processing	1%
Hawker	1%
Dry fish collection	0%
Other	2%
Base	393

51% of the respondents expressed that women household member contribute to family livelihood while 49% of the respondents expressed that women do not contribute to the family livelihood. This is a representation of the fact that there is still scope for women to get involved in the family livelihood and contribute to the family income.

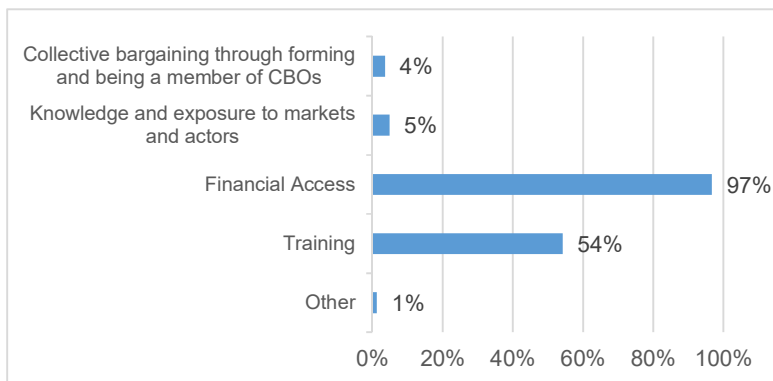


Figure 24: Prerequisites for women involvement in IGAs

Respondents were further asked on women involvement in livelihood. As can be seen in figure-25, 54% of the respondents reported that women are involved in production while 18% of the respondents expressed that women contribute to the family by working as a labour.

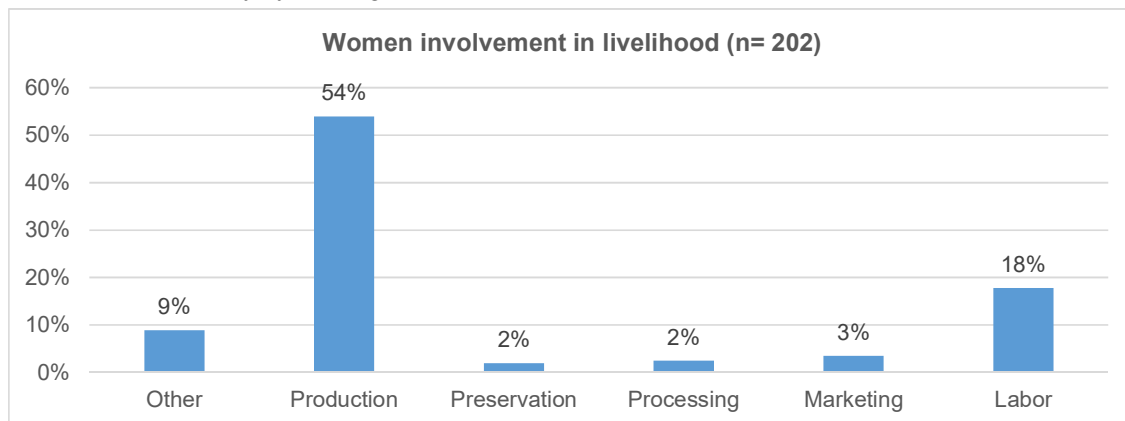


Figure 25: Women involvement in livelihood

capable as men in IGA. This suggests that there maybe be social norms that the GPOP project can address, as well as soft skills development.

To understand the inhabitants' perception on suitable IGAs for women, respondents were asked regarding the suitable IGAs for women. As can be seen in table-6, 75% of the respondents expressed that Indigenous chicken rearing is the suitable IGA for women. 55% of the respondents reported that goat rearing (own) and 53% of the respondents reported that cattle rearing for dairy (own) is the most suitable IGA for women.

Respondents were further asked about prerequisites for women involvement in IGAs. 97% of the respondents reported that financial access and 54% of the respondents reported that training is the prerequisite for women involvement in IGAs (figure-24).

As can be seen in figure-26, 44% of the respondents expressed that they make collective decision in their families while 26% of the respondents expressed that husband of the family generally takes household decisions.

To investigate on the mobility of women of the region, we asked whether the women go to the local markets regularly or not. 85% of the respondents reported that women do not go to the local markets regularly in the region while only 15% of the respondents expressed that women go to the local markets regularly (figure-27). We investigated further

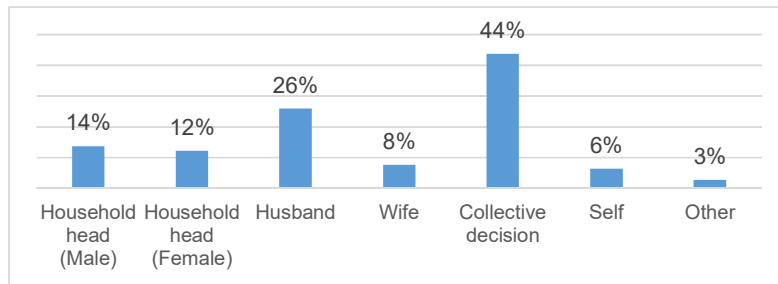


Figure 26: Decision making within family

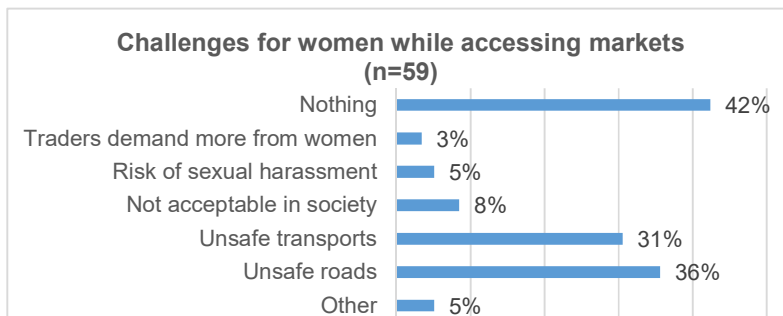


Figure 27: Challenges for women while accessing markets

on the probable reasons behind women's immobility. 84% of the respondents reported that women have access in local markets while only 16% have expressed that women do not have access in local markets.

95% of the respondents reported that women do not face any difficulty while

accessing markets while only 5% of the respondents expressed that women face difficulty in accessing markets.

Women who go to local markets regularly, were further asked to state some challenges (if any) they face while accessing markets. 46% of the respondents mentioned unsafe roads and 31% of the respondents mentioned unsafe transports as challenges while accessing local markets (figure-28).

The survey results show that, 90% of the respondents find the local market places safe while only 10% of the respondents expressed that they do not find the market places safe for women. It can thus be inferred that the market place is safe and accessible for the women. Although, majority of the women do not regularly visit the markets. Household responsibilities or restriction from the household head can be the restricting factors behind women not accessing the markets.



Figure 28: % of women find the market places safe

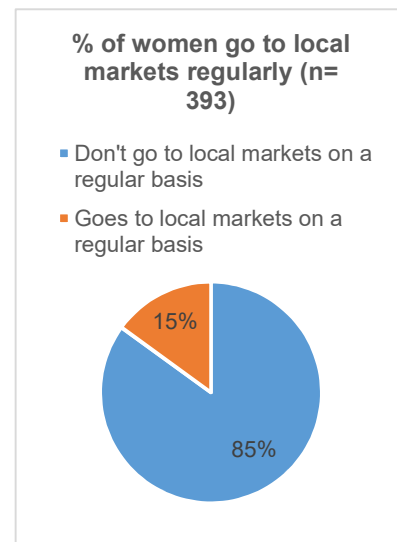


Figure 29: % of women go to local markets regularly

3.2.5 Financial Inclusion

Respondents were asked whether they save for future. As can be seen in figure-31, 94% of the respondents do not have any tendency of savings. Only 5% of the respondents have tendency of savings. Those who have the tendency of savings were all reported to save in cash (Annex 3).

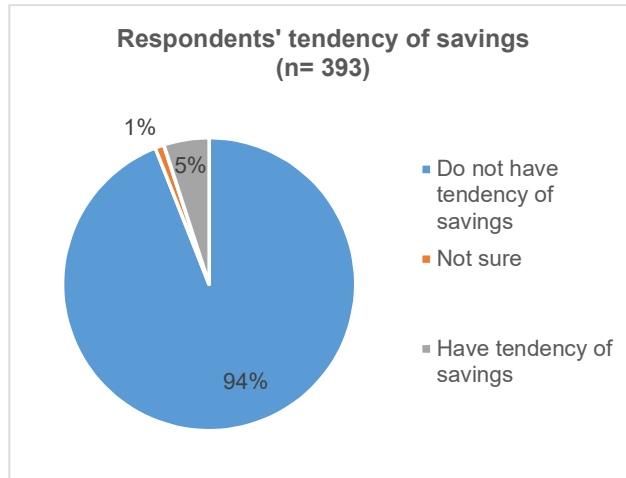


Figure 30: Respondents' tendency of savings

According to our survey, average monthly household income is BDT 3925 and average monthly expenditure BDT 4634 (Annex 3). The deficiency is covered by the informal loans taken by the inhabitants during food shortages or in times of needs. According to our survey, 80% of the respondents do not have any outstanding loan at the time the survey was undertaken. 20% of the respondents expressed that they had outstanding loan at the time the survey was undertaken. The average loan amount was reported to be BDT 18, 060 at an interest rate of 8% (Annex 3).

The scenario is similar within the female household members. 98% of the respondents reported that female household members never took any loan while only 2% of the respondents reported that the female household members took loans. We further investigated on whether women face any challenge while accessing financial services or not. As can be seen in figure-33, 60% of the respondents do not face any challenge while accessing financial services while 40% of the respondents expressed that they face challenge while accessing financial services.



Figure 31: % of women face challenges while accessing financial services

Respondents were further asked on the challenges they face while accessing financial services. As can be seen in figure-34, 71% of the respondents reported that they do not have the ability to repay the loans. Another 54% of the respondents also identified their incapability to repay the loans as challenges while accessing the financial services. Lack of credit worthiness (33%) and lack of collaterals or asset required (23%) were also identified by the respondents.

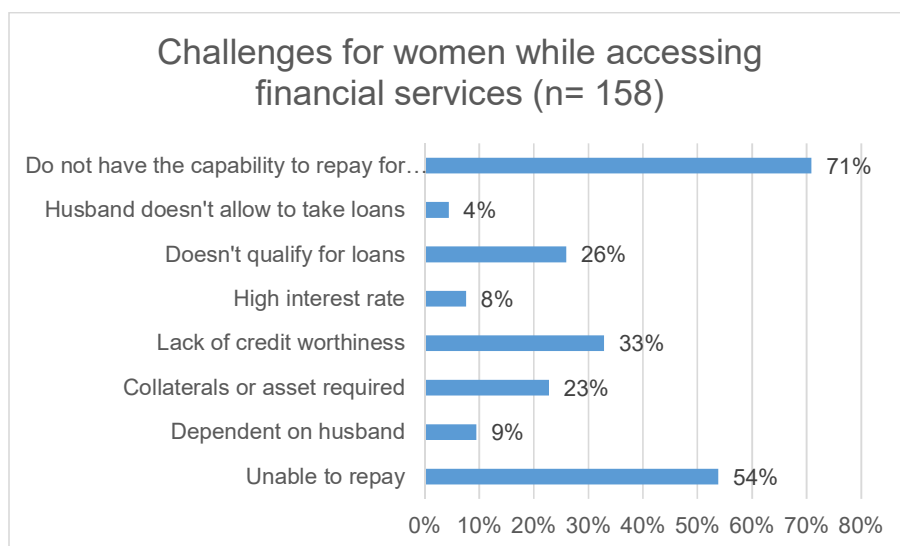


Figure 32: Challenges for women while accessing financial services

In case of men, 61% of the respondents expressed that they do not face any challenge while accessing financial services in contrast to 39% of the respondents. Challenges for men while accessing financial services reiterated the case of women. 77% of the respondents expressed that they do not have the capability to repay the loans. 66% of the respondents identified not having a regular source of income and 32% of the respondents identified not having a regular source of income as main challenges while accessing financial services.

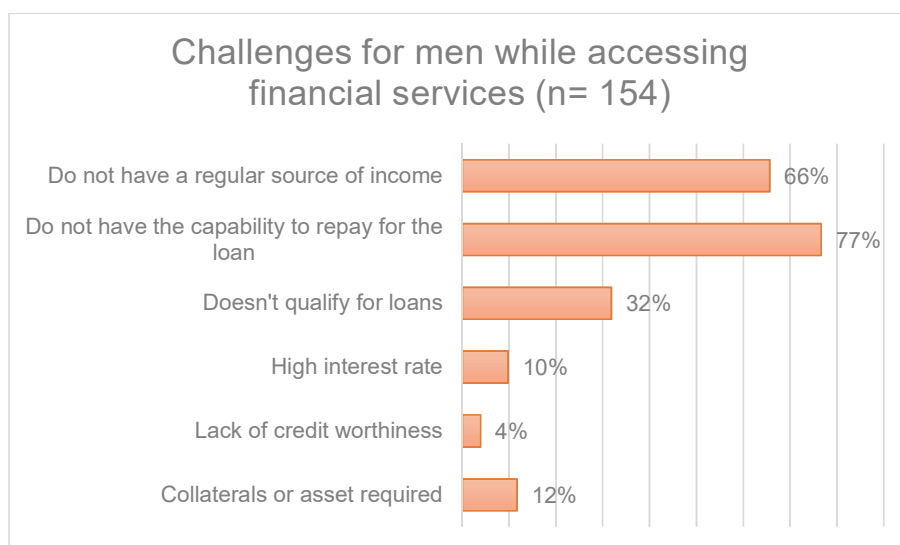


Figure 33: Challenges for men while accessing financial services

Among the respondents, 70% of the respondents reported that they did not get financial services/credit as per their requirement in contrast to 30% of the respondents who expressed that they received financial aid/credit as per their requirement.

When asked about the sources of their credit, it was observed that majority of the respondents received credit from informal sources. 82% of the respondents identified relatives as main sources of credit while 64% of the respondents identified friends as their source of credit. Other sources of credit include *mohajon* and MFIs (figure-34).

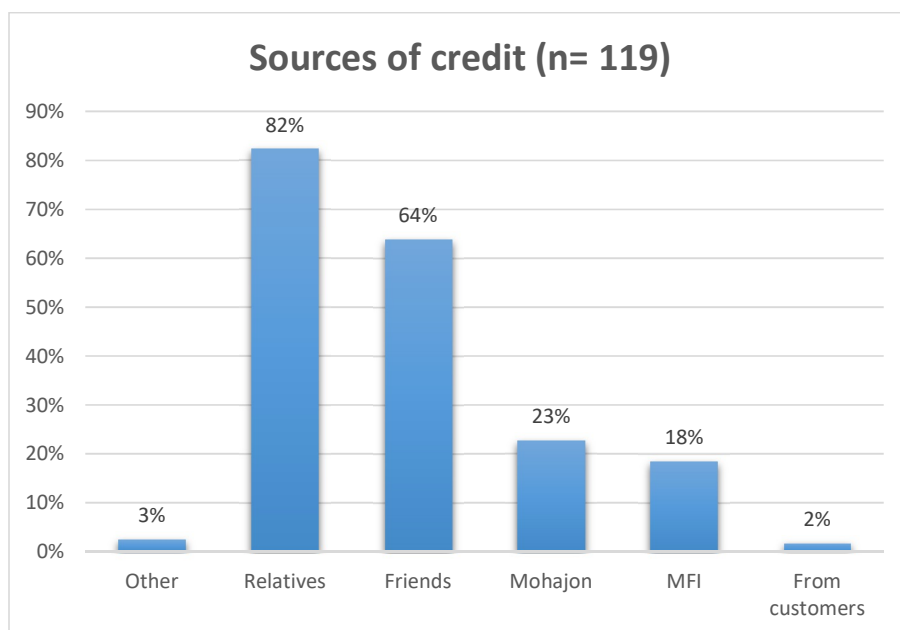


Figure 34: Sources of credit

While investigating the risks involved in managing finance, 74% of the respondents reported that there are no risks involved in managing finance while 13% of the respondents have identified theft as a risk while managing finance. Another 13% of the respondents identified hijacking as a risk while managing finance (figure-35).

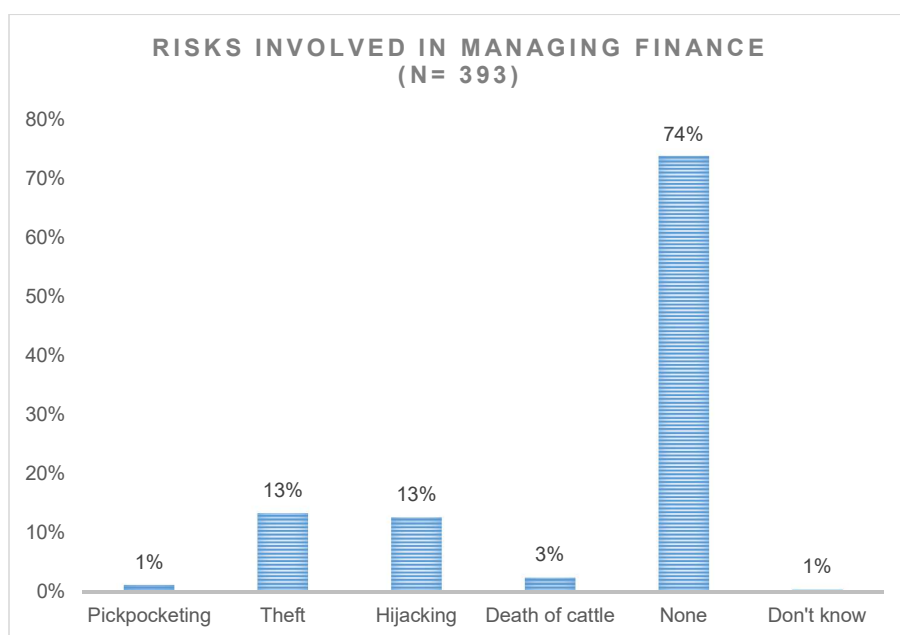


Figure 35: Risks involved in managing finance

95% of the respondents are not involved with any associations (samitees) at the time the survey was undertaken while only 5% of the respondents reported that they are involved with any association. This represents the fact that there is scope to group the inhabitants and provide further assistance through the group. The benefits of being involved in an association thus can be made available for the project beneficiaries.

3.2.6 Social limitations for women

As can be seen in Figure-36, 54% of the respondents expressed that child marriage takes place in their region. Child marriage places female children at high risk of violence, exploitation and abuse. Child marriage is a restraining factor for women to get involved in societal activities and consequently results in low literacy rate of women. Low literacy contributes to low economic empowerment of the women.

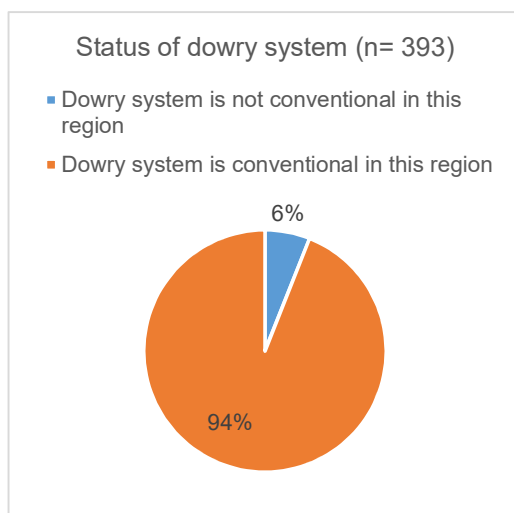


Figure 36: Status of dowry system

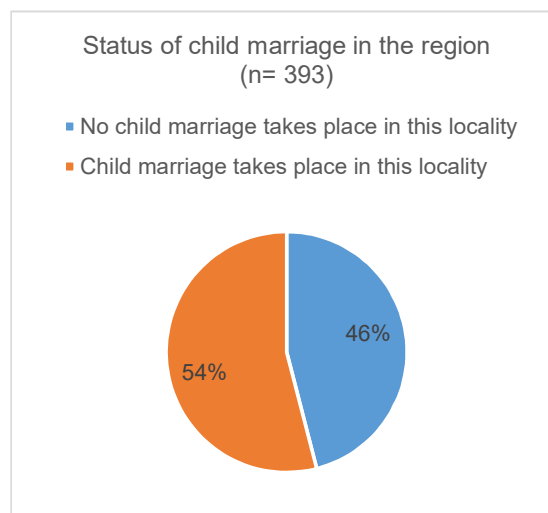


Figure 37: Status of child marriage in the region

Respondents were further asked whether they know about the laws concerning child marriage. 77% of the respondents reported that they are aware of the child marriage laws in contrast to 23% of the respondents who expressed that they do not know about child marriage laws.

As can be seen in figure-37, 94% of the respondents reported that dowry system is conventional in their region in contrast to the 6% respondents who expressed that dowry system is not conventional in their region. Dowry system is another constraining factor for the ultra-poor households.

Respondents were asked whether occurrences of sexual harassment take place in their region or not. 85% of the respondents reported that no occurrence of sexual harassment takes place in their region in contrast to the 15% of the respondents who expressed that occurrences of sexual harassment takes place in their locality.

53% of the respondents reported that they report to the Union Parishad if any occurrence of sexual harassment takes place in their region. 47% of the respondents reported that they go to the village leaders for justice while 29% of the respondents expressed that they do not report the incident at all as it is a matter of prestige to them (figure-38).

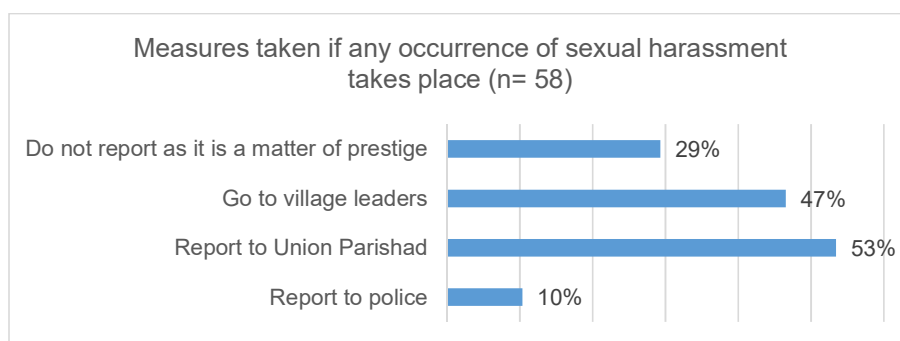


Figure 38: Measures taken if any occurrence of sexual harassment takes place

3.2.7 Livelihood status of female-headed ultra-poor households

This chapter will provide further analysis on livelihood status of the female-headed ultra-poor households of Ukhiya and Teknaf Upazilas. According to our survey, majority of the inhabitants are day labourers (agricultural 32%, non- agricultural 31%). Day labourers do not have a regular income source and thus exposed to poverty and food insecurity. Seasonal effects also impact the livelihood of the day labourers. Our assessment suggests that day labourers experience shortage of work opportunities in monsoon season which lead to extreme vulnerability. In addition, recent *Rohingya* influx impacted upon the labour market in Ukhiya and Teknaf Upazilas. *Rohingya* refugees were reported to charge much less than the host population for their work. This caused a significant transformation in labour market of the targeted regions causing the ultra-poor inhabitants even more vulnerable. According to our survey, 23% of the households were reported to be female-headed. The livelihood scenario of the women-headed household of the targeted regions was observed to be of similar kind. As can be seen in Table 10, 32% of the female-headed households' primary occupation is agricultural day labour and other 30% of the female-headed households' primary occupation is non-agricultural day labour. The comparative livelihood status shows that both the female-headed and male-headed households' livelihood practice is almost identical.

Table 10: Livelihood of the respondents

Primary Occupation of the Household	Female-headed household	Male-headed households
Farming (Day Labour)	32%	32%
Non-agricultural day labour	30%	31%
Other	9%	3%
Farming (lease land)	5%	3%
House maid	5%	0%
Tailoring	5%	1%
Handicrafts	3%	0%
Wood collection	3%	3%
Hawker	1%	1%
Fishing	1%	11%
Indigenous chicken rearing	1%	1%
Rickshaw	1%	8%
Small business	1%	2%
Homestead vegetable gardening	1%	0%
Farming (reserved forest)	0%	4%
Fattening cattle (Other people's cows)	0%	0%
Base	76	317

As can be seen in Table 11, the highest income generating professions among the female-headed households include fishing, agricultural day labour, house-maid and non-agricultural day labour. According to our assessment, women are not much involved in fishing as this is a strenuous work. However, women, who are involved in fishing are mostly involved in fishing prawn larvae from the shores of the Bay of Bengal. However, fishing prawn larvae has severe negative impact on the environment and thus cannot be promoted. As stated earlier, working as a day labourer leads the inhabitants to extreme vulnerability. Our assessment suggests that respondents are not satisfied with their current livelihood practices as they still live in extreme poverty.

Table 11: Annual income from primary household occupation

Primary Occupation of the Household	Annual income (in BDT)	
	Female-headed of household	Male-headed households
Farming (Day Labour)	30,468	43,524
Farming (lease land)	14,400	26,702
Farming (reserved forest)	-	34,765

Beef fattening (Other people's cows)	-	54,000
Hawker	30,000	58,860
Fishing	80,000	38,857
Handicrafts	27,000	-
House maid	29,800	-
Indigenous chicken rearing	13,600	16,000
Non-agricultural day labour	27,719	45,449
Rickshaw	-	37,629
Small business	21,000	163,113
Tailoring	15,066	34,500
Homestead Vegetable gardening	180	-
Wood collection	18,000	32,710
Other	39,943	42,508
Base	76	317

Majority of the respondents do not have a secondary occupation. As can be seen in Table 12, 75% of the female-headed households responded that they do not have a secondary occupation in contrast to 25% of the respondents who do have a secondary occupation.

Table 12: Status of secondary occupations of the respondents

	Female-headed households	Male-headed households	Overall
Does not have a secondary occupation	75%	82%	81%
Have secondary occupation	25%	18%	19%
Base	76	317	393

We further investigated on Households who have secondary occupations. Majority of the female-headed households were reported to be working as wood collectors, house maid, vegetable cultivators, day labourers and tailors (Table 13). However, majority of the households were reported to be not engaged in any secondary occupation.

Table 13: Secondary occupation of the respondents

	Female-headed household	Male-headed households	Overall
House Maid	16%	2%	5%
Wood collection	21%	38%	33%
Day Labour	11%	25%	21%
Vegetable cultivation/Agriculture	11%	16%	15%
Helper	0%	4%	3%
Cow rearing (other's)	0%	2%	1%
Lumbering	0%	4%	3%
Tailor	11%	2%	4%
Rickshaw	0%	5%	4%
Fishing	5%	2%	3%
Clam collection	5%	0%	1%
Corn Business	0%	2%	1%
Handicraft	0%	2%	1%
Chicken rearing	11%	0%	3%
Cow rearing (own)	5%	0%	1%
Service/Job	0%	2%	1%
Hawker	5%	0%	1%
Salon	0%	2%	1%
Electrician	0%	2%	1%
Base	19	56	75

Given that majority of the female-headed households are currently working as day labourers and 75% of the respondents do not have any secondary occupation, there is much scope of engagement in other potential livelihood opportunities. Respondents were asked regarding their preferred livelihoods.

Table 14: Preferred livelihood of the households

Livelihood	Female-headed household	Male-headed household	Overall
Indigenous chicken rearing	66%	48%	51%
Dairy (own)	64%	57%	58%
Goat rearing (own)	59%	44%	47%
Tailoring	18%	10%	12%
Small business	16%	38%	34%
Farming (leased land)	11%	20%	18%
Homestead vegetable gardening	11%	9%	10%
Beef fattening (own)	7%	9%	8%
Handicraft	7%	4%	5%
Farming (reserved forest)	4%	4%	4%
Dairy (others' cow)	4%	4%	4%
Other	4%	13%	11%
Farming (own land)	3%	10%	8%
Fishing	1%	4%	4%
Beef fattening (others')	1%	1%	1%
Dry fish processing	1%	1%	1%
Wood collection	1%	0%	1%
Rickshaw pulling	1%	4%	4%
Hawker	1%	2%	2%
Farming (Day Labour)	0%	2%	2%
Dry fish collection	0%	0%	0%
Crab and shrimp farming	0%	0%	0%
Base	76	317	393

As can be seen in Table 14, 66% of the female-headed households prefer Indigenous chicken rearing, 64% prefer to raise cows for dairy and 59% prefer goat rearing for their livelihoods. Another 18% of the female-headed households prefer tailoring while 16% prefer small business for their livelihood. As, majority of the respondents from female-headed households prefer cattle/goat/Indigenous chicken rearing, we can infer that women from the communities of targeted Upazilas prefer to stay at home jobs. Our assessment also suggests likewise. Women rearing cattle/goats/chickens is already reported to be culturally accepted and traditionally practiced. Respondents expressed that besides carrying out household chores, it is difficult for the women to go out for work. Similar findings were reflected in our survey findings when majority of the women chose cattle/goat/rearing as their preferred livelihoods.

Table 15: Barriers for women in livelihoods

Livelihood	Female-headed household	Male-headed household	Overall
Conservative attitude in the family	5%	15%	13%
Lack of decision-making ability among their families	13%	24%	22%
Lack of social acceptance	21%	21%	21%

Lack of skills to engage in livelihoods	57%	38%	41%
Lack of mobility	9%	5%	6%
Lack of opportunity to build skills	24%	22%	22%
Lack of capital/resources	80%	75%	76%
Other	1%	1%	1%
Total	76	317	393

Respondents were also asked about their barriers/obstacles in the livelihoods. 80% of the respondents from female-headed households identified lack of capital/resources as obstacle in their livelihoods. 57% of them identified lack of skills and 24% identified lack of opportunity to build skills as their main obstacles in livelihoods.

Lack of resources/capital can be addressed through arranging loans for the ultra-poor inhabitants. According to our assessment there are several institutions who offer loan for the ultra-poor. Table 16 illustrates the institutions who offer loans in the targeted regions:

Table 16: Loan programs in the targeted region

Institutions	Loan schemes
Upazila Social Welfare Office	Provision of group-based savings and loan scheme is offered. Each group has a number of 10 members with one group leader. One group can save BDT 10-100 per month. Each group can get a loan of maximum BDT 30, 000. Loan takers will have to repay the loans in a 10-month tenure with an interest rate of 10%.
Privately owned banks	No scheme to provide unsecured loans. However, if any person can arrange a guarantor, he/she can get a loan of BDT 30, 000 – BDT 50, 000 at an interest of 9%-11%. A loan taker also must submit passport-sized picture and a photocopy of NID of himself/herself along with his/her spouses'.
Bangladesh Krishi Bank	Offer loan up to BDT 20, 000 for agricultural farming. Offer loan schemes for crab and shrimp farming, beef fattening, cattle rearing (dairy) etc.
Grameen Bank (MFI)	Documents needed- Passport sized photo and photocopy of NID of loan takers' and their spouses'. Any inhabitant can take a loan of maximum BDT 40, 000 at an interest rate of 25%.
Local NGOs (MFI)	Local NGOs also offer microcredit loans at an interest rate of 16%-25% of different schemes.

To address the lack of skills to engage in livelihoods, there are several training initiatives offered by several Upazila Offices. Table 17 illustrates the institutions who offer skill development in the targeted regions.

Table 17: Existing loan programs in the targeted regions

Institutions	Training schemes
Upazila Livestock Office	Improved variety of cattle/goat/chicken
	Artificial insemination
	Embryo transfer
	Beef fattening
	Goat rearing
	Cattle rearing (Dairy)
Upazila youth development Office	Fisheries
	Cattle rearing
	Homestead vegetable gardening
	Beef fattening
	Block and boutique

Upazila Women Affairs Office	Nursery
	Sewing
	Computer
	Sewing
	Block and boutique
	Beautification

There are several loan programs offered by various institutions in the targeted Upazilas. However, majority of the respondents of the study do not tend to avail loans. 80% of the respondents did not have any outstanding loan at the time the survey was undertaken.

Although there are multiple training programs offered by several Upazila offices, inhabitants were reported to have not attended any training on their livelihood. 100% of the respondents reported that they did not receive any training on their livelihood at the time the survey was undertaken.

Our assessment suggest that the ultra-poor inhabitants need support both in form of cash and kind. The specific intervention design which need support thorough cash and/or in kind is stated in the Value Chain assessment section. However, the project should address the limitations as identified by the respondents. The project can get support from the existing institutions stated above if the project mandate allows to provide support to the ultra-poor inhabitants either in form of cash or kind through other public/private institutions.

3.2.8 Summary of findings

Inhabitants of Ukhiya and Teknaf Upazilas are mainly involved in agricultural and non-agricultural day labour. Working as a day labour make them vulnerable to seasonal effects and disasters. While the inhabitants were already facing irregularity in income which consequently lead to poverty, recent *Rohingya* influx has worsen the situation. The daily wage decreased by a significant amount putting the inhabitants in a difficult situation.

The ultra-poor inhabitants are passing a difficult time than ever and experiencing severe food shortage. Having no land assets and lack of capital put them in an impossible situation. The situation only worsens over time. Women were reported to be highly affected in this situation. Although, there are several financial institutions in the region to assist the inhabitants financially, the inhabitants were observed to be not getting adequate financial assistance for various reasons.

This chapter stresses on the current livelihood practices of the inhabitants and tried to focus on other issues, such as- women empowerment, food security, financial inclusion and social limitations for women to capture the overall socio-economic condition of the targeted region.

Women are not well-involved in the livelihood activities of their families. They also think that their contribution to the livelihood should supplement the family income and/or assist in their husband/son's work. To make them aware on their potential, awareness raising campaign and training sessions can be conducted in the targeted Upazilas. If suitable livelihood options can be presented to them with particular assistance like- training, financial aid etc., ultra-poor graduation is possible through involvement of women in livelihoods.

Chapter 4: Gender-Sensitive Value Chain analysis for Homestead Vegetable Gardening

4.1 Brief Overview

Vegetable production in the Ukhiya and Teknaf peninsula of Cox's Bazar district is increasing because of raising urban demand, Rohingya influx and tourism industry, even though the lack of cultivable land and extreme poverty is an issue in this particular area. Salt and Shrimp cultivation contribute to the reduction of land for rice and vegetable cultivation. However, currently vegetables are cultivated on around 2126ha (Ukhiya-1001+ Teknaf 1125) of land during the summer and winter season.

The vegetables that are grown in these regions include potato, brinjal, bitter gourd, snake gourd, spinach, pumpkin, okra, summer tomato, chili, etc. Based on the data collected from the Department of Agricultural Extension office in Ukhiya and Teknaf Upazila, the total market size of vegetables in the project areas is around 80,000-90,000 metric tons, out of which there is at least scope for 30% production to be increased in order to meet the current market demand. Some major constraints identified include the lack of knowledge of farmer, especially ultra-poor farmers, about using proper inputs and cultivation techniques. This can be addressed by trainings and demonstration to promote vegetable cultivation and build the capacity of the producers. Facilitation of linkage between farmers with traders, and also traders with forward market actors can be done to ensure the consistent demand for vegetables. Thus, the vegetable value chain can expand to meet the growing demand in the region.

The role of women in homestead gardening is visible but their decision-making power is limited to production and processing. Marketing decision is dominated by their male counterparts. Most of the villages and town markets are accessible to everyone as there is no restriction to visit the market. In most households, male members go to the market to sell produce and purchase items for consumption. Due to security concerns, women, elderly and children hardly go to the market. Control over income lies mostly with husband or a male member of the family though women members save small share of the income which they are able to use for the purchase of assets like poultry, goat or other high value foods such as milk and eggs for their family. They are able to save money because they sell 40% to 50% of the harvest directly to their neighbours.

4.2 Value Chain Map

4.2.1 Overview of the Value Chain

The following figure provides an overview of homestead vegetable gardening Value Chain in Ukhiya and Teknaf Upazilas of Cox's Bazar district:

Table 18: Overview of the homestead vegetable gardening value chain

Overview of the homestead vegetable gardening value chain		
End Market	Retailers are their primary customers but they can also act as retailers themselves, selling directly to household consumers.	It is estimated that there are around 1000 market retailers in some 20 markets of different sizes along the Ukhiya-Teknaf road. These retailers buy vegetables from farmers including ultra-poor farmers, village collectors, as well as from the wholesalers. Their customers are, Rohingya refugee and host community household consumers but some of them also sell to restaurants.

Trading	There are some vegetables collectors regularly operating at the village level.	These collectors are a combination of farmers supplementing their income, specialized village collectors, wholesalers and retailers. Small holder Farmers usually sell their vegetables to collectors who pick up their produce several times a month from the farm gate.
Production	There are more than 52,140 households live in 8 Unions of Ukhiya and Teknaf Upazila.	Most of these households are anyhow involved in some form of vegetable cultivation.
Input Supply	Seeds, fertilizers and insecticide/pesticide are the major inputs for vegetables cultivation.	Government enlisted retailers at union level and Upazila level dealers allowed to collect and distribute to farmers according to government fixed rate.

4.2.2 Relationships in the Value Chain

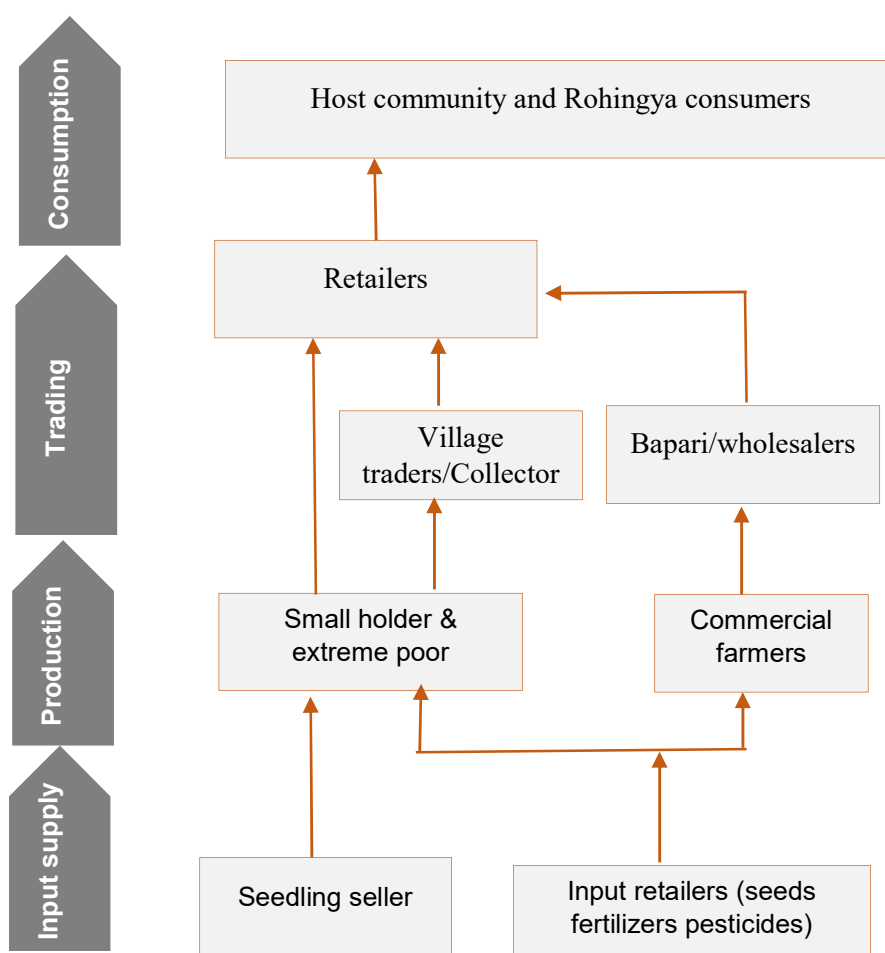


Figure 39: Value Chain Map of Homestead Vegetable

4.3 Key Research Findings

The Value Chain analysis will be conducted in accordance with the Value Chain selection criteria which was based on the project outcomes. This chapter will try to analyse the current status of the homestead vegetable gardening Value Chain through investigating each of the selection criteria. The scopes and constraints for ultra-poor graduation through indigenous chicken value chain is assessed through the different selection criteria i.e. Competitiveness, Partnerships and quick win potential, Impact on the ultra-poor, Gender and Youth inclusion and Climate change adaptation and environmental sustainability.

4.3.1 Competitiveness

The competitiveness of homestead vegetable gardening Value chain is further assessed through different sub-criteria.

Market Size and Growth Potential

About 50%-60% of the vegetables produced by the extremely poor households in the study area are consumed by household members. Rest of the harvests are sold to the neighbours or village collectors or retailers in the local markets. Apart from household buyers, local restaurants buy vegetables from the local markets. The local markets of these two Upazilas are listed in the following table:

Table 19: Local markets for vegetable in Ukhiya and Teknaf

Local markets of Ukhiya Upazila	Local markets of Teknaf Upazila
1. Ukhiya Daroga Bazar	1. Sabrang bazar
2. Court bazar	2. Noyapara bazar
3. Morichya bazar	3. Shahporir dip bazar
4. Patabari bazar	4. St. Martin bazar
5. Sonarpara bazar	5. Teknaf bazar
6. Inanai bazar	6. Bottuli bazar
7. Kutupalong bazar	7. Hnila bazar
8. Customghat bazar	8. Leda bazar
9. Balukhali bazar	9. Moulobhibazar
10. Thaingkhali bazar	10. Kharankali bazar
11. Bhalukia Harun market	11. Noyapara bazar
	12. Unchiprang bazar
	13. Mina bazar
	14. Waikhyong bazar
	15. Ulomunia bazar
	16. Borodil bazar
	17. Jahajpur bazar
	18. Shilkhali bazar
	19. Shamlapur bazar

Recent Rohingya influx has significantly increased the demand of vegetables in these two Upazilas. In addition, thousands of tourists visit Cox's Bazar every year. The demand of vegetables in the local hotels and restaurants has thus been significantly increasing. Hence, it can be inferred that the vegetables have a large market size in this region. The growth potential was also found to be significantly high.

Ability to meet market demand

Information received from Upazila Agricultural Extension department suggests that vegetables are cultivated in around 2000 hectares of land and around 60,000 MT of vegetables are produced in Ukhiya and Teknaf Upazila. As most of the *Rohingya* camps are established in the target area, demand for vegetables have increased in many folds since *Rohingya* influx in October 2017. Currently, Ukhiya and

Teknaf host 700,000 *Rohingya* refugee. Women Vegetable group interviewed mentioned that cost of vegetable has increased 40%- 60% due to arrival of *Rohingya* refugees. They compared the price hike of following vegetables:

Table 20 Price hike of the vegetables in recent months

Vegetables	Price per KG in 2018 (in BDT)	Price per KG in 2019 (in BDT)	Increase in %
Eggplant	20	30	50
Okra (ladies finger)	50	80	60
Tomato	15	30	100
Potato	20	35	75
Bitter gourd	30	50	67

The consumption pattern shows that the average daily consumption of ultra-poor household is shaped by the vegetable they grow plus locally available vegetables. Thus, it can be expected that increase in productivity of vegetables will increase the family consumption and local consumption. Women play the lead in micro-vegetable gardening and family consumption.

Opportunities for value addition

Homestead vegetable gardening is a usual practice among the inhabitants of the targeted Upazilas. Vegetables available in the markets are largely procured from the commercial farmers who generally use high amount of pesticides and chemical fertilizers. Homestead vegetable gardening requires very small amount of chemical fertilizer and pesticides. Vegetables produced through homestead gardening are mostly produced with organic fertilizers. Small amount of pesticides and chemical fertilizers were also observed to be applied by the households. Careful organic production can add value and can target niche market. However, it is very difficult for the ultra-poor inhabitants to start cultivation of organic vegetables at the first stage.

4.3.2 Partnership and Quick Win Potential

Scope for partnership and quick win potential is further assessed under the following sub-criteria:

Input/output market, service providers and potential employers

Input Suppliers: Seeds, fertilizers and insecticide/pesticide are the major inputs for vegetables cultivation. For fertilizers, government enlisted retailers at union level and Upazila level dealers allowed to collect and distribute to farmers according to government fixed rate. There are 16 union level dealers in selected 8 Unions of Teknaf and Ukhiya Upazila are responsible for selling fertilizers. Hundred percent of these retailers are male. They get commission decided by the government. The fertilizer collection and distribution system is supervised by Upazila Agriculture Officer. The wholesalers who sell to union level retailers and commercial farmers and have strong relations with sales representatives of large companies. Apart from supplying inputs, the input retailers also provide information on use of feed and aqua-chemicals as an embedded service. There are no specific input suppliers for vegetable inputs alone, rather for agricultural inputs overall. Most retailers can be found locally. At the village level some farmers preserve seeds. Many of them are women but there is no gender dis-aggregated statics about these village level seed farmers.

Collectors: There are some vegetables collectors regularly operating at the village level. These collectors are a combination of farmers supplementing their income, specialized village collectors, wholesalers and retailers. Small holder Farmers usually sell their vegetables to collectors who pick up their produce several times a month from the farm gate. The collectors then go on to sell to wholesalers or retailers at markets. In general, demand for vegetables by the village collectors is high in dry season as farmers produce higher yields compared to the rainy season; there is also an additional demand for vegetables during festival season. All the collectors are male.

Wholesalers: There are 5/6 wholesalers in major markets or distribution nodes such as Court Bazar, Ukhiya City Bazar, Hnilla Bazar, and Teknaf Bazar in Ukhiya and Teknaf. Retailers are their primary customers, but they can also act as retailers themselves, selling directly to household consumers.

Retailers: Based on the key informants' interview with local vegetables traders, it is estimated that there are around 1000 market retailers in some 20 markets of different sizes along the Ukhiya-Teknaf road. These retailers buy vegetables from farmers including ultra-poor farmers, village collectors, as well as from the wholesalers. Their customers are, Rohingya refugee and host community household consumers but some of them also sell to restaurants.

Potential training partners and/or apprenticeship programs for skills training

Ultra-poor inhabitants were observed to have very little knowledge on appropriate techniques of vegetable production. Vegetable gardening are mostly done for household consumption and more than half of their cultivation is wasted due to various diseases. Inhabitants were found to be indifferent about the wastage and they hardly take any measure to prevent pest attacks. Although, pesticides are applied to some extent, appropriate usage of pesticides were reported to be absent. DAE, Upazila Youth Development Office, Local NGOs etc. are the potential training providers in this regard.

Linkages with Government services, and favourable policies or existing programs

Linkage with DAE can ensure proper cultivation practice among the ultra-poor inhabitants. DAE can provide training on appropriate techniques of homestead vegetable cultivation which can result in greater harvest. Local NGOs can also provide support to the ultra-poor with regard to homestead vegetable gardening.

Ability to have quick income generation potential for the ultra-poor target group

Homestead vegetable gardening can be beneficial to the ultra-poor inhabitants in two broad sense. As the harvested vegetables are mostly used for household consumption, homestead vegetable gardening can ensure nutritional food for the household members. The surplus can be sold to the local markets where the demand for vegetables is already high. Thus, it can be inferred that homestead vegetable gardening has ability to generate quick income for the ultra-poor inhabitants.

4.3.3 Impact on Ultra-poor

Proportion of ultra-poor already participating in the livelihoods option

According to our assessment, majority of the ultra-poor inhabitants are already engaged in homestead vegetable cultivation. Some are involved in semi-commercial production while others mostly cultivate for household consumption.

The potential for household to be impacted

As majority of the ultra-poor female inhabitants are already engaged in homestead vegetable gardening, 80-85% of the project beneficiaries can be reached through interventions designed for homestead vegetable gardening value chain, according to our assessment.

Ultra-poor interested in livelihood option

Our assessment suggests that 80-90% of the inhabitants will be interested in homestead vegetable gardening. All the ultra-poor female inhabitants were observed to be engaged in homestead vegetable gardening in a small scale at the time the assessment was undertaken.

Ability of the livelihood option to provide regular and sufficient income to cover household expenses for the ultra-poor

Homestead vegetable gardening can generate quick and sufficient income if cultivated properly. However, the main challenge for the ultra-poor will be the land required for vegetable gardening semi-commercially. The practice of land leasing for vegetable gardening was also observed among the ultra-poor inhabitants.

Ultra-poor inhabitants who do not have adequate land for vegetable cultivation can generate sufficient income through leasing land for vegetable cultivation.

Potential for the ultra-poor gain self-employment/wage employment

Ultra-poor inhabitants can gain self-employment through engaging in homestead vegetable value chain. Homestead vegetable gardening does not require any additional labour unless it is for commercial production. Gradual development of the ultra-poor inhabitants can lead to commercial production. However, it will be difficult for the ultra-poor inhabitants to start commercial production at the inception stage.

Low entry barriers for the ultra-poor

Low entry barriers for ultra-poor inhabitants include lack of appropriate knowledge on vegetable gardening. Ultra-poor inhabitants also face difficulties with regards to arranging capital to scale-up.

4.3.4 Gender and youth inclusion

High share of women employed in the livelihood option compared to the economy at large

Homestead vegetable gardening is mostly conducted by the female household members. Men are only involved in buying pesticides and fertilizers from local markets. Our assessment suggests that female inhabitants are more involved in production than their male counterparts in this value chain.

Low entry barriers for women

Barriers for women include lack of awareness, lack of knowledge on appropriate methods of vegetable cultivation and lack of mobility. Ultra-poor women were observed to be involved in homestead vegetable gardening which provide a great advantage for women to scale-up their activities. Lack of mobility restricts women to be involved in market trading.

Women control equipment/assets/resources required to participate

As male members do not have much involvement in vegetable gardening, women's control over equipment and asset required to participate in this value chain was observed to be strong. However, women's control over resources like financial support was observed to be weaker than their male counterparts.

4.3.5 Climate change adaptation and environmental sustainability

Climate change adaptation

Vegetable cultivation has a strong seasonal impact. Different vegetables are generally cultivated in different seasons. During monsoon season the harvest is typically low and inhabitants face waterlogging in some areas. During the times of disaster, the whole harvest is likely to get damaged. Homestead vegetable gardening is thus highly vulnerable to disasters.

Extent the livelihood option is safe, sustainable and legal and complementary to food security

Homestead vegetable gardening is safe and legal in accordance with the country's laws. Semi-commercial cultivation can result in sustainable income and as, cultivated vegetables are mostly used for household consumption, this value chain is complementary to food security.

Scoring for indigenous chicken value chain			
Criteria	Score	Weight	Weighted Score
Competitiveness	8	.15	1.2
Partnership and Quick Win Potential	8	.15	1.2
Impact on Ultra-poor	8.5	.30	2.55
Gender and youth inclusion	9	.30	2.7

Climate change adaptation and environmental sustainability	8	.10	.8
Total Score			8.45

4.4 Gender sensitive SWOT analysis

Strength <ul style="list-style-type: none"> ▪ Easy to sell locally, in the local markets and in the region ▪ Availability of external inputs such as chemical fertilizers and pesticides ▪ Potential for the use of organic fertilizers. ▪ High prices of vegetable in the region ▪ Potential to create jobs and employment, especially for ultra-poor farmers 	Weakness <ul style="list-style-type: none"> ▪ Limited availability of local expertise/ extension workers in vegetable production ▪ Ultra-poor farmers have limited technical knowledge, skills and experience in vegetable growing ▪ Low productivity and loss of yield from insects, pests and disease ▪ Improper use of chemical fertilizers and pesticides on farms ▪ Unavailability of timely market information ▪ Ultra-poor farmers do not have access to sufficient capital for investment in vegetable production ▪ Expensive imported agricultural inputs ▪ Small plot sizes for vegetable cultivation in the wet season and insufficient irrigation water in dry season ▪ Unavailability of reliable irrigation system
Opportunities <ul style="list-style-type: none"> • High demand for local vegetables in all local markets and in the region • Price of vegetables are high in the province • compared to other provinces • Inputs shops in in all markets in two Upazila 	Threats <ul style="list-style-type: none"> • Limited high land for vegetable production in the wet season • Absence of collaborative effort among the vegetable value chain actors • Price fluctuations for vegetables • Majority of MFIs have high interest rates on credit provision

4.5 Profitability Analysis

Summer	Winter
Vegetable cultivation in 5 decimals of land (2 seasons per year)	Vegetable cultivation in 40 decimals of land (2 seasons per year)
CASE 1	CASE 2
Vegetable cultivation in 5 decimals of land (2 seasons per year)	Vegetable cultivation in 40 decimals of land (2 seasons per year)

Case-1: Vegetable cultivation in 5 decimals of land (2 seasons per year)					
		Summer	Winter	Note	
Production cost	Cost head		Amount	Amount	
	Lease cost (Yearly)		900		Lease cost for 5 Decimals of Land. In case of homestead land, lease cost will not be necessary. Per decimal lease cost BDT 180 (for 1 year)
	Platform Construction Cost (Fixed cost)		1000		Structure/Platform will be constructed in 2 decimals of land and will be used for bottle gourd, pui spinach and beans. Platforms will last 1 year.
	Type of Inputs & Cost	Seed	190	273	Eggplant- BDT 300 (3000 per KG, 100 gm required for 5 decimal of land) Bottle gourd- BDT 50 (500 per KG, 100 gm required for 5 decimal of land) Pui spinach- BDT 200 (1000 per KG, 200 gm required for 5 decimal of land) Data spinach- BDT 200 (2000 per KG, 100 gm required for 5 decimal of land) Tomato- BDT 150 (3000 per KG, 50 gm required for 5 decimal of land) Beans- BDT 600 (1200 per KG, 500 gm required for 5 decimal of land) Pumpkin- BDT 140 (700 per KG, 200 gm required for 5 decimal of land) **Seed cost given is for 5 decimals of land. **Average cost of seeds is cited.
		Fertilizer	302	201	Compost- BDT 500 (50 per KG, 10 KG required for 5 decimal of land) Urea- BDT 306 (17 per KG, 18 KG required for 5 decimal of land) TSP- BDT 224 (28 per KG, 8 KG required for 5 decimal of land) DAP- BDT 70 (35 per KG, 2 KG required for 5 decimal of land) MP- BDT 85 (17 per KG, 5 KG required for 5 decimal of land) Zink Sulfate- BDT 23 (150 per KG, 0.15 KG required for 5 decimal of land) **Fertilizer cost given is for 5 decimals of land. **Average cost of fertilizers is cited.
Pesticide		300	400	Average cost.	

	Labour Cost	0	0	Household members are involved in farming themselves.
	Transport Cost	400	500	Transportation costs are incurred while selling chickens in the markets and taking them to the veterinary hospital.
	Others	1050		Spade- 300 (1 pc) Hoe- 150 (1 pc) Fence- 600 (fence construction cost) **These costs are fixed costs. **Equipment will last for five years.
	Total Cost (BDT)	5516		
	Total Annual Cost	4676		Equipment cost is distributed in 5 years as we assume the equipment will last for five years.
Sales of Vegetable	Sales price	4750	8041	Eggplant- BDT 7500 (Production- 250 KG, Average price per KG- BDT 30) Bottle gourd- BDT 4500 (Production- 150 pieces, Average price per piece- BDT 30) Pui spinach- BDT 3000 (Production- 200 KG, Average price per KG- BDT 15) Data spinach- BDT 4000 (Production- 200 KG, Average price per KG- BDT 20) Tomato- BDT 15000 (Production- 500 KG, Average price per KG- BDT 30) Beans- BDT 5250 (Production- 150 KG, Average price per KG- BDT 35) Pumpkin- BDT 9000 (Production- 150 pieces, Average price per piece- BDT 60) **Estimated production for 5 decimals of land for each kind of vegetable. **Average cost of sales price is cited.
	Total sales (BDT/Year)	12,791		
	Profit (BDT/Year)	8115		
	Return on investment (%/Year)	147.11%		ROI= Net profit/investment*100

Case-2: Vegetable cultivation in 40 decimals of land (2 seasons per year)					
		Summer	Winter	Note	
Production cost	Cost head		Amount	Amount	
	Lease cost (Yearly)		6000		Lease cost for 40 Decimals of Land. In case of homestead land, lease cost will not be necessary.
	Platform Construction Cost (Fixed cost)		5000		Structure/Platform will be constructed in 10 decimals of land and will be used for bottle gourd, pui spinach and beans. Platforms will last 1 year.
	Type of Inputs & Cost	Seed	1520	2184	Eggplant- BDT 300 (3000 per KG, 100 gm required for 5 decimal of land) Bottle gourd- BDT 50 (500 per KG, 100 gm required for 5 decimal of land) Pui spinach- BDT 200 (1000 per KG, 200 gm required for 5 decimal of land) Data spinach- BDT 200 (2000 per KG, 100 gm required for 5 decimal of land) Tomato- BDT 150 (3000 per KG, 50 gm required for 5 decimal of land) Beans- BDT 600 (1200 per KG, 500 gm required for 5 decimal of land) Pumpkin- BDT 140 (700 per KG, 200 gm required for 5 decimal of land) **Seed cost given is for 5 decimals of land. **Average cost is cited after multiplying the cost by 8 to determine cost for 40 decimals of land.
		Fertilizer	2416	1608	Compost- BDT 500 (50 per KG, 10 KG required for 5 decimal of land) Urea- BDT 306 (17 per KG, 18 KG required for 5 decimal of land) TSP- BDT 224 (28 per KG, 8 KG required for 5 decimal of land) DAP- BDT 70 (35 per KG, 2 KG required for 5 decimal of land) MP- BDT 85 (17 per KG, 5 KG required for 5 decimal of land) Zink Sulfate- BDT 23 (150 per KG, 0.15 KG required for 5 decimal of land) **Fertilizer cost given is for 5 decimals of land. ****Average cost is cited after multiplying the cost by 8 to determine cost for 40 decimals of land.
		Pesticide	2400	3200	Average cost.
	Labour Cost		3750	3750	Women labour 250 per day.15 labour-day required for 40 decimals of land.

	Transport Cost	1500	2500	Transportation costs are incurred while selling chickens in the markets and taking them to the veterinary hospital.
	Irrigation	1500	2500	Irrigation cost on average.
	Others	1050		Spade- 300 (1 pc) Hoe- 150 (1 pc) Fence- 600 (fence construction cost) **These costs are fixed costs. **Equipment will last for five years.
	Total Cost (BDT)	40, 878		
	Total Annual Cost	40, 068		Equipment cost is distributed in 5 years as we assume the equipment will last for five years.
Sales of Vegetable	Sales price	38,000	64, 328	Eggplant- BDT 7500 (Production- 250 KG, Average price per KG- BDT 30) Bottle gourd- BDT 4500 (Production- 150 pieces, Average price per piece- BDT 30) Pui spinach- BDT 3000 (Production- 200 KG, Average price per KG- BDT 15) Data spinach- BDT 4000 (Production- 200 KG, Average price per KG- BDT 20) Tomato- BDT 15000 (Production- 500 KG, Average price per KG- BDT 30) Beans- BDT 5250 (Production- 150 KG, Average price per KG- BDT 35) Pumpkin- BDT 9000 (Production- 150 pieces, Average price per piece- BDT 60) **Estimated production for 5 decimals of land for each kind of vegetable. **Average cost of sales price is cited.
	Total sales (BDT/Year)	102, 328		
	Profit (BDT/Year)	62,260		
	Return on investment (%/Year)	155.38%		ROI= Net profit/investment*100

Assumptions
<ul style="list-style-type: none"> Vegetables are cultivated in 2 seasons (Summer and Winter) Lease cost in case-1 is assumed. In case of homestead gardening, no lease cost will be required. Some varieties of vegetables are suggested which are prevalent in the region. Other varieties of vegetables can also be cultivated. Labour and irrigation cost will not be required in case-1. Profitability is analysed through calculating average cost and sales price.

4.6 Constraints

Lack of access to quality inputs: The ultra-poor families do not source high quality packaged inputs since the demand for them is low. Most of them try to preserve seed for vegetable cultivation. They buy seedlings of eggplant, chili, and tomato from neighbours or from local market which in some cases are not of good qualities. Irrigation is a problem for many ultra-poor families living on forest land and involved in vegetable cultivation.

Poor cultivation techniques: Ultra-poor farmers are not aware about vegetable cultivation as they produce mostly for consumption. But they are not well-informed about the cultivation techniques or best practices to achieve high productivity from vegetable cultivation by using quality inputs in proper doses.

Limited or no land for vegetable cultivation: Most of the ultra-poor families do not have land for vegetable cultivation. Thus, they are involved in vertical agriculture i.e. they grow pumpkins, bottle gourd, ash gourd, cucumber, etc. on the roof or raised structure for household consumption. They grow chili, radish, eggplant, red amaranth, potato and maize on the homestead lands or on the leased land near their home sites. They are very much interested to have leased land for income generation through vegetable cultivation.

Financial Services: Most of the ultra-poor farmers interviewed are willing have leased land and use better inputs for vegetable cultivation. They would like to get credit/grant for investment into vegetable cultivation. But there is no micro-credit institutions in some villages which can provide loan to the ultra-poor.

Public extension services: The public extension service focus on supporting small holders or commercial farmers. They do not actively operate in remote locations. Thus, farmers are not getting the required information for vegetable cultivation and using proper cultivation techniques to achieve high productivity. Because of this, farmers produce poor quality vegetables and make limited profit from it.

4.7 Recommendation

The recommendation is provided through intervention design and intervention details:

4.7.1 Intervention design

	Input Supplies		Production	Trading
Intervention	Provide training to ultra-poor on composting and using herbicide for lowering cost of vegetable cultivation.	Ensure availability of high-quality inputs supply by private agro-input suppliers and seed and organic fertilizers from the ultra-poor farmers specially women farmers.	Training on appropriate techniques of vegetable cultivation.	Establish linkages with local market retailers, arottdars, restaurants and ultra-poor women for increasing production and selling
	Promote seed farmers from ultra-poor women to supply low cost quality seeds or seedlings.	Liaison with DAE to ensure adequate information, training and demonstration support for vegetable cultivation.	Provide seeds, hand tools, finance for taking lease of lands	

4.7.2 Intervention details

The potential interventions are detailed below, considering the opportunities that can be worked on with specific actors to improve vegetable cultivation in these areas:

Intervention 1: Provide training to ultra-poor on composting and using herbicide for lowering cost of vegetable cultivation.

Potential Partners: Department of Agriculture Extension

Support Service Providers: World Vision partners, DAE

The general perception of the farmers in these regions is that vegetable cultivation is not possible without high yielding seeds, chemical fertilizers and insecticides. Ultra-poor farmers are not the exception in this regard. To change this mindset, the best method is to showcase through providing training to ultra-poor women on vermi-composting, making herbicides and creating demonstration plots. Some lead farmers from the ultra-poor, who have a potential to influence others in the locality, can be chosen to be trained and carry out vermin-compost production and vegetable farming in their lands.

Intervention 2: Promote seed farmers from ultra-poor women to supply low cost quality seeds or seedlings.

Potential Partners: Department of Agriculture Extension

Support Service Providers: World Vision partners, DAE

Traditionally, vegetable cultivation was dependent on local seed which has been replaced with HYV seeds. However, some farmers still prefer local seeds. Taking this into consideration, interested ultra-poor farmers can be trained to preserve seeds and seedlings that can ensure satisfactory production of high value crops and lower cost of production. Some of these vegetables include chili, gourd, white gourd, sweet gourd, Yam (*Meté Alu*), Drumstick (*Moringa Oleifera*), Sweet potato, red amaranth, stem amaranth, Spinach, Water Spinach, mint leaves, and betel leaf. For example, there is a high demand for betel leaf saplings. Betel leaf farmers collect it from Rangamati and other sources. As betel leaf farming expensive, ultra-poor women can develop betel leaf saplings nursery and supply to betel leaf farmers and earn a significant income.

Intervention 3: Ensure availability of high-quality inputs supply by private Argo-input suppliers and seed and organic fertilizers from the ultra-poor farmers specially women farmers

Potential Partners: Seed companies; Fertilizer companies; Argo-chemical companies and village nurseries.

Support Service Providers: World Vision partners, DAE.

Since the ultra-poor farmer are not aware of their benefit of quality inputs including organic fertilizers and herbicides, there is a potential market for input companies and seed farmers, and compost producers to market and sell their produce. Input retailers have direct contact with the farmers and have the motivation to promote better quality products to them, in order to build better relationships with the farmers. World vision partners can create awareness through information dissemination and developing the linkage/collaboration between the village and market level input suppliers.

DAE have the interest to encourage organic fertilizer production specially vermi-compost for vegetable cultivation in these regions.

Intervention 4: Provide seeds, hand tools, finance for taking lease of lands

Potential Partners: Seed companies; Fertilizer companies; Argo-chemical companies and Commercial nurseries.

Support Service Providers: partner NGOs, DAE.

The ultra-poor families do not have financial ability to cultivate vegetable that can bring significant for the family. So, the objective of providing package support for vegetable cultivation is to enable local farmers to produce enough nutritious vegetables to be able to increase consumption, income generation and reduce their reliance external aids. Under this, the ultra-poor women can be provided with training, financial assistance for taking the lease of land and support in kind like seeds, saplings,

hand tools and equipment like a spade, watering can or, small water pump, seed preservation drum, etc. for vegetable cultivation.

Intervention 5: Establish linkages with local market retailers, arotdars, restaurants and ultra-poor women for increasing production and selling

Potential Partners: local market retailers, Arotdars, wholesalers, restaurants

Support Service Providers: WVB partner NGOs, DAE.

When ultra-poor households start cultivating vegetables, and produce a surplus to be sold, there will be a requirement for traders in these areas. The farmers can start the facilitation of selling vegetables in bulk through one or two specific traders. Facilitation activities will be carried out to link ultra-poor vegetable farmers to forward traders/actors like retailers, arotdars or restaurants who can ensure a consistent demand for vegetables, so farmers can sell to them.

Chapter 5: Gender Sensitive Value Chain Analysis for Indigenous Chicken

5.1 Brief Overview

Indigenous chickens are referred to indigenous breeds of chickens raised in the courtyards of households. Indigenous chickens are typically raised in small flocks and on scavenging. Productivity is generally low and mortality rate is too high due to diseases and poor feeding.

Indigenous chicken rearing was observed to be a common practice among the inhabitants of both Ukhiya and Teknaf Upazilas. According to the respondents, indigenous chicken has long been traditionally raised by most of the households across the Upazilas. Very few of the households are engaged in commercial farming while majority of the dwellers raise chickens mostly for household consumption. Female household members were observed to be more engaged in indigenous chicken rearing than their male counterparts.

Dwellers were seemed to have no commercial expectation from indigenous chicken rearing. According to our observation, indigenous chicken is being reared without maintaining appropriate rearing techniques. Chickens are not properly vaccinated and were reported to be frequently affected by diseases. Villagers were observed to be indifferent regarding the epidemics. There are scarcity of poultry vaccines and drugs in Ukhiya Upazila. Livestock officers provide vaccines and medicines from Upazila Livestock offices. However, shortage in supply of poultry medicines and vaccines in the Upazila offices were also reported. There is a tendency of pursuing medicines when a chicken is affected. However, vaccination of the indigenous chickens was observed to be not practiced by majority of the villagers. Villagers collect medicines from local markets when needed. There are also inadequacy of private veterinarians in the villages of both Ukhiya and Teknaf Upazilas. Because of the villagers' reluctance to vaccinate their chickens, epidemics occur frequently, mostly in winter season, and results in high mortality rate of indigenous chickens in the region.

On an average 5-10 indigenous chickens are sold to markets/local traders in a year by a household. 5-15 chickens are consumed by the households yearly. In addition to that, respondents purchase 15-20 chickens per year for household consumption. Majority of the respondents reported to sell the chickens to the local traders who generally purchase from the households. These local traders later sell the chickens to the local markets. Very few of the villagers sell their chickens directly in the local markets. In some of the villages, chickens are sold by kilograms while in other villages, price is determined according to the size of the chicken. However, it was observed that traders usually sell chickens by KG in the local markets.

5.2 Value Chain Analysis

5.2.1 Overview of the Value Chain

The following figure provides an overview of indigenous chicken Value Chain in Ukhiya and Teknaf Upazilas of Cox's Bazar district:

Table 21: Overview of the Indigenous chicken value chain

End Market	<p>End market for indigenous chickens are the local markets of Ukhiya and Teknaf Upazila.</p> <p>Recent influx of Rohingya refugees increased the local demand in the two regions. Almost 100% of the produced indigenous chickens are sold in the local markets and in the hotels/resorts of Cox's Bazar district.</p>	<p>As per local traders, the demand of indigenous chickens has significantly increased in the past few years. This has increased the price of the indigenous chickens.</p> <p>The end market price for indigenous chicken is BDT 350-400/KG.</p>
Trading	<p>Villagers primarily sell the indigenous chickens to the local traders who collect the chickens from the households.</p> <p>Very few of the respondents reported that they sell their chickens directly to the local markets.</p>	<p>In some places, chickens are sold by weight measurement (KG). Others sell their product through mutual understanding of the producer and the trader.</p> <p>Women were observed to be involved in trading as they can sell the chickens from their home to the local traders.</p> <p>Producers sell the chickens to the local traders at the rate of 250-320 BDT per KG.</p>
Production	<p>A chick needs 5/6 months of rearing before selling.</p> <p>Average household production is about 10-25 chickens per year.</p> <p>Villagers were reported to be engaged in indigenous chicken rearing round the year.</p>	<p>Majority of the households are small scale producers and are not engaged in commercial production.</p> <p>The total production cost for an indigenous chicken is about 500-600 BDT.</p> <p>Average household production is about 25-65 KGs per year.</p>
Input Supply	<p>Input for indigenous chicken includes rice, rice polish and rice bran.</p> <p>Rice bran costs around 80-85 BDT/KG and rice polish costs 25-30 BDT/KG.</p> <p>Usually it takes 5/6 months of rearing for a chick to grow up. On an average a chicken requires 1 KG of rice bran and 1 KG of rice polish every month.</p> <p>The total cost of chicken feed in 6 months is BDT 500-550.</p>	<p>Those who cultivate rice can gather rice bran and rice polish from their own production. Others need to purchase from the local shops.</p> <p>Supply of Rice bran and rice polish in the local markets was observed to be adequate.</p> <p>In case of rice, producers feed the chickens with the leftover rice from their meal.</p>

5.2.2 Relationships in the value chain

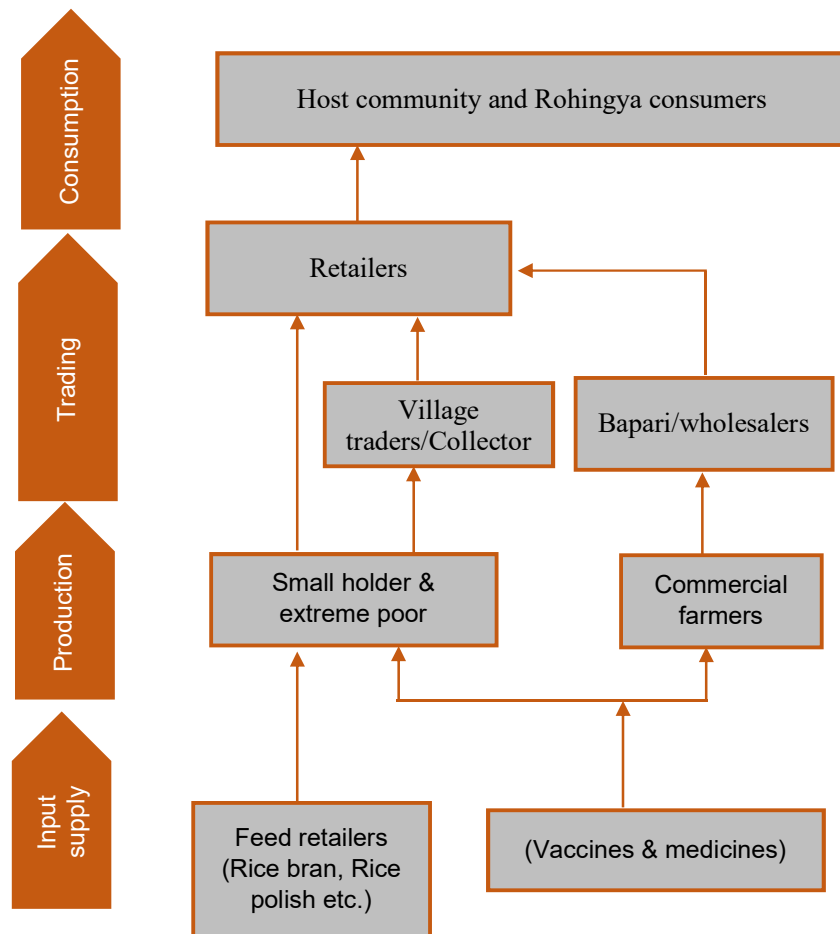


Figure 40: Value Chain Map for Indigenous Chicken

5.3 Key Research Findings

The Value Chain analysis will be conducted in accordance with the Value Chain selection criteria which was based on the project outcomes. This chapter will try to analyse the current status of the indigenous chicken Value Chain through investigating each of the selection criteria. The scopes and constraints for ultra-poor graduation through indigenous chicken value chain is assessed through the different selection criteria i.e.- Competitiveness, Partnerships and quick win potential, Impact on the ultra-poor, Gender and Youth inclusion and Climate change adaptation and environmental sustainability.

5.3.1 Competitiveness

The competitiveness of the indigenous chicken Value chain is further assessed through different sub-criteria.

Market Size and Growth Potential

The main markets for indigenous chickens are the local markets of Ukhiya and Teknaf Upazilas. The total number of markets in the two Upazilas is 30. There are 5-10 small traders of chickens in each of the markets. According to the traders, the 100% of the indigenous chickens are sourced either through the local traders who collect indigenous chickens from the villages or directly through the villagers who

sell their chickens directly to them. The list of local markets in the two Upazilas are listed in the following table.

Table 22: Local Markets locations for Indigenous Chicken

Local markets of Ukhiya Upazila	Local markets of Teknaf Upazila
12. Ukhiya Daroga Bazar	1. Sabrang bazar
13. Court bazar	2. Noyapara bazar
14. Morichya bazar	3. Shahporir dip bazar
15. Patabari bazar	4. St. Martin bazar
16. Sonarpara bazar	5. Teknaf bazar
17. Inanai bazar	6. Bottuli bazar
18. Kutupalong bazar	7. Hnila bazar
19. Customghat bazar	8. Leda bazar
20. Balukhali bazar	9. Moulobhibazar
21. Thaingkhali bazar	10. Kharankali bazar
22. Bhalukia Harun market	11. Noyapara bazar
	12. Unchiprang bazar
	13. Mina bazar
	14. Waikhyong bazar
	15. Ulomunia bazar
	16. Borodil bazar
	17. Jahajpur bazar
	18. Shilkhali bazar
	19. Shamlapur bazar

Cox's bazar is an attractive tourist destination in Bangladesh. Every year thousands of tourists, both from Bangladesh and abroad visit Cox's Bazar. Over the years, the hotels and restaurants of the city has been a significant market place for the indigenous breed of chickens. In addition to the hotels and restaurants, indigenous breed is also popular among the inhabitants of the district. Recent *Rohingya* influx has impacted the market demand for indigenous chickens. Demand for indigenous breed has increased significantly for the past few years. The growth potential for the indigenous breed is very high, according to our assessment.

Ability to meet market demand

According to the market traders, 5-10 KGs of indigenous chicken, on an average, are sold every day by a single trader of the local markets of the region. Our assessment suggests that each market includes 5-10 chicken vendors in each of the market. It can thus be concluded that there is a daily demand of 750-3000 KGs of indigenous chicken in the 30 local markets of Ukhiya and Teknaf. Market traders have expressed that the demand of the indigenous chicken has increased over the past few years and the demand is still in rise. There are no other sources of indigenous chickens other than the villagers who are involved in chicken rearing.

Table 23 Comparative demand scenario of Indigenous Chicken

Variety	Percentage of volume of sell	Per KG market price
Broiler	60-70%	BDT 180-200
Sonali	3-5%	BDT 280-320
Layer	10-15%	BDT 240-260
Pakistani	5-10%	BDT 250-280
Indigenous Chicken	5-10%	BDT 350-400

However, the demand for other varieties of the chickens was observed to be far greater than that of the indigenous chickens. Indigenous chicken accounts for only 5-10% of total sell of the chicken traders. The demand for other varieties of chicken is much higher. The following Table 23 illustrates the

comparative demand scenario of different varieties of chicken in the local markets of Ukhiya and Teknaf Upazila.

As can be seen in the table, the demand for broiler chickens are the most among the varieties. The price of the broiler chicken is also the least. Traders have expressed that the demand of the indigenous chickens is high in the market. Because of the inadequacy in supply, the traders are unable to fulfil the market demand. The price of the indigenous chickens is also very high due to the unmet demand.

The demand for indigenous chickens in the local markets is still unmet due to inadequate supply. Total supply of indigenous chickens to the local markets are about 750-3000 KGs/day. The whole supply of 750-3000 KGs of Indigenous chickens usually got sold as the demand is much higher.

Opportunities for value addition

Indigenous chickens, like other available breeds in the market, are sold by Kg. The more the weight, the more income can be generated from chickens. Opportunities for value addition thus are dependent on feed for the chickens. Proper nutritious feed can at one hand increase the weight of the chickens and make them resistant to diseases. In addition to proper diet, vaccinations and medicines in times of diseases can reduce mortality rate of the chickens and thus can result in more added value.

5.3.2 Partnership and Quick Win Potential

Scope for partnership and quick win potential for indigenous chicken is further assessed under the following sub-criteria:

Input/output market, service providers and potential employers

Inputs for indigenous chicken rearing include poultry feed traders (rice bran, rice polish) and vaccine and medicine traders. Output actors include local traders and market retailers. Service providers include DLS, local medicinal shops and private veterinarians. As indigenous chicken is usually reared by the household members themselves and thus provision of engaging external employers is very limited.

Feed Suppliers: Indigenous chickens are usually fed with rice bran, rice polish and rice during rearing. Chicken feed was found available in the local markets. Producers usually buy rice bran and rice polish from the local markets. They also feed the chickens with the leftover rice from their meals.

There are very few chicken-feed selling shops in the local markets of the region. According to the feed suppliers, there are adequate supply of chicken feed in the market. Our assessment suggests that there are 1-3 chicken feed supply shops in the local markets. Although, there are 5-10 feed supply shops in some of the markets (Teknaf bazar, Ukhiya bazar). Each of the shops sell 200-1600 KGs of chicken feed daily. Input suppliers import the chicken feed from Chittagong and Cox's Bazar. Male household members are the primary buyer of chicken feed in the local markets. Very few women procure chicken feed from the markets.

Vaccination and Medicine suppliers: There is inadequacy in poultry vaccination and medicine supply. Producers were observed to be not aware about vaccinating the chickens. However, respondents have expressed that they source medicines from the local shops when the poultry get affected by disease. The medicines are also reported to be in short supply in both Ukhiya and Teknaf Upazilas. Producers have expressed that they can source vaccinations and medicines from Upazila Livestock Office as well. However, they generally do not visit the ULO because of the long distance between their villages and ULO. Both the ULOs have expressed that they do not have adequate supply of poultry vaccination and medicines.

Private companies offer vaccinations for 1000/2000 poultry birds in a single package. This also restricts the small producers from vaccinating the chickens. Majority of the villagers were observed to be small producers, rearing only 5-10 chickens at a time. Private veterinarians are also absent in the regions.

Newcastle and viral diseases due to cold are among prevalent diseases in the region. Respondents have reported that indigenous chickens get affected by these diseases frequently and consequently epidemics occur. Villagers, however, seemed to be indifferent about frequent occurrence of the epidemics. Producers were reported to source medicine from local medicine shops when the indigenous chickens get affected by diseases. Their knowledge on chicken diseases are very low. They depend on medicine shopkeepers and their husbands on the medicines.

Local traders: Local traders visit the villages to collect indigenous chickens from the households. There are adequate number of local traders in both the villages. Presence of multiple local traders ensure fair prices of the indigenous chickens. Very few villagers were reported to be selling their chickens directly to the local markets. 90-95% of the indigenous chickens are sold to the markets through the local traders.

Local traders source indigenous chickens from the village households by visiting villages 2/3 times per week. As a large number of households are engaged in indigenous chicken rearing, local traders can collect 5-10 chickens from a village in any day.

Market retailers: The end market for indigenous chicken Value chain is the local market retailers of the 30 markets of Ukhiya and Teknaf Upazilas. Each of the market has 3-10 market retailers who sell indigenous chickens. The retailers procure indigenous chicken either from the local traders or directly from the producers. 100% of the market retailers were observed to be male. Among the varieties of chicken, retailers sell to the consumers, indigenous chicken costs the most and constitute the least percentage of their total sell. Although the sale of indigenous chicken is very low compared to the other varieties, the demand for indigenous chicken is on the rise.

Potential training partners and/or apprenticeship programs for skills training

Inhabitants lack awareness in chicken rearing. Our assessment suggests that the chickens are not vaccinated and are not properly treated when affected by diseases. Villagers tend to raise the chickens through following age-old rearing practice where chickens are rarely vaccinated. Villagers need proper training on awareness raising and skill development. Potential training partners include the DLS and existing NGOs.

Linkages with Government services, and favourable policies or existing programs: Linkages with DLS can ensure increased awareness among the inhabitants involved in indigenous chicken rearing. The vaccinations and medicines can also be provided to the villagers through DLS.

Ability to have quick income generation potential for the ultra-poor target group: Indigenous chicken breed can be sold after 5-6 months of rearing. Ultra-poor inhabitants of the region can generate quick income by involving in indigenous chicken rearing. Ultra-poor inhabitants will have an advantage with regards to chicken rearing experience. Proper support services can ensure appropriate practices of chicken rearing by raising awareness. Proper vaccinations and medicines can also be provided through establishing linkages with market actors (DLS, private veterinarians) which can lead to low mortality rate and consequently can generate greater income. Profitability analysis in the following chapter will provide a detailed analysis of income generation potential of indigenous chicken value chain.

5.3.3 Impact on Ultra-poor

Proportion of ultra-poor already participating in the livelihoods option

According to our assessment, majority of the Households have long been involved in indigenous chicken rearing. The age-old rearing practice provide them with an opportunity to increase income through ensuring proper practice of rearing.

The potential for household to be impacted

As majority of the ultra-poor female inhabitants are already engaged in indigenous chicken rearing, 90-95% of the project beneficiaries can be reached through interventions designed for indigenous chicken rearing value chain, according to our assessment.

Ultra-poor interested in livelihood option

Our assessment suggests that 90% of the inhabitants will be interested in indigenous chicken rearing. All the ultra-poor female inhabitants were observed to be either engaged in indigenous chicken rearing at the time the assessment was undertaken or have previous experience of chicken rearing.

Ability of the selected livelihood option to provide regular and sufficient income to cover household expenses for the ultra-poor

Proper rearing practice can ensure regular and sufficient income to cover household expenses for the ultra-poor. The profitability analysis will provide an estimation of profitability of indigenous chicken value chain.

Potential for the ultra-poor gain self-employment/wage employment

Ultra-poor inhabitants can gain self-employment through engaging in indigenous chicken value chain. Indigenous chicken rearing does not require any additional labour unless it is for commercial production. Gradual development of the ultra-poor inhabitants can lead to commercial production. However, during project duration, it will be difficult for the ultra-poor inhabitants to start commercial production.

Low entry barriers for the ultra-poor

Low entry barriers for ultra-poor inhabitants include skills for appropriate chicken rearing that include proper vaccination, medicines and proper shelter for the chickens. Ultra-poor inhabitants also face difficulties with regards to arranging capital to scale-up.

5.3.4 Gender and youth inclusion

High share of women employed in the livelihood option compared to the economy at large

Indigenous chicken rearing is mostly conducted by the female household members. Men are only involved in buying feed and medicines from local markets. Our assessment suggests that female inhabitants are more involved than their male counterparts in this value chain.

Low entry barriers for women

Barriers for women include lack of awareness, lack of knowledge on appropriate methods of chicken rearing and lack of mobility. Ultra-poor women were observed to be experienced in chicken rearing which provide a great advantage for women to scale-up their activities. Lack of mobility restricts women to be involved in market trading. However, local traders who collect chickens from the households are mostly dealt by the female household members.

Women control equipment/assets/resources required to participate

As male members do not have much involvement in chicken rearing, women's control over equipment and asset required to participate in this value chain was observed to be strong. However, women's control over resources like financial support was observed to be weaker than their male counterparts.

5.3.5 Climate change adaptation and environmental sustainability

Climate change adaptation

Indigenous chicken rearing is practiced all the year round. However, during monsoon and winter, chickens are reported to be at high risk of affecting by diseases. Proper vaccinations and medicines can address this issue.

Extent the livelihood option is safe, sustainable and legal and complementary to food security

Indigenous chicken rearing was observed to be safe and legal. Proper methods of chicken rearing can ensure sustainable income for the ultra-poor inhabitants. Indigenous chickens are also used for household consumption which ensures nutritional diet for the ultra-poor.

5.3.6 Sector scoring based on the study

Based on our analysis, the following scores have been assigned to each of the major criteria mentioned in the subsector selection workshop, to compare different IGAs among the selected value chains for this study. The following table shows the scores allocated for indigenous chicken as a source of income for the ultra-poor in the project areas.

Table 24: Scoring for indigenous chicken value chain

Criteria	Score	Weight	Weighted Score
Competitiveness	9	.15	1.35
Partnership and Quick Win Potential	8.5	.15	1.27
Impact on Ultra-poor	10	.30	3
Gender and youth inclusion	10	.30	3
Climate change adaptation and environmental sustainability	10	.10	1
Total Score			9.62

5.4 Gender Sensitive SWOT analysis

Strength <ul style="list-style-type: none">Majority of the ultra-poor women are involved in indigenous chicken rearing. There is potential to scale-up their operation and/or improve the process to gain more profit.Women who are involved in indigenous chicken rearing was observed to already have linkages with both the input suppliers and traders. There is already cultural acceptance of womenDue to mobility constraints of women, it is positive that local traders collect the chickens at the household.	Weakness <ul style="list-style-type: none">Ultra-poor women struggle to accumulate the working capital as majority of them live hand to mouth.Household responsibilities restrict women to take up business endeavours.Lack of knowledge on business profitability calculation.Currently, men are the ones involved in the marketing even though women are the key producers.
Opportunities <ul style="list-style-type: none">Working capital can provide the ultra-poor women with an opportunity to expand their business.Support through trainings can increase their knowledge which can lead to a profitable business.	Threats <ul style="list-style-type: none">Lack of vaccinations and medicines can cause epidemics of the chickens.It can take a long time to take up business endeavours with indigenous chicken as women from the targeted region has long been traditionally raising chicken without any expectation of profit.

5.5 Profitability Analysis

Table 25: Profitability analysis of smallholder chicken farmers

CASE 1	CASE 2
Indigenous Chicken (5 Hen and 1 Rooster) rearing for 1 year with proper vaccination and rearing management	Indigenous Chicken (8 Hen and 2 Roosters) rearing for 1 year with proper vaccination and rearing management

Production cost	Cost head		Case 1	Case 2	Notes
	Lease cost		0	0	Farmers usually keep their chickens in their own living premises.
	Coop Construction Cost (Fixed cost)		8000	8000	Each chicken requires 2 sq. feet space for rearing. Therefore, rearing 150 chickens in a 300 sq. ft. Coop construction costs around BDT 8,000. The coops are made of corrugated tin and net, which lasts for five to six years.
	Type of Inputs & Cost	Chicken (Fixed cost)	2,650	4,460	Each indigenous hen and each rooster is procured at BDT 420 and BDT 550 respectively.
		Feed	21,600	32,400	The feed consists of rice bran, broken rice and rice husk. Average price per KG- 30 BDT. Required amount/chicken/day – 50 gm.
		Medicine	50	50	Physician's honorarium included. Ensuring proper vaccination reduces the disease and thus usage of medication
		Vaccine	300	500	Farmers provide medicine in case of any disease outbreak. Increasing number of chickens reduces the overall cost of vaccination for each chicken.
	Labour Cost		0	0	Female members of the households look after the chickens, hence hiring labour is not required.
	Transport Cost		50	100	Transportation costs are incurred while selling chickens in the markets and taking them to the veterinary hospital.
	Others		300	500	Bowls, pots, etc. for feeding
Total Cost (BDT)		32950	46010		
Total running cost (BDT)		24430	36042	Fixed cost is distributed in 5 years as we assume the coop will last for five years.	
Sales of Meat production	Sales quantity of chicken (Unit/year)		96	160	Considering Fertility rate – 80% Mortality rate- 20% A hen gives birth to 10 chickens per 4 month-cycle.
	Sales price (BDT/3 month aged hen)		420	420	Average market price for a chicken – BDT 420 (Average weight 1-1.5 KG)
	Sales price (BDT/3 month aged Rooster)		550	550	Roosters have a comparatively higher price than hen. Average market price for a chicken – BDT 550 (Average weight 1-1.5 KG)
	Total sales (BDT/Year)		46560	77600	
Profit (BDT/Year)		22130	41,558		
Return on investment (%/Year)		67.16%	90.32%	ROI= Net profit/investment*100	

Assumptions	
	<ul style="list-style-type: none"> Fixed cost is provided through the project or provided through Financial Institutions by establishing linkages. Initial investment is considered as "Fixed costs". Fixed cost is divided into 5 years while calculating the profitability. With proper vaccination and medications, mortality rate can be reduced. Adequate amount of vaccination, medicines and private veterinarians are present in the market. A chicken can be sold after a cycle of 4-months rearing. 3 cycles/year. Majority of the eggs are preserved for hatching and some are for household consumption. Number of chickens will increase in each cycle. Increasing number of chickens will account for increased profit.

5.6 Constraints

- **Inadequate knowledge:** Producers were observed to have very little knowledge on appropriate techniques of chicken rearing. Respondents do not have adequate knowledge on diseases of indigenous chicken, the importance of vaccination and appropriate application of medicines, importance of nutritious feed etc. The inadequate knowledge results in epidemics of the chickens.
- **Absence of business endeavours:** Producers were reported to have no business endeavours on indigenous chicken production. It was observed that the producers were involved in chicken rearing since many years and they do not view indigenous chicken rearing as the primary source of household income, rather as an additional income source to the household. Thus, indigenous chicken rearing is not as significant as other sources of income to the household members.
- **Inadequate supply of vaccinations and medicines:** There are inadequacy in supply of poultry vaccination and medicines. Both in the Upazila offices and in the local medicine shops, the scenario is similar. In addition to that, vaccinations are prepared for 1000/2000 chickens in a single package. This restricts the small-scale producers to vaccinate their chickens.
- **Inadequate veterinarians:** Private veterinarians were observed to be absent in both the Upazilas. The absence of private veterinarians restricts the villagers to ensure proper treatment for their chickens. Government officials also can't provide for all the producers due to their several limitations.
- **Less awareness:** Producers were reported to be not aware about the diseases of the chickens. They also do not have the knowledge on proper techniques of chicken rearing. Producers were reported to have not received training on appropriate methods of chicken rearing. Training initiatives and proper business endeavours can raise the awareness of the producers.

5.7 Recommendation

5.7.1 Intervention design

	Input Supplies		Production	Trading
Interventions	Marketing of nutritious feed for indigenous chickens	Ensure availability of vaccinations and medicines through private sector engagement	Training on appropriate techniques of chicken rearing	Establishing linkages with local market retailers
	Introduce private veterinarians in the targeted Upazilas	Liaison with ULO to ensure adequate amount of vaccination and medicines.	Training on adapting business ventures	

5.7.2 Intervention details

Marketing of nutritious feed for indigenous chickens: Respondents were observed to be feeding the chickens with locally produced rice bran, rice polish and leftover meal. Providing nutritious feed can account for better health and rapid growth. In addition, nutritious feed can lead to less exposure to diseases. Nutritious feed for chicken includes wheat, corn, barley etc.

Actor: DLS

Project stage: Inception stage

Ensure availability of vaccinations and medicines: Vaccinations and medicines are not in adequate amount in the markets of Ukhiya and Teknaf. Linkages with private companies who manufacture poultry vaccination and medicine can be established. Department of Livestock Services (DLS) also expressed that they don't receive adequate amount of poultry vaccine and medicine.

Actor: Project team

Project stage: Inception stage

Introduce private veterinarians in the targeted Upazilas: Private veterinarians are not present in the targeted Upazilas. Introduction of private veterinarians can bring in raised awareness on chicken diseases and can ensure proper vaccination of the chickens.

Actor: Project team

Project stage: Inception stage

Liaison with ULO to ensure adequate amount of vaccination and medicines: Although the DLS do not receive adequate amount of poultry vaccines and medicine supply, liaison with the DLS officials can ensure vaccinations, medicines and health services in future. Villagers involved in cattle rearing and goat rearing were observed to be seeking services from the DLS office. However, this practice was not observed among the indigenous chicken producers. ULOs can take measures to raise awareness of the inhabitants on appropriate method of chicken rearing and can make them take help of the DLS officials when necessary.

Actor: Project team

Project stage: Inception stage

Training on awareness raising on techniques of chicken rearing: It was observed that the producers are not aware on appropriate techniques on indigenous chicken rearing. As stated earlier, inhabitants involved in chicken rearing, do not have much financial expectation from indigenous chickens. Through training, awareness can be raised on appropriate techniques on chicken rearing and consequently a good source of income can be ensured.

Actor: DLS or other agencies

Project stage: Inception stage

Training on adapting business ventures: Producers do not take business ventures on indigenous chicken farming. Training on business opportunities with indigenous chicken can assist the producers to adapt business ventures. Knowledge on profitability calculation through indigenous chicken rearing can make the producers take up indigenous chicken business ventures.

Actor: Project team

Project stage: 1 year after inception

Establishing linkages with local market retailers: Through establishing direct linkages with market retailers can ensure better price of the indigenous chickens. A fixed place to sell their chickens can also instigate taking-up business ventures.

Actor: Project team

Project stage: Inception stage

Chapter 6: Gender Sensitive Value Chain Analysis for Cattle Rearing

6.1 Brief Overview

The livestock sector is one of the fastest growing sectors of the agricultural economy. Beyond its role in generating food and income, livestock are a valuable asset, serving as a store of wealth, collateral for the credit, an essential safety net during difficult times of the poor families in the village.

The farmers involved in cattle rearing in Ukhiya and Teknaf have one or two cows mostly of indigenous type. They operate under the traditional systems. Given the limited and ever decreasing land holding sizes, on a per capita basis, beef fattening system is very promising. However, it requires improved feeding and management systems which would be beyond the affordability of the ultra-poor households. For the ultra-poor to adapt to a better system, there is a need for improved access to services such as better breeds, better feeding systems, veterinary services and marketing.

6.2 Value Chain Analysis

6.2.1 Overview of the Value Chain

Table 26: Overview of the cattle rearing value chain

End Market	The main cattle markets in the regions are Ukhiya, Moricha and Teknaf. Farmers buy small cattle for fattening from these markets and sell when fatten.	The informal market consists of individuals buying cattle from farmers for different reasons which include slaughtering, as an investment or for social functions such customary celebrations, weddings and religious celebrations as Eid ul aza,
Trading	Farmers sell cattle directly to village cattle traders or middlemen who aggregate cattle and sell to large cattle traders who supplies to butcheries selling meat to consumers and restaurants.	Traders are also involved in import and trade of cattle from Myanmar and India. Teknaf and Satkhira border area are known as distribution hubs of imported cattle.
Production	A cow needs 6 months of rearing before selling for beef. Villagers were reported to be engaged in cattle rearing (mostly cow) throughout the year. Majority of the ultra-poor are not involved in this sector due to high initial investment. However, it is a profitable sector for them.	Total cattle population in Ukhiya is around 121,000 ¹ . This includes all cattle heads like the dairy cow, cuffs and beef cattle. It is estimated that around 36,300 (30% ²) of the total cattle population would be beef cattle. Total meat produced is around 2904 (36,300X 80Kg/cattle=2904000kg) metric ton/year.
Input Supply	Input for beef cattle rearing includes cattle feed e.g. chaff husk, grass etc., vaccination and medicines. Input supply for beef production consists of the supply of calves (animals for fattening), provision of animal health services, feed and provision of credit services.	The study found that farmers mainly supply calves for fattening. Shops in the nearby market supply feed like rice bran and oil cake to farmers. Medicine and private veterinary support providers sell medicine and provide veterinary services through farmers' home visit.

¹ Upazila livestock office, Ukhiya, 2019

² This was estimated based on the FGD with female and male group in the community. The participants mentioned that most of the families who have means for cattle raising, prefer rearing mother cow for milk and cuff and then beef cattle.

6.2.2 Relationships in the value chain

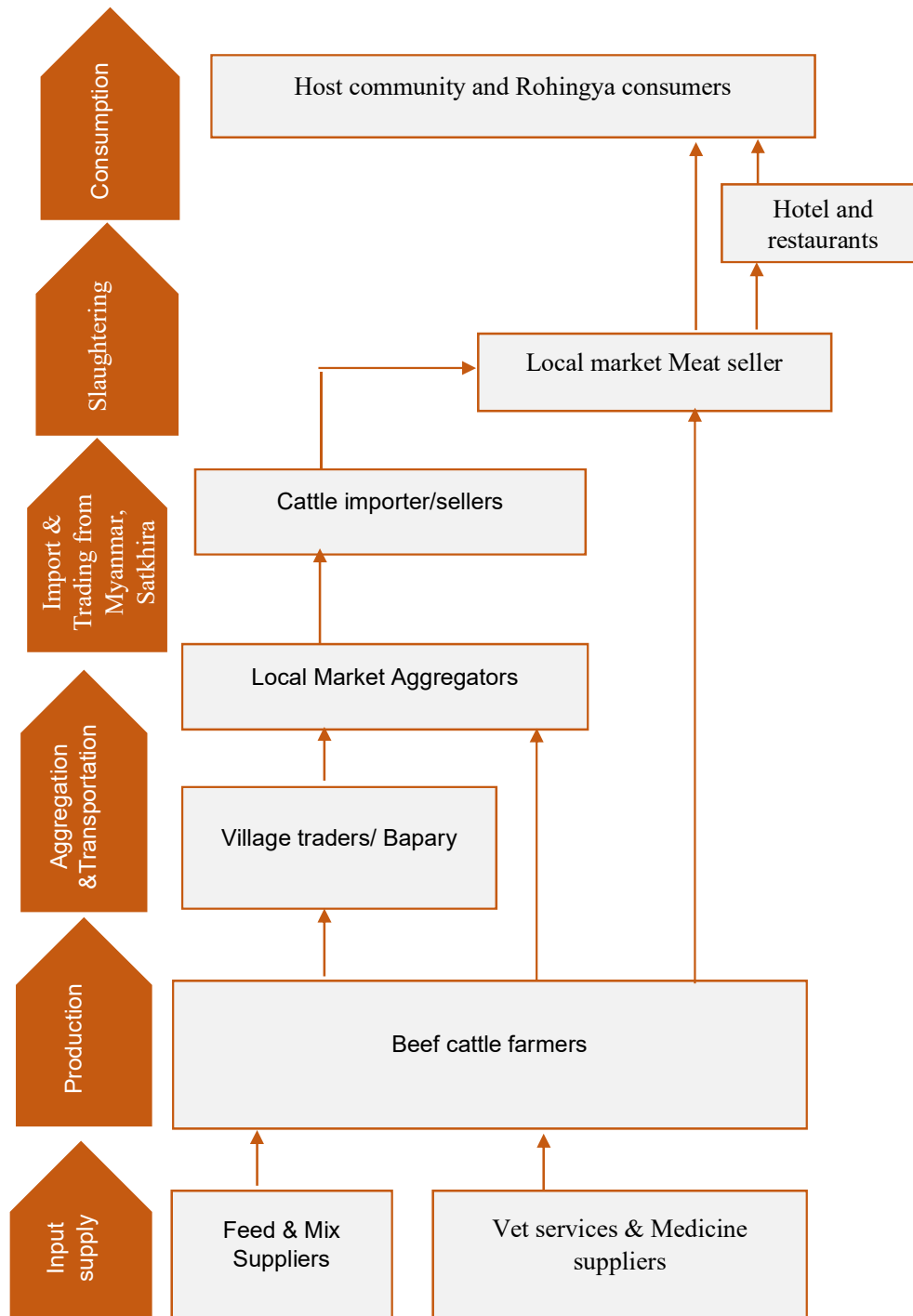


Figure 41: Value Chain Map for Beef Cattle Rearing

6.3 Key Research Findings

6.3.1 Competitiveness

Market Size and Growth Potential

Market for cattle rearing value chain is the local markets of Ukhiya and Teknaf Upazilas. Numerous hotels and restaurants of Cox's Bazar district demand sizable amount of beef. Inhabitants were reported to sell their cattle in the local markets of the Upazilas. Cows are sold to the *haats* (market setting in 1/2 days per week) where buyers from several large markets visit to source cattle. Butchers also source reared cows from the *haats*. Cox's Bazar is among the most attractive tourist destinations of the country and thousands of tourists visit Cox's Bazar every year. Recent *Rohingya* influx has significantly increased the demand of beef in the region. Both these factors contributed to a large market size for cattle and the growth potential was also observed to be high for these reasons.

Ability to meet market demand

Total cattle population in Ukhiya is around 121,000 (Ukhiya = 61,082³ and Teknaf 59,840⁴). This includes all cattle heads like the dairy cow, cuffs and beef cattle. It is estimated that around 36,300 (30%⁵) of the total cattle population would be beef cattle. Total meat produced is around 2904 (36,300X80Kg/cattle=2904000kg) metric ton/year.

As the market size and growth potential is high for cattle rearing value chain, despite of a significant supply, there is still provision of more beef in the region. Through involving more households into cattle rearing, the local demand could be met and there is also provision to export cow to other regional markets of Chittagong division.

Opportunities for value addition

Beef can be processed from cattle. According to our assessment several butchers sell beef in each of the local markets of Ukhiya and Teknaf Upazilas. As there is high demand of beef in the markets, the opportunity for value addition in this Value Chain is significantly high.

6.3.2 Partnership and Quick Win Potential

Scope for partnership and quick win potential is further assessed under the following sub-criteria:

Input/output market, service providers and potential employers

Key players of beef cattle in the areas comprise a number of participants or actors. The chain integrates beef cattle producers, traders, wholesaler, butchers cum meat sellers and retailers. The beef cattle are moved from farmers to traders, then to butchers who slaughter animals and convert them into beef. The products finally reach consumers through meat sellers. In rural markets butchers act as meat sellers or retailers.

Input Suppliers: Input supply for beef production consists of the supply of calves (animals for fattening), provision of animal health services, feed and provision of credit services. The study found that farmers mainly supply calves for fattening. Shops in the nearby market supply feed like rice bran

³ Upazila livestock office, Ukhiya, 2019

⁴ Upazila livestock office, Ukhiya, 2019

⁵ This was estimated based on the FGD with female and male group in the community. The participants mentioned that most of the families who have means for cattle raising, prefer rearing mother cow for milk and cuff and then beef cattle.

and oil cake to farmers. Medicine and private veterinary support providers sell medicine and provide veterinary services through farmers' home visit.

Local meat sellers (Beef Cattle Farmers/Producers): The smallholder producers in the study areas are the major suppliers of beef cattle for local consumption. Particularly the smallholder cattle farmer supply fattened beef cattle to the Market in Maricha, Ukhiya and Teknaf all year round. The farmers of these areas generally 1-2 head of beef cattle are tethered and managed by feeding. Gendered roles and responsibilities linked to the key tasks linked to beef cattle production

Village Traders (Bapari): These market agents usually operate in the primary beef markets, buy up to 5-8 animals on a given marketing day using their own capital or big traders' money and they have trade ties with affiliated large traders. These traders have detailed knowledge of the production system and related environs in cases where disputes arise with regard to transactions.

Local market Aggregator: These market agents serve as mediators between buyers (cattle importer/sellers) and sellers in the livestock market. They are usually expected to link buyers with sellers and facilitate the terms of exchange.

Roadside butchers of beef: Butchers are those who are engaged in selling of cattle meat to consumers. They are found in rural as well as in urban areas. They usually buy cattle from primary and secondary markets before slaughtering them and selling the meat to various consumers. They may prepare standard cuts of meat for sale in retail or wholesale food establishments. Roadside and market stall butcheries account for 100% percent of all retailed meat and are the backbone of the meat supply chain. They have no cooling facilities and therefore only stock meat that can be sold within the day. Processing by these butcheries is minimal, and there is unhygienic handling of meat at this level.

Consumers: They are the end value chain actors or end users. Beef consumers as mentioned above are local consumers who buy meat from butchers or who, as a group, buy beef animals to slaughter and then share the meat.

Hotels and Restaurants: These are the final actors in the value chain. Hotels are supplied with meat or carcasses as per their specific requirements by butchers. The hotels and restaurants prepare dishes such as Beef curry, Beef masala biryani, Beef nehari, Kababs, Paya curry and sell them to their customers. Hotels and restaurants in Ukhiya and Teknaf and other smaller markets can buy beef cattle from producers, collectors and small-scale traders.

Individual consumers/Household consumers: Individual consumers are market actors who buy directly from any farmers, bapari or cattle market during an event such Eid-ul Aza, wedding, and other social ceremony. They generally prefer better meat quality and the greater proportion of meat on a carcass.

6.3.3 Impact on Ultra-poor

Proportion of ultra-poor already participating in the livelihoods option

Very few of the ultra-poor inhabitants were observed to be engaged in cattle rearing. Investment requirement for cattle rearing is amongst the major reasons behind this. In addition to the large investment required, the risks involved (death of cattle, theft etc.) in cattle rearing also restrict the ultra-poor from being involved in this value chain.

The potential for household to be impacted

Ultra-poor inhabitants were observed to be familiar with cattle rearing techniques. Although they do not have complete knowledge on appropriate cattle rearing techniques, proper training and need-based support can address this issue. In addition, the low mortality rate of cattle offers significant potential for ultra-poor households.

Ultra-poor interested in livelihood option

Although very few of the ultra-poor households are currently involved in cattle rearing, many of them are reported to be highly interested in this value chain. Low mortality rate of cattle and high profitability contribute to the high interest of the ultra-poor in this value chain.

Ability of the selected livelihood option to provide regular and sufficient income to cover household expenses for the ultra-poor

Cattle rearing offers significant profitability which is sufficient for regular income through this value chain. Those who are involved in cattle rearing expressed that the profit achieved through the livelihood provides sufficient earnings to cover household expenses.

Potential for the ultra-poor gain self-employment/wage employment

Cattle rearing can be done by the female household members. Hiring labour is not required in this livelihood and thus it does not offer much employment for others who are not engaged in cattle rearing. However, there is provision for hiring labour in case someone invests in cattle and hands over the rearing responsibility to others.

Low entry barriers for the ultra-poor

Low entry barriers for the ultra-poor in this livelihood include lack of capital, lack of knowledge on appropriate rearing techniques and lack of knowledge on improved breeds of cattle.

6.3.4 Gender and youth inclusion

High share of women employed in the livelihood option compared to the economy at large

Female household members were observed to be traditionally involved in cattle rearing. However, less mobility and social constructs restrict them to involve in trading. Trading is mostly done by men in these regions.

Low entry barriers for women

Low entry barriers for women include current social perspectives where women are supposed to stay at home and household earning responsibility has historically been bestowed on male household members. Lack of knowledge on appropriate rearing techniques is also an impediment for the female household members.

Women control equipment/assets/resources required to participate

Women's control over equipment, assets and resource required were reported to be significantly weak compared to their male counterparts.

6.3.5 Climate change adaptation and environmental sustainability

Climate change adaptation

Adaptation for climate change requires construction of proper shelter for the cattle and provide vaccines and nutritious foods so as to prevent the effects of temperature rise. Adequate amount of water also needs to be supplied to the cattle.

Extent the livelihood option is safe, sustainable and legal and complementary to food security

Cattle rearing is safe, sustainable, legal according to national laws and complementary to food security as it offers significant profit.

6.3.6 Sector scoring based on the study

Based on our analysis, the following scores have been assigned to each of the major criteria mentioned in the subsector selection workshop, to compare different IGAs among the selected value chains for this study. The following table shows the scores allocated for cattle rearing as a source of income for the ultra-poor in the project areas.

Table 27: Scoring for indigenous cattle rearing value chain

Criteria	Score	Weight	Weighted Score
Competitiveness	9	.15	1.45
Partnership and Quick Win Potential	8	.15	1.20
Impact on Ultra-poor	7	.30	2.10
Gender and youth inclusion	9	.30	2.70
Climate change adaptation and environmental sustainability	7	.10	0.70
Total Score			8.15

6.4 Gender Sensitive SWOT analysis

Strength <ul style="list-style-type: none"> Beef cattle can be sold easily because they are always in demand as a source of food. Beef cattle are managed almost by women. They bring them out for grazing, take care of them when they're ill. 	Weakness <ul style="list-style-type: none"> Inadequate access to calf, feed and veterinary services. Lack of grazing land. Lack of access to market information and appropriate fattening technologies. Lack of capital Low productivity. Lack of support service Poor access to market information and transportation. Lack of access to finance of cattle traders. High price for small cattle/calves to be raised for beef
Opportunities <ul style="list-style-type: none"> Scope for making and distribution of prepared feed Grass cultivation is profitable Market demand of fresh beef in the regions 	Threats <ul style="list-style-type: none"> Sudden disease outbreak Frequent natural disaster Sudden increase of cross border import of beef cattle carrying diseases and depressing price

6.5 Profitability Analysis

CASE 1	CASE 2
Rearing 2 Cows for 6 months, twice a year, with vaccination and improved management	Rearing 4 Cows for 6 months, twice a year, with vaccination and improved management

Table 28: Profitability analysis of smallholder cattle (beef) farmers

Production cost	Cost head		Case 1	Case 2	Notes
	Lease cost		-	-	Farmers usually keep their cattle's in their own living premises.
	Barn (Fixed cost)		20,200	20,200	One 15 feet by 20 feet Barn can provide shelter to 4 cows. The barns are made of corrugated tin, wood, bamboo etc. which lasts for five to six years. The labour cost of BDT 5000 is also included.
	Type of Inputs & Cost	Calf/ small cows	160,000	160,000	Each calf costs BDT 40,000.
		Feed, vaccine, medicines	58,400	116,800	Average input cost per cow for a day is BDT 70. Food cost is BDT 40/Kg Worm Tablet cost BDT needed once every 4 months Vaccination is given once every 4 months
	Labour Cost		-	-	Female members of the households look after the cattle, hence hiring labour is not required.
	Transport Cost		3,600	7,200	Transportation costs BDT 600 for food carriage, and BDT 300 once while taking the cow to the market
	Total Investment per year (BDT)		242,200	304,200	
	Total per year cost (BDT)		225,366	287,366	Fixed cost is distributed in 6 years as we assume the barn will last for 6 years.
Revenue Total sales (BDT/Year)			280,000	560,000	Selling price of each cow BDT 70,000
Profit (BDT/Year)			54,633	272,633	
Return on investment (%/Year)			23%	90%	ROI= Net profit/investment*100

Assumptions
<ul style="list-style-type: none"> • Fixed cost is provided through the project or provided through Financial Institutions by establishing linkages. • Initial investment is considered as “Fixed costs”. • Fixed cost is divided into 6 years while calculating the profitability. • Adequate amount of vaccination, medicines and private veterinarians are present in the market. • A cow can be sold after a cycle of 6-months rearing. • 2 cycles/year. • Increasing number of cows will account for increased profit.

6.6 Constraints

Only 4% of the ultra-poor households rearing beef cattle face constraints related to genetics or breed, veterinary service, nutrition, fodder, farm practices, management and marketing of cattle.

Genetics and breed: Most of the families rear local indigenous breeds that are poor in body structure. U Upazilas. So, it is very difficult to provide adequate veterinary service for livestock development. There are private veterinary service providers, but they are not trained or skilled enough to provide veterinary services as required. Some of them are interested sell medicine. There is no monitoring system to regulate their service.

Availability of quality vaccines of anthrax, FMD, etc is a problem. Ultra-poor farmers find this as a major risk and problem for them to raise beef cattle.

Nutrition: There is a huge deficiency in feed and fodder production for cattle rearing in the country. Cattle suffer from chronic malnutrition. The farmers mainly start farming without sufficient knowledge regarding cattle nutrition. Ignorance and high price of low-quality feed or feed ingredient constraint them in managing cattle rearing. Mainly dry straw some rice bran and water are used for feeding cattle. As a result, most of the cattle raised by the ultra-poor are malnourished.

Green grass: Green grass is a basic feed for normal growth of cattle. Ultra-poor farmers cannot cultivate grass due to lack of land and feed cattle with sufficient green grass. They mostly depend of natural grass of poor quality often mixed with dirty materials including mud or soil having very little nutritive value. Commercial grass production has begun in different parts of the country, but grass cultivation is not popular in Ukhiya and Teknaf.

Husbandry: Farmers lack knowledge about shade management. Almost all cattle shades were found to be unclean likely to be susceptible to infection of FMD. There is no provision of clean water and water ponds were unhygienic and dirty. Often cattle drink water of that pond water causing stomach infection. Management of the shade and husbandry is left to casual labours that have no knowledge of it. A great deal of technical training would be required to enhance the capacity of fatteners to ensure proper husbandry along with balance nutrition.

Sales: As most of the farmers selling beef cattle to middlemen or nearby market, they don't face any significant problem except *hasil* (sale tax) which is quite high for the ultra-poor.

6.7 Recommendation

As beef cattle fattening is very capital intensive with high risk related to diseases, theft, and other issues, World Vision and its partner NGOs can consider alternative support package. These could be training and technical assistance to ultra-poor women to become feed sellers and supporting the women cattle fattener with production techniques and market information.

6.7.1 Intervention design

	Input Supplies	Production	Trading
Intervention	Provide training on feed processing techniques and preservation to ultra-poor women and develop them as feed sellers.	Organizing the Smallholders' Production System	Promote market information & production technologies with support of DLS and NGOs
	Facilitate the linkage between input suppliers and women feed sellers so that they can collect ingredient for cattle feed.	Provide a small grant as capital to ultra-poor women for starting feed selling business.	

6.7.2 Intervention details

<p>Provide feed processing techniques to Ultra-poor women for cattle feed preparation and preservation</p> <p>Potential Partners: Department of Livestock Service (DLS) and private cattle feed manufacturer</p> <p>Support Service Providers: World Vision partners, NGOs</p> <p>Raw materials for cattle feed are locally available. So, World Vision can arrange better training and the recipe for developing cattle feed entrepreneurs from the selected ultra-poor women. Based on the rapid market assessment (potential buyer in the village, quantity they would like to buy and price they can afford), ultra-poor women can get concrete ideas about the market. World Vision can identify cattle feed expert for recipe development and conducting training.</p>
Project stage: Year 1

<p>Facilitate the linkage between input suppliers and women feed sellers so that they can collect ingredient for cattle feed.</p> <p>Potential Partners: Input sellers, Department of Livestock Service (DLS) and private cattle feed manufacturer</p> <p>Support Service Providers: World Vision partners, NGOs</p> <p>While making nutritious cattle feed at home by using ingredients available in the village, the trained entrepreneurs can establish the business relationship with nearby market traders for buying raw material that are not available in the village. This will enable the newly trained women entrepreneurs diversify their cattle feed items to meet cattle farmers requirement. World Vision and its partners will have to identify ingredient seller willing to work with women entrepreneurs.</p>
Project stage: Year 1

<p>Organizing the Smallholders' Production System.</p> <p>Potential Partners: Ultra-poor women, World Vision partner NGOs</p> <p>Support Service Providers: World Vision partners, NGOs</p> <p>Most of the ultra-poor families currently rearing beef cattle are not organized. As a result, they lack required technical knowledge and skills for cattle rearing. It will be extremely difficult to provide the service such as quality feeds, medicines, veterinary services, technology dissemination, advisory and extension services, training and campaigns. Therefore, ultra-poor beef cattle farmers including other</p>

small holder families must be organized as self-managed groups to facilitate easy access to the business development services as well as help emerge institutions of smallholders for contracts and negotiations with market forces and service agencies through strong technical and leadership development programs.

Project stage: Year 2

Provide a small grant as capital to ultra-poor women for starting feed selling business.

Potential Partners: Input sellers, Department of Livestock Service (DLS) and private cattle feed manufacturer

Support Service Providers: World Vision partners, NGOs

The ultra-poor families do not have financial ability to start cattle feed business. So, the objective of providing a small grant support to selected women It will enable the village cattle farmers reduce reliance on expensive cattle feed. Under this, the ultra-poor women can be provided with training, financial assistance for buying ingredients, tools and equipment like mixture machine, grinding machine, drum or sack for storing raw materials and cattle feed.

Project stage: Year 1

Promote market information & production technologies with support of DLS and NGOs.

Potential Partners: Ultra-poor women, DLS, NGOs

Support Service Providers: World Vision partners, NGOs

Market is the most critical factor to make beef cattle sector development successful. It has been observed that consistent facilitation may bring the market actors together but without proper information sharing the relationship cannot be maintained. So, the cattle feed value chain development will give emphasis on sharing market information. World vision partner will facilitate the linkage between private feed seller, DLS and ultra-poor women.

Project stage: Year 2

Chapter 7: Gender Sensitive Value Chain Analysis for Dry Fish

7.1 Brief Overview

Cox's Bazar is geographically blessed with the Bay of Bengal across the western and southern sides of the district. The Bay of Bengal is vastly enriched with various species of marine fishes. The Bay of Bengal, with all its natural resources, largely affects the livelihoods of the inhabitants. Although, a large number of people are engaged in fishing, both in the adjacent rivers/canals and in the sea, dry fish farming was found out to be a rather uncommon livelihood practice among the inhabitants of Ukhiya Upazila. In contrast, dry fish farming is a common livelihood option among the dwellers of Teknaf Upazila.

Round the year, plenty of fish is harvested from the Bay of Bengal and from the adjacent rivers/canals. Based on the supply of input, dominant clusters of dry fish processing has emerged in different villages across Teknaf Upazila. There are around 6/7 large dry fish processing farms and around 50 small processing farms in Teknaf Sadar union. Dry fish processing in a small scale (Household Level) was also observed to be a common practice in Teknaf. Inhabitants have long been traditionally engaged in dry fish processing, in a small scale, mostly for Household consumption. The practice was observed to be widespread among the fishermen families who dry the harvested fishes in the courtyards for household consumption. Scaling up of household level fish drying is restricted by several factors which are broadly discussed in the following chapters.

According to the dry fish traders, an average of 100-120 workers are engaged in dry fish farming in each of the processing firms. Majority of the workers were observed to be female who work there as laborers. They work from 8 AM to 6 PM with a one hour lunch break from 1 PM-2 PM. They are usually paid BDT 250 per day. Workers were reported to work 18-20 days a month.

The fish drying process is a routine work and workers who work in the processing farms are skilled enough to run a fish drying processing farm on their own. However, some constraining factors restrict them to run their own fish drying business, which are discussed in the subsequent sections.

The dry fish produced in Teknaf Upazila is traded to regional and national markets. The main market of dried fish is in Chittagong. Traders were reported to usually transport the dried fishes in the markets of Chittagong (80-85%). In addition, they also supply dried fishes in the markets of Ramu, Ukhiya and Teknaf Upazila (15-20%). Regional traders from Chittagong district source dried fishes from the processors which are then supplied across the country.

The field investigation shows that the processors are seeing increase in dry fish trading over the year. The processors we interviewed opined that their trading volume is in the rise every year. Dried fish market is expanding every year, especially in the southern region of the country (Chittagong, Cox's Bazar districts). The supply of raw fish is also concentrated on the markets of Cox's Bazar and Chittagong districts. According to our observation, processors import raw fishes from the large markets of Chittagong and Cox's Bazar and after processing, dried fishes are again transported to the very same markets. In addition to import raw fishes from markets of Chittagong and Cox's Bazar districts, processors also collect fishes from the local fishermen.

7.2 Value Chain Analysis

7.2.1 Overview of the Value Chain

The following figure provides an overview of dry fish Value Chain in Ukhiya and Teknaf Upazilas of Cox's Bazar district:

Table 29: Overview of the dry fish value chain

End Market	Regional- Local Markets of Ukhiya and Teknaf Upazila National- Chittagong and Cox's Bazar	The price is higher in the winter season and gets lower during July-October
Trading	Primary selling place- Primary selling places of the dry fish are Markets of Chittagong and Cox's Bazar, local markets of Ukhiya and Teknaf Upazila	Average monthly sale of the retailers of local markets of Ukhiya and Teknaf Upazila- BDT 10, 00, 000- 20, 00, 000.
Production	Processing season- Dry fish processing continues round the year. July-October (Srabon-Kartik) is the peak season for dry fishing and production is lesser during the Winter season (Poush-Magh) Fresh water fish to dry fish conversion ratio: The raw fish-dry fish conversion ration differs by varieties of fish. On an average 1 KG of dry fish is processed from 2.5-3 KGs of fish.	Working capital- For a large processing farm 20-30 lacs BDT is needed as working capital. For small processing farms, the capital ranges from BDT 10,000-100, 000 Per month production- Large processing farms produce 20, 000- 30, 000 KGs of dry fish per month and small processors produce 40-320 KGs of dry fish
Input Supply	The input for fish drying comes from the Bay of Bengal and adjacent rivers/canals. Markets of Chittagong and Cox's Bazar districts are the large market in the region for input trading where traders from Teknaf Upazila source raw fish for processing.	Raw fishes are imported from the local fishermen as well.

7.2.2 Relationships in the Dry Fish Value Chain

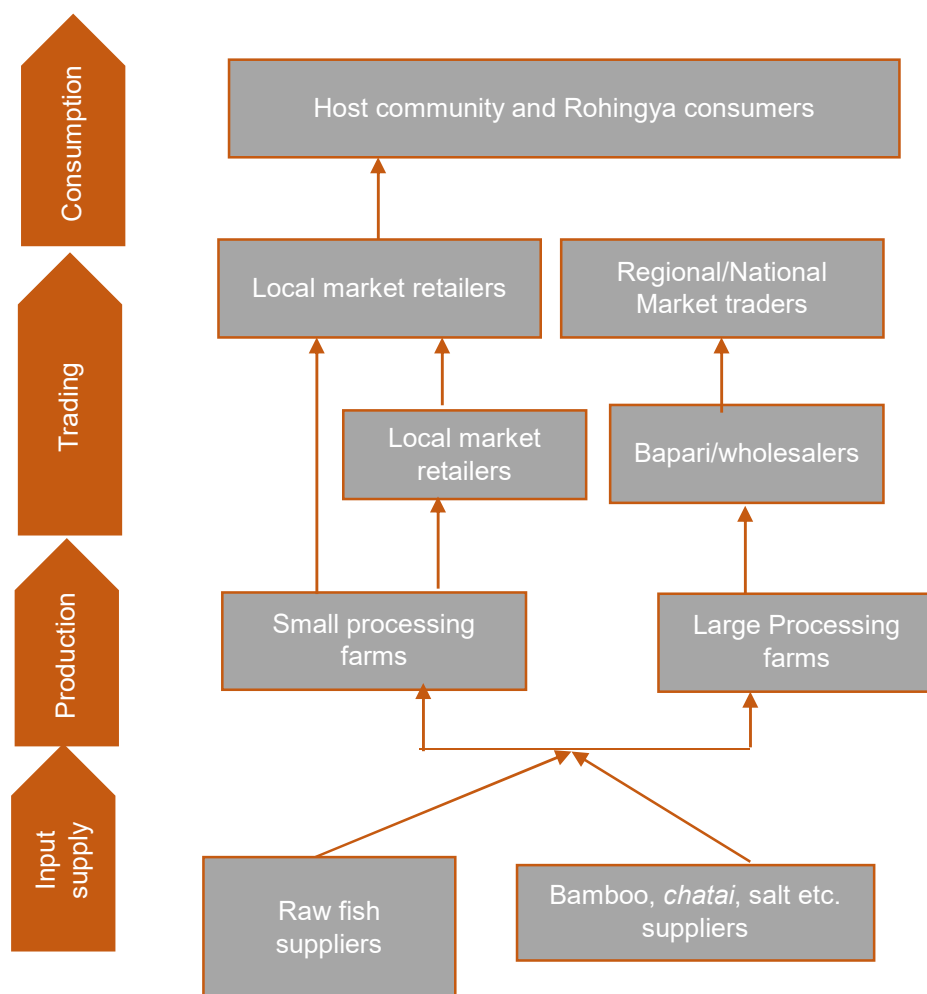


Figure 42: Relationships in the Value Chain

7.3 Key Research Findings

The Value Chain analysis will be conducted in accordance with the Value Chain selection criteria which was based on the project outcomes. This chapter will try to analyse the current status of the Dry Fish Value Chain through investigating each of the selection criteria. The scopes and constraints for ultra-poor graduation through dry fish value chain is assessed through the different selection criteria i.e.- Competitiveness, Partnerships and quick win potential, Impact on the ultra-poor, Gender and Youth inclusion and Climate change adaptation and environmental sustainability.

7.3.1 Competitiveness

The competitiveness of dry fish Value chain is further assessed through different sub-criteria.

Market Size and Growth Potential

The main markets of dry fish are the markets of Chittagong, Cox's bazar districts. Local markets of Ukhiya and Teknaf Upazilas are also significant market places for the dry fish industry. Local markets of the 2 Upazilas are listed in the following table:

Table 30: Local markets for dry fish in Ukhiya and Teknaf

Local markets of Ukhiya Upazila	Local markets of Teknaf Upazila
23. Ukhiya Daroga Bazar	1. Sabrang bazar
24. Court bazar	2. Noyapara bazar
25. Morichya bazar	3. Shahporir dip bazar
26. Patabari bazar	4. St. Martin bazar
27. Sonarpara bazar	5. Teknaf bazar
28. Inanai bazar	6. Bottuli bazar
29. Kutupalong bazar	7. Hnila bazar
30. Customghat bazar	8. Leda bazar
31. Balukhali bazar	9. Moulobhibazar
32. Thaingkhali bazar	10. Kharankali bazar
33. Bhalukia Harun market	11. Noyapara bazar
	12. Unchiprang bazar
	13. Mina bazar
	14. Waikhyong bazar
	15. Ulomunia bazar
	16. Borodil bazar
	17. Jahajpur bazar
	18. Shilkhali bazar
	19. Shamlapur bazar

Traders of local markets of Ukhiya and Teknaf Upazilas source dry fish from the processing farms. With the recent *Rohingya* influx, the demand of dry fish in the local markets is increasing exponentially.

Markets of Chittagong and Cox's Bazar districts are two of the largest national markets of dry fish. Traders of Chittagong and Cox's Bazar import dry fishes from the processors and distribute to other districts.

Due to the varieties of fish sourced from the Bay of Bengal, and due to the age-old practice of dry fish processing, Chittagong and Cox's Bazar have long been a large market place for dry fish. In addition to meeting the national demand, dry fish is also exported to other countries. Demand for dry fish is also reported to have been increasing significantly for the past few years. These factors contributed to a substantial growth potential for the dry fish.

Ability to meet market demand

There are 3-10 dry fish retailers in each of the local markets of the region. Each of the retail shops sells around 1000-40, 000 KGs of dry fish per month. Each of the large processors produce around 25,000-30,000 KGs of dry fish per month. The dry fish are primarily exported to the markets of Chittagong, Cox's Bazar and local markets of Ukhiya and Teknaf Upazilas. From the markets of Chittagong, dry fish is exported to other districts of Bangladesh (Dhaka, Comilla, Feni etc.). According to the traders, the supply of dry fish is adequate, and the demand is in the rise.

Local markets of Ukhiya and Teknaf Upazilas are two of the major markets of dry fish at present. With recent Rohingya influx, the demand of dry fish in the local markets is exponentially increasing. Cox's Bazar and Chittagong are two of the largest national markets of dry fish which are not very far from the targeted regions. Dry fish processors were reported to be exporting processed dry fish in the markets of Chittagong and Cox's Bazar. It can thus be inferred that there is significant market opportunity for dry fish in the targeted region and systematic commercial production has a considerable potential to meet the market demand.

Opportunities for value addition

According to our assessment, hygienic processing of dry fish is not practiced by majority of the existing processors. Rather, the widespread practice of dry fish processing in open environment was observed. Hygienic processing provides a great opportunity for the project beneficiaries by targeting the niche market.

7.3.2 Partnership and Quick Win Potential

Scope for partnership and quick win potential for dry fish value chain is further assessed under the following sub-criteria:

Input/output market, service providers and potential employers

Raw fish suppliers are the main input actors for dry fish processing. Dry fish processors were reported to import fishes from the local fishermen who source fish from the Bay of Bengal. Dry fish processors can source raw fishes from the fishermen or from the local markets of Ukhiya and Teknaf Upazilas where raw fishes are available in large quantity. In addition, dry fish processors can also source fish from large markets of Chittagong and Cox's Bazar. Large processors were reported to import fish from markets of Chittagong and Cox's Bazar.

Local Traders: Traders of local markets of Ukhiya and Teknaf Upazilas source dry fish from the processing farms. With the recent *Rohingya* influx, the demand of dry fish in the local markets is increasing exponentially.

Large Traders: Markets of Chittagong and Cox's Bazar districts are two of the largest national markets of dry fish. Traders of Chittagong and Cox's Bazar import dry fishes from the processors and distribute to other districts.

Service Providers: Potential service providers for this value chain include Upazila Fisheries office, Fisheries Training and Extension Centres and local NGOs.

Employers: Large dry fish processors employ the local inhabitants as laborers in their farms. Many ultra-poor inhabitants, mostly women were observed to be working in large processing farms.

Potential training partners and/or apprenticeship programs for skills training

Potential training partners for this value chain include Upazila Fisheries office, Fisheries Training and Extension Centres and local NGOs. Owners of large processing farms are also amongst the potential trainers. Local NGOs, Upazila Women Affairs office, Upazila Youth Development office and Upazila Co-operative office are also potential training providers on business development of dry fish processing.

Linkages with Government services, and favourable policies or existing programs

Linkages with Upazila Fisheries office can ensure hygienic dry fish processing. Government has favourable policy for dry fish farming. Through forming cooperatives, farmers can avail various Government support.

Ability to have quick income generation potential for the ultra-poor target group

Dry fish processing can generate quick return as dry fish processing require 3-7 days. Ultra-poor inhabitants will have an advantage with regards to dry fish processing experience as many of the inhabitants work as laborers in processing farms. In addition to that, many of the ultra-poor female inhabitants were reported to be involved in fish drying in a very small scale for household consumption. Proper support services can ensure appropriate practices of fish drying by skill development. Profitability analysis in the following chapter will provide a detailed analysis of income generation potential of dry fish value chain.

7.3.3 Impact on Ultra-poor

Proportion of ultra-poor already participating in the livelihoods option

According to our assessment, the practice of dry fish processing is not so prevalent among the inhabitants of Ukhiya Upazila. However, many of the inhabitants are engaged in dry fish processing in Teknaf Upazila. Small and large processors, both were seen in Teknaf. Ultra-poor inhabitants, especially women were observed to have been engaged, mostly as laborers in dry fish processing farms. The practice was also observed in the villages alongside the Naf River, where villagers usually process dry fish in their courtyards for household consumption.

The potential for household to be impacted

Many of the ultra-poor female inhabitants from Teknaf Upazila are already engaged in dry fish processing. Availability of raw fish and ready market place for the processed dry fish provides an immense opportunities to the inhabitants of the Ukhiya Upazila to be engaged in dry fish processing as well. Ultra-poor inhabitants were observed to highly interested in dry fish processing. Through providing necessary support, 50-60% of the project beneficiaries can be reached through interventions designed for dry fish processing value chain.

Ultra-poor interested in livelihood option

National marketplace for dry fish is in Chittagong and Cox's Bazar. Targeted Upazilas are not very far from the large marketplaces. Due to the presence of large marketplaces and due to availability of raw fishes in the region, many of the respondents showed high interest in dry fish processing business.

Ability of the selected livelihood option to provide regular and sufficient income to cover household expenses for the ultra-poor

Necessary support and adequate knowledge can result in increased income for the ultra-poor inhabitants. Dry fish processing is among the most profitable businesses in the region. It can thus be inferred that proper business operation can provide regular and sufficient income to the ultra-poor inhabitants.

Potential for the ultra-poor gain self-employment/wage employment

Ultra-poor inhabitants can gain self-employment through engaging in dry fish processing. Large processing farms require wage laborers and thus dry fish processing can create employment opportunities for the other ultra-poor households of the targeted region. Gradual development of the ultra-poor inhabitants can lead to commercial production. However, during project duration, it may be difficult for the ultra-poor inhabitants to start large scale production.

Low entry barriers for the ultra-poor

Low entry barriers for ultra-poor inhabitants include lack of knowledge for appropriate hygienic methods of dry fish processing, lack of market linkages and lack of knowledge on business development.

7.3.4 Gender and youth inclusion

High share of women employed in the livelihood option compared to the economy at large

100% of the large dry fish processing farms are run by men. However, women were observed to be engaged in dry fish processing as laborers which gives them an advantage with regards to dry fish processing techniques. In addition, women were observed to be drying fish for household consumption. It can thus be inferred that there is an immense opportunity for the women to be engaged in dry fish processing.

Low entry barriers for women

As dry fish processing business is largely owned and managed by men, women will face several low entry barriers while engaging in the business. Input and output market linkage is one of the major barriers. Raw fish can be procured from the local markets where linkages can be established without much difficulty. However, in case of output market, external support is necessary to establish linkage with the local market traders and/or with the market traders from Chittagong. Other low entry barriers for women include lack of business development knowledge and lack of knowledge on hygienic processing.

Women control equipment/assets/resources required to participate

As stated earlier, women who are involved in dry fish processing, are mostly laborers. They do not have much control over equipment and asset required. However, as they can be made capable of running the business, their control over assets and equipment can get much stronger over time. In case of resources, financial transaction has long traditionally been conducted by the male household member. Men were mostly observed to make decisions related to household finance. Women's control over financial resources was observed to be weaker than their male counterparts.

7.3.5 Climate change adaptation and environmental sustainability

Climate change adaptation

Dry fish processing is practiced all the year round. However, during monsoon production rate falls due to heavy rain. Dry fish processing requires constant heat from the sunlight and thus the business is vulnerable to disasters. However, considering the fact that dry fish processing can generate quick return, repercussions of disaster can be reduced through proper business management.

Extent the livelihood option is safe, sustainable and legal and complementary to food security

Dry fish processing is a safe and legal business. Appropriate methods of processing can account for sustainable livelihood. Opportunity for increased income can support the households to achieve food security. Dry fish consumption can also meet the demand for protein of the inhabitants.

Scoring for dry fish value chain			
Criteria	Score	Weight	Weighted Score
Competitiveness	8	.15	1.2
Partnership and Quick Win Potential	7	.15	1.05
Impact on Ultra-poor	9	.30	2.7
Gender and youth inclusion	8	.30	2.4
Climate change adaptation and environmental sustainability	10	.10	1
Total Score			8.35

7.4 Gender sensitive SWOT analysis

Strength <ul style="list-style-type: none">• Majority of the ultra-poor women are involved in the dry fishing sector as labourers. As a result, they are already skilled enough in dry fish processing.• Women who are involved in dry fish processing, have linkages with both the input supplier and traders	Weakness <ul style="list-style-type: none">• Ultra-poor women struggle to accumulate the working capital to run their own business as majority of them live hand to mouth.• Household responsibilities restrict women to take up business endeavours.• Lack of knowledge on business profitability calculation.
Opportunities <ul style="list-style-type: none">• Working capital can provide the ultra-poor women with an opportunity to set-up their own farms (group -level).• Support through trainings can increase their knowledge which can lead to a profitable business.	Threats <ul style="list-style-type: none">• Ultra-poor struggle to gain all the skills required for producing in groups.• Current processing farm owners can act as threats to the new-comers to the business.• Male dominant society can restrict women from engaging in market activities.

7.5 Profitability Analysis

Profitability analysis of smallholder dry fish processors			Case-1	Case-2	Assumptions
Production cost	Cost head		Amount	Amount	
	Lease cost (Annual)		10,000	10,000	For 3 decimal of land.
	Platform Construction Cost (Fixed cost)		10,000	10,000	Construction cost of platform: Bamboo- BDT 5000; Labour cost- BDT 3000; Strings and others- BDT 2000; Platform will last for 5 years.
	Type of Inputs & Cost	Raw fish	8,00,000	4,00,000	Raw fish- 100 BDT/KG on average. 100 KGs of fish will be procured for processing in each cycle (case-1)/ 50 KGs of fish will be procured for processing in each cycle (case-2). Each cycle is of 3-4 days on an average. During monsoon season and in times of disaster, the business will be affected. 80 cycles of production annually.
		Salt	1,60,000	80,000	1 KG of salt for 1 KG of fish.
	Labour Cost		70,000	0	2 women labours (case-1)/ no labour (case-2) will be required. Wage rate: BDT 250/day. 280 working days/year
	Transport Cost		80,000	40,000	Transportation costs for importing raw fish and exporting dried fish. BDT 1000 for importing fish and exporting dried fish for case-1 and BDT 500 for case-2
	Platform maintenance cost (Annual)		2000	2000	
	Total Cost		11,32,000	542,000	
	Total running cost		11,24,000	536,000	Fixed cost is distributed in 5 years as we assume the platform will last for five years with proper maintenance.
Sales of Meat production	Sales (KG)		3200	1600	Raw fish-Dried fish conversion ratio- 2.5:1 40 KGs of dried fish can be produced from100 KGs of raw fish per cycle. 3200 KGs of dried fish will be produced annually (in 80 cycles).
	Sales price		400	400	Average market price of dried fish- BDT 400/KG
	Total sales (BDT/Year)		12,80,000	6,40,000	
Profit (BDT/Year)			1,56,000	1,04,000	
Return on investment (%/Year)			13.7%	19.1%	ROI= Net profit/investment*100

Assumptions
<ul style="list-style-type: none"> Fixed cost is provided through the project or provided through Financial Institutions by establishing linkages. Initial investment is considered as "Fixed costs". Linkages with financial institutions can ensure accumulation of capital. Household members will work in dry fish processing and no additional labour will be hired in case-2. With a duration of 3/4 day cycle, a total of 80 cycles of production can be conducted in a year.

7.6 Constraints

Business capital: The main constraining factors for dry fish processing is business capital. To set-up a small processing farm, BDT 30000- BDT 40000. The amount of raw fish to be imported depends on the processor. However, 100 KGs of raw fish processing can account for a sizable profit.

Lack of knowledge on hygienic processing: Dry fish processors were observed to have less knowledge on hygienic processing. Fishes are dried on an elevated platform without covering the fishes which is not a very hygienic practice.

Lack of business knowledge: Ultra-poor inhabitants lack business knowledge on dry fish processing. Majority of the inhabitants of the targeted region were reported to be uneducated or less educated. Lack of education consequently leads to lack of business knowledge on dry fish farming.

7.7 Recommendation

7.7.1 Intervention design

The recommendation is provided through intervention design and intervention details:

Intervention Design
<ul style="list-style-type: none"> Business Capital: Ultra-poor households lack business capital to start dry fish processing business. Lack of business capital was reported to be the main constraining factor for the ultra-poor inhabitants. A business capital needs to be provided to the ultra-poor households to help them start the business.
<ul style="list-style-type: none"> Training on hygienic processing of dry fish: As stated before, hygienic practice of dry fish processing was not observed. A training on appropriate methods of dry fish farming needs to be provided to the potential households.
<ul style="list-style-type: none"> Increasing business knowledge: Lack of business knowledge can lead to inefficient business operation. Business knowledge on dry fish farming through training needs to be provided to the potential ultra-poor households.

7.7.2 Intervention Details

Business Capital: A business capital of 30,000 needs to be provided to the potential ultra-poor households for an effective business operation. Project can form groups with 4/5 potential ultra-poor households and can disseminate the capital within the group to form a dry fish processing business group. Through proper monitoring, the project can further assist the groups on business expansion. As dry fish processing is expected to generate quick return, capital can be arranged through loans or can be paid through instalments. Beneficiaries can repay instalments from the profit generated in first 3/4 months.

Actor: Project team/Local financial institutions

Project stage: Inception stage

Training on hygienic processing of dry fish: Training on hygienic processing of dry fish can lead the ultra-poor households to produce better qualities of dry fish. Which can be further imported in a good price causing a greater profit through the business.

Actor: Project team/Upazila Fisheries office

Project stage: Inception stage

Increasing business knowledge: Training on increasing business knowledge will enable the ultra-poor households to keep track of their profit and further utilize the profit to gain more business opportunities. As majority of the inhabitants of the targeted region is uneducated or less educated, proper monitoring after providing the training is necessary. Households might need further assistance on expansion of business. The project can design a program over the project lifespan for providing a continuous support to the processors.

Actor: Project team/Local NGOs

Project stage: Inception stage

Training on adapting business ventures: As majority of the inhabitants do not have any formal education, training on adaptation of business venture can increase their knowledge on profit/loss calculation and can build-up confidence. The training can also help them to take initiatives for expanding their business.

Actor: Project team/Partner NGOs

Project stage: During 1st year of the project

Linkages with input suppliers: Establishing linkages with input suppliers can ensure adequate supply of raw fishes.

Actor: Project team

Project stage: Inception stage

Establishing linkages with local market retailers: Through establishing direct linkages with market retailers can ensure better price of the dried fish. A fixed place to sell their chickens can also instigate taking-up business ventures.

Actor: Project team

Project stage: Inception stage

Chapter 8: Gender-Sensitive Value Chain analysis for Marine Fish

8.1 Brief Overview

Marine fisheries play an important function in providing nutrition, creating employment and earning foreign currency for Bangladesh. The country has seashore of 480 km out of which Cox's bazaar, Ukhiya and Teknaf covers around 100 km. Marine fishery being a labour-oriented sector extend productive employment to a significant number of the labour force.

The marine fisheries are dominated by small-scale operations including small-scale near shore fry fishing with push and drag nets and operations with motorized and non-motorized boats ranging from 6 to 12 m l.o.a. deploying set bag nets, gill nets and longlines⁶. There is also semi-industrial gill net fishing with mechanized vessels up to 20 m l.o.a. and the industrial trawler (shrimp and finfish) fleet⁷. In Bangladesh, there are approximately 900 000 fishers engaged in marine fishery (FAO 2014). A substantial portion of these fishers are women. Allied activities like processing and marketing, if properly developed, are likely to absorb a large number of labour forces.

Presently, the government has been giving increasing attention to augment the production of marine fish in Bangladesh. However, marine fish production and marketing in Bangladesh face a number of problems like long supply chain, rough handling, improper cleaning and packaging, exploitation of fishermen by middlemen, insufficient and poor transportation facility, excessive cost, and inadequate storage facilities, shortage of capital, market limitation, etc. An appropriate marketing system can make the marine fish more available to the ultimate consumers.

Marine fisheries is regulated by two major instruments. These includes registration for fishing, ban on Jatka (juvenile Hilsa fish) catching in coastal Bangladesh, using net like current net and push net that harms biodiversity. Government provides food rations to fishers during fishing ban but that cannot include all the fishers' households needing support and the distribution system is not always transparent. Some of the fishers reported that they have to give bribe for various reasons to coast guard to avoid harassment while fishing. The other side of the story is some fisher use net that are banned.

Marketing infrastructure is virtually non-existent on the island. Raw fish is sold on the beach or on the roadside. There is not enough landing facilities that can be used for handling, sorting and grading of fish prior to sale. Simply by improving the landing facilities (better sorting and grading of raw fish by commercial category) the fishers or traders can increase the revenue of a fishing by 5 to 10%.

UNDP provide support the formation of "Matshojeebi Somity" (fishers, boat owners and traders association) for raising awareness among the fishing communities about unauthorised fishing, banned fishing gear like current net, knowledge on sustainable fisheries, fishery laws, rights, and rules on access to the fishing grounds, and government services.

The fishers also get weather update from local administration, Bangladesh Meteorological department through radio and television.

8.2 Value Chain Map

8.2.1 Overview of the Value Chain

The following figure provides an overview of marine fish Value Chain in Ukhiya and Teknaf Upazilas of Cox's Bazar district:

⁶ Fishery and Aquaculture Country Profiles; <http://www.fao.org/fishery/facp/BGD/en>

⁷ Fishery and Aquaculture Country Profiles; <http://www.fao.org/fishery/facp/BGD/en>

Table 31: Overview of the marine fish value chain

End Market	<ul style="list-style-type: none"> Beparies are second level traders who make their purchase from Farias or fishers directly depending upon the opportunities and sell to the Aratder in Cox's bazaar whole sale market. 	<ul style="list-style-type: none"> Aratders are commission agent who have storage facilities. They work with both Farias/Beparies and retailers.
Trading	<ul style="list-style-type: none"> Farias work individually or in a group and share profit among themselves. During the peak season, they send their fish in Chittagong Arot. 	<ul style="list-style-type: none"> Beparies are second level traders who make their purchase from Farias or fishers directly depending upon the opportunities and sell to the Aratder in Cox's bazaar whole sale market.
Production	<ul style="list-style-type: none"> 12,000 (4000 in Ukhiya and 8000 in Teknaf) registered artisanal fishers in coastal villages. On average, catch per trip is reported to be 40 – 100 kg, of which 60% is sold to the market raw and 30% to traders involved in drying, and about 10% consumed at home. 	<ul style="list-style-type: none"> Each boat make an average of 16 –22 trips per month. 15%-20% of landed fish is lost or wasted from landing to consumption as a consequence of spoilage, infestation, fragmentation or a lack of temperature control.
Input Supply	<ul style="list-style-type: none"> Boat owners or Mahajan in Ukhiya and Teknaf, are the main input suppliers for fishers who uses different type of fishing gear for catching varieties of fishes. Fishing gear or net are quite expensive 	<ul style="list-style-type: none"> Other input includes diesel for the boat, ice and fridges for harvested fish. Most boat are is engine operated.

8.2.2 Relationships in the Marine Fish Value Chain

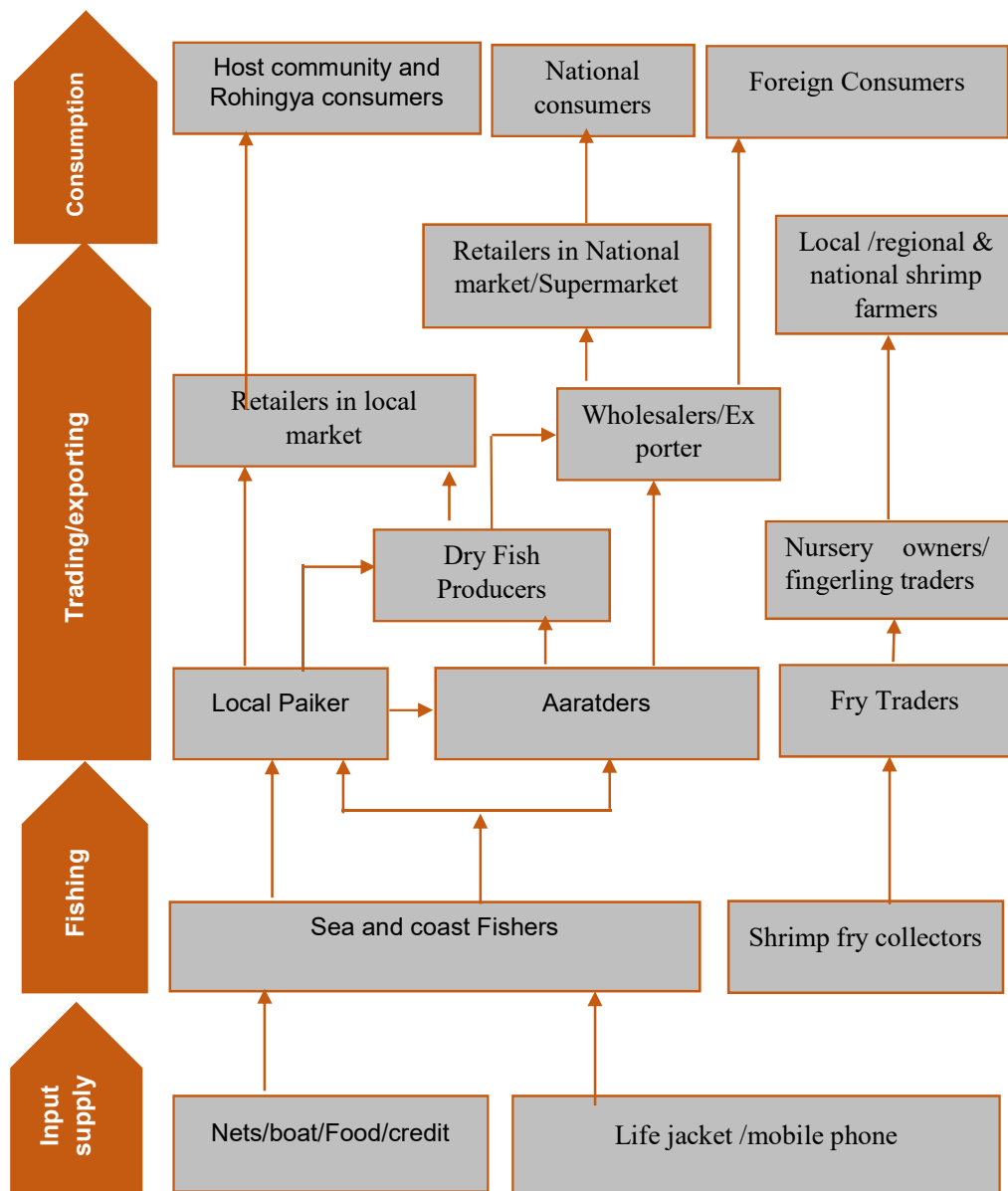


Figure 43: Relationships in marine fish Value Chain

8.3 Key Research Findings

The Value Chain analysis will be conducted in accordance with the Value Chain selection criteria which was based on the project outcomes. This chapter will try to analyse the current status of the Marine Fish Value Chain through investigating each of the selection criteria. The opportunities and constraints for ultra-poor graduation through marine fish value chain is assessed through the different selection criteria i.e. Competitiveness, Partnerships and quick win potential, Impact on the ultra-poor, Gender and Youth inclusion and Climate change adaptation and environmental sustainability.

8.3.1 Competitiveness

The competitiveness of marine fish value chain is further assessed through different sub-criteria.

Market Size and Growth Potential

The main markets of marine fish are the markets of Chittagong and Cox's bazar districts. Local markets of Ukhiya and Teknaf Upazilas are also significant market places for marine fish industry. Local markets of the 2 Upazilas are listed in the following table:

Table 32: Local markets for marine fish in Ukhiya and Teknaf

Local markets of Ukhiya Upazila	Local markets of Teknaf Upazila
34. Ukhiya Daroga Bazar	1. Sabrang bazar
35. Court bazar	2. Noyapara bazar
36. Morichya bazar	3. Shahporir dip bazar
37. Patabari bazar	4. St. Martin bazar
38. Sonarpara bazar	5. Teknaf bazar
39. Inanai bazar	6. Bottuli bazar
40. Kutupalong bazar	7. Hnila bazar
41. Customghat bazar	8. Leda bazar
42. Balukhali bazar	9. Moullobhibazar
43. Thaingkhali bazar	10. Kharankali bazar
44. Bhalukia Harun market	11. Noyapara bazar
	12. Unchiprang bazar
	13. Mina bazar
	14. Waikhyong bazar
	15. Ulomunia bazar
	16. Borodil bazar
	17. Jahajpur bazar
	18. Shilkhali bazar
	19. Shamlapur bazar

Local Paikars, Aratdars and fry traders source different species of marine fishes from the fishermen/fry collectors and export them to nurseries, wholesalers, local market retailers and dry fish processors. The targeted Upazilas are geographically blessed with the Bay of Bengal. Hundreds of species of marine fish is sourced every year to meet the national demand of fishes. It can thus be inferred that there is a large market size of marine fishes already in place.

Due to the varieties of fish sourced from the Bay of Bengal, Chittagong and Cox's Bazar have long been a large market place for marine fishes. In addition to meeting the local demand, fishes are also exported to other parts of the country. These factors contributed to a significant growth potential for the marine fish.

Ability to meet market demand

Apart from the districts located alongside the shorelines of the Bay of Bengal, the country has no other source of marine fish. Being one of the districts, fishermen from Cox's Bazar district is amongst the largest marine fish suppliers of the country. With the vast sea alongside these two Upazilas, marine fish value chain has high capability to meet market demand.

Opportunities for value addition

Rare species of marine fishes have high demand both in the national market and in the international markets. Some species of fishes are exported to other countries and export of fishes significantly contribute to the national GDP. Increasing volume of fish export can generate significant revenue from this sector.

Dry fish processing is also a significant livelihood option for the inhabitants of the two Upazilas. Main input of dry fish sector is the marine fish sourced from the Bay of Bengal. As was presented in the Value Chain map, dry fish processors are amongst the importers of marine fish. Dry fish processing provides a significant opportunity for value addition with regard to this value chain.

8.3.2 Partnership and Quick Win Potential

Scope for partnership and quick win potential is further assessed under the following sub-criteria:

Input/output market, service providers and potential employers

Input Suppliers: Boat owners or Mahajan in Ukhiya and Teknaf, are the main input suppliers for fishers who use different type of fishing gear for catching varieties of fishes such as Hilsha, *Laittya* (Bamaloh), Bata and Bora fish. Fishing gear or net are quite expensive. Price for different fishing net are as follows

Hilsha – BDT200, 000

Loita (Bamaloh)– BDT 150, 000

Bata – BDT 80, 000

Bora Fish – BDT120, 000

Other input includes diesel for the boat, ice and fridges for harvested fish. Most boats are engine operated. The boat owners provide fuel, food, ice and other inputs and costs for a fishing trip to secure access to the resulting fish catch. Ultra-poor fishers go to marine fishing, depend on this Mahajan. Fifty percent of the caught fish is taken for the input cost. Rest of the 50 percent are equally shared among, boat driver (*majhi*) and fishers. There are about 2000 *Mohajons* or boat owners playing the major role in marine fishing.

Fishermen: Almost 95% of household fishing households are involved in fishing. They are using various small-scale, low-technology, low-capital, artisanal fishing practices. Discussion with fisheries Officer in Ukhiya and Teknaf suggest that there are 12,000 (4000 in Ukhiya and 8000 in Teknaf) registered artisanal fishers in coastal villages. They are registered with Upazila Fisheries office.

There are gender-specific roles for the different members of the households, men are predominantly involved in catching fish and women are involved in collecting coast line fry collection and selling to traders. FGD conducted with male in Uttarpara mentioned that the primary source of livelihood for these households is fishing and fry collection with about 80% coming directly from fish catching and 20% from fry collection.

Each boat makes an average of 16 –22 trips per month. In terms of seasonality variations, the FGD participants reported that the highest catch per unit trip takes place in July and the lowest in December. On average, catch per trip is reported to be 40 – 100 kg, of which 60% is sold to the market raw and 30% to traders involved in drying, and about 10% consumed at home. It came out in the FGD with fishers in Uttar Sonarpara that about 15%-20% of landed fish is lost or wasted from landing to consumption as a consequence of spoilage, infestation, fragmentation or a lack of temperature control. There is no data available though.

Fry collectors: There are 1500 fry collectors are mostly women accompanied by their adolescent girls and boys. Fry collectors walk with the net while catching fry. They supply the fry to nearby fish nursery. Generally, they sell 1000 fry at 20 to 30 taka. Their daily income is around BDT 50-100. The nursery owners advance these women about BDT 3000-5000 to meet their needs. This advance ensures them to get supply of fry on regular basis. The fry collectors reported that they suffer from skin diseases on the hands and legs due to exposure to salty water for long time.

Farias: Farias are petty traders who purchase fish from the fishers in the sea or from the Ghat (fish terminal) and sell to the Beparies in Cox's whole Sale markets. During the peak season, they send their

fish in Chittagong Arot. The Farias work individually or in a group and share profit among themselves. In most cases, they do all the marketing functions but also hire female and male labour when necessary. The fish drying is done in some villages like Dorgachora. About 40% of workers involved in fish drying are female. Wage rate for men and women differs. Male workers get BDT 400 to BDT 600 whereas female members get BDT 250 to BDT 300. Wages are paid daily or weekly depending on the needs of the workers. There are about 160 Farias active in Ukhiya and Teknaf.

Beparies/Agent: Beparies are second level traders who make their purchase from Farias or fishers directly depending upon the opportunities and sell to the Aratder in Cox's bazaar whole sale market. Some rich Beparies send their consignment to Chittagong. They hire water transport and buy fish from fishers directly and bring Chittagong to sell to the retailers through the Aratders. According to the respondent of key informant interview with Beparies, it was learnt that there are about 60 Beparies active in Ukhiya and Teknaf.

Aratders: They are commission agent who have storage facilities. They work with both Farias/Beparies and retailers. They help the Farias/Beparies to sell their product and charge commission for the service. In order to maintain the loyalty of the Beparies and the retailers they advance loan to Beparies and supply fish retailer on credit. They advance loan to Beparies on the condition that the Beparies have to sell their fish to them. These Beparies hire both casual labour and regular staff for their business operation. According the Fariars, there are about 12 Aratders in Court para Bazar, Ukhiya and Teknaf city market 12.

Retailer: They buy fish from arotder or Beparies via Arotder on credit and sell fish to consumers. They have fixed establishment and have licence. Some large retailers have hired staff and labour on daily basis for operation of their business independently. There are 250-300 retailers in 20 markets in Ukhiya and Teknaf.

Consumers: Most of the local consumers purchase fish from the retailers in the local markets or in some cases, from the distribution nodes. Urban consumers buy marine fish from super markets like Agora or Meena bazaar.

Market price for some commonly available fishes in the area:

Name of fish	English or scientific name	In Taka
Ilsh Machh	Hilsha fish	500-600
Laittya Machh	Bombay Duck	70-100
Chapila Machh		70-100
Baila Machh	Apocryptes bato	120-130
Churma Machh		400-420
Poa Machh	Less Tiger-toothed Croacker	100-120
Tofse Machh	Paradise Threadfin	250-300
Churi Machh	Lepturacanthus savala	120-130
Tailya Machh		450-500
Tuitya Machh		180-200

Potential training partners and/or apprenticeship programs for skills training

Potential training partners for this value chain include Upazila Fisheries Office, Upazila Youth Development Office and local NGOs. While Upazila Fisheries offices can provide strategic guidance and can support the fishermen with necessary equipment, infrastructural development, local NGOs can provide training on safety measures and on appropriate techniques of fishing etc.

Linkages with Government services, and favourable policies or existing programs

Linkages with Upazila Fisheries office can ensure appropriate fishing practice. During the time of reproduction of fishes and during the time of disaster, fishing in the sea should be restricted. Government policies should provide proper direction to the fishermen and proper monitoring should be in place to ensure appropriate fishing techniques.

Fishing in *Naf* River is banned for the past few years due to security issues. This Government policy has not been working in favour of the fishermen from the adjacent villages. Fishermen who have long been involved in fishing in the *Naf* River are now in trouble as, historically they have been involved in fishing and now, for the past few years, their only livelihood was restrained.

Ability to have quick income generation potential for the ultra-poor target group

Fishing in the Bay of Bengal requires a significant amount of investment at the first stage. The boat, nets and labour cost require high amount of investment which does not imply much potential for the ultra-poor target group. Fishing in the Bay of Bengal as laborers is a usual practice among the ultra-poor inhabitants. After the ban imposed on fishing in the *Naf* River, fishermen from the adjacent villages, are now living in distress. Fishing in the rivers/canals would have been a suitable option for the ultra-poor target group with a quick income generation potential. However, at current status, fishing does not propose a quick income generation potential for the ultra-poor target group.

8.3.3 Impact on Ultra-poor

Proportion of ultra-poor already participating in the livelihoods option

According to our assessment, 30-40% of the ultra-poor inhabitants from the targeted Upazilas are involved in fishing in the Bay of Bengal. However, all the participants of this livelihood were observed to be working as laborers which does not offer regular income or much growth potential for the ultra-poor inhabitants.

The potential for household to be impacted

Many of the ultra-poor inhabitants were observed to be involved in fishing in the Bay of Bengal as laborers in the boats. That implies that many of the inhabitants are already skilled in fishing. However, due to the requirement of huge capital investment for the value chain, the potential for the ultra-poor household to be impacted is not very high, according to our assessment.

Ultra-poor interested in livelihood option

As the geographical setting is suitable for fishing, many of the inhabitants were observed to be interested in fishing. Many of the inhabitants expressed that the market size for marine fishes is very large in the region and there is an opportunity for them to graduate from ultra-poor condition through involving in this livelihood. Fishing in rivers/canals around the Upazilas generate more interest among the ultra-poor inhabitants. However, due to recent ban on fishing in *Naf* river has restricted the opportunity.

Ability of the selected livelihood option to provide regular and sufficient income to cover household expenses for the ultra-poor

Fishing in the Bay of Bengal can generate adequate and regular income for the ultra-poor inhabitants. The challenge is to start fishing as it requires a huge investment at the inception stage.

Potential for the ultra-poor gain self-employment/wage employment

Fishing in the Bay of Bengal requires a team work where 6/7 fishermen are involved in setting-up the nets and hauling in regular intervals and a boatman who is responsible for steering and guiding the boat. Ultra-poor inhabitants are already working as laborers in the boats and there is a significant opportunity to create wage employment in this value chain.

Low entry barriers for the ultra-poor

Low entry barriers for ultra-poor inhabitants include lack of knowledge for appropriate fishing techniques and lack of capital to invest for boats and nets. High amount of investment required to start fishing is amongst the major barriers for ultra-poor to get involved in this value chain. Lack of training initiatives on appropriate fishing techniques also restrict the ultra-poor to be engaged in this livelihood.

8.3.4 Gender and youth inclusion

High share of women employed in the livelihood option compared to the economy at large

No ultra-poor women were observed to be engaged in fishing in the Bay of Bengal. Some women were observed to be engaged in fishing in the adjacent rivers and canals. Due to recent ban imposed on fishing in Naf River contributed to lesser involvement of women in fishing. Many of the ultra-poor women were observed to be engaged in fry collection in the Bay of Bengal. However, fry collection is declared illegal by the Government of Bangladesh.

Low entry barriers for women

Women are traditionally not involved in fishing in the Bay of Bengal. Men were observed to be the ones who go for fishing in the Bay of Bengal mostly because of the strength needed for fishing in the sea. Women were seen to be largely involved in fry collection and in small-scale fishing in the rivers/canals. Traditional practice of not being involved in fishing acts as barriers for women to get engaged in fishing.

Women control equipment/assets/resources required to participate

Women were observed to have hardly any control over fishing equipment, assets and resources. Those who are involved in fry collection have control over the nets and equipment. However, as fry collection is illegal, the project should not promote such activity.

8.3.5 Climate change adaptation and environmental sustainability

Climate change adaptation

Fishing has high-vulnerability to disasters and climate change. During the times of disaster, fishing in the Bay of Bengal is restricted. Due to climate change, fish capture is decreasing significantly over time.

Extent the livelihood option is safe, sustainable and legal and complementary to food security

Fishing in the sea is not entirely safe due to risks involved in times of disaster and bad weather. Income generated through fishing will provide a sustainable earning. Fishing in the sea is legal if regulations are properly followed. Fishing not only provides sustainable income but also ensures protein requirement of the household members.

Scoring for Marine Fish Value Chain			
Criteria	Score	Weight	Weighted Score
Competitiveness	8	.15	1.2
Partnership and Quick Win Potential	7	.15	1.05
Impact on Ultra-poor	6	.30	1.8
Gender and youth inclusion	5	.30	1.5
Climate change adaptation and environmental sustainability	8	.10	0.8
Total Score			6.35

8.4 Gender sensitive SWOT analysis

Strength	Weakness
<ul style="list-style-type: none"> Long coastal area for marine fishing Excellent geographic location Source of livelihood of a large number of fishers households Many people engaged in fish marketing Strong contact among marketing people 	<ul style="list-style-type: none"> Post-harvest losses which is about 15% of the total catch Low value addition Exploitative non-Institutional credit System Lack of institutional finance High transportation cost and toll particularly in the <i>ghats (landing stations)</i> of river routes.

<ul style="list-style-type: none"> • People prefer fish as food • Huge fisheries diversity 	<ul style="list-style-type: none"> • Illegal toll by the local police/coast guards, <i>mastans</i>, etc. • Unhygienic condition in fish handling
Opportunities <ul style="list-style-type: none"> • Employment opportunity for people • Scope for increasing income due to increase fish price • Have export potential to earn foreign currency • There is a scope of increased competition in marketing particularly between fishermen and middlemen is often unequal due to financial dependency and poor access to the existing marketing system. • Scope for processing marine fish like fish fry as snacks, semi processed fish ball, pickles, sandwich paste • The production of marine fish can be increased by developing and improving the fishing crafts and gears. 	Threats <ul style="list-style-type: none"> • Unsustainable fishing practices • Scarce skill manpower and high labour cost • High marketing cost and low marketing profits

8.5 Profitability Analysis

The profitability analysis for this value chain has been avoided due to a few reasons which is essential for this study as well as the nature of the WV project itself. The main investment for the fishermen is the fishing boat, which costs more than BDT 200,000. This amount is very high compared to the overall compensation package for the WV project. The core reason behind not including the profitability analysis is that in the core value-chain, there is little to no involvement of women in the study area. For this reason, the study team decided against the inclusion of the profitability analysis for the marine fish value chain. However, in the later sections, different interventions have been recommended which will help the ultra-poor women indirectly.

8.6 Constraints

Monopoly: Marine fish marketing and trading is complex and competitive. Men dominate the fish value chain, especially the wholesaling, processing, trading and retailing of marine fish. In the weak institutional environment and marketing system, fishers have no influence over marketing and supply chain management, rather strongly managed and monopolized by large traders, brokers, as well as large super market companies, whose intervention distorts price in domestic market and, thereby, erodes profitability and preference of fishers.

Absence institutional credit: In the marine fisheries sector, fishers, traders, processors and wholesalers cannot expand their businesses without access to capital. Discussions with banks staff in Ukhiya and Teknaf revealed that their banks rarely provide loans to marine fish enterprises as these chain actors often lack assets and collateral such as land although they provide some loans to shrimp farms.

Traditional fishing practices: This study team find that there is very little change in fishing activities in Ukhiya and Teknaf and there is almost no evidence of introducing new fishing gears. Fishermen are using the common fishing gears such as set bag nets, gill nets and longlines for fishing in marine areas. However, fishers are aware about safety issues while fishing in the coast line. They use mobile phone for communication with other fishers catching fish in the sea or other fishers waiting in the community for receiving information about fish flocks/abundance.

Declining catches of marine fish: Substantial increases of marine fish catches contributes to a gradual decline of catches has been observed by the fisherfolk of coastal communities and traders specialised in marine fish. This was confirmed by the by the FGD participants. But they pointed out that

the decline is not linear and that some years are better than other years. Nevertheless, the threat of declining fish stocks is highly present in coastal communities. The main reasons they mentioned are over-fishing, commercial trawl fishing, the increased number of boats, use of more efficient / destructive gear, etc. According to fishers, changes in the natural environment (e.g. changes in the seabed, siltation). Climate change and environmental shock is likely to have major consequences upon the livelihoods of those concerned.

Seasonality: In low season (January-June), ultra-poor fisher families suffers from income shortage due to irregular and lower amount of fish landed. This directly contribute to the food security of their family. Seasonality affects the balance of power in the market system: in the peak season, it is a buyer's market with the fishers having less influence over prices, whilst in the low season, the fishers have a bargaining position. But ultimately, their bad times continues due to limited fish catch. It happens in both marine fish and shrimp fry collection.

Low value addition: In artisanal fishing, value addition starts from the handling of raw fish from its harvesting point. Due to long chain, value addition starts with sorting grading, icing, packaging and transportation. These types of value addition increase price of fresh marine fish. Another area of value addition is drying fish. However, this cannot reduce the high level of post-harvest loss due to lack of maintaining proper cold chain, mishandling, etc.

8.7 Recommendation

As the artisanal marine fish catching and marketing is mostly male dominated, intervention against the constraints mentioned above for this value chain development may not be the priority of World Vision. However, some interventions enabling the women involved in fry fishing within the artisanal marine fish sector to be engaged in alternative livelihoods proposed below for consideration.

8.7.1 Intervention design

	Input Supplies		Production	Trading
Intervention	Promote community-based savings and credit groups based on WEE principle to support fishers' families in accessing institutional finance, inputs for fish processing, vegetable cultivation, goat rearing or mariculture as alternative livelihoods.	Facilitate the linkage between Argo- input suppliers and women fishers so that women can collect quality seeds fertilizers to start/ strengthen homestead gardening/vegetable cultivation.	Organize the fisher women for community goat rearing and contributing to family economy during low season in marine fishery.	Promote market information & production technologies with support of different private and public institutions.
	Facilitate the linkage between Faria and fisher women to ensure the supply of fresh marine fish for processing like fried fish, street food or snacks by the women groups.		Provide training, a small grant and technology for Mariculture like cage culture to women involved in fish fry collection.	

8.7.2 Intervention details

Intervention 1: Promote community-based savings and credit groups based on WEE principle to support fishers' families in accessing institutional finance, inputs for fish processing, vegetable cultivation, goat rearing or mariculture as alternative livelihoods.

Potential Partners: Micro-credit organization, Banks

Support Service Providers: World Vision partners NGOs, DAE, DoF, and DLS

The existing credit system that has sustained the local marine fisheries industry is the informal financial arrangements between fishermen, fish processors and traders (e.g. fish processors and agents providing fishermen with fuel or other inputs on credit on the agreement that fishermen sell their catch to them. However, as the poor fishers lose bargaining power and control over fishing and

fish marketing power, arrangements Community-based savings and credit groups such as village savings and loans associations will enable poor rural farmers to access NGO or formal sources of credit.

Intervention 2: Facilitate the linkage between Faria and fisher women to ensure the supply of fresh marine fish for processing like fried fish, street food or snacks by the women groups.

Potential Partners: Boat owners, Farias, and other traders, consumers

Support Service Providers: World Vision partners NGOs

Currently boat owners and the fishers sell fresh marine fish to Farias and agent. World Vision partners can facilitate linkage between fisher women and the traders to buy raw fish for value addition through processing drying fish in a hygienic way, selling fried fish, or fish-based snacks to the tourist or other consumers.

Training on food processing, credit or small grant for working capital, and technology support would be very useful in this regard. World vision partners can help the women doing the initial market assessment through exposure visit, rapid market survey, arrange training on food processing, and provide utensils, equipment for starting the business.

Intervention 3: Facilitate the linkage between Argo- input suppliers and women fishers so that women can collect quality seeds fertilizers to start/ strengthen homestead gardening/ vegetable cultivation.

Potential Partners: Local Argo-inputs dealers, DAE

Support Service Providers: World Vision partners NGOs, youth department, women affairs

The study team has observed that many women in the fisher community are involved in vegetable cultivation in homestead or leased crop land. But due to lack of skill, knowledge and access to quality seeds and other inputs, they cannot control vegetable disease or get desired yield. So facilitation of linkage with local Argo-inputs dealers, DAE will enable them to have access to quality inputs, training and extension services. Besides, small capital for buying seed, fertilizers, and hand tools will encourage existing and more women in the fisher community to be engaged in vegetable cultivation. This will enable them to improve health and nutrition and family economy.

Intervention 4: Organize the fisher women for community goat rearing and contributing to family economy during low season in marine fishery.

Potential Partners: Private veterinary service provider, DLS and Micro-credit organization, feed seller.

Support Service Providers: World Vision partners NGOs, DAE, and DLS

It was observed that most of the fisher community live in a cluster of households nearby the sea and there is a scarcity of land for each family. But there is scope for community goat rearing where 4 to 5 women can jointly rear goat and make a substantial contribution to family income. Goat rearing is very suitable for women because, 90% of its diseases can be prevented by ensuring timely vaccination. One mother goat can also give birth to 4-8 baby goats.

In Bangladesh India and Nepal, goats are exclusively managed by women. They bring them out for grazing, take care of them when they're ill, and sell them at the community. With more control of the earned from goat selling, women not only improve their status within the homes, but they also have the greater ability to make decisions and have greater power over their own lives. Taking this into consideration, World Vision partner, with support of Upazila Livestock department can develop veterinary service providers from the women to prevent diseases and improve goat health, arrange training for the women on goat rearing, provide small grants for goat shade, distribute goat to a small group fisher women as part of the intervention. Goat rearing can also be expanded in other communities under the G-PoP project as one of the most promising livelihood options for Women Economic Empowerment.

Intervention 5: Provide training, small grant and technology for Mari culture like cage culture, crab fattening to women involved in fish fry collection.

Potential Partners: Private Veterinary Service providers, Feed Sellers, DLS

Support Service Providers: World Vision partners NGOs, DLS

In Bangladesh, both freshwater and brackish water aquaculture are widely practiced. But culture of marine organisms in the marine environment is yet to be introduced. The Bay of Bengal and the associated river mouths are characterized by strong waves, wide tidal and salinity fluctuations, frequent cyclones and tidal bores. The open beaches are strongly surf-bitten, apparently because of this mariculture has not taken off. However, considering the low season when fish fry collectors' income is very low, piloting can be done for mariculture, for example, crab fattening near the river mouth can be considered as salinity of the sea or river water is then more than the other times. Cage culture of some fish species like *Vetki* (coral) can also be considered as alternative livelihoods for the fry collectors. Partnership with fisheries department would enable the project to receive required technical assistance and policy back support for implementation of this intervention.

Intervention 6: Promote market information & production technologies with support of different private and public institutions.

Potential Partners: Ultra-poor women, DoF, NGOs

Support Service Providers: World Vision partners, NGOs

Market is the most critical factor to make any livelihood options successful. Hence this intervention is applicable for all the interventions mentioned above. It has been observed that consistent facilitation may bring the market actors together but without proper information sharing the relationship cannot be maintained. The project will need to give emphasis on dissemination and sharing of market information, World Vision partner will facilitate the linkage between markets actors, technology providers and ultra-poor women.

Chapter 9: Conclusion

Inhabitants of Ukhiya and Teknaf Upazilas are amongst the poor residents of Bangladesh. Recent *Rohingya* influx has significantly affected the livelihood of the inhabitants of these two Upazilas. Ultra-poor inhabitants mostly work as day-laborers. Being day-laborers, inhabitants do not have any regular source of income and their earning is utterly dependent on availability of work. Especially during monsoon season, there are less availability of work opportunities. Irregular income along with limited scope has resulted in food shortages, slow growth and several social complications for the ultra-poor families. Moreover, recent *Rohingya* influx has significantly affected the labour market in these regions. Scope of work and wage rate has decreased over the past few years. Ultra-poor families have been struggling to survive and adequate support is necessary for their development.

Supporting the ultra-poor families through intervening in their livelihood can make the graduation sustainable. The five selected Value Chains have potential to provide regular and substantial income for the ultra-poor households. However, fishing and cattle rearing requires a sizable amount of investment which will be difficult for the ultra-poor to arrange. Indigenous chicken rearing, dry fish processing and homestead vegetable gardening can be done by accumulating a reasonable amount.

While majority of the ultra-poor are dependent on a single source of income and mostly from their work as day-laborers, many of the inhabitants were observed to be involved in one or more selected value chains which provides a significant opportunity for the ultra-poor to get involved in any of the selected Value Chains for sustainable livelihood. The major difficulties include lack of capital for initial investment, lack of knowledge and lack of awareness among the ultra-poor inhabitants. With systematic support from the project team and/or from the supporting institutions, i.e.- DAE, DLS etc. can assist them to graduate from the ultra-poor condition.

Less financial solvency leads to other socio-cultural difficulties for the ultra-poor. Food shortage experienced by the ultra-poor inhabitants results in malnutrition among the children and other household members. Children are also deprived of education due to poverty. Women members face difficult times in the society and child marriage and dowry system were observed to be existent in the two Upazilas.

Women household members are in a more difficult state as they do not have much involvement in income generating activities. The selected Value Chains have significant opportunities for women to get involved and earn a substantial amount for the family. Major impediments for women include lack of mobility, lack of education and historical perception of women being a homemaker. Being involved in income generating activities, women can make their position strong in the households which can consequently lead to empowerment.

The project can form groups with 4-5 ultra-poor women based on a common livelihood and can provide further support through the groups. This way, the ultra-poor can build ownership and can get the benefits of cohesion. Proper monitoring of the livelihood activities is also necessary to ensure ultra-poor graduation in these regions. Appropriate knowledge should be disseminated through training for ensuring apposite development. Appropriate liaisons with the Government and Non-Government support organizations and financial institutions can assure sustainable growth of the ultra-poor inhabitants. Appropriate interventions along with proper monitoring system to scale-up the activities of the beneficiaries can significantly contribute to the ultra-poor graduation in Ukhiya and Teknaf Upazilas of Cox's Bazar district.

Annex 1: Country Map and Study Location



Figure 44 Map of Bangladesh, Country of Study



Figure 45 Study Area: Teknaf Upazila

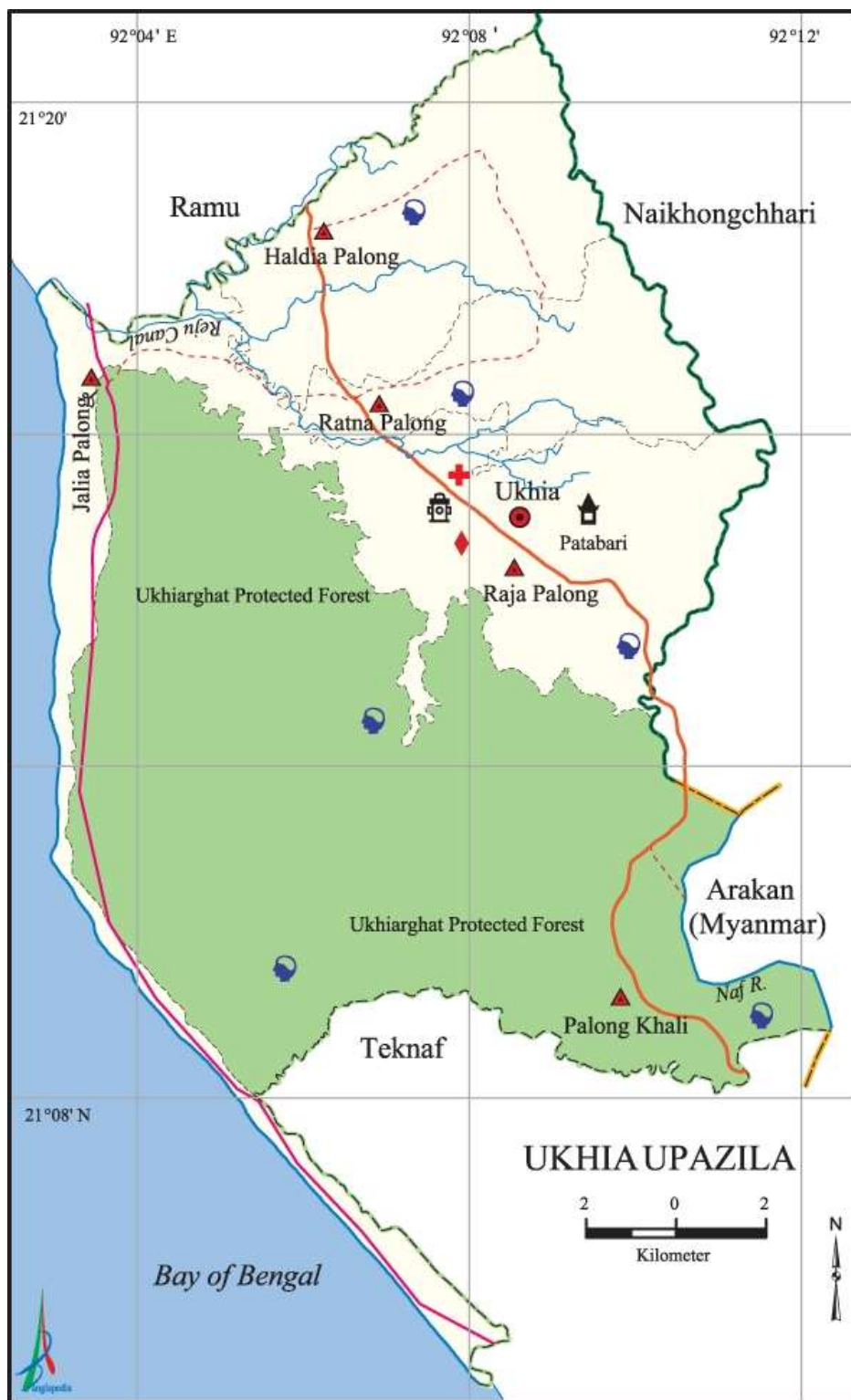


Figure 46: Study Area - Ukhiya Upazila

Annex 2: Stakeholders Interviewed in the selected Sub Sector

Table 33: Participants' list of Sub-sector selection workshop in Ukhiya

Subsector and Resilient Livelihoods/IGAs selection Workshop Ukhiya, Cox's Bazar			
Participants' List			
SI No	Name	Designation	Contact
1	Md. Shoriful Islam	Upazila Agriculture officer	01818359738
2	Dr. Md. Shahab uddin	Upazila Livestock officer	01819073661
3	Md. Sazzadul Haque	Upazila Youth Development officer	01829355818
4	Kabir Ahmed	Upazila Co-operative officer	01670309970
5	Md. Siraz Uddin	Upazila Social welfare officer	01558042770
6	Md. Abdus Salam	President: Bazar somitee	01824677472
7	Md. Harun-or Rashid	General Secretary: Bazar Somitee	01839222176
8	Md. Joynan Islam	Agriculture /Rice/Vegetable Input Seller	01817796766
9	Md. Joynan Islam	Poultry/Goat/cattle Rearing input Seller	01881050985
10	Abdullah	Poultry/Goat/cattle Rearing input Seller	01814737256
11	Md. Shajahan	Poultry/Goat/cattle Rearing input Seller	01853844898
12	Shonjib Boruya	Small Trader	01840069928
13	Shemol Boruya	Small Trader	01849703519
14	Ashish Boruya	Handicraft business	01883358428
15	Shongkor Boruya	Handicraft business	01878754829
16	Md. Abdul Karim	Handicraft Input Seller	01829805374
17	Ripu Boruye	Input Seller (Fishing)	01880624110
18	Md. Abdur Rashid	Large Trader (Dry fish)	01843136116
19	Md. Nazrul Islam	Small Traders (Dry fish)	01823534895
20	Md. Shajahan	Agriculture/Vegetable farmer	01874419792
21	Md. Abdus Salam	Day labourer	01844802059
22	Thaitu Boruya	Small Business	01822972317
23	Abu Taher	Poultry/cattle Rearing Small Trader	01876917976
24	Abdur Rob	Innovision Consulting	01819253236
25	Ainee Islam	Innovision Consulting	01817104343
26	Nafees Maharuf Shafakat	Innovision Consulting	01674906557
27	Parvez Mahmud	Innovision Consulting	01795135404
28	Md. Aftab Uddin	Innovision Consulting	01712819439
29	Md. Akbar Ali	Innovision Consulting	01681221491

Table 34: Participants' list of Sub-sector selection workshop in Teknaf

Subsector and Resilient Livelihoods/IGAs selection Workshop Teknaf, Cox's Bazar			
Participants' List			
SI No	Name	Designation	Contact
1	Md. Shohidul Islam	Upazila Agriculture officer	01812604651
2	Md. Nurul Alom	Upazila Livestock officer	01819915135
3	Md. Delower Hossain	Upazila Fisheries officer	01819943785
4	Md. Monjur Alom	Upazila Youth Development officer	01741562474
5	Md. Alomgir Kabir	Upazila Women & Children officer	01721106423
6	Shamol Boruwa	Upazila Co-operative officer	01814954244
7	Md. Siraj Uddin	Upazila Social welfare officer	01712505430
8	Md. Akram Hossain	Businessman (Rice)	01829990085
9	Md. Soyod Mia	Agriculture/Rice/Vegetable Input Seller	01819065270
10	Md. Nurul Amin	Small Trader	01856991789
11	Md. Alamin	Small Trader	01821570128
12	Md. Ferdous Mia	Small Trader	01829293320
13	Md. Samsur Rahman	Business: Handicraft	01842675503
14	Md. Alom	Input Seller: Handicraft	01817271375
15	Md. Abu Taher	Large Trader: Fish	01812366309
16	Md. Abdul Kader	Small Trader: Dry Fish	01816174588
17	Md. Saddam Hossain	Input Seller: Poultry	01851236508
18	Md. Badsha Mia	Large Trader: Poultry	01856710709
19	MA Kader	FSO, RIC	01735320785
20	Md. Abdus Salam	President: Bazar Somitee	01914676112
21	Jahid Hasan	Small Trader: Poultry	01841103090
22	Md. Jakir Hossain	Handicraft business	01821182580
23	Md. Monayem	RIC	01726117962
24	Kamal Uddin	Small Businessman	01818677369
25	Md. Humayon Kabir	Large Trader: Handicraft	01822972331
26	Abdur Rob	Innovision Consulting	01819253236
27	Ainee Islam	Innovision Consulting	01817104343
28	Nafees Maharuf Shafakat	Innovision Consulting	01674906557
29	Parvez Mahmud	Innovision Consulting	01795135404
30	Md. Aftab Uddin	Innovision Consulting	01712819439
31	Mostafa tarafder	Innovision Consulting	01733491040

Annex 3: Subsector Selection Results

Table 35 Subsector selection results with average scores per criteria

Criteria	Weight	Fishing	Poultry	Dry Fish	Handy Craft	Cattle Rearing	Rice Cultivation	Small Business	Goat rearing	Homestead Vegetable
Competitiveness Market size and growth potential	15%	3.44	3.94	3.89	1.83	4.33	3.17	4.17	3.78	3.83
Partnership and Quick Win Potential	15%	3.21	3.71	3.21	1.67	3.42	2.83	3.67	3.58	4.46
Impact on the ultra-poor	30%	2.95	3.62	3.35	1.53	4.13	2.67	3.63	3.12	4.15
Gender and youth inclusion	30%	3.16	4.31	2.96	2.19	1.88	1.64	1.31	2.18	4.53
Climate Change adaptation and environmental sustainability	10%	3.08	3.50	3.08	1.58	3.33	2.67	3.50	3.25	4.00
Weighted Average		3.14	3.87	3.27	1.80	3.30	2.46	3.01	3.02	4.25
Rank		5	2	4	9	3	8	7	6	1

Annex 4: Questions Guide for Qualitative Assessments

Core Sectors	Guiding Questions
Context of the market assessment	<ol style="list-style-type: none"> 1. What are the main IGAs of the ultra-poor of the two sub-districts (Ukhiya and Teknaf) of Cox's Bazar? 2. What are the constraints of the ultra-poor households in the IGA they are involved in? 3. What opportunities do the ultra-poor have in various appropriate sub-sectors in the region? 4. What is necessary for the ultra-poor for ensuring an appropriate and gender-inclusive livelihood intervention within the graduation model?
Market system analysis	<p>We will, first, select ultra-poor households of the targeted region, based on the following criteria for the assessment study:</p> <p>Competitiveness:</p> <ol style="list-style-type: none"> 1. What is the market size of different value chains in the targeted region? 2. How is the market growth potential? 3. What are the opportunities for partnership and quick win potential for the ultra-poor in light of the graduation model? <p>Impact on ultra-poor</p> <ol style="list-style-type: none"> 1. What is the current volume of production/services that the ultra-poor have achieved in the selected value chains? Is this significant in-terms of market share covered by the ultra-poor in the target area? 2. What number of households is being impacted in different value chain in the targeted region (desegregated by male-vs. female headed households) ? 3. To what extent does the value chains have the ability to provide self and waged employment to be able to generate sufficient income for the ultra-poor? 4. To what extent, can the ultra-poor acquire the specific skills, knowledge, resources and assets to participate in the livelihood option? 5. To what extent are the ultra-poor interested in the livelihood options? Does the livelihood option present low entry barriers and risks for the ultra-poor? 6. Does the value chain option also contribute to food security? (disaggregated by male-vs. female headed households)? <p>Gender Inclusion</p> <p>The market assessment should seek to understand the different challenges faced by sub-categories of women. All the below questions should consider the following categories.</p> <ul style="list-style-type: none"> • Women within female headed households • Women within male headed households • Women with a disability <ol style="list-style-type: none"> 1. Does the selected value chains have a high share of women employed in the livelihood option compared to the economy at large? What roles and responsibilities to women occupy in the value chain? 2. Does the selected value chains have low entry barriers for women (E.g. low start-up costs, close to household, skills set required value addition/employment opportunities is possible, less restrictive gender norms barriers, less time barriers)

Core Sectors	Guiding Questions
	<p>3. To what extent do women have ability to benefit and decision-making ability within the livelihood options/selected value chains? Within these selected value chains do women control equipment/assets/resources required to participate? Do they influence productive or business decisions? How are they remunerated for the work in their value chains?</p> <p>Youth participation:</p> <p>1. Does the selected value chain/livelihood options have low entry barriers for youth? Are there any differences for young women compared to young men?</p> <p>2. To what extent are youth already participating in the livelihood option? What roles and responsibilities are they currently working? Are there any differences for young women compared to young men?</p> <p>3. Can youth can access the equipment/assets resources required to participate? Are there any differences for young women compared to young men?</p> <p>Cross-cutting issue: Impact of climate change:</p> <p>1. How is the climate change adoption prospect in the targeted region?</p> <p>2. What is the impact of climate change in various IGA ultra-poor households are involved in?</p> <p>3. To what extent is the livelihood option is safe, sustainable and legal and complementary to food security outcomes?</p>
Market Assessment and Value chain analysis	<p>“The market assessment and value chain analysis” study will be conducted to map out the appropriate IGA/interventions for the ultra-poor households. We will try to gather information on the followings:</p> <p>Ultra-poor selection criteria:</p> <p>Based on the criteria of the ultra-poor households as set by WV, we will conduct household survey only on the ultra-poor households. The criteria are as follows:</p> <ul style="list-style-type: none"> • Less than <20 decimals of land (607.5 – 810sqm) • Irregular source (no regular work to earn income consistently) of income • Permanent residence one village (at least last one year) • Permanent residence one village (at least last one year) • Participant have National ID Card <p>Food Security:</p> <p>1. What food for each meal (breakfast, lunch and dinner) your family take each day?</p> <p>2. How much does it cost?</p> <p>3. How many months your family face food crisis?</p> <p>4. Please mention name of the months when your family face food crisis.</p> <p>5. How much money you need to face food crisis during lean period?</p> <p>6. Where do you get money to face the seasonal food crisis?</p> <p>7. How food security of your family can be ensured?</p> <p>Livelihood and Market:</p> <p>1. What are the main sources of income of the ultra-poor households (desegregated by male-vs. female headed households, geography, youth?)? What roles to their occupy within the value chain?</p>

Core Sectors	Guiding Questions
	<p>2. What are the opportunities and constraints on livelihood activities of the ultra-poor households (desegregated by male-vs. female headed households, geography)?</p> <p>3. What are the specific challenges faced by female ultra-poor headed households? What are the specific challenges faced by women within male-led ultra-poor households?</p> <p>4. What are the potential/constraining factors for the selected value chains in the targeted region?</p> <p>5. What are the marketing challenges do the ultra-poor households face for the selected value chain? (Disaggregated by male-vs. female headed households)?</p> <p>6. In the context of the graduation model, what interventions are necessary to establish an appropriate and gender-inclusive market system for the ultra-poor inhabitants of the region?</p> <p>Financial Inclusion</p> <p>1. What is the status of access to financial services of the ultra-poor households (desegregated by male-vs. female headed households)?</p> <p>Gender and Social Empowerment</p> <p>1. Who is responsible for making major decisions related to income generation activities (IGAs) and non-IGA expenditure (i.e. what is generally accepted in this community) in the households?</p> <p>a. Who makes the decision about business idea and its finalisation?</p> <p>b. Who decides on major purchases (livestock, land...) in your household?</p> <p>c. Who makes the decision about borrowing money</p> <p>d. Who makes decisions about how money is spent in your household?</p> <p>e. Who decides on schooling/education in your household?</p> <p>2. How involved are women in various household and IGAs their family is involved in? (fully, partially, occasionally, etc.)</p>
Appropriate Value Chains for vulnerable households	<p>The study will try to find the appropriate Value chains for the ultra-poor households of the targeted region (Ukhiya and Teknaf Upazila of Cox's Bazar district), with a focus on female headed households. The key questions for finding appropriate value chains are as follows:</p> <p>1. What are the Value Chains which best fit the ultra-poor households for their graduation, especially for female headed households?</p> <p>2. Which IGA/interventions are necessary for inclusion of the ultra-poor households in the selected value chains, especially for female headed households?</p>

Annex 5: List of Respondents for Qualitative Assessment

	Name	Type of Respondent	Designation	Village	Union	Upazilla	District	Phone Number	Date of Interview	Name of the interviewer
1.	Abdul Haque	Key Informantion	Union Secretary	-	1 no. Jaliapalang	Ukhiya	Cox's-Bazar	-	27.02.2019	Abdur Rob and Nafees
2.	Jaynal Abedin	Key Informantion	-	-	-	Ukhiya Sadar	Cox-Bazar	-	28.02.2019	Abdur Rob and Nafees
3.	Sanjib Barwa	Key Informantion	-	-	-	-	Cox-Bazar	-	20.02.2019	Abdur Rob and Nafees
4.	Nilu Barwa	Key Informantion	-	Patabari	Rajapalang	Ukhiya	Cox-Bazar	-	21.02.2019	Abdur Rob and Nafees
5.	Sabal Bader	Key Informantion	ICT Officer		Whykong	Teknaf	Cox-Bazar	01818067887	02.03.2019	Abdur Rob and Nafees
6.	Senoyara Khatun	FGD Participant -	(Fishing group - Female)	Uttar Sonapara	Jaliapalong	Ukhiya	Cox-Bazar	01857076855	07.03.2019	Abdur Rob and Nafees
7.	Manayara	FGD Participant (Fishing group - Female)	(Fishing group - Female) -	Uttar Sonapara	Jaliapalong	Ukhiya	Cox-Bazar	01857076835	08.03.2019	Abdur Rob and Nafees
8.	Manayara	FGD Participant	Fishing Women	Uttar Sonapara	Jaliapalong	Ukhiya	Cox-Bazar	01884768854	08.03.2019	Abdur Rob and Nafees
9.	Shonamar	FGD Participant	Fishing Women	Uttar Sonapara	Jaliapalong	Ukhiya	Cox-Bazar	01850745332	08.03.2019	Abdur Rob and Nafees
10.	Sania	FGD Participant	Fishing Women	Uttar Sonapara	Jaliapalong	Ukhiya	Cox-Bazar	-	08.03.2019	Abdur Rob and Nafees
11.	Sufia	FGD Participant	Fishing Women	Uttar Sonapara	Jaliapalong	Ukhiya	Cox-Bazar	-	08.03.2019	Abdur Rob and Nafees
12.	Anawara Begam	FGD Participant	Fishing Women	Uttar Sonapara	Jaliapalong	Ukhiya	Cox-Bazar	01827931992	08.03.2019	Abdur Rob and Nafees
13.	Alam Ara	FGD Participant	Fishing Women	Uttar Sonapara	Jaliapalong	Ukhiya	Cox-Bazar	-	08.03.2019	Abdur Rob and Nafees
14.	Rupjon	FGD Participant	Fishing Women	Uttar Sonapara	Jaliapalong	Ukhiya	Cox-Bazar	-	08.03.2019	Abdur Rob and Nafees
15.	Sakhina	FGD Participant	Fishing Women	Uttar Sonapara	Jaliapalong	Ukhiya	Cox-Bazar	-	08.03.2019	Abdur Rob and Nafees
16.	Manayara	FGD Participant	Fishing Women	Uttar Sonapara	Jaliapalong	Ukhiya	Cox-Bazar	-	08.03.2019	Abdur Rob and Nafees
17.	Fatema	FGD Participant	Fishing Women	Uttar Sonapara	Jaliapalong	Ukhiya	Cox-Bazar	01852412242	08.03.2019	Abdur Rob and Nafees

	Name	Type of Respondent	Designation	Village	Union	Upazilla	District	Phone Number	Date of Interview	Name of the interviewer
18.	Khadija	FGD Participant	Fishing Women-	Uttar Sonapara	Jaliapalong	Ukhiya	Cox-Bazar	-	08.03.2019	Abdur Rob and Nafees
19.	Jannatul FERDOZE	FGD Participant	Fishing Women	Uttar Sonapara	Jaliapalong	Ukhiya	Cox-Bazar	-	08.03.2019	Abdur Rob and Nafees
20.	Bobita	FGD Participant	Fishing Women	Uttar Sonapara	Jaliapalong	Ukhiya	Cox-Bazar	-	08.03.2019	Abdur Rob and Nafees
21.	Sahara Khanom	FGD Participant	Fishing Women	Uttar Sonapara	Jaliapalong	Ukhiya	Cox-Bazar	01829099734	08.03.2019	Abdur Rob and Nafees
22.	Kajol	FGD Participant	Fishing Women	Uttar Sonapara	Jaliapalong	Ukhiya	Cox-Bazar	01858049160	08.03.2019	Abdur Rob and Nafees
23.	Sayad Nur	Key Informantion	Fisheman	North Sonapara	Jaliapalong	Ukhiya	Cox-Bazar	-	08.03.2019	Abdur Rob and Nafees
24.	Mr. Yusuf Nur	Key Informantion	Fisher Man	North Sonapara	Jaliapalong	Ukhiya	Cox-Bazar	01879255304	08.03.2019	Abdur Rob and Nafees
25.	Jahara	FGD Participant	Fisher Women	Delpara	Jaliapalong	Ukhiya	Cox-Bazar	01839415693	08.03.2019	Abdur Rob and Nafees
26.	Nurushaba	FGD Participant	Fisher Women	Delpara	Jaliapalong	Ukhiya	Cox-Bazar	01864472091	08.03.2019	Abdur Rob and Nafees
27.	Rokeya Begam	FGD Participant	Fisher Women	Delpara	Jaliapalong	Ukhiya	Cox-Bazar	01812769869	08.03.2019	Abdur Rob and Nafees
28.	Moriyam	FGD Participant	Fisher Women	Delpara	Jaliapalong	Ukhiya	Cox-Bazar	-	08.03.2019	Abdur Rob and Nafees
29.	Shabera	FGD Participant	Fisher Women	Delpara	Jaliapalong	Ukhiya	Cox-Bazar	-	08.03.2019	Abdur Rob and Nafees
30.	Shenoara	Key Informant	Fisher Women	Delpara	Jaliapalong	Ukhiya	Cox-Bazar	-	08.03.2019	Abdur Rob and Nafees
31.	Mobia	FGD Participant	Fisher Women	Delpara	Jaliapalong	Ukhiya	Cox-Bazar	-	08.03.2019	Abdur Rob and Nafees
32.	Rojsana	FGD Participant	Fisher Women	Delpara	Jaliapalong	Ukhiya	Cox-Bazar	-	08.03.2019	Abdur Rob and Nafees
33.	Hajra	FGD Participant	Fisher Women	Delpara	Jaliapalong	Ukhiya	Cox-Bazar	-	08.03.2019	Abdur Rob and Nafees
34.	Romela	FGD Participant	Fisher Women	Delpara	Jaliapalong	Ukhiya	Cox-Bazar	-	08.03.2019	Abdur Rob and Nafees
35.	Kahirum Akter	FGD Participant	Fisher Women	Delpara	Jaliapalong	Ukhiya	Cox-Bazar	-	08.03.2019	Abdur Rob and Nafees

	Name	Type of Respondent	Designation	Village	Union	Upazilla	District	Phone Number	Date of Interview	Name of the interviewer
36.	Sabina	FGD Participant	Fisher Women	Delpara	Jaliapalong	Ukhiya	Cox-Bazar	-	08.03.2019	Abdur Rob and Nafees
37.	Sayad Hamja	FGD Participant	Homestead Vegetable (At home)	Goyalmara	Rotnapalang (Word 6)	Ukhiya	Cox-Bazar	01845199735	08.03.2019	Abdur Rob and Nafees
38.	Jahidul Hussain	FGD Participant	Homestead Vegetable (In Field))	Goyalmara	Rotnapalang (Word 6)	Ukhiya	Cox-Bazar	01830647076	08.03.2019	Abdur Rob and Nafees
39.	Syad Hussain	FGD Participant	Plowing	Goyalmara	Rotnapalang (Ward 6)	Ukhiya	Cox-Bazar	01834960938	08.03.2019	Abdur Rob and Nafees
40.	Modon Ali	FGD Participant	Homestead Vegetable	Goyalmara	Rotnapalang (Word 6)	Ukhiya	Cox-Bazar	01814143087	08.03.2019	Abdur Rob and Nafees
41.	Delwar Hussain	FGD Participant	Plowing	Goyalmara	Rotnapalang (Word 6)	Ukhiya	Cox-Bazar	01865819892	08.03.2019	Abdur Rob and Nafees
42.	Belal Uddin	FGD Participant	Homestead Vegetable	Goyalmara	Rotnapalang (Word 6)	Ukhiya	Cox-Bazar	01846038692	08.03.2019	Abdur Rob and Nafees
43.	Mahmud Hasan	FGD Participant	Homestead Vegetable	Goyalmara	Rotnapalang (Word 6)	Ukhiya	Cox-Bazar	01843797795	08.03.2019	Abdur Rob and Nafees
44.	Sultan Ahmad	FGD Participant	Homestead Vegetable	Goyalmara	Rotnapalang (Word 6)	Ukhiya	Cox-Bazar	01853277491	08.03.2019	Abdur Rob and Nafees
45.	Jalal Uddin	FGD Participant	Homestead Vegetable (In field)	Goyalmara	Rotnapalang (Word 6)	Ukhiya	Cox-Bazar	01872018760	08.03.2019	Abdur Rob and Nafees
46.	Nurul Islam	FGD Participant	Homestead Vegetable	Goyalmara	Rotnapalang (Word 6)	Ukhiya	Cox-Bazar	-	08.03.2019	Abdur Rob and Nafees
47.	Faijul Alam	FGD Participant	Homestead Vegetable	Goyalmara	Rotnapalang (Word 6)	Ukhiya	Cox-Bazar	01838370977	08.03.2019	Abdur Rob and Nafees
48.	Russel	FGD Participant	Native Chicken Male	Jadimara	Rajapalang	Ukhiya	Cox-Bazar	-	08.03.2019	Abdur Rob and Nafees
49.	Moulovi Shah Alam	FGD Participant	Native Chicken Male	Jadimara	Rajapalang	Ukhiya	Cox-Bazar	01835678539	08.03.2019	Abdur Rob and Nafees

	Name	Type of Respondent	Designation	Village	Union	Upazilla	District	Phone Number	Date of Interview	Name of the interviewer
50.	Zoraf	FGD Participant	Native Chicken Male	Jadimara	Rajapalang	Ukhiya	Cox-Bazar	-	08.03.2019	Abdur Rob and Nafees
51.	Abul Hashem	FGD Participant	Native Chicken Male	Jadimara	Rajapalang	Ukhiya	Cox-Bazar	01840003964	08.03.2019	Abdur Rob and Nafees
52.	MD. Ashan	FGD Participant	Native Chicken Male	Jadimara	Rajapalang	Ukhiya	Cox-Bazar	01816471253	08.03.2019	Abdur Rob and Nafees
53.	Ridwan	FGD Participant	Native Chicken Male	Jadimara	Rajapalang	Ukhiya	Cox-Bazar	01829628587	08.03.2019	Abdur Rob and Nafees
54.	Enamul Haque	FGD Participant	Native Chicken Male	Jadimara	Rajapalang	Ukhiya	Cox-Bazar	01820118541	08.03.2019	Abdur Rob and Nafees
55.	Abul Kasham	FGD Participant	Native Chicken Male	Jadimara	Rajapalang	Ukhiya	Cox-Bazar	01816831836	08.03.2019	Abdur Rob and Nafees
56.	Abdur Rashid	FGD Participant	Native Chicken Male	Jadimara	Rajapalang	Ukhiya	Cox-Bazar	01834501112	08.03.2019	Abdur Rob and Nafees
57.	Khaleda Begam	FGD Participant	Native Chicken Female	Anjumanpara	Palongkhali	Ukhiya	Cox-Bazar	01811912849	08.03.2019	Abdur Rob and Nafees
58.	Arefa	FGD Participant	Native Chicken	Anjumanpara	Palongkhali	Ukhiya	Cox-Bazar	01843561896	08.03.2019	Abdur Rob and Nafees
59.	Fatema Khatun	FGD Participant	Native Chicken	Anjumanpara	Palongkhali	Ukhiya	Cox-Bazar	-	08.03.2019	Abdur Rob and Nafees
60.	Joynab	FGD Participant	Native Chicken	Anjumanpara	Palongkhali	Ukhiya	Cox-Bazar	01864510652	08.03.2019	Abdur Rob and Nafees
61.	Ayasha khatun	FGD Participant	Native Chicken	Anjumanpara	Palongkhali	Ukhiya	Cox-Bazar	01839413037	08.03.2019	Abdur Rob and Nafees
62.	Hosna Ara Begum	FGD Participant	Native Chicken	Anjumanpara	Palongkhali	Ukhiya	Cox-Bazar	01864510652	08.03.2019	Abdur Rob and Nafees
63.	Hasina Begum	FGD Participant	Native Chicken	Anjumanpara	Palongkhali	Ukhiya	Cox-Bazar	-	08.03.2019	Abdur Rob and Nafees

	Name	Type of Respondent	Designation	Village	Union	Upazilla	District	Phone Number	Date of Interview	Name of the interviewer
64.	Amena Begum	FGD Participant	Native Chicken	Anjumanpara	Palongkhali	Ukhiya	Cox-Bazar	01851391287	08.03.2019	Abdur Rob and Nafees
65.	Monoara Begum	FGD Participant	Native Chicken	Anjumanpara	Palongkhali	Ukhiya	Cox-Bazar	-	08.03.2019	Abdur Rob and Nafees
66.	Hasina Begum	FGD Participant	Native Chicken	Anjumanpara	Palongkhali	Ukhiya	Cox-Bazar	01537751950	08.03.2019	Abdur Rob and Nafees
67.	Lucky Akhtar	FGD Participant	Native Chicken	Anjumanpara	Palongkhali	Ukhiya	Cox-Bazar	01860179297	08.03.2019	Abdur Rob and Nafees
68.	Tasmina Akhtar	FGD Participant	Native Chicken	Anjumanpara	Palongkhali	Ukhiya	Cox-Bazar	01878559650	08.03.2019	Abdur Rob and Nafees
69.	Shahina Khatun	FGD Participant	Native Chicken	Anjumanpara	Palongkhali	Ukhiya	Cox-Bazar	01864510652	08.03.2019	Abdur Rob and Nafees
70.	Rojina Akhtar	FGD Participant	Native Chicken	Anjumanpara	Palongkhali	Ukhiya	Cox-Bazar	01812806635	08.03.2019	Abdur Rob and Nafees
71.	Fatema Khanum	FGD Participant	Native Chicken	Anjumanpara	Palongkhali	Ukhiya	Cox-Bazar	-	08.03.2019	Abdur Rob and Nafees
72.	Monoara Begum	FGD Participant	Native Chicken	Anjumanpara	Palongkhali	Ukhiya	Cox-Bazar	-	08.03.2019	Abdur Rob and Nafees
73.	Kulsume Begum	FGD Participant	Native Chicken	Anjumanpara	Palongkhali	Ukhiya	Cox-Bazar	-	08.03.2019	Abdur Rob and Nafees
74.	Somira Akhter	FGD Participant	Native Chicken	Anjumanpara	Palongkhali	Ukhiya	Cox-Bazar	-	08.03.2019	Abdur Rob and Nafees
75.	Rehena Akhter	FGD Participant	Native Chicken	Anjumanpara	Palongkhali	Ukhiya	Cox-Bazar	-	08.03.2019	Abdur Rob and Nafees
76.	Rokeya	FGD Participant	Native Chicken	Anjumanpara	Palongkhali	Ukhiya	Cox-Bazar	-	08.03.2019	Abdur Rob and Nafees
77.	Beluja	In Depth Interview	Homestead Gardening	New Mocharkola	Palonkhali	Ukhiya	Cox-Bazar	01851343108	09.03.2019	Abdur Rob and Nafees
78.	Taiyaba	In Depth Interview	Native Chicken	New Mocharkola	Palonkhali	Ukhiya	Cox-Bazar	01887665695	09.03.2019	Abdur Rob and Nafees
79.	Gulbahar	In Depth Interview	Farmer(Female)	New Mocharkola	Palonkhali	Ukhiya	Cox-Bazar	-	09.03.2019	Abdur Rob and Nafees
80.	Rahima Khatun	In Depth Interview	Farmer(Female)	New Mocharkola	Palonkhali	Ukhiya	Cox-Bazar	01865581423	09.03.2019	Abdur Rob and Nafees
81.	Rehana Begum	In Depth Interview	Farmer(Female)	New Mocharkola	Palonkhali	Ukhiya	Cox-Bazar	01838971982	09.03.2019	Abdur Rob and Nafees

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82.	Nur Safa	In Depth Interview	Farmer(Female)	New Mocharkola	Palonkhali	Ukhiya	Cox-Bazar	01844836462	09.03.2019	Abdur Rob and Nafees
83.	MD. Jubayer	Key Informantion	Shop Kipper	-	Palangkhali	Ukhiya	Cox-Bazar	01625190062	09.03.2019	Abdur Rob and Nafees
84.	Monirujjaman	Key Informantion	-	-	-	-	Cox-Bazar	01831184217	09.03.2019	Abdur Rob and Nafees
85.	MD. Siraj Uddin	Key Informantion	Social Welfare Department	-	-	Ukhiya	Cox-Bazar	01558042770	10.03.2019	Abdur Rob and Nafees
86.	Pankoje sarma	Key Informantion	Office attendant	-	-	Ukhiya	Cox-Bazar	01825157536	10.03.2019	Abdur Rob and Nafees
87.	Randhin Barman	Key Informantion	Union Social worker	-	-	Ukhiya	Cox-Bazar	01816097416	10.03.2019	Abdur Rob and Nafees
88.	Sheikh MD. Ershad Bin Shahid	Key Informantion	Upazila Fisheries Officer	-	-	Ukhiya	Cox-Bazar	01019076544	10.03.2019	Abdur Rob and Nafees
89.	MD. sazzadul Haque	Key Informantion	Upazila youth Dev. Officer	-	-	Ukhiya	Cox-Bazar	01819819241	10.03.2019	Abdur Rob and Nafees
90.	MD. Alamgir Kabir	Key Informantion	Upazila Women Affairs Officer	-	-	Ukhiya	Cox-Bazar	01721106423	10.03.2019	Abdur Rob and Nafees
91.	MD. Afjal Hossain	Key Informant	Office Attendant	-	-	Ukhiya	Cox-Bazar	01811827076	10.03.2019	Abdur Rob and Nafees
92.	MD. Shariful Islam	Key Informant	Upazila Agri. Officer	-	-	Ukhiya	Cox-Bazar	01712639218	10.03.2019	Abdur Rob and Nafees
93.	MD. Rafik Uddin	Key Informant	Principal Officer	-	-	Ukhiya	Cox-Bazar	01829499907	10.03.2019	Abdur Rob and Nafees
94.	Sohal sarwar	Key Informant	Officer, Grameen Bank	-	Rajapalang	Ukhiya	Cox-Bazar	01814249037	10.03.2019	Abdur Rob and Nafees
95.	MD. Edissom Das	Key Informant	Branch Manager	-	Rajapalang	Ukhiya	Cox-Bazar	-	10.03.2019	Abdur Rob and Nafees
96.	Master Chandra Sen Das	FGD Participant	Fisherman (Male)	Hnila, Jaliapara	Hnila	Teknaf	Cox-Bazar	01811892837	11.03.2019	Abdur Rob and Nafees
97.	Kumbo Das	FGD Participant	Fisherman (Male)	Hnila, Jaliapara	Hnila	Teknaf	Cox-Bazar	01821712468	11.03.2019	Abdur Rob and Nafees

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98.	Milon Jolo Das	FGD Participant	Fisherman (Male)	Hnila, Jaliapara	Hnila	Teknaf	Cox-Bazar	01820020991	11.03.2019	Abdur Rob and Nafees
99.	Nila Kanto Das	FGD Participant	Fisherman (Male)	Hnila, Jaliapara	Hnila	Teknaf	Cox-Bazar	01861185368	11.03.2019	Abdur Rob and Nafees
100.	Anil	FGD Participant	Fisherman (Male)	Hnila, Jaliapara	Hnila	Teknaf	Cox-Bazar	01865428775	11.03.2019	Abdur Rob and Nafees
101.	Bhaiggodhon Das	FGD Participant	Fisherman (Male)	Hnila, Jaliapara	Hnila	Teknaf	Cox-Bazar	01835294779	11.03.2019	Abdur Rob and Nafees
102.	Ruponjolo Das	FGD Participant	Fisherman (Male)	Hnila, Jaliapara	Hnila	Teknaf	Cox-Bazar	01884113941	11.03.2019	Abdur Rob and Nafees
103.	Ratan Jolo Das	FGD Participant	Fisherman (Male)	Hnila, Jaliapara	Hnila	Teknaf	Cox-Bazar	-	11.03.2019	Abdur Rob and Nafees
104.	Shotto Das	FGD Participant	Fisherman (Male)	Hnila, Jaliapara	Hnila	Teknaf	Cox-Bazar	01865929961	11.03.2019	Abdur Rob and Nafees
105.	Krishnopodo Joldas	FGD Participant	Fisherman (Male)	Hnila, Jaliapara	Hnila	Teknaf	Cox-Bazar	01828422673	11.03.2019	Abdur Rob and Nafees
106.	Dilip Das	FGD Participant	Fisherman (Male)	Hnila, Jaliapara	Hnila	Teknaf	Cox-Bazar	01961586903	11.03.2019	Abdur Rob and Nafees
107.	Rampodo Das	FGD Participant	Fisherman (Male)	Hnila, Jaliapara	Hnila	Teknaf	Cox-Bazar	01855232907	11.03.2019	Abdur Rob and Nafees
108.	Shipon Das	FGD Participant	Fisherman (Male)	Hnila, Jaliapara	Hnila	Teknaf	Cox-Bazar	01851062115	11.03.2019	Abdur Rob and Nafees
109.	Bhuginath Das	FGD Participant	Fisherman (Male)	Hnila, Jaliapara	Hnila	Teknaf	Cox-Bazar	01882163958	11.03.2019	Abdur Rob and Nafees
110.	Anando Das	FGD Participant	Fisherman (Male)	Hnila, Jaliapara	Hnila	Teknaf	Cox-Bazar	01832513022	11.03.2019	Abdur Rob and Nafees
111.	Dulabagchi Das	FGD Participant	Fisherman (Male)	Hnila, Jaliapara	Hnila	Teknaf	Cox-Bazar	01837035421	11.03.2019	Abdur Rob and Nafees
112.	Dula Das	FGD Participant	Fisherman (Male)	Hnila, Jaliapara	Hnila	Teknaf	Cox-Bazar	01840884581	11.03.2019	Abdur Rob and Nafees
113.	Sumanto Das	FGD Participant	Fisherman (Male)	Hnila, Jaliapara	Hnila	Teknaf	Cox-Bazar	01836633896	11.03.2019	Abdur Rob and Nafees
114.	Nipun das	FGD Participant	Fisherman (Male)	Hnila, Jaliapara	Hnila	Teknaf	Cox-Bazar	01853609590	11.03.2019	Abdur Rob and Nafees
115.	Juman	FGD Participant	Fisherman (female)	Jelepara	Hnila	Teknaf	Cox-Bazar	01811892837	11.03.2019	Abdur Rob and Nafees

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116.	Shafili	FGD Participant	Fisherman (female)	Jelepara	Hnila	Teknaf	Cox-Bazar	-	11.03.2019	Abdur Rob and Nafees
117.	Horibashi Das	FGD Participant	Fisherman (female)	Jelepara	Hnila	Teknaf	Cox-Bazar	01860659932	11.03.2019	Abdur Rob and Nafees
118.	Anika	FGD Participant	Fisherman (female)	Jelepara	Hnila	Teknaf	Cox-Bazar		11.03.2019	Abdur Rob and Nafees
119.	Urboshi	FGD Participant	Fisherman (female)	Jelepara	Hnila	Teknaf	Cox-Bazar		11.03.2019	Abdur Rob and Nafees
120.	Nodi	FGD Participant	Fisherman (female)	Jelepara	Hnila	Teknaf	Cox-Bazar		11.03.2019	Abdur Rob and Nafees
121.	Dipti das	FGD Participant	Fisherman (female)	Jelepara	Hnila	Teknaf	Cox-Bazar		11.03.2019	Abdur Rob and Nafees
122.	Asha Rani	FGD Participant	Fisherman (female)	Jelepara	Hnila	Teknaf	Cox-Bazar		11.03.2019	Abdur Rob and Nafees
123.	Sudha Das	FGD Participant	Fisherman (female)	Jelepara	Hnila	Teknaf	Cox-Bazar		11.03.2019	Abdur Rob and Nafees
124.	Joyha Das	FGD Participant	Fisherman (female)	Jelepara	Hnila	Teknaf	Cox-Bazar		11.03.2019	Abdur Rob and Nafees
125.	Shamoli Das	FGD Participant	Fisherman (female)	Jelepara	Hnila	Teknaf	Cox-Bazar	0182002099	11.03.2019	Abdur Rob and Nafees
126.	Monibala Das	FGD Participant	Fisherman (female)	Jelepara	Hnila	Teknaf	Cox-Bazar	018330689368	11.03.2019	Abdur Rob and Nafees
127.	Bobita Das	FGD Participant	Fisherman (female)	Jelepara	Hnila	Teknaf	Cox-Bazar	01833275644	11.03.2019	Abdur Rob and Nafees
128.	Jhorah Das	FGD Participant	Fisherman (female)	Jelepara	Hnila	Teknaf	Cox-Bazar		11.03.2019	Abdur Rob and Nafees
129.	Kajoli	FGD Participant	Fisherman (female)	Jelepara	Hnila	Teknaf	Cox-Bazar		11.03.2019	Abdur Rob and Nafees
130.	Monju Das	FGD Participant	Fisherman (female)	Jelepara	Hnila	Teknaf	Cox-Bazar		11.03.2019	Abdur Rob and Nafees
131.	Seuli Das	Key Informant	Fisherman (female)	Jelepara	Hnila	Teknaf	Cox-Bazar	01834412994	11.03.2019	Abdur Rob and Nafees
132.	Normala	FGD Participant	Fisherman (female)	Jelepara	Hnila	Teknaf	Cox-Bazar		11.03.2019	Abdur Rob and Nafees
133.	Lokhhi Somi Das	FGD Participant	Fisherman (female)	Jelepara	Hnila	Teknaf	Cox-Bazar		11.03.2019	Abdur Rob and Nafees
134.	Dulali	FGD Participant	Fisherman (female)	Jelepara	Hnila	Teknaf	Cox-Bazar		11.03.2019	Abdur Rob and Nafees
135.	Basanti	FGD Participant	Fisherman (female)	Jelepara	Hnila	Teknaf	Cox-Bazar		11.03.2019	Abdur Rob and Nafees

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136.	Robibanti	FGD Participant	Fisherman (female)	Jelepura	Hnila	Teknaf	Cox-Bazar	01828707511	11.03.2019	Abdur Rob and Nafees
137.	Siraj	FGD Participant	Dry Fish (male)	durgasara	Teknaf Sadar Union	Teknaf	Cox-Bazar	01812366268	11.03.2019	Abdur Rob and Nafees
138.	MD. Hasan	FGD Participant	Dry Fish (male)	durgasara	Teknaf Sadar Union	Teknaf	Cox-Bazar	01834501200	11.03.2019	Abdur Rob and Nafees
139.	Abdur Rahim	FGD Participant	Dry Fish (male)	durgasara	Teknaf Sadar Union	Teknaf	Cox-Bazar	01855757704	11.03.2019	Abdur Rob and Nafees
140.	Shukkur	FGD Participant	Dry Fish (male)	durgasara	Teknaf Sadar Union	Teknaf	Cox-Bazar	01881470661	11.03.2019	Abdur Rob and Nafees
141.	Rahamat ullah	FGD Participant	Dry Fish (male)	durgasara	Teknaf Sadar Union	Teknaf	Cox-Bazar	01851829407	11.03.2019	Abdur Rob and Nafees
142.	Abdur Halim	FGD Participant	Dry Fish (male)	durgasara	Teknaf Sadar Union	Teknaf	Cox-Bazar	01879202783	11.03.2019	Abdur Rob and Nafees
143.	MD. Hasan	FGD Participant	Dry Fish (male)	durgasara	Teknaf Sadar Union	Teknaf	Cox-Bazar	01863372833	11.03.2019	Abdur Rob and Nafees
144.	Shakh Ahmad	FGD Participant	Dry Fish (male)	durgasara	Teknaf Sadar Union	Teknaf	Cox-Bazar	01821040048	11.03.2019	Abdur Rob and Nafees
145.	MD. Hosen	FGD Participant	Dry Fish (male)	durgasara	Teknaf Sadar Union	Teknaf	Cox-Bazar	01875943909	11.03.2019	Abdur Rob and Nafees
146.	Rahamatullah	FGD Participant	Dry Fish (male)	durgasara	Teknaf Sadar Union	Teknaf	Cox-Bazar	01832462732	11.03.2019	Abdur Rob and Nafees
147.	MD. Hasan Lalu	FGD Participant	Dry Fish (male)	durgasara	Teknaf Sadar Union	Teknaf	Cox-Bazar	01817222599	11.03.2019	Abdur Rob and Nafees
148.	Abdur Gaffar	FGD Participant	Dry Fish (male)	durgasara	Teknaf Sadar Union	Teknaf	Cox-Bazar	- 01815480692	11.03.2019	Abdur Rob and Nafees

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149.	Shaymul Alam	FGD Participant	Dry Fish (male)	durgasara	Teknaf Sadar Union	Teknaf	Cox-Bazar	01865641988-	11.03.2019	Abdur Rob and Nafees
150.	Jahayad Ahmad	FGD Participant	Dry Fish (male)	durgasara	Teknaf Sadar Union	Teknaf	Cox-Bazar	- 01822239959	11.03.2019	Abdur Rob and Nafees
151.	Nur Mahammad	FGD Participant	Dry Fish (male)	Habirsara	Teknaf Sadar	Teknaf	Cox-Bazar	01829255380	11.03.2019	Abdur Rob and Nafees
152.	Saleh Ahmad	FGD Participant	Dry Fish (male)	Habirsara	Teknaf Sadar	Teknaf	Cox-Bazar	-	11.03.2019	Abdur Rob and Nafees
153.	Saimun	FGD Participant	Dry Fish (male)	Habirsara	Teknaf Sadar	Teknaf	Cox-Bazar	- 01850649345	11.03.2019	Abdur Rob and Nafees
154.	MD. Abir	FGD Participant	Dry Fish (male)	Habirsara	Teknaf Sadar	Teknaf	Cox-Bazar		11.03.2019	Abdur Rob and Nafees
155.	Syad Karim	FGD Participant	Dry Fish (male)	Habirsara	Teknaf Sadar	Teknaf	Cox-Bazar		11.03.2019	Abdur Rob and Nafees
156.	Abdul Karim	FGD Participant	Dry Fish (male)	Habirsara	Teknaf Sadar	Teknaf	Cox-Bazar	01843267217	11.03.2019	Abdur Rob and Nafees
157.	Foyej	FGD Participant	Dry Fish (male)	Habirsara	Teknaf Sadar	Teknaf	Cox-Bazar	01832737403	11.03.2019	Abdur Rob and Nafees
158.	Fahid Mir	FGD Participant	Dry Fish (male)	Habirsara	Teknaf Sadar	Teknaf	Cox-Bazar		11.03.2019	Abdur Rob and Nafees
159.	Mahamudullah	FGD Participant	Dry Fish (male)	Habirsara	Teknaf Sadar	Teknaf	Cox-Bazar		11.03.2019	Abdur Rob and Nafees
161	Rustom Ali	FGD Participant	Cattle (male)	Moddho Hanila Noyapara	waikhyong	Teknaf	Cox-Bazar		12.03.2019	Abdur Rob and Nafees
162	Ahmad	FGD Participant	Cattle (male)	Moddho Hanila Noyapara	waikhyong	Teknaf	Cox-Bazar		12.03.2019	Abdur Rob and Nafees
163	Khairul Basar	FGD Participant	Cattle (male)	Moddho Hanila Noyapara	waikhyong	Teknaf	Cox-Bazar		12.03.2019	Abdur Rob and Nafees
164	Saber Ahmad	FGD Participant	Cattle (male)	Moddho Hanila Noyapara	waikhyong	Teknaf	Cox-Bazar	01825751473	12.03.2019	Abdur Rob and Nafees

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165	Abul Basar	FGD Participant	Cattle (male)	Moddho Hanila Noyapara	waikhyong	Teknaf	Cox-Bazar		12.03.2019	Abdur Rob and Nafees
166	Nurul Hosain	FGD Participant	Cattle (male)	Moddho Hanila Noyapara	waikhyong	Teknaf	Cox-Bazar	01836526032	12.03.2019	Abdur Rob and Nafees
167	Ahmad Hossain	FGD Participant	Cattle (male)	Moddho Hanila Noyapara	waikhyong	Teknaf	Cox-Bazar	01825752543	12.03.2019	Abdur Rob and Nafees
168	Niat	FGD Participant	Cattle (male)	Moddho Hanila Noyapara	waikhyong	Teknaf	Cox-Bazar	01883827978	12.03.2019	Abdur Rob and Nafees
169	Ali Hossain	FGD Participant	Cattle (male)	Moddho Hanila Noyapara	waikhyong	Teknaf	Cox-Bazar	01868517321	12.03.2019	Abdur Rob and Nafees
170	MD. Rafiq	FGD Participant	Cattle (male)	Moddho Hanila Noyapara	waikhyong	Teknaf	Cox-Bazar	01827048233	12.03.2019	Abdur Rob and Nafees
171	Nadar Ali	FGD Participant	Cattle (male)	Moddho Hanila Noyapara	waikhyong	Teknaf	Cox-Bazar	01880199618	12.03.2019	Abdur Rob and Nafees
172	Umme Khatun	FGD Participant	Native Chicken(Female)	Moddho Hanila Noyapara	waikhyong	Teknaf	Cox-Bazar		12.03.2019	Abdur Rob and Nafees
173	Joymur	FGD Participant	Native Chicken(Female)	Moddho Hanila Noyapara	waikhyong	Teknaf	Cox-Bazar		12.03.2019	Abdur Rob and Nafees
174	Nasima	FGD Participant	Native Chicken(Female)	Moddho Hanila Noyapara	waikhyong	Teknaf	Cox-Bazar		12.03.2019	Abdur Rob and Nafees
175	Saleha	FGD Participant	Native Chicken(Female)	Moddho Hanila Noyapara	waikhyong	Teknaf	Cox-Bazar		12.03.2019	Abdur Rob and Nafees
176	Monoara	FGD Participant	Native Chicken(Female)	Moddho Hanila Noyapara	waikhyong	Teknaf	Cox-Bazar		12.03.2019	Abdur Rob and Nafees
177	Ayesha Begum	FGD Participant	Native Chicken(Female)	Moddho Hanila Noyapara	waikhyong	Teknaf	Cox-Bazar		12.03.2019	Abdur Rob and Nafees
178	Faridha Begum	FGD Participant	Native Chicken(Female)	Moddho Hanila Noyapara	waikhyong	Teknaf	Cox-Bazar		12.03.2019	Abdur Rob and Nafees
179	Shainur Begum	FGD Participant	Native Chicken(Female)	Moddho Hanila Noyapara	waikhyong	Teknaf	Cox-Bazar		12.03.2019	Abdur Rob and Nafees

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180	Monoara Begum	FGD Participant	Native Chicken(Female)	Moddho Hanila Noyapara	waikhyong	Teknaf	Cox-Bazar	01846529136	12.03.2019	Abdur Rob and Nafees
181	Shaila Bulutua	FGD Participant	Native Chicken(Female)	Moddho Hanila Noyapara	waikhyong	Teknaf	Cox-Bazar		12.03.2019	Abdur Rob and Nafees
182	Bodiul Alam	FGD Participant	Native Chicken(male)	South Shilgari	Baharchora	Teknaf	Cox-Bazar	01868809899	12.03.2019	Abdur Rob and Nafees
183	Nurul Alam	FGD Participant	Native Chicken(male)	South Shilgari	Baharchora	Teknaf	Cox-Bazar	01875124374	12.03.2019	Abdur Rob and Nafees
184	Abu Ahmad	FGD Participant	Native Chicken(male)	South Shilgari	Baharchora	Teknaf	Cox-Bazar	01875124616	12.03.2019	Abdur Rob and Nafees
185	Hosen Ali	FGD Participant	Native Chicken(male)	South Shilgari	Baharchora	Teknaf	Cox-Bazar	01879652147	12.03.2019	Abdur Rob and Nafees
186	Abu Musa	FGD Participant	Native Chicken(male)	South Shilgari	Baharchora	Teknaf	Cox-Bazar	01838979727	12.03.2019	Abdur Rob and Nafees
187	Usman Dheru	FGD Participant	Native Chicken(male)	South Shilgari	Baharchora	Teknaf	Cox-Bazar	01875804955	12.03.2019	Abdur Rob and Nafees
188	Liaboul Ali	FGD Participant	Native Chicken(male)	South Shilgari	Baharchora	Teknaf	Cox-Bazar	01816438123	12.03.2019	Abdur Rob and Nafees
189	Sirajul Islam	FGD Participant	Native Chicken(male)	South Shilgari	Baharchora	Teknaf	Cox-Bazar	01846525972	12.03.2019	Abdur Rob and Nafees
190	Shakera	FGD Participant	Native Chicken (female)	South Shilgari	Baharchora	Teknaf	Cox-Bazar	01850783176	12.03.2019	Abdur Rob and Nafees
191	Lutfurnessa	FGD Participant	Native Chicken (female)	South Shilgari	Baharchora	Teknaf	Cox-Bazar	01823812982	12.03.2019	Abdur Rob and Nafees
192	Mahmuda	FGD Participant	Native Chicken (female)	South Shilgari	Baharchora	Teknaf	Cox-Bazar	01846525972	12.03.2019	Abdur Rob and Nafees

	Name	Type of Respondent	Designation	Village	Union	Upazilla	District	Phone Number	Date of Interview	Name of the interviewer
193	Jahannara	FGD Participant	Native Chicken (female)	South Shilgari	Baharchora	Teknaf	Cox-Bazar	01856038332	12.03.2019	Abdur Rob and Nafees
194	Selina Akhter	FGD Participant	Native Chicken (female)	South Shilgari	Baharchora	Teknaf	Cox-Bazar	01863193436	12.03.2019	Abdur Rob and Nafees
195	Hasina	FGD Participant	Native Chicken (female)	South Shilgari	Baharchora	Teknaf	Cox-Bazar		12.03.2019	Abdur Rob and Nafees
196	Moriom Begum	FGD Participant	Native Chicken (female)	South Shilgari	Baharchora	Teknaf	Cox-Bazar		12.03.2019	Abdur Rob and Nafees
197	Shakina Begum	FGD Participant	Native Chicken (female)	South Shilgari	Baharchora	Teknaf	Cox-Bazar	01831896815	12.03.2019	Abdur Rob and Nafees
198	Rokeya Begum	FGD Participant	Native Chicken (female)	South Shilgari	Baharchora	Teknaf	Cox-Bazar	01830191358	12.03.2019	Abdur Rob and Nafees
199	Rajina	In Depth Interview		Dakhin Shilkhali Bainnapara Kaderpara	Baharchora	Teknaf	Cox-Bazar	01870096884	12.03.2019	Abdur Rob and Nafees
200	Anwara	In Depth Interview		Dakhin Shilkhali Bainnapara Kaderpara	Baharchora	Teknaf	Cox-Bazar	01885000578	12.03.2019	Abdur Rob and Nafees
201	Nurunnahar	In Depth Interview		Dakhin Shilkhali Bainnapara Kaderpara	Baharchora	Teknaf	Cox-Bazar	01874750951	12.03.2019	Abdur Rob and Nafees
202	Sushilon nurul	In Depth Interview		Lengurbil	Teknaf	Teknaf	Cox-Bazar	01715359574	13.03.2019	Abdur Rob and Nafees
203	Nazrul	In Depth Interview		Lengurbil	Teknaf	Teknaf	Cox-Bazar	01864625734	13.03.2019	Abdur Rob and Nafees
204	Abdul Rasid	In Depth Interview		Lengurbil	Teknaf	Teknaf	Cox-Bazar	01984440013	13.03.2019	Abdur Rob and Nafees
205	Mr. Badul Alam	Key Informant	Society for Health Extension and Development		Teknaf	Teknaf	Cox-Bazar	01819058770	13.03.2019	Abdur Rob and Nafees
206	Kamal Barwa	Key Informant			Teknaf	Teknaf	Cox-Bazar	01812711512	13.03.2019	Abdur Rob and Nafees

	Name	Type of Respondent	Designation	Village	Union	Upazilla	District	Phone Number	Date of Interview	Name of the interviewer
207	Mr.Sohnal Hossain	Key Informant	Sanitary Officer		Teknaf	Teknuf	Cox-Bazar	01817752389	13.03.2019	Abdur Rob and Nafees
208	Mr. Abul Kalam	Key Informant	Microcredit Officer		Teknaf	Teknuf	Cox-Bazar	01816084059	13.03.2019	Abdur Rob and Nafees
209	Jahangir Alam	Key Informant	Microcredit Officer (ASA)		Teknaf	Teknuf	Cox-Bazar	01730084752	13.03.2019	Abdur Rob and Nafees
210	Abu Taher	Key Informant	Senior Officer(AB Bank)		Teknaf	Teknuf	Cox-Bazar	01819836560	13.03.2019	Abdur Rob and Nafees
211	Farida Yasmin	FGD Participant	Dry Fish(Female)	Durgachara	Teknaf	Teknuf	Cox-Bazar	01887671507	13.03.2019	Abdur Rob and Nafees
212	Hasina	FGD Participant	Dry Fish(Female)	Durgachara	Teknaf	Teknuf	Cox-Bazar		13.03.2019	Abdur Rob and Nafees
213	Momotaj Begum	FGD Participant	Dry Fish(Female)	Durgachara	Teknaf	Teknuf	Cox-Bazar		13.03.2019	Abdur Rob and Nafees
214	Rokeya	FGD Participant	Dry Fish(Female)	Durgachara	Teknaf	Teknuf	Cox-Bazar		13.03.2019	Abdur Rob and Nafees
215	Marium	FGD Participant	Dry Fish(Female)	Durgachara	Teknaf	Teknaf	Cox-Bazar		13.03.2019	Abdur Rob and Nafees
216	Jahanara Akhter	FGD Participant	Dry Fish(Female)	Durgachara	Teknaf	Teknuf	Cox-Bazar		13.03.2019	Abdur Rob and Nafees
217	Mr. Abu Sarwer	Key Informant	Project Officer			Ukhiya	Cox-Bazar	01840003884	14.03.2019	Abdur Rob and Nafees
218	Biplob Sudhan	Key Informant	Credit Programmer			Ukhiya	Cox-Bazar	01831193147	14.03.2019	Abdur Rob and Nafees
219	Mujibur Rahman	Key Informant	Project Officer			Ukhiya	Cox-Bazar	01811822034	14.03.2019	Abdur Rob and Nafees
220	Aiyub Khan	Key Informant	Senior Project Manager			Ukhiya	Cox-Bazar	01816236544	14.03.2019	Abdur Rob and Nafees
221	Nurul Islam	InDepth Interview		Anjumanpara	Palonkhali	Ukhiya	Cox-Bazar	01872018996	14.03.2019	Abdur Rob and Nafees
222	Satyanban Das	InDepth Interview		Jelepara	Hnila	Teknaf	Cox-Bazar	01869628663	14.03.2019	Abdur Rob and Nafees

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223	Roby Sharma	InDepth Interview		Jelepara	Hnila	Ukhiya	Cox-Bazar	01866583442	14.03.2019	Abdur Rob and Nafees
224	Abul Hamid	InDepth Interview	Day Labor	Durgasara	Teknuf Sadar	Teknuf	Cox-Bazar	01870096650	14.03.2019	Abdur Rob and Nafees
225	Abdul Goffur	InDepth Interview		Durgasara	Teknuf Sadar	Teknuf	Cox-Bazar		14.03.2019	Abdur Rob and Nafees
226	Rafiq	InDepth Interview	Vegetable Seller				Cox-Bazar	01815079443	14.03.2019	Abdur Rob and Nafees
227	Hosan Ahmad	InDepth Interview		Sagnapur		Teknuf	Cox-Bazar	01888032049	14.03.2019	Abdur Rob and Nafees
228	Johir Ahmad	InDepth Interview					Cox-Bazar	01818425709	14.03.2019	Abdur Rob and Nafees
229	MD. Nurul Haque	InDepth Interview					Cox-Bazar	01819084427	14.03.2019	Abdur Rob and Nafees
230	MD.Dil Mahammad	InDepth Interview	Fish Businessman	Hnila Kacha Bazar	Hnila Kacha Bazar	Teknuf	Cox-Bazar	01825445626	15.03.2019	Mostafa Tarafdar
231	MD. Javed	InDepth Interview	Dry Fish Businessman	Hnila Kacha Bazar	Hnila Kacha Bazar	Teknuf	Cox-Bazar	01820546152	15.03.2019	Mostafa Tarafdar
232	Nur Mahammad	InDepth Interview	Raw Market	Hnila Kacha Bazar	Hnila Kacha Bazar	Teknuf	Cox-Bazar	01822345384	15.03.2019	Mostafa Tarafdar
233	MD.Jahangir Hosain	Key Informant	Cow Feed Businessman	Hnila Kacha Bazar	Hnila Kacha Bazar	Teknuf	Cox-Bazar	01822858306	15.03.2019	Mostafa Tarafdar
234	MD. Hasan	Key Informant	Pesticides Businessman	Hnila Kacha Bazar	Hnila Kacha Bazar	Teknuf	Cox-Bazar	01817733643	15.03.2019	Mostafa Tarafdar
235	MD. Nur	Key Informant	Bushier	Hnila Kacha Bazar	Hnila Kacha Bazar	Teknuf	Cox-Bazar	01813541752	15.03.2019	Mostafa Tarafdar
236	MD. ALam	Key Informant	Chicken Businessman	Hnila Kacha Bazar	Hnila Kacha Bazar	Teknuf	Cox-Bazar	01851832152	15.03.2019	Mostafa Tarafdar
237	MD. Jahangir Alam	Key Informant	Fish Businessman	Hnila Kacha Bazar	Hnila Kacha Bazar	Teknuf	Cox-Bazar	01855363435	15.03.2019	Mostafa Tarafdar

	Name	Type of Respondent	Designation	Village	Union	Upazilla	District	Phone Number	Date of Interview	Name of the interviewer
238	MD. Abdullah	Key Informant	Cow Supplier and Farm Worker	Hnila Kacha Bazar	Hnila Kacha Bazar	Teknuf	Cox-Bazar	01825151322	15.03.2019	Mostafa Tarafdar
239	Babul Barwa	Key Informant	Dry Fish Shop kipper	Ukhiya Bazar	Ukhiya Bazar	Ukhiya	Cox-Bazar	01640865914	15.03.2019	Nur Nobi
240	Anwar Islam	Key Informant	Vegetable Seller	Ukhiya Bazar	Ukhiya Bazar	Ukhiya	Cox-Bazar	01811281896	15.03.2019	Nur Nobi
241	Sayed Akhbor	Key Informant	Chicken Shop	Ukhiya Bazar	Ukhiya Bazar	Ukhiya	Cox-Bazar	01813715930	15.03.2019	Nur Nobi
242	Sunil Barwa	Key Informant	Feed Businessman	Ukhiya Bazar	Ukhiya Bazar	Ukhiya	Cox-Bazar	01854768681	15.03.2019	Nur Nobi
243	MD. Abu Taher	Key Informant	Fish Businessman	Ukhiya Bazar	Ukhiya Bazar	Ukhiya	Cox-Bazar	01867549382	15.03.2019	Nur Nobi
244	Joyti Mahan Barwa	Key Informant	Dry Fish Businessman	Ukhiya Bazar	Ukhiya Bazar	Ukhiya	Cox-Bazar	01821919209	15.03.2019	Nur Nobi
245	Salim Uddin	Key Informant	Vegetable Businessman	Ukhiya Bazar	Ukhiya Bazar	Ukhiya	Cox-Bazar	01821343914	15.03.2019	Nur Nobi
246	MD. Mamunur Rasid	Key Informant	Fertilizer Businessman	Ukhiya Bazar	Ukhiya Bazar	Ukhiya	Cox-Bazar	01818677646	15.03.2019	Nur Nobi
247	Kabir Ahmad	Key Informant	Raw Fish	Whykong Bazar	Whykong Bazar	Teknuf	Cox-Bazar	01865116722	15.03.2019	Suman Roy
248	MD. Nuruddhin	Key Informant	Vegetable	Whykong Bazar	Whykong Bazar	Teknuf	Cox-Bazar	01876097694	15.03.2019	Suman Roy
249	Amirul Haque	Key Informant	Chicken	Whykong Bazar	Whykong Bazar	Teknuf	Cox-Bazar	01863461545	15.03.2019	Suman Roy
250	MD. Helal Uddin	Key Informant	Chicken Feed(Input Supplier)	Whykong Bazar	Whykong Bazar	Teknuf	Cox-Bazar	01340744107	15.03.2019	Suman Roy
251	Nurul Amin	Key Informant	Grocery Goods	Whykong Bazar	Whykong Bazar	Teknuf	Cox-Bazar	01818566933	15.03.2019	Suman Roy
252	Imam Hossien	Key Informant	Fertilizer Shop(Input Supplier)	Whykong Bazar	Whykong Bazar	Teknuf	Cox-Bazar	01878914754	15.03.2019	Suman Roy

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253	MD. Samim	Key Informant	Vegetable	Whykong Bazar	Whykong Bazar	Teknuf	Cox-Bazar	01855107613	15.03.2019	Suman Roy
254	Kader Hossain	Key Informant	Dry Fish	Teknuf Bazar	Teknuf Bazar	Teknuf	Cox-Bazar	01883827951	15.03.2019	Suman Roy
255	Mrs. Rokeya Begum	InDepth Interview		Kaderpara	Baharchara	Teknuf	Cox-Bazar	01811201373	15.03.2019	MD. Aftab Uddin
256	Monoyara Begum	InDepth Interview		Kaderpara, Baniyapara	Baharchara	Teknuf	Cox-Bazar	01835451789	15.03.2019	MD. Aftab Uddin
257	Rozina	InDepth Interview		KaderparaBaniyapara	Baharchara	Teknuf	Cox-Bazar	01870096884	15.03.2019	MD. Aftab Uddin
258	Anowara	InDepth Interview		KaderparaBaniyapara	Baharchara	Teknuf	Cox-Bazar	01885000578	15.03.2019	MD. Aftab Uddin
259	Nurnahar	InDepth Interview		KaderparaBaniyapara	Baharchara	Teknuf	Cox-Bazar	01874750951	15.03.2019	MD. Aftab Uddin
260	Halima	InDepth Interview		Anjumanpara	Palongkhali	Ukhiya	Cox-Bazar	01813950064	15.03.2019	MD. Aftab Uddin
261	MR. Abdur Rahaman	InDepth Interview		Anjumanpara	Palongkhali	Ukhiya	Cox-Bazar	01863375614	15.03.2019	MD. Aftab Uddin
262	Kumbu Das	InDepth Interview		Jelepara	Hnila	Teknuf	Cox-Bazar	01821712468	15.03.2019	MD. Aftab Uddin
263	Somju Das	InDepth Interview		Jelapara	Hnila	Teknuf	Cox-Bazar	01836437641	15.03.2019	MD. Aftab Uddin
264	Jharna Das	InDepth Interview		Jelepara	Hnila	Teknuf	Cox-Bazar	01865929961	15.03.2019	MD. Aftab Uddin
265	MD. Taher	InDepth Interview		Darghar	Teknuf	Teknuf	Cox-Bazar	01837916622	15.03.2019	MD. Aftab Uddin
266	Nur Mohammad	InDepth Interview		Darghar Chara	Teknuf	Teknuf	Cox-Bazar	01871736193	15.03.2019	MD. Aftab Uddin
267	Badsha Md. Shah Alam	Key Informant			Teknuf Sadar	Teknuf	Cox-Bazar	01817747863	15.03.2019	MD. Aftab Uddin
268	Selina	FGD Participant	Homestead vegetable Female Group	Lomboripara	Jaliyapalong	Ukhiya	Cox's Bazar	01826036699	07.03.2019	Abdur Rob and Ainee

	Name	Type of Respondent	Designation	Village	Union	Upazilla	District	Phone Number	Date of Interview	Name of the interviewer
269	Momotaj Begum	FGD Participant	Homestead vegetable Female Group	Lomboripara	Jaliyapalong	Ukhiya	Cox's Bazar		07.03.2019	Abdur Rob and Ainee
270	Sumi Khatun	FGD Participant	Homestead vegetable Female Group	Lomboripara	Jaliyapalong	Ukhiya	Cox's Bazar		07.03.2019	Abdur Rob and Ainee
271	Saleha	FGD Participant	Homestead vegetable Female Group	Lomboripara	Jaliyapalong	Ukhiya	Cox's Bazar		07.03.2019	Abdur Rob and Ainee
272	Anowara	FGD Participant	Homestead vegetable Female Group	Lomboripara	Jaliyapalong	Ukhiya	Cox's Bazar		07.03.2019	Abdur Rob and Ainee
273	Masuma Akter	FGD Participant	Homestead vegetable Female Group	Lomboripara	Jaliyapalong	Ukhiya	Cox's Bazar		07.03.2019	Abdur Rob and Ainee
274	Sofiya	FGD Participant	Homestead vegetable Female Group	Lomboripara	Jaliyapalong	Ukhiya	Cox's Bazar		07.03.2019	Abdur Rob and Ainee
275	Samsun Naher	FGD Participant	Homestead vegetable Female Group	Lomboripara	Jaliyapalong	Ukhiya	Cox's Bazar		07.03.2019	Abdur Rob and Ainee
276	Morium Khatun	FGD Participant	Homestead vegetable Female Group	Lomboripara	Jaliyapalong	Ukhiya	Cox's Bazar		07.03.2019	Abdur Rob and Ainee
277	Hafiza Khatun	FGD Participant	Homestead vegetable Female Group	Lomboripara	Jaliyapalong	Ukhiya	Cox's Bazar		07.03.2019	Abdur Rob and Ainee
278	Mahmuda Begum	FGD Participant	Homestead vegetable Female Group	Lomboripara	Jaliyapalong	Ukhiya	Cox's Bazar	01872382695	07.03.2019	Abdur Rob and Ainee

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279	Nurun Naher	FGD Participant	Homestead vegetable Female Group	Lomboripara	Jaliyapalong	Ukhiya	Cox's Bazar	01820092578	07.03.2019	Abdur Rob and Ainee
280	Md. Unus	FGD Participant	Cattel Rearing Male	Balukiya Palong	Ratna Palong	Ukhiya	Cox's Bazar	01849964521	08.03.2019	Abdur Rob and Aftab
281	Abul Kalam	FGD Participant	Cattel Rearing Male	Balukiya Palong	Ratna Palong	Ukhiya	Cox's Bazar	01857393257	08.03.2019	Abdur Rob and Aftab
282	Shaker Ali	FGD Participant	Cattel Rearing Male	Balukiya Palong	Ratna Palong	Ukhiya	Cox's Bazar	01817265877	08.03.2019	Abdur Rob and Aftab
283	Saiful Islam	FGD Participant	Cattel Rearing Male	Balukiya Palong	Ratna Palong	Ukhiya	Cox's Bazar	01814814054	08.03.2019	Abdur Rob and Aftab
284	Md. Alom	FGD Participant	Cattel Rearing Male	Balukiya Palong	Ratna Palong	Ukhiya	Cox's Bazar		08.03.2019	Abdur Rob and Aftab
285	Ayus	FGD Participant	Cattel Rearing Male	Balukiya Palong	Ratna Palong	Ukhiya	Cox's Bazar	01850537526	08.03.2019	Abdur Rob and Aftab
286	Md. shajahan	FGD Participant	Cattel Rearing Male	Balukiya Palong	Ratna Palong	Ukhiya	Cox's Bazar	01818764237	08.03.2019	Abdur Rob and Aftab
287	Sabbir Ahmed	FGD Participant	Cattel Rearing Male	Balukiya Palong	Ratna Palong	Ukhiya	Cox's Bazar	01830151022	08.03.2019	Abdur Rob and Aftab
288	Md. Mobarak	FGD Participant	Cattel Rearing Male	Balukiya Palong	Ratna Palong	Ukhiya	Cox's Bazar	01874976790	08.03.2019	Abdur Rob and Aftab
289	Md. shahin	FGD Participant	Cattel Rearing Male	Balukiya Palong	Ratna Palong	Ukhiya	Cox's Bazar	01824246242	08.03.2019	Abdur Rob and Aftab
290	Shaiful Alom	FGD Participant	Cattel Rearing Male	Balukiya Palong	Ratna Palong	Ukhiya	Cox's Bazar	01845222679	08.03.2019	Abdur Rob and Aftab
291	Jashim Uddin	FGD Participant	Cattel Rearing Male	Balukiya Palong	Ratna Palong	Ukhiya	Cox's Bazar	01834557253	08.03.2019	Abdur Rob and Aftab
292	Md. Mamun	FGD Participant	Cattel Rearing Male	Balukiya Palong	Ratna Palong	Ukhiya	Cox's Bazar	01831858487	08.03.2019	Abdur Rob and Aftab
293	Nur Islam	FGD Participant	Cattel Rearing Male	Balukiya Palong	Ratna Palong	Ukhiya	Cox's Bazar	01852911223	08.03.2019	Abdur Rob and Aftab
294	Hashem	FGD Participant	Cattel Rearing Male	Balukiya Palong	Ratna Palong	Ukhiya	Cox's Bazar	01819607662	08.03.2019	Abdur Rob and Aftab

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295	Md. Kashem	FGD Participant	Cattel Rearing Male	Balukiya Palong	Ratna Palong	Ukhiya	Cox's Bazar	01849434108	08.03.2019	Abdur Rob and Aftab
296	Md. Maruf	FGD Participant	Cattel Rearing Male	Balukiya Palong	Ratna Palong	Ukhiya	Cox's Bazar	01875373538	08.03.2019	Abdur Rob and Aftab
297	Din Mohammad	FGD Participant	Cattel Rearing Male	Balukiya Palong	Ratna Palong	Ukhiya	Cox's Bazar	01865181993	08.03.2019	Abdur Rob and Aftab
298	Abul Kalam	FGD Participant	Cattel Rearing Male	Balukiya Palong	Ratna Palong	Ukhiya	Cox's Bazar	01855295037	08.03.2019	Abdur Rob and Aftab
299	Bulbul	FGD Participant	Native Chicken Female	Katghor,sonerpara	Jaliyapara	Ukhiya	Cox's Bazar	01838971780	07.03.2019	Abdur Rob,Ainee & Nafees
300	Momotaj Begum	FGD Participant	Native Chicken Female	Katghor,sonerpara	Jaliyapara	Ukhiya	Cox's Bazar	01816911221	07.03.2019	Abdur Rob,Ainee & Nafees
301	Khaleda Begum	FGD Participant	Native Chicken Female	Katghor,sonerpara	Jaliyapara	Ukhiya	Cox's Bazar	01836632007	07.03.2019	Abdur Rob,Ainee & Nafees
302	Touyara	FGD Participant	Native Chicken Female	Katghor,sonerpara	Jaliyapara	Ukhiya	Cox's Bazar	01838039074	07.03.2019	Abdur Rob,Ainee & Nafees
303	Fatema	FGD Participant	Native Chicken Female	Katghor,sonerpara	Jaliyapara	Ukhiya	Cox's Bazar	01852412242	07.03.2019	Abdur Rob,Ainee & Nafees
304	Nur Aysha	FGD Participant	Native Chicken Female	Katghor,sonerpara	Jaliyapara	Ukhiya	Cox's Bazar		07.03.2019	Abdur Rob,Ainee & Nafees
305	Delowyara	FGD Participant	Native Chicken Female	Katghor,sonerpara	Jaliyapara	Ukhiya	Cox's Bazar		07.03.2019	Abdur Rob,Ainee & Nafees
306	Gulsamra	FGD Participant	Native Chicken Female	Katghor,sonerpara	Jaliyapara	Ukhiya	Cox's Bazar		07.03.2019	Abdur Rob,Ainee & Nafees
307	Jannatul	FGD Participant	Native Chicken Female	Katghor,sonerpara	Jaliyapara	Ukhiya	Cox's Bazar		07.03.2019	Abdur Rob,Ainee & Nafees
308	Begumjan	FGD Participant	Native Chicken Female	Katghor,sonerpara	Jaliyapara	Ukhiya	Cox's Bazar		07.03.2019	Abdur Rob,Ainee & Nafees

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309	Jahanara	FGD Participant	Native Chiken Female	Katghor,sonerpara	Jaliyapara	Ukhiya	Cox's Bazar		07.03.2019	Abdur Rob,Ainee & Nafees
310	Hajera Khatun	FGD Participant	Native Chiken Female	Katghor,sonerpara	Jaliyapara	Ukhiya	Cox's Bazar	01863439347	07.03.2019	Abdur Rob,Ainee & Nafees
311	Rehena Khatun	FGD Participant	Native Chiken Female	Katghor,sonerpara	Jaliyapara	Ukhiya	Cox's Bazar	01839415635	07.03.2019	Abdur Rob,Ainee & Nafees
312	Sabukun Naher	FGD Participant	Native Chiken Female	Katghor,sonerpara	Jaliyapara	Ukhiya	Cox's Bazar		07.03.2019	Abdur Rob,Ainee & Nafees
313	Kulsum	FGD Participant	Native Chiken Female	Katghor,sonerpara	Jaliyapara	Ukhiya	Cox's Bazar		07.03.2019	Abdur Rob,Ainee & Nafees
314	Morium Khatun	FGD Participant	Vegetable Female	Katghor,sonerpara	Jaliyapara	Ukhiya	Cox's Bazar		07.03.2019	Abdur Rob,Ainee & Nafees
315	Nurjahan	FGD Participant	Vegetable Female	Katghor,sonerpara	Jaliyapara	Ukhiya	Cox's Bazar		07.03.2019	Abdur Rob,Ainee & Nafees
316	Nurnahar	FGD Participant	Vegetable Female	Katghor,sonerpara	Jaliyapara	Ukhiya	Cox's Bazar		07.03.2019	Abdur Rob,Ainee & Nafees
317	Morjina	FGD Participant	Vegetable Female	Katghor,sonerpara	Jaliyapara	Ukhiya	Cox's Bazar	01846137981	07.03.2019	Abdur Rob,Ainee & Nafees
318	Naurnahar-1	FGD Participant	Vegetable Female	Katghor,sonerpara	Jaliyapara	Ukhiya	Cox's Bazar		07.03.2019	Abdur Rob,Ainee & Nafees
319	Fatema-1	FGD Participant	Vegetable Female	Katghor,sonerpara	Jaliyapara	Ukhiya	Cox's Bazar	01811204271	07.03.2019	Abdur Rob,Ainee & Nafees
320	Minara Begum	FGD Participant	Vegetable Female	Katghor,sonerpara	Jaliyapara	Ukhiya	Cox's Bazar		07.03.2019	Abdur Rob,Ainee & Nafees
321	Sokina Akter	FGD Participant	Vegetable Female	Katghor,sonerpara	Jaliyapara	Ukhiya	Cox's Bazar	01852522150	07.03.2019	Abdur Rob,Ainee & Nafees
322	Mohochina	FGD Participant	Vegetable Female	Katghor,sonerpara	Jaliyapara	Ukhiya	Cox's Bazar	01871602714	07.03.2019	Abdur Rob,Ainee & Nafees
323	Minuyara	FGD Participant	Vegetable Female	Katghor,sonerpara	Jaliyapara	Ukhiya	Cox's Bazar		07.03.2019	Abdur Rob,Ainee & Nafees

	Name	Type of Respondent	Designation	Village	Union	Upazilla	District	Phone Number	Date of Interview	Name of the interviewer
324	Anoyara	FGD Participant	Vegetable Female	Katghor,sonerpara	Jaliyapara	Ukhiya	Cox's Bazar	01882078145	07.03.2019	Abdur Rob,Ainee & Nafees
325	Delara Begum	FGD Participant	Vegetable Female	Katghor,sonerpara	Jaliyapara	Ukhiya	Cox's Bazar		07.03.2019	Abdur Rob,Ainee & Nafees
326	Mina Akter	FGD Participant	Vegetable Female	Katghor,sonerpara	Jaliyapara	Ukhiya	Cox's Bazar		07.03.2019	Abdur Rob,Ainee & Nafees
327	Alom Yara	FGD Participant	Vegetable Female	Katghor,sonerpara	Jaliyapara	Ukhiya	Cox's Bazar		07.03.2019	Abdur Rob,Ainee & Nafees
328	Minara Begum	FGD Participant	Vegetable Female	Moricha Guna	Hnila	Teknaf	Cox's Bazar	01878346904	11.03.2019	Abdur Rob & Aftab
329	Sona Meher	FGD Participant	Vegetable Female	Moricha Guna	Hnila	Teknaf	Cox's Bazar	01876706553	11.03.2019	Abdur Rob & Aftab
330	Saleha Begum	FGD Participant	Vegetable Female	Moricha Guna	Hnila	Teknaf	Cox's Bazar		11.03.2019	Abdur Rob & Aftab
331	Mymuna	FGD Participant	Vegetable Female	Moricha Guna	Hnila	Teknaf	Cox's Bazar		11.03.2019	Abdur Rob & Aftab
332	Khaleda Begum	FGD Participant	Vegetable Female	Moricha Guna	Hnila	Teknaf	Cox's Bazar	01849841829	11.03.2019	Abdur Rob & Aftab
333	Fulmoti	FGD Participant	Vegetable Female	Moricha Guna	Hnila	Teknaf	Cox's Bazar	01854869832	11.03.2019	Abdur Rob & Aftab
334	Hasina	FGD Participant	Vegetable Female	Moricha Guna	Hnila	Teknaf	Cox's Bazar		11.03.2019	Abdur Rob & Aftab
335	Bilkis Khatun	FGD Participant	Vegetable Female	Moricha Guna	Hnila	Teknaf	Cox's Bazar		11.03.2019	Abdur Rob & Aftab
336	Nurjahan	FGD Participant	Vegetable Female	Moricha Guna	Hnila	Teknaf	Cox's Bazar	01626365465	11.03.2019	Abdur Rob & Aftab
337	Husneyara	FGD Participant	Vegetable Female	Moricha Guna	Hnila	Teknaf	Cox's Bazar	01838973044	11.03.2019	Abdur Rob & Aftab
338	Hasina Begum	FGD Participant	Vegetable Female	Moricha Guna	Hnila	Teknaf	Cox's Bazar	01856677409	11.03.2019	Abdur Rob & Aftab
339	Amena Khatun	FGD Participant	Vegetable Female	Moricha Guna	Hnila	Teknaf	Cox's Bazar		11.03.2019	Abdur Rob & Aftab
340	Samsun Naher	FGD Participant	Vegetable Female	Moricha Guna	Hnila	Teknaf	Cox's Bazar		11.03.2019	Abdur Rob & Aftab

	Name	Type of Respondent	Designation	Village	Union	Upazilla	District	Phone Number	Date of Interview	Name of the interviewer
341	Namiya Khatun	FGD Participant	Cattle Rearing Female	Kaderpara,Baniyapara	Baherchara	Teknaf	Cox's Bazar		12.03.2019	Nafees & Aftab
342	Nurjahan	FGD Participant	Cattle Rearing Female	Kaderpara,Baniyapara	Baherchara	Teknaf	Cox's Bazar	01855500615	12.03.2019	Nafees & Aftab
343	Khodeza Begum	FGD Participant	Cattle Rearing Female	Kaderpara,Baniyapara	Baherchara	Teknaf	Cox's Bazar	01872514213	12.03.2019	Nafees & Aftab
344	Nurnaher	FGD Participant	Cattle Rearing Female	Kaderpara,Baniyapara	Baherchara	Teknaf	Cox's Bazar	01874750951	12.03.2019	Nafees & Aftab
345	Feroza Khatun	FGD Participant	Cattle Rearing Female	Kaderpara,Baniyapara	Baherchara	Teknaf	Cox's Bazar		12.03.2019	Nafees & Aftab
346	Parvin Akter	FGD Participant	Cattle Rearing Female	Kaderpara,Baniyapara	Baherchara	Teknaf	Cox's Bazar	01843728907	12.03.2019	Nafees & Aftab
347	Ruhul Amin	FGD Participant	Fishing Male	Katghor,Sonerpara	Jaliyapalong	Ukhiya	Cox's Bazar	01817075032	07.03.2019	Abdur Rob & Ainee
348	Syed Alam	FGD Participant	Fishing Male	Katghor,Sonerpara	Jaliyapalong	Ukhiya	Cox's Bazar	01830669233	07.03.2019	Abdur Rob & Ainee
349	Syed Mia	FGD Participant	Fishing Male	Katghor,Sonerpara	Jaliyapalong	Ukhiya	Cox's Bazar	01831609297	07.03.2019	Abdur Rob & Ainee
350	Mohammad Hossain	FGD Participant	Fishing Male	Katghor,Sonerpara	Jaliyapalong	Ukhiya	Cox's Bazar	018880695221	07.03.2019	Abdur Rob & Ainee
351	Md. Romjan	FGD Participant	Fishing Male	Katghor,Sonerpara	Jaliyapalong	Ukhiya	Cox's Bazar	01867641526	07.03.2019	Abdur Rob & Ainee
352	Md. Zafor Ali	FGD Participant	Fishing Male	Katghor,Sonerpara	Jaliyapalong	Ukhiya	Cox's Bazar		07.03.2019	Abdur Rob & Ainee
353	Sonali	FGD Participant	Fishing Male	Katghor,Sonerpara	Jaliyapalong	Ukhiya	Cox's Bazar	01865401700	07.03.2019	Abdur Rob & Ainee
354	Nurul Amin	FGD Participant	Fishing Male	Katghor,Sonerpara	Jaliyapalong	Ukhiya	Cox's Bazar	01837273278	07.03.2019	Abdur Rob & Ainee
355	Khairul	FGD Participant	Fishing Male	Katghor,Sonerpara	Jaliyapalong	Ukhiya	Cox's Bazar	01814494202	07.03.2019	Abdur Rob & Ainee

	Name	Type of Respondent	Designation	Village	Union	Upazilla	District	Phone Number	Date of Interview	Name of the interviewer
356	Md. Ayez	FGD Participant	Fishing Male	Katghor, Sonerpara	Jaliyapalong	Ukhiya	Cox's Bazar	01840881196	07.03.2019	Abdur Rob & Ainee
357	Hamidul Islam	FGD Participant	Fishing Male	Katghor, Sonerpara	Jaliyapalong	Ukhiya	Cox's Bazar	01822537271	07.03.2019	Abdur Rob & Ainee
358	Champa Khatun	FGD Participant	Cattle Rearing Female	Dakshin Anjumanpara(Battali)	Palongkhali	Ukhiya	Cox's Bazar		11.03.2019	Abdur Rob & Aftab
359	Mabia Khatun	FGD Participant	Cattle Rearing Female	Dakshin Anjumanpara(Battali)	Palongkhali	Ukhiya	Cox's Bazar		11.03.2019	Abdur Rob & Aftab
360	Rehana Begum	FGD Participant	Cattle Rearing Female	Dakshin Anjumanpara(Battali)	Palongkhali	Ukhiya	Cox's Bazar		11.03.2019	Abdur Rob & Aftab
361	Rashida Begum	FGD Participant	Cattle Rearing Female	Dakshin Anjumanpara(Battali)	Palongkhali	Ukhiya	Cox's Bazar		11.03.2019	Abdur Rob & Aftab
362	Rehena akter	FGD Participant	Cattle Rearing Female	Dakshin Anjumanpara(Battali)	Palongkhali	Ukhiya	Cox's Bazar		11.03.2019	Abdur Rob & Aftab
363	Saleha Begum	FGD Participant	Cattle Rearing Female	Dakshin Anjumanpara(Battali)	Palongkhali	Ukhiya	Cox's Bazar		11.03.2019	Abdur Rob & Aftab
364	Monoyara Begum	FGD Participant	Cattle Rearing Female	Dakshin Anjumanpara(Battali)	Palongkhali	Ukhiya	Cox's Bazar		11.03.2019	Abdur Rob & Aftab
365	Chenera Begum	FGD Participant	Cattle Rearing Female	Dakshin Anjumanpara(Battali)	Palongkhali	Ukhiya	Cox's Bazar		11.03.2019	Abdur Rob & Aftab
366	Sabekun Naher	FGD Participant	Cattle Rearing Female	Dakshin Anjumanpara(Battali)	Palongkhali	Ukhiya	Cox's Bazar		11.03.2019	Abdur Rob & Aftab
367	Sabina Yasmin	FGD Participant	Cattle Rearing Female	Dakshin Anjumanpara(Battali)	Palongkhali	Ukhiya	Cox's Bazar		11.03.2019	Abdur Rob & Aftab
368	Sabikun Naher	FGD Participant	Cattle Rearing Female	Dakshin Anjumanpara(Battali)	Palongkhali	Ukhiya	Cox's Bazar		11.03.2019	Abdur Rob & Aftab
369	Rokeya Begum	FGD Participant	Cattle Rearing Female	Dakshin Anjumanpara(Battali)	Palongkhali	Ukhiya	Cox's Bazar		11.03.2019	Abdur Rob & Aftab

	Name	Type of Respondent	Designation	Village	Union	Upazilla	District	Phone Number	Date of Interview	Name of the interviewer
370	Rashida Akter	FGD Participant	Cattle Rearing Female	Dakshin Anjumanpara(Battali)	Palongkhali	Ukhiya	Cox's Bazar		11.03.2019	Abdur Rob & Aftab
371	Sobura Khatun	FGD Participant	Cattle Rearing Female	Dakshin Anjumanpara(Battali)	Palongkhali	Ukhiya	Cox's Bazar		11.03.2019	Abdur Rob & Aftab
372	Islam Khatun	FGD Participant	Cattle Rearing Female	Dakshin Anjumanpara(Battali)	Palongkhali	Ukhiya	Cox's Bazar		11.03.2019	Abdur Rob & Aftab
373	Laila Khatun	FGD Participant	Cattle Rearing Female	Dakshin Anjumanpara(Battali)	Palongkhali	Ukhiya	Cox's Bazar		11.03.2019	Abdur Rob & Aftab
374	Sbekun	FGD Participant	Cattle Rearing Female	Dakshin Anjumanpara(Battali)	Palongkhali	Ukhiya	Cox's Bazar		11.03.2019	Abdur Rob & Aftab
375	Samju	FGD Participant	Vegetable Male	Lomoripara	Jaliyapalong	Ukhiya	Cox's Bazar		07.03.2019	Abdur Rob & Ainee
376	Giasuddin	FGD Participant	Vegetable Male	Lomoripara	Jaliyapalong	Ukhiya	Cox's Bazar		07.03.2019	Abdur Rob & Ainee
377	Nurul Hakim	FGD Participant	Vegetable Male	Lomoripara	Jaliyapalong	Ukhiya	Cox's Bazar		07.03.2019	Abdur Rob & Ainee
378	Hakim Ali	FGD Participant	Vegetable Male	Lomoripara	Jaliyapalong	Ukhiya	Cox's Bazar		07.03.2019	Abdur Rob & Ainee
379	Abdur Rashid	FGD Participant	Vegetable Male	Lomoripara	Jaliyapalong	Ukhiya	Cox's Bazar		07.03.2019	Abdur Rob & Ainee
380	Mohammad Alom	FGD Participant	Vegetable Male	Lomoripara	Jaliyapalong	Ukhiya	Cox's Bazar		07.03.2019	Abdur Rob & Ainee
381	Md.Mamunur Rashid	FGD Participant	Vegetable Male	Lomoripara	Jaliyapalong	Ukhiya	Cox's Bazar		07.03.2019	Abdur Rob & Ainee
382	Abu Taher	FGD Participant	Vegetable Male	Lomoripara	Jaliyapalong	Ukhiya	Cox's Bazar		07.03.2019	Abdur Rob & Ainee
383	Jamir Ahmed	FGD Participant	Vegetable Male	Lomoripara	Jaliyapalong	Ukhiya	Cox's Bazar		07.03.2019	Abdur Rob & Ainee
384	Abul Kalam	FGD Participant	Vegetable Male	Lomoripara	Jaliyapalong	Ukhiya	Cox's Bazar		07.03.2019	Abdur Rob & Ainee

	Name	Type of Respondent	Designation	Village	Union	Upazilla	District	Phone Number	Date of Interview	Name of the interviewer
385	Babar	FGD Participant	Vegetable Male	Lomoripara	Jaliyapalong	Ukhiya	Cox's Bazar		07.03.2019	Abdur Rob & Ainee

Annex 6: Quantitative Survey Questionnaire

Mandatory criteria for direct participants:	Yes/ No
1. Less than <20 decimals of land (607.5 – 810sqm)	
2. Irregular source (no regular work to earn income consistently) of income	
3. Permanent residence one village (at least last one year)	
4. Participant over 18 years of age (one participants per household)	
5. Participant have National ID Card	
6. Monthly income below 5000 taka	
7. Has any household member over 15 and able to work?	

Exclusion Criteria of direct participants	Yes/ No
1. Similar type of support (cash or asset transfer) received by any of the government or non-government program	
2. No household member over 15 and able to work	
3. Is involved with begging	
4. Living in far distance/in spread geographical area	

SECTION A – DEMOGRAPHIC INFORMATION		
1	Name of the Community/village	[Text]
1a	Word/Union/Sub District/District	
2	Respondent's name	[Text]
3	Other name(s)	[Text]
4	Gender of respondent	Female = 1; Male = 2
5	His/her marital status	Married=1; Unmarried=2; Divorced=3; Abandoned by husband=4; Widow=5; Other (Please Specify) = 6
6	His/her position in this household?	Male Head of Household = 1; Female head of household = 2 Husband = 3; Wife = 4, Child = 5
7	Age of the respondent	Under 18 = 1; 18-35 = 2; 36-50 = 3; >50 = 4
8	Number of household members (including the respondent)	Adult male=1 [Number] Adult female=2 [Number] Youth aged 15-25=3 [Number] Girls aged 15-25=4 [Number] Boys aged 15-25=5 [Number] Boys aged 6-14=6 [Number] Girls aged 6-14=6 [Number] Boys under 5=7 [Number] Girls under 5=8 [Number]
9	Education level of the respondent	No formal education = 1; No formal education but can sign = 2; Below Grade 8 = 3; SSC or equivalent = 4; HSC or equivalent = 5; Graduate or higher = 6
10	Housing Condition	Mud wall and Polyethylene roof=1; Mud wall and entirely thatched=2; Mud wall tiles=3; Both wall and roof by CI sheets=4;

		Others (Please specify)=5
11	Do you or your family have possession and area of homestead land/ cultivable land/water bodies?	Yes=1; No=2 [If NO Skip to Q15]
12	If yes, what do you possess? (Multiple response possible)	Homestead=1; Cultivable land=2; Water body=3, Others=4
13	Size of the land and water body	Homestead in Decimal=1: _____ Cultivable Land in Decimal=2: _____ Water Body In Decimal=3: _____
14	Who owns?	Husband=1; Wife=2; Joint ownership=3; Other [specify]=4
SECTION B – FOOD SECURITY		
15	Does your family rely on a single source of income?	Yes = 1; Not at all = 2; Not sure = 3
16	Who earns the income?	Husband=1; wife=2; Son=3; Daughter=4; Other Please specify=5 [multiple options possible]
16a	Income from what occupation?	Agricultural work (agricultural day laborer) / (agricultural work)/ (own land) (lease land)/(reserve forest)/(others) Vegetable cultivation at home yard Rearing dairy cow (own) (others) Catching fish Cow fattening (own) (others cow) Small business Rearing local chicken Goat rearing (own) Tailoring work Hand crafting Pottery Dry fish making Collecting wood Rickshaw pulling Hawker Collecting dry fish Cultivating crab and pawn Other
16 b	How much earn?	Husband Wife Son Daughter others
16c	Was your family suffer food shortage in past 12 months?	Yes No
17	Is your livelihood/income sufficient to prevent food shortage?	Yes = 1; Not at all = 2; Not sure = 3
18	If “Not at all” how do you cope?	Borrow food from others = 1; Borrow money = 2; Begging = 3; Reduce number of meals a day = 4; Other (Please Specify) = 4
19	Do you/your household depend on external food assistance	Yes = 1; No = 2; Not sure = 3 [If “No” or “Not Sure” Skip to Q 24]
19a	If “Yes” what type of help	Ration Relief Others
20	If “Yes” to what extent (estimate a percentage)	Ration | Amount (yearly)

21	If "Yes" do you ever sell some of this ration?	Yes = 1; No = 2; Not sure = 3 [If "No" or "Not Sure" Skip to Q 24]
22	If "Yes" to what extent (estimate a percentage of the overall amount received)	% Text Field
23	If "Yes" what do you purchase instead? Multiple choice options	Vegetables = 1; Meat = 2; Fish = 3; Clothing = 4; Household items = 5; Personal Hygiene items = 6; Other (Please Specify) = 7
24	In the past 12 months have your household experienced food shortages?	Yes = 1; No = 2; Not sure = 3 [If "No" or "Not Sure" Skip to Q 27]
24a	When did food shortage happen?	Summer Rainy season Autumn Late Autumn Winter Spring
25	If "Yes" is this a regular event, every, week or month or is it a random event?	Regular each week = 1; Regular each month = 2; Random event = 3
26	If "Yes" how has your family/ household coped with such shortages?	Sale of livestock = 1; Sell animal product = 2; Wage labour = 3; Cash for work = 4; Food aid = 5; Get food/cash on credit = 6; Take out a loan = 7; Petty trading = 8; Assistance from relatives/neighbours = 9; Remittances = 10; Everybody strives Borrow money Other (please specify)
26a	If your family fall in shortage then which member of family faces most challenge?	Father Mother Son Daughter Husband Wife Others
26b	For coping up food shortage it take loan or borrow money then who repay?	Father Mother Son Daughter Husband Wife Others
26c	Who take decision to coop with food crises?	Father Mother Son Daughter Husband Wife Others
27	If your family depends on daily wage what is wage rate for male and female	Daily Wage rate for female=1 Text Field; For male=2; Text Field Money without food

28	Is your household prepared for a food crisis?	Yes very much = 1; Yes a little = 2; Not sure = 3; Not at all = 4
29	How would you compare your household's Food security today compared with 12 months ago?	High improvement = 1; Some improvement = 2; No change = 3; Not as good as it was before = 4; Much worse off today = 5
29a	In last 12 month what type of steps should be taken that your family would not face food shortage?	(Opened answer)

SECTION C – PEOPLE's LIVELIHOODS & MARKETS

30	What is your household's <u>main source</u> of income (livelihood) today?	No active livelihood = 1; Agricultural day labourer = 2, Non-agriculture day labourer = 3 Homestead gardening=4 Poultry=5 Cattle rearing=6 Handicraft (Please Specify)=7 Small business=8 Dry fish=9 Goat rearing=10 Rice cultivation=11 Fishing=12 [Multiple option possible but consider that at least one of the selected subsector is the main source of income. If response is 1, 2, or 3 only then stop surveying the household]
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30a	What is the permanent cost of your profession build-up?
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30b	Permanent Cost					
	Serial no.	Input	Total purchased	volume	Rate per unit	Total
30c	What is the current cost of your profession build up (yearly)					
	Current Cost					
	Serial no.	Input	Total purchased	volume	Rate per unit	Total
30c	What is the annual income of your profession?					
	(a)Producing crop	(b)Unit of measure	(c)Quantity produced in last 12 months	(d)Quantity consumed at home	(e)Quantity wasted	(f)market price per unit

31	What are the sources of income for youth member of your family if engaged in any income (livelihood) today?	No active livelihood = 1; Agricultural day labourer = 2, Non-agriculture day labourer = 3 Homestead gardening=4 Poultry=5 Cattle rearing=6 Handicraft (Please Specify)=7 Small business=8 Dry fish=9 Goat rearing=10 Rice cultivation=11 Fishing=12 Other (specify please)=13 [Multiple option possible but consider that at least one of the selected subsector is the main source of income. If response is 1, 2, or 3 only then stop surveying the household]
32	How much do you earn on average from this activity?	Daily=1; BDT Text Field Monthly=2; BDT Text Field Seasonally=3; BDT Text Field Annually=4; BDT Text Field
33	Do you have any secondary occupation?	Yes = 1, No = 2 (If No Skip to Q35)
34	If yes what is that?	1. Option 1(Please specify)=1 2. Option 2 (Please specify)=2 3. Option 3 (Please specify)=3
35	What is your average monthly household income?	BDT Text Field
36	What is your average monthly household expenditure?	BDT Text Field
37	Did you receive any training on this livelihood?	Yes = 1, No = 2 (If No Skip to Q36)
38	If yes, who provided the training?	NGO=1; Women Affairs=2; Department of Youth=3; Department of Agricultural Extension=4; Livestock Department=5; Department of fisheries=6; BSCIC=7; Others (Please Specify)=8
39	What did you learn? <i>Multiple answers possible</i>	Production=1; processing=2; Packaging=3; Marketing=4; Others (Please Specify)=5
40	Are you satisfied with your present form of livelihood?	Yes = 1 (Skip to Q47), No = 2
41	If "No", what problems do you face in your present form of livelihood? <i>Multiple answers possible</i>	Traditional livelihoods are no longer effective/unproductive = 1, Climate characteristics have changed = 2; Damage land due to salinity = 3, Lack of knowledge about climate adaptive livelihood options = 4, Water logging = 5, Flash flood = 6, Loss of land to floods = 7, Lack of skill in managing livelihood options = 8, Lack of demand in markets = 9, No knowledge on how to access markets = 10, Lack of access to extension service providers = 11,

		Lack of capital = 12 , Other (Please specify) = 13
42	Is your livelihood affected by lean period or seasonality?	Yes = 1, No = 2, Not sure = 3 [If "No" or "Not Sure" Skip to Q53]
43	If "Yes", how has it been affected by seasonality?	Loss of wage income=1; loss of income from the business=2; Family members have to go unfed=3; Others (please specify)=4
44	What activities are undertaken to address lean period or seasonality?	Have to borrow money from money lenders for food=1; Sale labour in advance=2; Sale crops in advance=3; Send children to work as domestic help=4; Others (please specify)=7
45	Is your livelihood affected by infrastructure?	Road/transport conditions=1; Telephone service=2; Electric supply=3; Crime/corruption=4; Storage=5; Irrigation facility=6; Others ((Please specify)=7
46	Is your livelihood affected by disaster?	Yes = 1, No = 2, Not sure = 3 (If "No" or "Not Sure" Skip to Q48)
47	If "Yes", how has it been affected in the past?	Reduced yields = 1; Loss of harvest = 2; Fishing interrupted by bad weather = 3; Livestock cannot survive due to weather change = 4; Other (Please specify) = 5
48	Is there any impact of Rohingya influx on your livelihoods?	Yes = 1, No = 2, Not sure = 3 (If "No" or "Not Sure" Skip to Q50)
49	If "Yes", how has it been affected?	Reduction in daily wage rate=1; Price of foods has increased=2; Cost for transportation has increased=3; Number of employment days decreased=4; Number of employment days increased=5; Income increased=6; Business opportunities created=7; Other (Please specify) = 8
50	What are the IGA opportunities that can help you to achieve resilient livelihoods?	Agricultural work (agricultural day laborer) / (agricultural work)/ (own land) (lease land)/(reserve forest)/(others) Vegetable cultivation at home yard Rearing dairy cow (own) (others) Catching fish Cow fattening (own) (others cow) Small business Rearing local chicken Goat rearing (own) Tailoring work Hand crafting Pottery Dry fish making Collecting wood Rickshaw pulling Hawker Collecting dry fish Cultivating crab and pawn Other

50a	Which livelihood is more suitable from your referred livelihoods?	Agricultural work (agricultural day laborer) / (agricultural work)/ (own land) (lease land)/(reserve forest)/(others) Vegetable cultivation at home yard Rearing dairy cow (own) (others) Catching fish Cow fattening (own) (others cow) Small business Rearing local chicken Goat rearing (own) Tailoring work Hand crafting Pottery Dry fish making Collecting wood Rickshaw pulling Hawker Collecting dry fish Cultivating crab and pawn Other
50b	Which are the possible opportunities of your favourite business?	
50c	Which are the possible obstacles of your favourite business?	
50d	How many days your favourite livelihood will run well?	Agricultural work (agricultural day laborer) / (agricultural work)/ (own land) (lease land)/(reserve forest)/(others) Vegetable cultivation at home yard Rearing dairy cow (own) (others) Catching fish Cow fattening (own) (others cow) Small business Rearing local chicken Goat rearing (own) Tailoring work Hand crafting Pottery Dry fish making Collecting wood Rickshaw pulling Hawker Collecting dry fish Cultivating crab and pawn Other
50e	What do you think that how many years you will have run your favourite business in good condition?	Agricultural work (agricultural day laborer) / (agricultural work)/ (own land) (lease land)/(reserve forest)/(others) Vegetable cultivation at home yard Rearing dairy cow (own) (others) Catching fish Cow fattening (own) (others cow) Small business Rearing local chicken Goat rearing (own) Tailoring work Hand crafting Pottery Dry fish making Collecting wood Rickshaw pulling

		Hawker Collecting dry fish Cultivating crab and pawn Other
51	What are the biggest barriers faced by women working in livelihoods? [Multiple responses are recorded but prioritise these will be set based on number responses. For example many mention the same barrier that means it might number one or two problem.]	Conservative attitude within family =1; Lack of decision making ability within their family =2 Low social acceptance=3; Women's lack of capacity to run such IGA=4; Lack of mobility =5; Lack of opportunities to build skills = 6 Lack of access to resources/finance = 7 Others please specify=8
52	Do you think that women should work to increase income?	Yes = 1; No = 2 [If "NO" Skip to Q54]
53	If your response is yes mention the reasons	They can supplement family income=1 They are good at some activities like food processing=2 They can be engaged as paid labour=3 Their unpaid time is transformed into paid time=4 They can assist their husband or son's work=5 Women are just as capable as men in income generation activities work in partnership with other family members to achieve = 6 Others (please specify)=7
54	If your answer is no then mention the reasons	They should not go out for work=1 They may not be able to manage household chores or work effectively=2 People may cheat them=3 They may not negotiate well=4 They should cook and take care of children=5 They are not physically fit for work=6 They may be abused or face sexual harassment=7 Others (please specify)=8
55	What IGAs do you think is suitable for women, considering the local context?	Vermicomposting=1; Seed preservation=2; High nutrient vegetable cultivation=3; Household food processing=4; Native or <i>deshi</i> chicken rearing=5; Others (specify)=6 Please specify [.....]=7
56	If yes, what is the need for women to pursue such IGA?	Training=1; Intensive follow-up support to run IGAs=2; Financial access=3; Knowledge and exposure to markets and actors=4; Collective bargaining through forming and being a member of CBOs=5; Others, please specify=6
57	Do you or any women member of your household go to a local market on a regular basis?	Yes = 1; No = 2 [If "NO" Skip to Q59]
58	Normally, do you (or household members) go to buy or sell?	Buy =1; Sell = 2; Both = 3; Not sure = 4 [Skip to Q70]
59	What is the commodity you purchase on a regular basis? (More than one response possible)	Food = 1; Clothing = 2; Materials to make something with to sell = 3; Livestock = 4; Livestock food = 5;

		Fuel/kerosene = 6; Firewood = 7; Shelter materials = 8; Household items = 9; Personal hygiene products = 10; Others (Please Specify) = 11
60	Do you sell any commodity on a regular basis?	Yes=1; No=2 [If "No Skip to Q60"]
61	If yes, who are your customers? Multiple options possible	Neighbours=1; Villagers=2; Petty traders=3; large traders=4; Others (please specify)=5
62	If yes what commodities you sell?	Snacks/street food=1; Dry fish=2; Salt=3; vegetables=4; Chicken=5; Eggs=6; Goat=7; Milk=8; Puffed rice=9; Bamboo crafts=10; Others (please specify)= 11
63	Unit produced per day /cycle/Season	Please specify in KG _____
64	Production cost/unit	In Taka _____
65	Selling price /unit	In Taka _____
66	Do you pay hut tax while selling products?	Yes=1; No=2 [If No skip to Q68]
67	Do you pay any other fees or tax?	Yes=1; No=2 [If No skip to]
68	What activities are undertaken for marketing of products?	Processing=1; Packaging=2; Transportation=3; Others=4 [please specify]
69	Do you go to more than one local market on a regular basis?	Yes = 1; No = 2 [Skip to Q75]
70	Does any of the women from your household goes to more than one local market on a regular basis?	Yes = 1; No = 2
71	If yes, please mention if she faces any challenge to commute to local markets.	Unsafe roads=1; Unsafe transportation=2; Not much socially accepted=3 Risk of sexual harassment=4 Traders exploit women in terms of allowing fair market price=5 Others, please specify=6
72	Does your women family member have unrestricted access to these markets?	Yes = 1; No = 2
73	Do you face challenges in access markets?	Yes = 1; No = 2 [If "NO"Skip to Q74]
74	In order of priority what are the marketing challenges that you experience?	Lack of transport = 1; High cost of transportation in general = 2; High transport cost at certain seasons = 3;

	<u>Is there a way to allow multiple responses but prioritise these??</u>	Poor village infrastructure (roads, communication network) = 4; Lack of marketing information (varieties, prices, market outlets, quality, quantity, value addition) = 5; Produce is perishable and no preservation knowledge and/or facilities are available = 6; Poor pricing (low, unstable, lack of bargaining power) = 7; No market outlets = 8; Small quantities of produce = 9; Exploitation by brokers/middlemen; Others (Please Specify) = 10
75	Do you (or household member) feel safe in these markets?	Yes = 1; No = 2
76	If no, then what are the causes?	Mugging =1; Unfriendly environment=2; Exploitation=3; Unsafe commute after sunset=4 Others, please specify=5
77	Do you have any regular link with a trader or traders?	Yes = 1; No = 2

SECTION D – FINANCIAL INCLUSION		
78	Does your household have money saved?	Yes = 1; Not at all = 2; Not sure = 3
78a	What type of savings?	Cash Investment Others
79	If “Yes” where do you save your money? Take to financial inclusion	Bank = 1; Community investment group = 2; Jewellery = 3; Livestock = 4; Other (Please Specify) = 5
80	As women do you face any challenges in accessing financial services	Yes = 1; No = 2
81	If yes, what challenges you face?	
82	As men do you face any challenges in accessing financial services	Yes = 1; No = 2
83	If yes, what challenges you face? [Multiple answers possible]	Ownership of assets like land required=1 Collaterals of assets required= 2 High interest rate=3 Lack of credit worthiness=4 Husband does not allow to take loans=5 Lack of capacity to repay loan=6 There is no regular source of income=7 Other (Please Specify) = 8
84	Do you get credit/ financial services as per your requirement?	Yes=1; No=2
85	If “Yes” what are sources? [Multiple answers possible]	Relatives =1; friends=2; Money lender = 3; Microfinance- 4; Input Suppliers=5; Buyers of your product=6; Other (lease Specify) = 5
86	Do you have any loan at the moment	Yes=1; If yes please mention the size of the current loan _____; No=2 [if No Skip to 89]
87	If yes what is the annual interest rate?	Please specify _____ %
88	Is any women member of your family have any loan at the moment?	Yes=1; If yes please mention the size of the current loan _____;

		No=2 [if No Skip to 86]
89	What risk involved in managing finance?	Pick-pocketing while travelling=1, stealing=2; snatching=3; loss of capital due to death of birds/animal purchased with borrowed money=4; Others (specify)=5
90	What are the challenges in receiving financial access for ultra-poor? <u>Is there a way to allow multiple responses but prioritise these??</u>	Complicated procedure=1; Lack of understanding of loan interest and payment =2; Lack of collateral=3; Unable to pay instalment on time=4; The amount of loan is very small=5; Staff of the organizations are not supportive to the poor=6; Loan facilities far from my home=7; Others, please specify=8;
91	Do Ultra-poor (women face any specific challenges in accessing financial services? <u>Is there a way to allow multiple responses but prioritise these??</u>	Complicated procedure=1; Lack of understanding of loan interest and payment =2; Lack of collateral=3; Unable to pay instalment on time=4; The amount of loan is very small=5; Staff of the organizations are not supportive to the poor=6; Loan facilities far from my home=7; Women perceived as a risk customer - 8 Others, please specify=9;

E – GENDER & SOCIAL EMPOWERMENT		
92	Do women in your household contribute to family livelihood e.g. washing, cleaning, sorting?	Yes = 1, No = 2 (Skip to Q95)
93	If “Yes” are they able to benefit from their livelihoods activities. I.e. Are women paid or unpaid for their work?	Yes = 1, No = 2
93a	Whether women get or do not get wage for their work?	Yes No
94	If “Yes” what is the <u>main activity</u> within the value chain they do?	Production=1 Preservation=2 Processing=3 Packaging=4 Marketing=5 Other (Please specify) = 6 [Multiple option possible]
95	Who is responsible for making major decisions (i.e. what is generally accepted in this community) in your household?	Male head of household = 1; Female head of household = 2; Husband = 3; Wife = 4; Joint decision making = 5; Other (Please Specify)
96	Who makes decisions about how money is spent in your household?	Male head of household = 1; Female head of household = 2; Husband = 3; Wife = 4; Joint decision making = 5; Other (Please Specify)
97	Who decides on major purchases (livestock, land...) in your household?	Male head of household = 1; Female head of household = 2; Husband = 3; Wife = 4; Joint decision making = 5; Other (Please Specify)
98	Who decides on schooling/education in your household?	Male head of household = 1; Female head of household = 2; Husband = 3; Wife = 4;

		Joint decision making = 5; Other (Please Specify)
99	How would you describe your economic situation today compared with 12 months ago?	Much better off = 1; Better off = 2; Same as before = 3; Worse today = 4; Much worse today = 5
100	How would you describe your social situation today compared with 12 months ago?	Much better off = 1; Better off = 2; Same as before = 3; Worse = 4; Much worse = 5
101	Are you or a member of your household involved in any organisation?	Yes=1; No=2
102	If yes please mention the type of organisation	NGO organised group=1; Women Affairs organised groups=2; Other (please specify)=3
103	Who decides on availing loans?	Husband=1; Wife=2; Joint decision=3; Other [Specify]=4
104	Who decides on marriage of children from the household?	Husband=1; Wife=2; Joint decision=3; Own(children)=4 Household Head=5 Other [Specify]=6
105 a	Do you participate in social and community programme?	Yes No
105	Who decides on participation in social and community programs?	Husband=1; Wife=2; Joint decision=3; Other [Specify]=4
106	Do you think the women of your household can move freely within the village/community?	Yes No
107	If no, please mention the reason:	Social norms does not accept free movement of women=1; It is not safe for women to freely move in the village=2; Religious aspects does not allow them=3; Women are vulnerable to sexual harassment and should stay at home=4; Others, please specify=5
108	Are there practices of child marriage in your community?	Yes=1; No=2
109	Are you aware of laws that restrict child marriage?	Yes=1; No=2
110	Are there practices of dowry in your community?	Yes=1; No=2
110 a	Are there any occurrences of sexual harassment in your community?	Yes No
111	If any occurrence of sexual harassment happens, what do you do?	Report to police=1; Report to Union Parishad=2 Go to village leaders=3 Do not report as it is a matter of prestige=4 Others [please specify]=5

Annex 7: Quantitative Survey Data Tables

Mandatory criteria for direct participants:

	Union Name														Upazila Name				Gender				Total	
	Baharc hara		HNila		Jaliap along		Palo ngkh ali	Rajap along		Rotn apalo ng	Teknaf		Whyk ong		Tekna f		Ukhia		Femal e		Male			
	N o	Y es	N o	Y es	N o	Y es	Yes	N o	Ye s	Yes	N o	Y es	N o	Y es	N o	Y es	N o	Y es	N o	Y es	N o	Y es	N o	Y es
Are you interested in participating in this survey?	0 %	10 %	0 %	10 %	0 %	10 %	100%	0 %	10 %	100%	0 %	10 %	0 %	10 %	0 %	10 %	0 %	10 %	0 %	10 %	0 %	10 %	0 %	10 %
Less than <20 decimals of land (607.5 – 810sqm)	0 %	10 %	0 %	10 %	0 %	10 %	100%	0 %	10 %	100%	0 %	10 %	0 %	10 %	0 %	10 %	0 %	10 %	0 %	10 %	0 %	10 %	0 %	10 %
Irregular source (no regular work to earn income consistently) of income	0 %	10 %	0 %	10 %	0 %	10 %	100%	2 %	98 %	100%	0 %	10 %	4 %	96 %	1 %	99 %	1 %	99 %	1 %	99 %	1 %	99 %	1 %	99 %
Permanent residence one village (at least last one year)	0 %	10 %	0 %	10 %	0 %	10 %	100%	0 %	10 %	100%	0 %	10 %	0 %	10 %	0 %	10 %	0 %	10 %	0 %	10 %	0 %	10 %	0 %	10 %
Participant over 18 years of age (one participants per household)	0 %	10 %	0 %	10 %	0 %	10 %	100%	0 %	10 %	100%	0 %	10 %	0 %	10 %	0 %	10 %	0 %	10 %	0 %	10 %	0 %	10 %	0 %	10 %
Participant have National ID Card	0 %	10 %	0 %	10 %	0 %	10 %	100%	0 %	10 %	100%	0 %	10 %	0 %	10 %	0 %	10 %	0 %	10 %	0 %	10 %	0 %	10 %	0 %	10 %
Monthly income below 5000?	4 %	96 %	1 6 %	84 %	2 %	98 %	100%	0 %	10 %	100%	1 0 %	90 %	7 %	93 %	9 %	91 %	1 %	99 %	4 %	96 %	7 %	93 %	5 %	95 %
Is there at least one of the working people over the age of 15 years?	0 %	10 %	0 %	10 %	0 %	10 %	100%	0 %	10 %	100%	0 %	10 %	0 %	10 %	0 %	10 %	0 %	10 %	0 %	10 %	0 %	10 %	0 %	10 %

Exclusion Criteria of direct participant	Union Name								Upazila Name		Gender		Total
	Baharc hara	HNila	Jaliapal ong	Palongk hali	Rajapal ong	Rotnapal ong	Teknaf	Whykon g	Teknaf	Ukhia	Fe mal e	Mal e	
	No	No	No	No	No	No	No	No	No	No	No	No	No
Similar type of support (cash or asset transfer) received by any of the government or non-government program	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Is involved with begging	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Living in far distance/in spread geographical area	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Gender of the respondent

	Union Name								Upazila Name		Gender		Total
	Baharchar a	HNila	Jaliapalon g	Palongkhal i	Rajapalon g	Rotnapalon g	Teknaf	Whykon g	Teknaf	Ukhia	Female	Male	
Female	80%	78%	76%	80%	90%	88%	76%	89%	81%	84%	100%	0%	82%
Male	20%	22%	24%	20%	10%	12%	24%	11%	19%	16%	0%	100%	18%
Total	49	50	51	44	52	51	50	46	195	198	323	70	393

Marital status

	Union Name								Upazila Name		Gender		Total
	Baharcha ra	HNila a	Jaliapalo ng	Palongkhal ali	Rajapalo ng	Rotnapalo ng	Teknaf	Whykon g	Teknaf af	Ukhia a	Femal e	Mal e	Tot al
Divorce	2%	2%	0%	2%	4%	2%	2%	2%	2%	2%	2%	0%	2%
Married	76%	82%	84%	84%	77%	84%	76%	76%	77%	82%	78%	90%	80%
Rejected by Husband/spouse (separated)	10%	4%	6%	11%	4%	6%	6%	11%	8%	7%	8%	1%	7%
Unmarried	2%	6%	4%	0%	6%	0%	0%	4%	3%	3%	2%	7%	3%
Widow	10%	6%	6%	2%	10%	8%	16%	7%	10%	7%	10%	1%	8%
Total	49	50	51	44	52	51	50	46	195	198	323	70	393

His/her position in this household (Ref. Q6)

	Union Name								Upazila Name		Gender		Total
	Baharchar a	HNila	Jaliapalo ng	Palongkhali	Rajapalong	Rotnapalo ng	Teknaf	Whyk ong	Tekna f	Ukhi a	Femal e	Mal e	
Child	6%	4%	4%	2%	6%	0%	2%	4%	4%	3%	3%	6%	4%
Daughter in law	4%	0%	0%	0%	0%	0%	0%	0%	1%	0%	1%	0%	1%
Female head of household	18%	14%	18%	20%	15%	24%	22%	22%	19%	19%	23%	0%	19%
Husband	8%	0%	6%	5%	4%	6%	4%	0%	3%	5%	5%	0%	4%
Male Head of Household	24%	22%	18%	20%	10%	14%	40%	13%	25%	15%	4%	93 %	20%
Wife	39%	60%	55%	52%	65%	57%	32%	61%	48%	58%	64%	1%	53%
Total	49	50	51	44	52	51	50	46	195	198	323	70	393

Age of the respondent (Ref. Q7)

	Union Name								Upazila Name		Gender		Total
	Baharch ara	HNila	Jaliapalo ng	Palongk hali	Rajapalo ng	Rotnapalo ng	Tekna f	Whyko ng	Teknaf	Ukhi a	Female	Mal e	
>50	14%	2%	2%	11%	0%	4%	8%	2%	7%	4%	3%	16%	5%
18-35	67%	64%	61%	64%	79%	53%	70%	59%	65%	64%	64%	66%	65%
36-50	18%	34%	37%	25%	21%	43%	22%	39%	28%	32%	33%	19%	30%
Total	49	50	51	44	52	51	50	46	195	198	323	70	393

Average Family Member (Ref. Q8)	Union Name								Upazila Name		Gender		Total
	Baharc hara	HNila	Jaliapa long	Palong khali	Rajapa long	Rotna palong	Teknaf	Whyko ng	Teknaf	Ukhia	Femal e	Male	
Total Male Family Member	2.0	2.0	2.0	2.0	2.0	2.0	2.0	3.0	2.0	2.0	2.0	3.0	2.0
Total Female Family Member	2.0	3.0	2.0	3.0	2.0	2.0	2.0	3.0	2.0	2.0	2.0	2.0	2.0
Total Family Member	5.0	5.0	5.0	5.0	4.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	5.0
0-5 years (Male)	1.0	0.0	0.0	1.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
0-5 years (Female)	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6-14 years (Male)	1.0	1.0	1.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
6-14 years (Female)	1.0	1.0	1.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	1.0
15-25 years (Male)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15-25 years (Female)	1.0	0.0	0.0	1.0	0.0	1.0	0.0	0.0	0.0	1.0	0.0	1.0	1.0
26-35 years (Male)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26-35 years (Female)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

36-50 years (Male)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36-50 years (Female)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
>50 years (Male)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
>50 years (Female)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Education level of the respondent (Ref. Q9)

	Union Name								Upazila Name		Gender		Total
	Baharch ara	HNila	Jaliapalo ng	Palongk hali	Rajapalo ng	Rotnapal ong	Teknaf	Whykon g	Teknaf	Ukhia	Femal e	Male	
Below Grade 8	33%	44%	45%	43%	48%	25%	24%	33%	33%	40%	36%	40%	37%
No formal education	10%	2%	8%	9%	4%	18%	26%	15%	13%	10%	10%	20%	11%
No formal education but can sign	53%	54%	45%	48%	48%	53%	48%	50%	51%	48%	52%	39%	50%
SSC or equivalent	4%	0%	2%	0%	0%	4%	2%	2%	2%	2%	2%	1%	2%
Total	49	50	51	44	52	51	50	46	195	198	323	70	393

Housing Condition (Ref. Q10)

	Union Name								Upazila Name		Gender		Total
	Baharc hara	HNila	Jaliap along	Palong khali	Rajap along	Rotnapa long	Teknaf	Whyko ng	Teknaf	Ukhia	Female	Male	
Bamboo walls and top (roof) paper / polythene	67%	84%	61%	23%	31%	16%	80%	37%	68%	33%	50%	53%	50%
Ce sheet both wall and ceiling	2%	0%	0%	0%	0%	0%	0%	2%	1%	0%	1%	0%	1%
Chaff with clay walls and roof complete straw	2%	6%	8%	9%	13%	27%	4%	17%	7%	15%	11%	10%	11%
Cottage walls and roof tiles	0%	0%	0%	5%	0%	2%	0%	0%	0%	2%	1%	0%	1%
Other	29%	10%	14%	23%	46%	31%	4%	22%	16%	29%	22%	23%	22%
Soil walls and polythene roofs	0%	0%	18%	41%	10%	24%	12%	22%	8%	22%	15%	14%	15%
Total	49	50	51	44	52	51	50	46	195	198	323	70	393

Do you or your family have possession and area of homestead land/ cultivable land/water bodies? (Ref. Q11)

	Union Name								Upazila Name		Gender		Total
	Baharchara	HNila	Jaliapalong	Palongkhali	Rajapalong	Rotnapalong	Teknaf	Whykong	Teknaf	Ukhia	Female	Male	
No	14%	4%	33%	43%	25%	20%	18%	4%	10%	30%	20%	21%	20%
Yes	86%	96%	67%	57%	75%	80%	82%	96%	90%	70%	80%	79%	80%
Total	49	50	51	44	52	51	50	46	195	198	323	70	393

If yes, what do you possess? (Ref. Q12)

	Union Name								Upazila Name		Gender		Total
	Baharchara	HNila	Jaliapalong	Palongkhali	Rajapalong	Rotnapalong	Teknaf	Whykong	Teknaf	Ukhia	Female	Male	
Homestead	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Cultivable land	0%	0%	3%	8%	3%	0%	0%	0%	0%	3%	0%	5%	1%
Base	42	48	34	25	39	41	41	44	175	139	259	55	314

Average Size of the Land in Decimal (Ref. Q13)

	Union Name								Upazila Name		Gender		Total
	Baharchara	HNila	Jaliapalong	Palongkhali	Rajapalong	Rotnapalong	Teknaf	Whykong	Teknaf	Ukhia	Female	Male	
Average Homestead in Decimal	7.4	3.3	5.9	10.0	8.5	8.1	9.0	4.4	5.9	8.0	6.9	6.7	6.8
Average Cultivable Land in Decimal	.	.	10.0	8.5	120.0	.	.	.	.	36.8	10.0	45.7	36.8

Who owns? (Ref. Q14)

	Union Name								Upazila Name		Gender		Total
	Baharchara	HNila	Jaliapalong	Palongkhali	Rajapalong	Rotnapalong	Teknaf	Whykong	Teknaf	Ukhia	Female	Male	
Husband	7%	31%	29%	32%	8%	39%	17%	43%	25%	27%	31%	2%	26%
Wife	2%	2%	3%	4%	0%	2%	7%	0%	3%	2%	2%	5%	3%
Joint ownership	5%	6%	3%	0%	3%	15%	12%	9%	8%	6%	6%	13%	7%
Self	10%	23%	9%	20%	3%	15%	24%	2%	15%	11%	9%	31%	13%
Father	14%	4%	3%	0%	3%	0%	10%	7%	9%	1%	5%	9%	5%
Father in law	21%	8%	12%	0%	3%	10%	17%	11%	14%	6%	12%	4%	11%
Government	0%	10%	41%	40%	82%	17%	0%	7%	5%	45%	21%	29%	23%
Brother	2%	0%	0%	0%	0%	0%	7%	14%	6%	0%	4%	0%	3%
Mother	7%	0%	0%	0%	0%	0%	0%	2%	2%	0%	1%	4%	1%
Mother in law	7%	13%	3%	0%	0%	0%	0%	0%	5%	1%	4%	0%	3%
Others	24%	6%	3%	4%	0%	2%	10%	5%	11%	2%	7%	5%	7%
Sister in law	0%	0%	0%	0%	0%	0%	2%	0%	1%	0%	0%	0%	0%
Base	42	48	34	25	39	41	41	44	175	139	259	55	314

Does your family rely on a single source of income? (Ref. Q15)

	Union Name								Upazila Name		Gender		Total
	Baharchara	HNila	Jaliapalong	Palongkhali	Rajapalong	Rotnapalong	Teknaf	Whykong	Teknaf	Ukhia	Female	Male	
No	10%	10%	18%	20%	13%	8%	14%	4%	10%	15%	12%	11%	12%
Yes	90%	90%	82%	80%	87%	92%	86%	96%	90%	85%	88%	89%	88%
Total	49	50	51	44	52	51	50	46	195	198	323	70	393

Did your family face food shortage in the last 12 months? (Ref. Q16b)

	Union Name								Upazila Name		Gender		Total
	Baharchara	HNila	Jaliapalong	Palongkhali	Rajapalong	Rotnapalong	Teknaf	Whykong	Teknaf	Ukhia	Female	Male	
No	0%	2%	2%	2%	4%	10%	0%	4%	2%	5%	3%	4%	3%
Yes	100%	98%	98%	98%	96%	90%	100%	96%	98%	95%	97%	96%	97%

Total	49	50	51	44	52	51	50	46	195	198	323	70	393
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Is your livelihood/income sufficient to prevent food shortage? (Ref. Q17)

	Union Name								Upazila Name		Gender		Total
	Baharchara	HNila	Jaliapalong	Palongkhali	Rajapalong	Rotnapalong	Teknaf	Whykong	Teknaf	Ukhia	Female	Male	
Not at all	88%	94%	96%	86%	100%	91%	88%	89%	90%	94%	92%	90%	92%
Not sure	8%	4%	0%	7%	0%	4%	2%	5%	5%	3%	3%	6%	4%
Yes	4%	2%	4%	7%	0%	4%	10%	7%	6%	4%	5%	4%	5%
Total	49	49	50	43	50	46	50	44	192	189	314	67	381

how do you cope? (Ref. Q18)

	Union Name								Upazila Name		Gender		Total
	Baharchara	HNila	Jaliapalong	Palongkhali	Rajapalong	Rotnapalong	Teknaf	Whykong	Teknaf	Ukhia	Female	Male	
Borrow food from others	25	42	28	23	34	29	21	30	118	114	195	37	232
Borrow money	41	46	37	31	43	34	37	39	163	145	252	56	308
Reduce number of meals a day	3	13	11	11	6	14	2	1	19	42	50	11	61
Others	2	0	5	1	5	1	2	0	4	12	15	1	16

Do you/your household depend on external food assistance (Ref. Q19)

	Union Name								Upazila Name		Gender		Total
	Baharchara	HNila	Jaliapalong	Palongkhali	Rajapalong	Rotnapalong	Teknaf	Whykong	Teknaf	Ukhia	Female	Male	
No	88%	92%	98%	93%	94%	92%	72%	85%	84%	94%	89%	91%	89%
Not sure	10%	4%	2%	2%	0%	2%	12%	7%	8%	2%	5%	4%	5%
Yes	2%	4%	0%	5%	6%	6%	16%	9%	8%	4%	6%	4%	6%
Total	49	50	51	44	52	51	50	46	195	198	323	70	393

Do you/your household depend on external food assistance (Ref. Q19)

	Union Name								Upazila Name		Gender		Total
	Baharchara	HNila	Jaliapalong	Palongkhali	Rajapalong	Rotnapalong	Teknaf	Whykong	Teknaf	Ukhia	Female	Male	
Ration	0%	100%	0%	100%	100%	33%	75%	25%	60%	75%	60%	100%	65%
Tran	0%	0%	0%	0%	0%	33%	63%	75%	53%	13%	35%	67%	39%
Other	100%	0%	0%	0%	0%	67%	13%	50%	27%	25%	30%	0%	26%
Base	1	2	0	2	3	3	8	4	15	8	20	3	23

If "Yes" to what extent (Ref. Q20) Average

	Union Name								Upazila Name		Gender		Total
	Baharchara	HNila	Jaliapalong	Palongkhali	Rajapalong	Rotnapalong	Teknaf	Whykong	Teknaf	Ukhia	Female	Male	
Money (Yearly)	.	.	.	.	.	.	24,000	.	24,000	.	24,000	.	24,000
Rice (Yearly)	50	110	.	190	60	80	144	260	158	107	162	33	142

If "Yes" do you ever sell some of this ration? (Ref. Q21)

	Union Name								Upazila Name		Gender		Total
	Baharchara	HNila	Jaliapalong	Palongkhali	Rajapalong	Rotnapalong	Teknaf	Whykong	Teknaf	Ukhia	Female	Male	
No	100%	100%	0%	100%	100%	100%	100%	75%	93%	100%	95%	100%	96%
Not Sure	0%	0%	0%	0%	0%	0%	0%	25%	7%	0%	5%	0%	4%
Yes	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Base	1	2	0	2	3	3	8	4	15	8	20	3	23

In the past 12 months has your household experienced food shortages? (Ref. Q24)

	Union Name								Upazila Name		Gender		Total
	Baharchara	HNila	Jaliapalong	Palongkhali	Rajapalong	Rotnapalong	Teknaf	Whykong	Teknaf	Ukhia	Female	Male	
No	2%	2%	0%	2%	2%	12%	0%	0%	1%	4%	2%	4%	3%
Not sure	0%	0%	0%	0%	0%	2%	0%	0%	0%	1%	0%	0%	0%
Yes	98%	98%	100%	98%	98%	86%	100%	100%	99%	95%	98%	96%	97%
Total	49	50	51	44	52	51	50	46	195	198	323	70	393

Had there been a food crisis? (Ref. Q24a)

	Union Name								Upazila Name		Gender		Total
	Baharchar a	HNil a	Jaliapalon g	Palongkhal i	Rajapalon g	Rotnapalon g	Tekna f	Whykon g	Tekna f	Ukhi a	Femal e	Mal e	
Summer	23%	20%	4%	2%	8%	5%	26%	11%	20%	5%	12%	15%	13%
Monsoon	81%	100%	96%	98%	96%	98%	82%	100%	91%	97%	94%	91%	94%
Autumn	6%	6%	2%	2%	4%	2%	8%	9%	7%	3%	5%	4%	5%
Hemant	4%	6%	2%	2%	2%	2%	8%	7%	6%	2%	4%	3%	4%
Winter	19%	6%	6%	5%	2%	2%	24%	7%	14%	4%	10%	4%	9%
Spring	13%	8%	4%	7%	4%	7%	18%	7%	11%	5%	8%	9%	8%
Other	0%	0%	2%	0%	2%	0%	2%	0%	1%	1%	1%	0%	1%
Base	48	49	51	43	51	44	50	46	193	189	315	67	382

If “Yes” is this a regular event every week or month or is it a random event? (Ref. Q25)

	Union Name								Upazila Name		Gender		Total
	Baharchar a	HNil a	Jaliapalon g	Palongkhal i	Rajapalon g	Rotnapalon g	Tekna f	Whykon g	Tekna f	Ukhi a	Femal e	Mal e	
Random event	58%	49%	96%	86%	90%	86%	66%	76%	62%	90%	76%	75%	76%
Regular each month	42%	18%	4%	7%	10%	7%	30%	24%	28%	7%	18%	16%	18%
Regular each week	0%	33%	0%	7%	0%	7%	4%	0%	9%	3%	6%	9%	6%
Base	48	49	51	43	51	44	50	46	193	189	315	67	382

If “Yes” how has your family/ household coped with such shortages? (Ref. Q26)

	Union Name								Upazila Name		Gender		Total
	Baharchar a	HNil a	Jaliapalon g	Palongkhal i	Rajapalon g	Rotnapalon g	Tekna f	Whykon g	Tekna f	Ukhi a	Femal e	Mal e	
Wage labour	2%	4%	10%	2%	2%	7%	8%	0%	4%	5%	5%	0%	4%
Cash for work	8%	4%	14%	7%	8%	16%	6%	11%	7%	11%	10%	7%	9%
Food aid	2%	4%	14%	9%	4%	14%	8%	7%	5%	10%	8%	6%	8%
Get food/cash on credit	40%	45%	47%	47%	76%	52%	28%	63%	44%	56%	50%	51%	50%
Take out a loan	2%	16%	6%	0%	6%	0%	2%	26%	11%	3%	6%	15%	7%

Petty trading	0%	0%	2%	0%	0%	0%	2%	4%	2%	1%	1%	1%	1%
Assistance from relatives/neighbours	23%	37%	39%	19%	35%	30%	32%	50%	35%	31%	33%	34%	33%
Remittances	0%	0%	0%	0%	0%	0%	2%	0%	1%	0%	0%	0%	0%
Borrow money	94%	94%	73%	84%	92%	82%	84%	93%	91%	83%	85%	97%	87%
Everyone does not eat	2%	4%	12%	21%	8%	14%	4%	7%	4%	13%	10%	4%	9%
Other	4%	0%	6%	2%	4%	7%	8%	0%	3%	5%	4%	3%	4%
Base	48	49	51	43	51	44	50	46	193	189	315	67	382

If your family falls in shortage then which member of your family faces most challenges? (Ref. Q26a)

	Union Name								Upazila Name		Gender		Total
	Baharchara	HNila	Jaliapalong	Palongkhali	Rajapalong	Rotnapalong	Teknaf	Whykong	Teknaf	Ukhia	Female	Male	
Father	0%	0%	2%	0%	4%	0%	2%	4%	2%	2%	1%	3%	2%
Mother	2%	8%	6%	16%	12%	14%	8%	7%	6%	12%	9%	9%	9%
Boy	2%	0%	0%	0%	0%	0%	4%	2%	2%	0%	1%	1%	1%
Girl	2%	2%	2%	0%	2%	5%	2%	0%	2%	2%	2%	1%	2%
Husband	21%	57%	12%	16%	20%	20%	20%	22%	30%	17%	21%	36%	24%
Wife	48%	78%	65%	63%	49%	45%	56%	67%	62%	56%	57%	69%	59%
Nijer	44%	16%	33%	30%	35%	27%	32%	20%	28%	32%	30%	28%	30%
Base	48	49	51	43	51	44	50	46	193	189	315	67	382

For coping up food shortage it take loan or borrow money then who repay? (Ref. Q26c)

	Union Name								Upazila Name		Gender		Total
	Baharchara	HNila	Jaliapalong	Palongkhali	Rajapalong	Rotnapalong	Teknaf	Whykong	Teknaf	Ukhia	Female	Male	
Father	4%	0%	0%	0%	4%	0%	2%	4%	3%	1%	2%	3%	2%
Mother	0%	4%	0%	7%	6%	2%	2%	4%	3%	4%	4%	0%	3%
Husband	63%	78%	75%	49%	69%	68%	62%	65%	67%	66%	69%	55%	66%
Wife	6%	6%	2%	30%	6%	7%	14%	15%	10%	11%	12%	4%	10%
Boy	8%	2%	4%	2%	2%	9%	4%	7%	5%	4%	4%	6%	5%
Girl	4%	2%	0%	0%	0%	2%	0%	0%	2%	1%	1%	0%	1%
Other	23%	14%	22%	30%	20%	16%	22%	13%	18%	22%	16%	37%	20%
Base	48	49	51	43	51	44	50	46	193	189	315	67	382

Who take decision to coop with food crises? (Ref. Q26d)

	Union Name								Upazila Name		Gender		Total
	Baharchara	HNila	Jaliapalong	Palongkhali	Rajapalong	Rotnapalong	Teknaf	Whykong	Teknaf	Ukhia	Female	Male	
Father	6%	0%	2%	0%	4%	0%	4%	4%	4%	2%	2%	4%	3%
Mother	4%	4%	2%	5%	6%	7%	2%	4%	4%	5%	5%	0%	4%
Husband	65%	80%	71%	51%	69%	75%	58%	67%	67%	67%	69%	60%	67%
Wife	35%	35%	29%	30%	31%	39%	30%	28%	32%	32%	34%	24%	32%
Boy	4%	2%	4%	2%	0%	7%	6%	2%	4%	3%	3%	6%	3%
Girl	4%	2%	0%	0%	0%	5%	0%	0%	2%	1%	2%	0%	1%
Nijei	23%	14%	29%	44%	27%	11%	22%	13%	18%	28%	21%	33%	23%
Base	48	49	51	43	51	44	50	46	193	189	315	67	382

If your family depends on daily wage what is wage rate for male and female (Ref. Q27)

	Union Name								Upazila Name		Gender		Total
	Baharchara	HNila	Jaliapalong	Palongkhali	Rajapalong	Rotnapalong	Teknaf	Whykong	Teknaf	Ukhia	Female	Male	
Daily Wage rate for female (with food)	190	200	194	145	158	170	205	134	180	167	171	175	171
Daily Wage rate for female (without food)	275	127	212	180	206	231	230	175	207	207	203	270	207
Daily Wage rate for For male (with food)	293	305	275	269	299	330	363	320	327	295	309	311	309
Daily Wage rate for For male (without food)	347	313	310	296	348	375	432	362	358	337	346	355	347

Is your household prepared for a food crisis? (Ref. Q28)

	Union Name								Upazila Name		Gender		Total
	Baharchara	HNila	Jaliapalong	Palongkhali	Rajapalong	Rotnapalong	Teknaf	Whykong	Teknaf	Ukhia	Female	Male	
Not at all	84%	94%	98%	98%	100%	76%	72%	85%	84%	93%	88%	89%	88%
Not sure	10%	4%	0%	2%	0%	20%	18%	11%	11%	6%	8%	9%	8%
Yes a little	6%	2%	2%	0%	0%	4%	10%	4%	6%	2%	4%	3%	4%
Total	49	50	51	44	52	51	50	46	195	198	323	70	393

How would you compare your household's Food security today compared with 12 months ago? (Ref. Q29)

	Union Name								Upazila Name		Gender		Total
	Baharchara	HNila	Jaliapalong	Palongkhali	Rajapalong	Rotnapalong	Teknaf	Whykong	Teknaf	Ukhia	Female	Male	
Much worse off today	27%	44%	10%	32%	13%	22%	32%	24%	32%	19%	27%	19%	25%
No change	22%	14%	31%	11%	17%	29%	26%	26%	22%	23%	19%	37%	22%
Not as good as it was before	22%	38%	51%	57%	69%	41%	14%	35%	27%	55%	43%	31%	41%
Some improvement	29%	4%	8%	0%	0%	8%	28%	15%	19%	4%	11%	13%	11%
Total	49	50	51	44	52	51	50	46	195	198	323	70	393

What is your household's main source of income (livelihood) today? (Ref. Q30)

	Union Name								Upazila Name		Gender		Total
	Baharchara	HNila	Jaliapalong	Palongkhali	Rajapalong	Rotnapalong	Teknaf	Whykong	Teknaf	Ukhia	Female	Male	
Farming (Day Labor)	37%	40%	27%	23%	17%	31%	40%	43%	40%	25%	31%	39%	32%
Farming (lease land)	2%	0%	4%	5%	6%	2%	2%	4%	2%	4%	3%	4%	3%
Farming (reserved forest)	6%	0%	2%	2%	4%	6%	2%	2%	3%	4%	3%	4%	3%
Fattening cattle (Other people's cows)	0%	0%	2%	0%	0%	0%	0%	0%	0%	1%	0%	1%	0%
Ferryman	0%	2%	0%	2%	2%	0%	2%	2%	2%	1%	1%	3%	1%
fishing	33%	12%	4%	0%	0%	0%	22%	2%	17%	1%	7%	17%	9%
Handicrafts	0%	2%	0%	0%	0%	2%	0%	0%	1%	1%	1%	0%	1%

House maid	0%	0%	0%	0%	0%	6%	2%	0%	1%	2%	1%	0%	1%
Keeping local chickens	0%	0%	2%	0%	0%	0%	4%	0%	1%	1%	1%	0%	1%
Non-agricultural day labor	16%	30%	35%	34%	56%	35%	16%	24%	22%	40%	33%	20%	31%
Other	2%	4%	2%	7%	2%	4%	2%	13%	5%	4%	5%	3%	4%
Rickshaw	0%	6%	12%	7%	13%	8%	2%	4%	3%	10%	8%	1%	7%
Small business	0%	2%	2%	2%	0%	6%	2%	2%	2%	3%	2%	1%	2%
Tailoring	4%	2%	0%	2%	0%	0%	2%	2%	3%	1%	2%	1%	2%
Vegetable farming in the house courtyard	0%	0%	0%	2%	0%	0%	0%	0%	0%	1%	0%	0%	0%
Wood collection	0%	0%	8%	14%	0%	0%	2%	0%	1%	5%	2%	4%	3%
Total	49	50	51	44	52	51	50	46	195	198	323	70	393

What are the sources of income for youth member of your family if engaged in any income (livelihood) today? (Ref. Q31)

	Union Name								Upazila Name		Gender		Total
	Baharchara	HNil a	Jaliapalong	Palongkhali	Rajapalong	Rotnapalong	Teknaf	Whykong	Teknaf	Ukhia	Female	Male	
Farming (Farm Day Workers)	2%	2%	2%	0%	2%	6%	2%	4%	3%	3%	3%	1%	3%
Farming (Land Acquired)	0%	0%	0%	0%	0%	2%	0%	0%	0%	1%	0%	0%	0%
Vegetable farming in the house courtyard	2%	0%	0%	0%	2%	0%	0%	0%	1%	1%	1%	0%	1%
Milk cows (custom)	4%	14%	0%	0%	2%	2%	0%	4%	6%	1%	3%	4%	3%
Milk cow (cow's cow)	0%	0%	0%	0%	2%	0%	0%	0%	0%	1%	0%	0%	0%
fishing	8%	0%	0%	0%	0%	0%	6%	0%	4%	0%	1%	4%	2%
Cow fatat (cow's cow)	2%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%
Small business	0%	10%	2%	0%	2%	2%	0%	0%	3%	2%	2%	1%	2%
Keeping local chickens	4%	14%	0%	0%	2%	0%	2%	4%	6%	1%	3%	3%	3%
Keeping goats (custom)	4%	16%	0%	0%	2%	2%	0%	4%	6%	1%	4%	3%	4%
Tailoring	4%	4%	0%	0%	0%	0%	0%	2%	3%	0%	2%	0%	1%
Wood collection	0%	0%	0%	14%	0%	0%	0%	0%	0%	3%	1%	3%	2%
Run rickshaw	0%	4%	0%	0%	0%	6%	0%	2%	2%	2%	1%	3%	2%

There is no youth	69%	68%	78%	77%	83%	63%	58%	83%	69%	75%	72%	71%	72%
Kono kaj kore na	14%	0%	10%	5%	10%	20%	30%	9%	13%	11%	12%	11%	12%
Non-Agriculture day labor	2%	2%	6%	5%	2%	8%	0%	0%	1%	5%	4%	0%	3%
Shop assistant	0%	0%	2%	0%	0%	0%	2%	0%	1%	1%	0%	1%	1%
Student	0%	6%	0%	0%	2%	2%	0%	0%	2%	1%	1%	1%	1%
Total	49	50	51	44	52	51	50	46	195	198	323	70	393

Do you have any secondary occupation? (Ref. Q33)

	Union Name								Upazila Name		Gender		Total
	Baharchara	HNila	Jaliapalong	Palongkhali	Rajapalong	Rotnapalong	Teknaf	Whykong	Teknaf	Ukhia	Female	Male	
No	84%	86%	71%	75%	88%	94%	66%	83%	79%	82%	83%	70%	81%
Yes	16%	14%	29%	25%	12%	6%	34%	17%	21%	18%	17%	30%	19%
Total	49	50	51	44	52	51	50	46	195	198	323	70	393

What is your average monthly household Income & expenditure? (Ref. Q35 & Q36)

	Union Name								Upazila Name		Gender		Total
	Baharchara	HNila	Jaliapalong	Palongkhali	Rajapalong	Rotnapalong	Teknaf	Whykong	Teknaf	Ukhia	Female	Male	
What is your average monthly household income?	3,877	4,019	3,403	3,548	3,907	3,897	4,262	4,502	4,159	3,695	3,883	4,121	3,925
What is your average monthly household expenditure?	4,503	4,481	4,473	4,539	4,635	4,918	4,756	4,761	4,623	4,644	4,573	4,915	4,634

Did you receive any training on this livelihood? (Ref. Q37)

	Union Name								Upazila Name		Gender		Total
	Baharchara	HNila	Jaliapalong	Palongkhali	Rajapalong	Rotnapalong	Teknaf	Whykong	Teknaf	Ukhia	Female	Male	
No	100%	100%	100%	98%	100%	100%	100%	100%	100%	99%	100%	100%	100%
Yes	0%	0%	0%	2%	0%	0%	0%	0%	0%	1%	0%	0%	0%
Total	49	50	51	44	52	51	50	46	195	198	323	70	393

If yes, who provided the training? (Ref. Q38)

	Union Name								Upazila Name		Gender		Total
	Baharchara	HNila	Jaliapalong	Palongkhali	Rajapalong	Rotnapalong	Teknaf	Whykong	Teknaf	Ukhia	Female	Male	
NGO	0%	0%	0%	100%	0%	0%	0%	0%	0%	100%	100%	0%	100%
Base	0	0	0	1	0	0	0	0	0	1	1	0	1

What did you learn? (Ref. Q39)

	Union Name								Upazila Name		Gender		Total
	Baharchara	HNila	Jaliapalong	Palongkhali	Rajapalong	Rotnapalong	Teknaf	Whykong	Teknaf	Ukhia	Female	Male	

Production	0%	0%	0%	100%	0%	0%	0%	0%	0%	100%	100%	0%	100%
Marketing	0%	0%	0%	100%	0%	0%	0%	0%	0%	100%	100%	0%	100%
Base	0	0	0	1	0	0	0	0	0	1	1	0	1

Are you satisfied with your present form of livelihood? (Ref. Q40)

	Union Name								Upazila Name		Gender		Total
	Baharchara	HNila	Jaliapalong	Palongkhali	Rajapalong	Rotnapalong	Teknaf	Whykong	Teknaf	Ukhia	Female	Male	
No	88%	88%	82%	84%	85%	73%	96%	80%	88%	81%	86%	77%	84%
Yes	12%	12%	18%	16%	15%	27%	4%	20%	12%	19%	14%	23%	16%
Total	49	50	51	44	52	51	50	46	195	198	323	70	393

If “No”, what problems do you face in your present form of livelihood? (Ref. Q41)

	Union Name								Upazila Name		Gender		Total
	Baharchara	HNila	Jaliapalong	Palongkhali	Rajapalong	Rotnapalong	Teknaf	Whykong	Teknaf	Ukhia	Female	Male	
Traditional livelihoods are no longer effective/ unproductive	5%	2%	0%	0%	0%	0%	2%	0%	2%	0%	1%	2%	1%
Climate characteristics have changed	14%	2%	40%	46%	48%	38%	15%	8%	10%	43%	27%	22%	26%
Damage land due to salinity	0%	0%	2%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
Lack of knowledge about climate adaptive livelihood options	0%	0%	0%	0%	9%	5%	0%	0%	0%	4%	2%	0%	2%
Water logging	12%	2%	12%	24%	23%	14%	4%	0%	5%	18%	12%	9%	11%
Flash flood,	5%	0%	21%	8%	11%	11%	4%	3%	3%	13%	9%	2%	8%
Loss of land to floods	5%	0%	7%	0%	2%	0%	2%	0%	2%	3%	2%	4%	2%
Lack of skill in managing livelihood options	19%	48%	7%	16%	45%	41%	2%	19%	22%	28%	25%	22%	24%
Lack of demand in markets	9%	11%	12%	19%	30%	16%	17%	11%	12%	19%	14%	22%	16%
No knowledge on how to access markets	2%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%
Lack of access to extension service providers	0%	0%	0%	3%	5%	0%	0%	0%	0%	2%	1%	0%	1%
Lack of capital	19%	41%	12%	27%	14%	5%	13%	35%	26%	14%	20%	24%	20%

There is no regular work	93%	91%	81%	62%	91%	76%	79%	92%	88%	78%	83%	83%	83%
Others	0%	0%	2%	14%	9%	8%	10%	3%	3%	8%	6%	6%	6%
Base	43	44	42	37	44	37	48	37	172	160	278	54	332

Is your livelihood affected by lean period or seasonality? (Ref. Q42)

	Union Name								Upazila Name		Gender		Total
	Baharchara	HNila	Jaliapalong	Palongkhali	Rajapalong	Rotnapalong	Teknaf	Whykong	Teknaf	Ukhia	Female	Male	
No	2%	6%	4%	9%	4%	20%	8%	11%	7%	9%	8%	6%	8%
Not sure	0%	0%	8%	14%	0%	2%	0%	4%	1%	6%	3%	3%	3%
Yes	98%	94%	88%	77%	96%	78%	92%	85%	92%	85%	88%	91%	89%
Total	49	50	51	44	52	51	50	46	195	198	323	70	393

If “Yes”, how has it been affected by seasonality? (Ref Q43)

	Union Name								Upazila Name		Gender		Total
	Baharchara	HNila	Jaliapalong	Palongkhali	Rajapalong	Rotnapalong	Teknaf	Whykong	Teknaf	Ukhia	Female	Male	
Reducing income of day wage	54%	64%	58%	74%	76%	68%	50%	69%	59%	69%	65%	59%	64%
Reducing income of business	13%	2%	7%	3%	4%	13%	7%	21%	10%	7%	9%	6%	8%
Family members does not get food	4%	2%	18%	21%	10%	13%	7%	3%	4%	15%	11%	3%	9%
Increasing facilities of work	0%	0%	0%	0%	0%	3%	0%	0%	0%	1%	0%	2%	0%
Decreasing facilities of work	77%	94%	87%	74%	94%	85%	74%	77%	81%	86%	84%	81%	83%
Others	2%	0%	0%	9%	6%	3%	7%	5%	3%	4%	4%	3%	4%
Base	48	47	45	34	50	40	46	39	180	169	285	64	349

What activities are undertaken to address lean period or seasonality? (Ref Q44)

	Union Name								Upazila Name		Gender		Total
	Baharchara	HNila	Jaliapalong	Palongkhali	Rajapalong	Rotnapalong	Teknaf	Whykong	Teknaf	Ukhia	Female	Male	
Have to take loan from money lender for food	58%	55%	36%	38%	34%	48%	50%	49%	53%	38%	47%	44%	46%
Selling wage advanced	6%	0%	9%	6%	0%	3%	13%	3%	6%	4%	5%	3%	5%

Bound to send children for doing household labour	2%	0%	7%	6%	0%	8%	4%	0%	2%	5%	3%	3%	3%
Nothing	2%	0%	36%	29%	38%	30%	0%	0%	1%	34%	17%	14%	17%
Lend	29%	45%	18%	12%	26%	15%	24%	49%	36%	18%	26%	33%	28%
Others	6%	0%	4%	9%	2%	0%	9%	5%	5%	4%	5%	3%	4%
Base	48	47	45	34	50	40	46	39	180	169	285	64	349

Is your livelihood affected by infrastructure? (Ref Q45)

	Union Name								Upazila Name		Gender		Total
	Baharchara	HNila	Jaliapalong	Palongkhali	Rajapalong	Rotnapalong	Teknaf	Whykong	Teknaf	Ukhia	Female	Male	
Condition of road and transport	37%	42%	18%	14%	21%	29%	46%	37%	41%	21%	31%	30%	31%
Telephone services	29%	4%	0%	0%	0%	0%	20%	20%	18%	0%	9%	7%	9%
Electric supply	12%	10%	0%	0%	2%	0%	18%	7%	12%	1%	6%	6%	6%
Storage	0%	0%	4%	5%	0%	0%	0%	0%	0%	2%	1%	3%	1%
Irrigation facility	2%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%
Does not depend on infrastructure	47%	54%	82%	82%	79%	71%	50%	63%	53%	78%	66%	67%	66%
Total	49	50	51	44	52	51	50	46	195	198	323	70	393

Is your livelihood affected by disaster? (Ref. Q46)

	Union Name								Upazila Name		Gender		Total
	Baharchara	HNila	Jaliapalong	Palongkhali	Rajapalong	Rotnapalong	Teknaf	Whykong	Teknaf	Ukhia	Female	Male	
No	31%	32%	20%	9%	10%	45%	38%	54%	38%	21%	32%	19%	30%
Not sure	0%	2%	10%	16%	2%	6%	0%	4%	2%	8%	5%	6%	5%
Yes	69%	66%	71%	75%	88%	49%	62%	41%	60%	71%	63%	76%	65%
Total	49	50	51	44	52	51	50	46	195	198	323	70	393

If “Yes”, how has it been affected in the past? (Ref Q47)

	Union Name								Upazila Name		Gender		Total
	Baharchara	HNil a	Jaliapalo ng	Palongkh ali	Rajapalo ng	Rotnapalo ng	Teknaf	Whyko ng	Teknaf	Ukhi a	Femal e	Mal e	
Reduced yields	9%	303 %	278%	303%	217%	400%	323%	526%	85%	71%	49%	189 %	39%
Lost of harvest	9%	303 %	278%	303%	217%	400%	323%	526%	85%	71%	49%	189 %	39%
Obstacle of catching fishes for bad weather	50%	303 %	278%	303%	217%	400%	323%	526%	85%	71%	49%	189 %	39%
Do not have work	41%	303 %	278%	303%	217%	400%	323%	526%	85%	71%	49%	189 %	39%
Other	3%	303 %	278%	303%	217%	400%	323%	526%	85%	71%	49%	189 %	39%
Base	34	33	36	33	46	25	31	19	117	140	204	53	257

Is there any impact of Rohingya influx on your livelihoods? (Ref. Q48)

	Union Name								Upazila Name		Gender		Total
	Baharchara	HNil a	Jaliapalong	Palongkhali	Rajapalong	Rotnapalong	Teknaf	Whykong	Teknaf	Ukhia	Female	Male	
No	0%	0%	18%	0%	0%	8%	6%	2%	2%	7%	2%	14%	4%
Yes	100%	100%	82%	100%	100%	92%	94%	98%	98%	93%	98%	86%	96%
Total	49	50	51	44	52	51	50	46	195	198	323	70	393

If “Yes”, how has it been affected? (Ref Q49)

	Union Name								Upazila Name		Gender		Total
	Baharchara	HNil a	Jaliapalo ng	Palongkh ali	Rajapalo ng	Rotnapalo ng	Teknaf	Whykon g	Teknaf	Ukhi a	Femal e	Mal e	
Reduction in daily wage rate	96%	92%	83%	95%	100%	94%	68%	84%	85%	94%	89%	92%	89%
Price of food has increased	100%	96%	90%	91%	98%	91%	91%	96%	96%	93%	95%	92%	94%
Cost for transportation has increased	45%	54%	79%	66%	92%	83%	36%	58%	48%	81%	64%	63%	64%
Number of employment days increased	45%	46%	38%	57%	60%	60%	34%	47%	43%	54%	47%	55%	48%
Number of employment days decreased	6%	0%	2%	5%	0%	2%	9%	7%	5%	2%	4%	2%	4%

Income increased	0%	0%	0%	0%	0%	2%	0%	4%	1%	1%	1%	0%	1%
Created opportunities of business	0%	0%	0%	0%	0%	2%	0%	7%	2%	1%	1%	0%	1%
Other	2%	0%	2%	2%	6%	2%	0%	0%	1%	3%	2%	2%	2%
Base	49	50	42	44	52	47	47	45	191	185	316	60	376

What are the IGA opportunities that can help you to achieve resilient livelihoods? (Ref Q50)

	Union Name								Upazila Name		Gender		Total
	Baharchara	HNil a	Jaliapaloning	Palongkhali	Rajapaloning	Rotnapaloning	Teknaf	Whykong	Teknaf	Ukhi a	Female	Male	
Agricultural work (agricultural day laborer)	0%	2%	0%	5%	0%	0%	6%	0%	2%	1%	2%	0%	2%
Agricultural work (agricultural own land)	2%	2%	14%	16%	19%	10%	2%	2%	2%	15%	7%	16%	8%
Agricultural work (lease land)	4%	6%	14%	14%	40%	37%	12%	13%	9%	27%	17%	20%	18%
Agricultural work (reserve forest)	0%	2%	6%	9%	10%	0%	2%	7%	3%	6%	3%	10%	4%
Vegetable cultivation at home yard	2%	0%	20%	9%	31%	10%	0%	4%	2%	18%	11%	3%	10%
Rearing dairy cow (own)	63%	52%	59%	66%	67%	69%	42%	48%	51%	65%	59%	56%	58%
Rearing dairy cow (others)	2%	0%	8%	2%	2%	6%	4%	7%	3%	5%	3%	7%	4%
Catching fish	6%	10%	4%	2%	2%	0%	6%	0%	6%	2%	3%	9%	4%
Cow fattening (own)	0%	8%	6%	7%	10%	10%	4%	24%	9%	8%	8%	10%	8%
Cow fattening (others)	0%	0%	4%	0%	2%	2%	2%	0%	1%	2%	1%	3%	1%
Small business	18%	24%	51%	32%	44%	43%	28%	30%	25%	43%	33%	41%	34%
Rearing native chicken	39%	56%	49%	68%	62%	49%	36%	54%	46%	57%	55%	33%	51%
Goat rearing (own)	53%	62%	45%	61%	54%	31%	22%	52%	47%	47%	51%	30%	47%
Tailoring work	18%	16%	10%	5%	10%	10%	10%	15%	15%	9%	14%	3%	12%
Hand crafting	0%	4%	2%	5%	13%	8%	0%	4%	2%	7%	5%	1%	5%
Dry fish making	2%	8%	0%	0%	0%	0%	0%	0%	3%	0%	1%	1%	1%
Collecting wood	0%	0%	0%	5%	0%	0%	0%	0%	0%	1%	1%	0%	1%
Rickshaw pulling	0%	8%	4%	11%	2%	2%	2%	0%	3%	5%	4%	3%	4%
Hawking	0%	8%	2%	5%	0%	0%	0%	0%	2%	2%	2%	0%	2%
Collecting dry fish	0%	2%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%
Cultivating crab and pawn	0%	0%	0%	0%	0%	0%	0%	2%	1%	0%	0%	0%	0%

Other	27%	4%	16%	2%	0%	6%	18%	20%	17%	6%	11%	14%	11%
Total	49	50	51	44	52	51	50	46	195	198	323	70	393

Which livelihood is more suitable from your referred livelihoods? (Ref. Q50a)

	Union Name								Upazila Name		Gender		Total
	Baharchara	HNil a	Jaliapaloning	Palongkhali	Rajapaloning	Rotnapaloning	Teknaf	Whykong	Teknaf	Ukhi a	Female	Male	
Auto ricksha	0%	0%	4%	0%	0%	2%	0%	0%	0%	2%	1%	0%	1%
Carpenter	0%	2%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%
CNG Driver	0%	0%	0%	0%	0%	0%	0%	2%	1%	0%	0%	0%	0%
Cow Fattening (Own)	4%	2%	2%	0%	2%	6%	0%	4%	3%	3%	3%	1%	3%
Cows Cultivation (Other people cows)	0%	0%	0%	5%	0%	2%	4%	2%	2%	2%	1%	6%	2%
Cows Cultivation (own)	35%	10%	29%	41%	35%	37%	24%	20%	22%	35%	31%	17%	29%
Dry fish	0%	2%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%
Farming (day laborer)	0%	0%	0%	5%	0%	0%	4%	0%	1%	1%	1%	0%	1%
Farming (lease land)	4%	2%	4%	7%	10%	14%	6%	4%	4%	9%	5%	11%	6%
Farming (Own land)	4%	0%	2%	2%	10%	2%	0%	2%	2%	4%	2%	4%	3%
Farming (reserved forest)	0%	2%	0%	2%	2%	0%	0%	0%	1%	1%	1%	0%	1%
Fattening cattle (Other people cow)	0%	0%	2%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
Ferryman	0%	4%	2%	0%	0%	0%	0%	2%	2%	1%	1%	0%	1%
Fish business	6%	8%	0%	0%	2%	0%	4%	2%	5%	1%	3%	1%	3%
fishing	2%	10%	0%	0%	0%	0%	0%	0%	3%	0%	1%	4%	2%
Grocery store	4%	0%	2%	0%	0%	2%	0%	9%	3%	1%	2%	3%	2%
Handicrafts	0%	0%	0%	0%	0%	2%	0%	0%	0%	1%	0%	0%	0%
Keeping Goats (Own)	10%	6%	2%	2%	4%	2%	14%	4%	9%	3%	7%	1%	6%
Keeping local chickens	2%	6%	2%	11%	4%	6%	14%	11%	8%	6%	7%	4%	7%
Non-Agriculture day labor	0%	0%	0%	0%	0%	0%	6%	0%	2%	0%	1%	1%	1%
paner boraj	6%	0%	2%	0%	0%	0%	4%	0%	3%	1%	1%	4%	2%
Raw materials business	2%	0%	0%	0%	0%	2%	0%	0%	1%	1%	0%	1%	1%
Rickshaw	0%	10%	2%	7%	2%	0%	2%	0%	3%	3%	2%	4%	3%
Saloon business	0%	12%	0%	0%	0%	0%	0%	0%	3%	0%	1%	3%	2%
Salt cultivation	0%	0%	0%	0%	0%	0%	0%	4%	1%	0%	0%	1%	1%

Shopkeeping	0%	0%	0%	0%	0%	0%	2%	0%	1%	0%	0%	0%	0%
Shutki Business	0%	2%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%
Small Business	16%	12%	33%	11%	31%	22%	10%	22%	15%	25%	18%	30%	20%
Tailoring	4%	10%	2%	2%	0%	2%	6%	7%	7%	2%	5%	0%	4%
Tea Stall	0%	0%	0%	0%	0%	0%	0%	2%	1%	0%	0%	0%	0%
Tomtom gari	0%	0%	6%	5%	0%	0%	0%	0%	0%	3%	2%	0%	1%
Vegetable farming in the house courtyard	0%	0%	4%	0%	0%	0%	0%	2%	1%	1%	1%	0%	1%
Total	49	50	51	44	52	51	50	46	195	198	323	70	393

How many days your favourite livelihood will run well? (Ref Q50D)

		Union Name								Upazila Name		Gender		Total
		Bahar chara	HNil a	Jalia palo ng	Palo ngkh ali	Raja palo ng	Rotn apal ong	Tekn af	Wh yko ng	Tekn af	Uk hia	Fe mal e	Mal e	
Agricultural work (agricultural day laborer)	How many days your favourite livelihood will run well?	.	.	365	232	.	365	273	.	273	277	269	365	274
	What do you think that how many years you will have run your favourite business in good condition?	.	.	20	19	.	20	16	.	16	19	18	2	17
agricultural work)/ (own land)	How many days your favourite livelihood will run well?	187	.	165	300	180	365	.	.	187	208	200	207	203
	What do you think that how many years you will have run your favourite business in good condition?	28	.	4	15	12	40	.	.	28	13	14	21	17
agricultural work (lease land)	How many days your favourite livelihood will run well?	205	220	200	183	198	202	267	200	236	197	216	204	213
	What do you think that how many years you will have run your favourite business in good condition?	32	20	10	10	6	13	25	5	22	10	15	14	15
agricultural work (reserve forest)	How many days your favourite livelihood will run well?	.	130	180	.	300	.	.	.	130	240	203	.	203
	What do you think that how many years you will have run your favourite business in good condition?	.	40	10	.	5	.	.	.	40	8	18	.	18

Vegetable cultivation home yard	at	How many days your favourite livelihood will run well?	.	.	150	.	.	.	.	100	100	150	125	.	125
		What do you think that how many years you will have run your favourite business in good condition?	.	.	5	.	.	.	.	5	5	5	5	.	5
Rearing dairy cow (own)		How many days your favourite livelihood will run well?	246	263	204	195	190	173	363	327	289	189	221	247	225
		What do you think that how many years you will have run your favourite business in good condition?	21	18	10	7	9	12	35	18	20	9	13	11	13
Rearing dairy cow (others)		How many days your favourite livelihood will run well?	.	.	.	.	.	205	310	.	310	205	205	310	240
		What do you think that how many years you will have run your favourite business in good condition?	.	.	.	.	.	12	38	.	38	12	12	38	21
Catching fish		How many days your favourite livelihood will run well?	185	260	.	.	365	.	180	.	231	365	239	260	246
		What do you think that how many years you will have run your favourite business in good condition?	12	11	.	.	15	.	35	.	14	15	15	13	14
Cow fattening (own)		How many days your favourite livelihood will run well?	90	365	190	.	272	135	.	232	230	201	214	.	214
		What do you think that how many years you will have run your favourite business in good condition?	24	30	7	.	15	6	.	18	23	11	17	.	17
Cow fattening (others cow)		How many days your favourite livelihood will run well?	.	.	100	.	.	.	.	.	.	100	100	.	100
		What do you think that how many years you will have run your favourite business in good condition?	.	.	10	.	.	.	.	.	.	10	10	.	10
Small business		How many days your favourite livelihood will run well?	217	352	236	275	277	290	271	325	307	265	278	279	279
		What do you think that how many years you will have run your favourite business in good condition?	25	26	13	14	15	16	18	23	23	14	17	18	17
Rearing chicken	local	How many days your favourite livelihood will run well?	365	343	365	201	210	220	327	365	346	223	315	153	297

	What do you think that how many years you will have run your favourite business in good condition?	30	27	5	10	10	13	21	32	27	10	22	7	20
Goat rearing (own)	How many days your favourite livelihood will run well?	329	343	180	150	180	300	293	175	299	198	275	300	276
	What do you think that how many years you will have run your favourite business in good condition?	27	23	2	5	6	30	20	8	21	10	19	10	19
Tailoring work	How many days your favourite livelihood will run well?	365	276	120	250	.	300	365	256	295	223	280	.	280
	What do you think that how many years you will have run your favourite business in good condition?	35	16	10	10	.	6	30	25	23	9	20	.	20
Hand crafting	How many days your favourite livelihood will run well?	.	.	.	.	.	365	.	.	.	365	365	.	365
	What do you think that how many years you will have run your favourite business in good condition?	.	.	.	.	.	40	.	.	.	40	40	.	40
Pottery	How many days your favourite livelihood will run well?	.	.	.	.	.	.	.	.	.	.	.	.	.
	What do you think that how many years you will have run your favourite business in good condition?	.	.	.	.	.	.	.	.	.	.	.	.	.
Dry fish making	How many days your favourite livelihood will run well?	.	250	.	.	.	.	.	.	250	.	250	.	250
	What do you think that how many years you will have run your favourite business in good condition?	.	18	.	.	.	.	.	.	18	.	18	.	18
Collecting wood	How many days your favourite livelihood will run well?	.	.	.	.	.	.	.	.	.	.	.	.	.
	What do you think that how many years you will have run your favourite business in good condition?	.	.	.	.	.	.	.	.	.	.	.	.	.
Rickshaw pulling	How many days your favourite livelihood will run well?	.	338	180	217	250	.	300	.	332	216	259	332	279
	What do you think that how many years you will have run your favourite business in good condition?	.	33	10	7	20	.	20	.	31	10	18	30	22

Hawker	How many days your favourite livelihood will run well?	.	310	270	.	.	.	.	200	273	270	272	.	272
	What do you think that how many years you will have run your favourite business in good condition?	.	18	25	.	.	.	.	30	22	25	22	.	22
Collecting dry fish	How many days your favourite livelihood will run well?	.	300	.	.	.	.	.	.	300	.	300	.	300
	What do you think that how many years you will have run your favourite business in good condition?	.	26	.	.	.	.	.	.	26	.	26	.	26
Cultivating crab and pawn	How many days your favourite livelihood will run well?	.	.	.	.	.	.	.	.	.	.	.	.	.
	What do you think that how many years you will have run your favourite business in good condition?	.	.	.	.	.	.	.	.	.	.	.	.	.
Others	How many days your favourite livelihood will run well?	240	334	237	290	.	230	306	288	288	248	277	278	277
	What do you think that how many years you will have run your favourite business in good condition?	31	33	23	18	.	24	60	29	35	22	33	26	31

What are the biggest barriers faced by women working in livelihoods? (Ref Q51)

	Union Name								Upazila Name		Gender		Total
	Baharc hara	HN ila	Jaliapa long	Palong khali	Rajapa long	Rotnap along	Tek naf	Whyk ong	Tek naf	Uk hia	Fem ale	Ma le	
Conservative attitude within family	2%	2%	8%	16%	23%	27%	8%	17%	7%	19%	13%	11%	13%
Lack of decision-making ability within their family	18%	8%	29%	25%	25%	29%	18%	20%	16%	27%	22%	21%	22%
Low social acceptance	10%	36%	24%	18%	25%	18%	10%	30%	22%	21%	19%	31%	21%
Women's lack of capacity to run such IGA	41%	26%	51%	50%	52%	37%	30%	46%	35%	47%	40%	49%	41%
Lack of mobility	4%	4%	2%	9%	10%	0%	18%	0%	7%	5%	6%	7%	6%

Lack of opportunities to build skills	4%	16%	27%	23%	48%	25%	14%	20%	13%	31%	23%	21%	22%
Lack of access to resources/finance	59%	74%	84%	98%	100%	76%	46%	70%	62%	89%	78%	66%	76%
Other	0%	0%	2%	2%	2%	2%	2%	0%	1%	2%	1%	4%	1%
Total	49	50	51	44	52	51	50	46	195	198	323	70	393

Do you think that women should work (Ref. Q52)

	Union Name								Upazila Name		Gender		Total
	Baharchara	HNil	Jaliapalong	Palongkhali	Rajapalong	Rotnapalong	Teknaf	Whykong	Teknaf	Ukhia	Female	Male	
No	20%	18%	25%	16%	15%	18%	10%	26%	18%	19%	15%	34%	19%
Yes	80%	82%	75%	84%	85%	82%	90%	74%	82%	81%	85%	66%	81%
Total	49	50	51	44	52	51	50	46	195	198	323	70	393

If your response is yes mention the reasons (Ref Q53)

	Union Name								Upazila Name		Gender		Total
	Baharchara	HNil	Jaliapalong	Palongkhali	Rajapalong	Rotnapalong	Teknaf	Whykong	Teknaf	Ukhia	Female	Male	
They can supplement family income	100%	100%	97%	97%	98%	98%	89%	100%	97%	98%	97%	98%	97%
They are good at some activities like food processing	44%	10%	63%	54%	64%	40%	36%	35%	31%	55%	44%	37%	43%
They can be engaged as paid labour	5%	5%	8%	5%	18%	7%	11%	3%	6%	10%	9%	4%	8%
Their unpaid time is transformed into paid time	8%	7%	5%	11%	34%	12%	7%	6%	7%	16%	12%	9%	12%

They can assist their husband or son's work	28%	78%	68%	51%	59%	60%	29%	65%	49%	60%	54%	54%	54%
Women are just as capable as men in income generation activities work in partnership with other family members to achieve	15%	5%	5%	5%	5%	0%	9%	12%	10%	4%	7%	9%	7%
Base	39	41	38	37	44	42	45	34	159	161	274	46	320

If your answer is no then mention the reasons (Ref Q54)

	Union Name								Upazila Name		Gender		Total
	Baharc hara	HNi la	Jaliapa long	Palong khali	Rajapa long	Rotnapa long	Tek naf	Whyk ong	Tek naf	Uk hia	Fem ale	Ma le	
They should not go out for work	21%	22%	32%	14%	18%	21%	7%	32%	19%	21%	16%	43%	20%
They may not be able to manage household chores or work effectively	8%	15%	13%	5%	9%	14%	4%	12%	9%	11%	8%	22%	10%
People may cheat them	0%	0%	3%	0%	2%	2%	0%	0%	0%	2%	1%	2%	1%
They may not negotiate well	0%	2%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%
They should cook and take care of children	21%	5%	11%	16%	9%	5%	4%	9%	9%	10%	8%	17%	10%
They are not physically fit for work	0%	0%	3%	8%	2%	0%	2%	3%	1%	3%	1%	7%	2%
They may be abused or face sexual harassment	3%	0%	3%	0%	0%	0%	0%	0%	1%	1%	0%	4%	1%
Others	0%	0%	3%	0%	0%	0%	2%	0%	1%	1%	0%	4%	1%
Base	39	41	38	37	44	42	45	34	159	161	274	46	320

What IGAs do you think is suitable for women, considering the local context? (Ref Q55)

	Union Name	Upazila Name	Gender	
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	Baharch ara	HNil a	Jaliapalo ng	Palongk hali	Rajapalo ng	Rotnapal ong	Tekn af	Whyko ng	Tekn af	Ukhi a	Fema le	Mal e	Tot al
Agricultural work (agricultural day laborer)	0%	2%	2%	0%	0%	0%	4%	0%	2%	1%	1%	1%	1%
Agricultural work (own land)	4%	0%	4%	7%	2%	0%	2%	0%	2%	3%	2%	3%	2%
Agricultural work (lease land)	4%	0%	4%	2%	15%	2%	4%	0%	2%	6%	5%	1%	4%
Agricultural work (reserve forest)	0%	0%	2%	2%	0%	0%	0%	0%	0%	1%	1%	0%	1%
Vegetable cultivation at home yard	6%	6%	35%	18%	40%	27%	2%	2%	4%	31%	19%	10%	18%
Rearing dairy cow (own)	59%	48%	55%	59%	69%	57%	38%	39%	46%	60%	56%	40%	53%
Rearing dairy cow (others)	4%	4%	0%	0%	6%	4%	0%	4%	3%	3%	3%	3%	3%
Cow fattening (own)	0%	4%	4%	0%	4%	6%	6%	11%	5%	4%	4%	4%	4%
Cow fattening (others cow)	0%	0%	0%	2%	2%	0%	0%	0%	0%	1%	0%	1%	1%
Small business	0%	10%	2%	0%	4%	0%	0%	7%	4%	2%	3%	3%	3%
Rearing local chicken	65%	78%	88%	68%	87%	75%	68%	67%	70%	80%	76%	70%	75%
Goat rearing (own)	55%	72%	55%	57%	75%	47%	24%	54%	51%	59%	57%	47%	55%
Tailoring work	31%	32%	29%	23%	29%	24%	34%	35%	33%	26%	29%	33%	30%
Hand crafting	4%	4%	6%	5%	13%	14%	0%	9%	4%	10%	7%	6%	7%
Pottery	0%	0%	0%	0%	0%	2%	0%	0%	0%	1%	0%	1%	0%
Dry fish making	0%	8%	2%	0%	0%	0%	0%	0%	2%	1%	2%	0%	1%
Collecting wood	0%	2%	2%	0%	0%	0%	0%	2%	1%	1%	1%	0%	1%
Collecting dry fish	0%	0%	0%	2%	0%	0%	0%	0%	0%	1%	0%	0%	0%
Other	2%	0%	2%	0%	2%	0%	8%	2%	3%	1%	2%	4%	2%
Total	49	50	51	44	52	51	50	46	195	198	323	70	393

If yes, what is the need for women to pursue such IGA? (Ref Q56)

	Union Name								Upazila Name		Gender		Total
	Baharchara	HNila	Jaliapal ong	Palongk hali	Rajapal ong	Rotnapal ong	Teknaf	Whyko ng	Teknaf	Ukhia	Fem ale	Mal e	
Training	55%	64 %	51%	68%	52%	49%	46%	50%	54%	55%	50%	73 %	54 %
Financial access	96%	100 %	98%	98%	100%	96%	88%	98%	95%	98%	98%	90 %	97 %
Knowledge and exposure to markets and actors	0%	2%	6%	5%	10%	10%	0%	7%	2%	8%	5%	4%	5%
bargaining through forming and being a member of CBOs	0%	0%	4%	2%	12%	10%	0%	0%	0%	7%	4%	3%	4%
Other	0%	0%	0%	5%	2%	0%	2%	2%	1%	2%	1%	1%	1%
Total	49	50	51	44	52	51	50	46	195	198	323	70	393

Do you or any women member of your household go to a local market on a regular basis? (Ref. Q57)

	Union Name								Upazila Name		Gender		Total
	Baharchar a	HNila	Jaliapalon g	Palongkhal i	Rajapalon g	Rotnapalon g	Teknaf	Whykon g	Teknaf	Ukhia	Female	Male	
No	55%	76%	75%	57%	60%	76%	66%	76%	68%	67%	66%	77%	68%
Yes	45%	24%	25%	43%	40%	24%	34%	24%	32%	33%	34%	23%	32%
Total	49	50	51	44	52	51	50	46	195	198	323	70	393

Normally, do you (or household members) go to buy or sell? (Ref. Q58)

	Union Name								Upazila Name		Gender		Total
	Baharchar a	HNila	Jaliapalon g	Palongkhal i	Rajapalo ng	Rotnapalon g	Teknaf	Whykon g	Teknaf	Ukhia	Femal e	Male	
Both	10%	2%	27%	20%	13%	8%	20%	2%	9%	17%	12%	17%	13%
Purchase	90%	98%	69%	73%	87%	88%	80%	98%	91%	79%	87%	76%	85%
Sale	0%	0%	4%	7%	0%	4%	0%	0%	0%	4%	1%	7%	2%

Total	49	50	51	44	52	51	50	46	195	198	323	70	393
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What is the commodity you purchase on a regular basis? (More than one response possible) (Ref Q59)

	Union Name								Upazila Name		Gender		Total
	Baharchara	HNil a	Jaliapal ong	Palongk hali	Rajapalo ng	Rotnapal ong	Teknaf	Whyko ng	Teknaf	Ukhi a	Femal e	Male	
Food	100%	100%	100%	98%	100%	100%	96%	100%	99%	99%	100%	97%	99%
Clothing	61%	66%	63%	48%	67%	43%	74%	87%	72%	56%	63%	69%	64%
Materials to make something with to sell	2%	2%	2%	5%	2%	0%	0%	0%	1%	2%	2%	1%	2%
Livestock	0%	0%	2%	0%	0%	0%	2%	0%	1%	1%	1%	0%	1%
Livestock food	2%	0%	0%	0%	0%	2%	8%	0%	3%	1%	1%	3%	2%
Fuel/kerosene	27%	4%	51%	59%	29%	29%	22%	9%	15%	41%	28%	33%	28%
Firewood	2%	2%	4%	9%	8%	8%	6%	0%	3%	7%	5%	6%	5%
Shelter materials	4%	0%	0%	0%	0%	0%	0%	0%	1%	0%	1%	0%	1%
Household items	53%	36%	65%	50%	63%	59%	36%	46%	43%	60%	55%	34%	51%
Personal hygiene products	29%	34%	45%	52%	50%	41%	30%	57%	37%	47%	43%	37%	42%
Fruits	0%	0%	0%	0%	0%	0%	2%	0%	1%	0%	0%	1%	0%
Medicine	6%	6%	0%	0%	2%	0%	0%	7%	5%	1%	2%	3%	3%
Total	49	50	51	44	52	51	50	46	195	198	323	70	393

Do you sell any commodity on a regular basis? (Ref Q60)

	Union Name								Upazila Name		Gender		Total
	Baharchara	HNil a	Jaliapal ong	Palongkhal i	Rajapal on g	Rotnapal on g	Teknaf	Whykon g	Teknaf	Ukhia	Female	Male	
No	20%	0%	6%	33%	14%	33%	60%	0%	41%	20%	27%	24%	26%
Yes	80%	100%	94%	67%	86%	67%	40%	100%	59%	80%	73%	76%	74%

Total	5	1	16	12	7	6	10	1	17	41	41	17	58
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If yes, who are your customers? (Ref Q61)

	Union Name								Upazila Name		Gender		Total
	Baharchara	HNil a	Jaliapalong	Palongkhali	Rajapalong	Rotnapalong	Teknaf	Whykong	Teknaf	Ukhia	Female	Male	
Neighbours	0%	0%	13%	0%	0%	25%	25%	100%	20%	9%	10%	15%	12%
Villagers	75%	0%	27%	50%	50%	25%	25%	100%	50%	36%	47%	23%	40%
Petty traders	25%	0%	7%	13%	0%	0%	0%	0%	10%	6%	10%	0%	7%
Sell at local market	75%	0%	67%	63%	50%	0%	50%	100%	60%	55%	40%	92%	56%
Wholesaler collects from home	50%	0%	13%	0%	17%	75%	25%	0%	30%	18%	27%	8%	21%
Other	0%	100%	7%	0%	0%	0%	0%	0%	10%	3%	7%	0%	5%
Base	4	1	15	8	6	4	4	1	10	33	30	13	43

If yes what commodities you sell? (Ref Q62)

	Baharchara	HNil a	Jaliapalong	Palongkhali	Rajapalong	Rotnapalong	Teknaf	Whykong	Teknaf	Ukhia	Female	Male	
Snacks/street food	0%	0%	0%	0%	17%	0%	0%	0%	0%	3%	0%	8%	2%
vegetables	25%	0%		Union Name	Upazila Name	Gender	Total	100%	20%	3%	10%	0%	7%
Chicken	25%	0%	7%	0%	33%	50%	25%	0%	20%	15%	23%	0%	16%
Eggs	0%	0%	7%	0%	0%	0%	0%	0%	0%	3%	3%	0%	2%
Goat	0%	0%	0%	0%	0%	25%	0%	0%	0%	3%	3%	0%	2%
Bamboo crafts	0%	0%	0%	0%	0%	25%	0%	0%	0%	3%	3%	0%	2%
Others	50%	100%	87%	100%	50%	25%	75%	100%	70%	76%	67%	92%	74%

Base	4	1	15	8	6	4	4	1	10	33	30	13	43
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Production (Ref Q63 & Q64 & Q65)

		Union Name								Upazila Name		Gender		Total
		Baharch ara	HNilā	Jaliap along	Palon gkhali	Rajap along	Rotnap along	Teknaf	Whyk ong	Teknaf	Ukhia	Fe mal e	Male	
Snacks/street food produced	Q63 – What measure	.	.	.	.	1,700	.	.	.	.	1,700	.	1,700	1,700
	Q64 – Cost of production (taka)	.	.	.	.	148,200	.	.	.	.	148,200	.	148,200	148,200
	Q65- Selling price (taka)	.	.	.	.	193,200	.	.	.	.	193,200	.	193,200	193,200
Produced vegetables	Q63 – What measure	200	.	80	.	.	.	.	1,200	700	80	493	.	493
	Q64 – Cost of production (taka)	12,000	.	175	.	.	.	.	30,000	21,000	175	14,058	.	14,058
	Q65- Selling price (taka)	36,000	.	3,800	.	.	.	.	60,000	48,000	3,800	33,267	.	33,267
Produced chicken	Q63 – What measure	5	.	39	.	10	6	3	.	4	14	11	.	11
	Q64 – Cost of production (taka)	300	.	300	.	65	850	200	.	250	426	376	.	376
	Q65- Selling price (taka)	500	.	9,800	.	2,550	450	500	.	500	3,160	2,400	.	2,400
Produced eggs	Q63 – What measure	.	.	220	.	.	.	.	.	.	220	220	.	220
	Q64 – Cost of production (taka)	.	.	-	.	.	.	.	.	.	-	-	.	-
	Q65- Selling price (taka)	.	.	220	.	.	.	.	.	.	220	220	.	220
Produced goat	Q63 – What measure	.	.	.	.	.	1	.	.	.	1	1	.	1

	Q64 – Cost of production (taka)	.	.	.	.	.	1,500	.	.	.	1,500	1,500	.	1,500
	Q65- Selling price (taka)	.	.	.	.	.	3,000	.	.	.	3,000	3,000	.	3,000
Produced bamboo crafts	Q63 – What measure	.	.	.	.	.	240	.	.	.	240	240	.	240
	Q64 – Cost of production(taka)	.	.	.	.	.	8,000	.	.	.	8,000	8,000	.	8,000
	Q65- Selling price(taka)	.	.	.	.	.	48,000	.	.	.	48,000	48,000	.	48,000
Produced others	Q63 – What measure	.	200	251	628	95	2,190	60	72	111	438	551	146	401
	Q64 – Cost of production(taka)	.	80	11,519	2,590	7,000	281,000	11,667	18,000	10,616	26,501	42,723	6,007	22,530
	Q65- Selling price(taka)	12,000	120	28,650	22,362	11,250	339,450	45,333	21,600	28,287	37,329	43,998	22,804	35,521

Do you pay hut tax while selling products? (Ref Q66)

	Union Name								Upazila Name		Gender		Total
	Baharchara	HNila	Jaliapalong	Palongkhali	Rajapalong	Rotnapalong	Teknaf	Whykong	Teknaf	Ukhia	Female	Male	
No	40%	100%	88%	75%	100%	100%	80%	0%	65%	88%	88%	65%	81%
Yes	60%	0%	13%	25%	0%	0%	20%	100%	35%	12%	12%	35%	19%
Total	5	1	16	12	7	6	10	1	17	41	41	17	58

Do you pay any other fees or tax? (Ref Q67)

	Union Name								Upazila Name		Gender		Total
	Baharchar a	HNila	Jaliapalon g	Palongkhal i	Rajapalon g	Rotnapalon g	Teknaf	Whykon g	Teknaf	Ukhia	Female	Male	
No	40%	100%	31%	67%	57%	100%	80%	0%	65%	56%	66%	41%	59%
Yes	60%	0%	69%	33%	43%	0%	20%	100%	35%	44%	34%	59%	41%
Total	5	1	16	12	7	6	10	1	17	41	41	17	58

What activities are undertaken for marketing of products? (Ref Q68)

	Union Name								Upazila Name		Gender		Total
	Baharchar a	HNila	Jaliapalon g	Palongkhal li	Rajapalon g	Rotnapalon g	Teknaf	Whykon g	Teknaf	Ukhia	Female	Male	
Processing	0%	100%	13%	8%	38%	50%	20%	50%	21%	20%	21%	19%	21%
Packaging	0%	0%	13%	8%	0%	0%	0%	0%	0%	7%	6%	0%	5%
transportation	60%	100%	75%	42%	25%	33%	20%	50%	37%	48%	36%	69%	44%
Nothing	40%	0%	13%	42%	38%	17%	60%	0%	42%	25%	36%	13%	30%
Base	5	1	16	12	8	6	10	2	19	44	47	16	63

Do you go to more than one local market on a regular basis? (Ref. Q69)

	Union Name								Upazila Name		Gender		Total
	Baharchar a	HNila	Jaliapalon g	Palongkhal i	Rajapalon g	Rotnapalon g	Teknaf	Whykon g	Teknaf	Ukhia	Female	Male	
No	73%	84%	63%	52%	50%	71%	68%	76%	75%	59%	70%	54%	67%
Yes	27%	16%	37%	48%	50%	29%	32%	24%	25%	41%	30%	46%	33%
Total	49	50	51	44	52	51	50	46	195	198	323	70	393

Does any of the women from your household goes to more than one local market on a regular basis? (Ref. Q70)

	Union Name								Upazila Name		Gender		Total
	Baharc hara	HNi la	Jaliapal ong	Palongk hali	Rajapal ong	Rotnapa long	Tek naf	Whyk ong	Tek naf	Ukh ia	Fem ale	Ma le	
No	88%	92 %	80%	89%	73%	84%	86%	87%	88%	81 %	84%	89 %	85 %
Yes	12%	8%	20%	11%	27%	16%	14%	13%	12%	19 %	16%	11 %	15 %
Total	49	50	51	44	52	51	50	46	195	198	323	70	393

If yes, please mention if she faces any challenge to commute to local markets (Ref Q71)

	Union Name								Upazila Name		Gender		Total
	Baharc hara	HNi la	Jaliapal ong	Palongk hali	Rajapal ong	Rotnapa long	Tek naf	Whyk ong	Tek naf	Ukh ia	Fem ale	Ma le	
Unsafe roads	50%	25 %	30%	80%	7%	38%	86%	0%	43%	29 %	38%	13 %	36 %
Unsafe transportation	33%	50 %	20%	40%	7%	38%	57%	33%	43%	21 %	33%	13 %	31 %
Not much socially accepted	0%	50 %	0%	0%	0%	13%	0%	33%	17%	3%	10%	0%	8%
Risk of sexual harassment	17%	0%	0%	20%	7%	0%	0%	0%	4%	5%	6%	0%	5%
Traders exploit women in terms of allowing fair market price	0%	0%	10%	0%	0%	0%	0%	17%	4%	3%	4%	0%	3%
Nothing	33%	0%	60%	20%	71%	63%	0%	17%	13%	58 %	38%	63 %	42 %
Other	0%	0%	0%	0%	21%	0%	0%	0%	0%	8%	4%	13 %	5%
Base	6	4	10	5	14	8	7	6	23	38	52	8	59

Do you have unrestricted access to these markets? (Ref. Q72)

	Union Name								Upazila Name		Gender		Total
	Baharchar a	HNila	Jaliapalon g	Palongkhal i	Rajapalong	Rotnapalon g	Teknaf	Whykon g	Teknaf	Ukhia	Female	Male	
No	14%	22%	0%	0%	8%	24%	34%	22%	23%	8%	15%	17%	16%
Yes	86%	78%	100%	100%	92%	76%	66%	78%	77%	92%	85%	83%	84%
Total	49	50	51	44	52	51	50	46	195	198	323	70	393

Do you face challenges in access markets? (Ref. Q73)

	Union Name								Upazila Name		Gender		Total
	Baharc hara	HN ila	Jaliapa long	Palon gkhali	Rajapa long	Rotnap along	Tek naf	Whyk ong	Tek naf	Uk hia	Fem ale	Mal e	
No	98%	96%	94%	95%	96%	98%	88%	96%	94%	96%	95%	96%	95%
Yes	2%	4%	6%	5%	4%	2%	12%	4%	6%	4%	5%	4%	5%
Total	49	50	51	44	52	51	50	46	195	198	323	70	393

In order of priority what are the marketing challenges that you experience? (Ref Q74)

	Union Name								Upazila Name		Gender		Total
	Baharc hara	HN ila	Jaliapa long	Palon gkhali	Rajapa long	Rotnap along	Tek naf	Whyk ong	Tek naf	Uk hia	Fem ale	Mal e	
Lack of transport	100%	50%	33%	50%	50%	100%	83%	50%	67%	50%	63%	67%	60%
High cost of transportation in general	100%	50%	0%	0%	0%	0%	0%	50%	25%	0%	19%	0%	15%
High transport cost at certain seasons	0%	0%	0%	0%	0%	0%	17%	0%	8%	0%	6%	0%	5%
Poor village infrastructure (roads, communication network)	100%	50%	0%	50%	0%	0%	17%	50%	33%	13%	31%	0%	25%

Lack of marketing information (varieties, prices, market outlets, quality, quantity, value addition)	0%	0%	33%	50%	100%	0%	17%	0%	8%	50%	31%	0%	25%
Produced small amount	0%	0%	0%	0%	0%	0%	17%	0%	8%	0%	0%	33%	5%
Other	0%	0%	33%	0%	0%	0%	17%	0%	8%	13%	6%	33%	10%
Base	1	2	3	2	2	1	6	2	12	8	16	3	20

Do you (or household member) feel safe in these markets? (Ref. Q75)

	Union Name								Upazila Name		Gender		Total
	Baharchar a	HNila	Jaliapalon g	Palongkhal i	Rajapalong	Rotnapalon g	Teknaf	Whykon g	Teknaf	Ukhia	Female	Male	
No	2%	22%	0%	2%	8%	10%	18%	20%	15%	5%	11%	4%	10%
Yes	98%	78%	100%	98%	92%	90%	82%	80%	85%	95%	89%	96%	90%
Total	49	50	51	44	52	51	50	46	195	198	323	70	393

If no, then what are the causes? (Ref Q76)

	Union Name								Upazila Name		Gender		Total
	Baharchara	HNila	Jaliapalong	Palongkhal	Rajapalong	Rotnapalong	Teknaf	Whykong	Teknaf	Ukhia	Female	Male	
Mugging	0%	0%	0%	0%	0%	0%	44%	0%	13%	0%	11%	0%	10%
Unfriendly environment	0%	0%	0%	0%	50%	20%	0%	0%	0%	30%	8%	0%	8%
Exploitation	0%	0%	0%	0%	25%	0%	11%	0%	3%	10%	3%	33%	5%
Unsafe commute after sunset	100%	0%	0%	0%	0%	20%	78%	11%	30%	10%	24%	33%	25%
Obstacle from family and society	100%	100%	0%	100%	50%	60%	78%	100%	93%	60%	86%	67%	85%
Base	1	11	0	1	4	5	9	9	30	10	37	3	40

Do you have any regular link with a trader or traders? (Ref Q77)

	Union Name								Upazila Name		Gender		Total
	Baharchara	HNil a	Jaliapalongo	Palongkhali	Rajapalongo	Rotnapalongo	Teknaf	Whykongo	Teknaf	Ukhi a	Female	Male	
ব্যবসায়ী বা দোকানদারের কাছে	88%	0%	8%	8%	0%	0%	87%	0%	80%	5%	32%	43%	34%
সাধারণ লোক/ক্রেতার কাছে	0%	100%	77%	85%	83%	71%	7%	100%	12%	79%	54%	50%	53%
Both	0%	0%	0%	8%	0%	0%	7%	0%	4%	3%	2%	7%	3%
Paiker	13%	0%	15%	0%	17%	29%	0%	0%	4%	13%	12%	0%	9%
Base	8	1	13	13	6	7	15	1	25	39	50	14	64

Does your household have money saved? (Ref. Q78)

	Union Name								Upazila Name		Gender		Total
	Baharchara	HNil a	Jaliapalongo	Palongkhali	Rajapalongo	Rotnapalongo	Teknaf	Whykongo	Teknaf	Ukhia	Female	Male	
No	96%	98%	94%	98%	83%	96%	96%	93%	96%	92%	93%	97%	94%
Not sure	0%	0%	0%	0%	4%	2%	0%	2%	1%	2%	1%	0%	1%
Yes	4%	2%	6%	2%	13%	2%	4%	4%	4%	6%	5%	3%	5%
Total	49	50	51	44	52	51	50	46	195	198	323	70	393

What type of savings? (Ref Q78a)

	Union Name								Upazila Name		Gender		Total
	Baharchara	HNil a	Jaliapalongo	Palongkhali	Rajapalongo	Rotnapalongo	Teknaf	Whykongo	Teknaf	Ukhia	Female	Male	
Cash	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Base	2	1	3	1	7	1	2	2	7	12	17	2	19

If yes, where do you save ?(Give financial savings) (Ref. Q79)

	Union Name								Upazila Name		Gender		Total
	Baharchara	HNil a	Jaliapalong	Palongkhali	Rajapalong	Rotnapalong	Teknaf	Whykong	Teknaf	Ukhia	Female	Male	
Community investment group	100%	0%	0%	0%	29%	0%	100%	50%	71%	17%	35%	50%	37%
Houseing	0%	0%	100%	100%	57%	100%	0%	0%	0%	75%	47%	50%	47%
NGO	0%	100%	0%	0%	14%	0%	0%	50%	29%	8%	18%	0%	16%
Base	2	1	3	1	7	1	2	2	7	12	17	2	19

As women do you face any challenges in accessing financial services (Ref. Q80)

	Union Name								Upazila Name		Gender		Total
	Baharchara	HNil a	Jaliapalong	Palongkhali	Rajapalong	Rotnapalong	Teknaf	Whykong	Teknaf	Ukhia	Female	Male	
No	57%	56%	55%	82%	40%	51%	70%	72%	64%	56%	58%	67%	60%
Yes	43%	44%	45%	18%	60%	49%	30%	28%	36%	44%	42%	33%	40%
Total	49	50	51	44	52	51	50	46	195	198	323	70	393

If yes, what challenges you face? (Ref Q81)

	Union Name								Upazila Name		Gender		Total
	Baharchara	HNil a	Jaliapalong	Palongkhali	Rajapalong	Rotnapalong	Teknaf	Whykong	Teknaf	Ukhia	Female	Male	
Lack of capacity to repay loan	52%	18%	74%	100%	61%	68%	33%	31%	34%	70%	56%	43%	54%
Husband does not allow to take loans	5%	0%	9%	0%	19%	16%	7%	8%	4%	14%	9%	13%	9%

Do not have Ownership of assets like land required	5%	0%	48%	50%	42%	16%	0%	23%	6%	37%	24%	13%	23%
Lack of credit worthiness	10%	0%	52%	75%	52%	56%	0%	15%	6%	55%	35%	22%	33%
High interest rate	0%	0%	4%	13%	16%	16%	0%	8%	1%	13%	8%	4%	8%
Lack of skill for taking loan	29%	0%	26%	25%	39%	16%	60%	15%	24%	28%	26%	26%	26%
Husband does not allow to take loans	0%	0%	0%	0%	10%	12%	0%	8%	1%	7%	5%	0%	4%
Lack of capacity to repay loan	86%	86%	70%	63%	71%	68%	40%	69%	73%	69%	68%	87%	71%
Base	21	22	23	8	31	25	15	13	71	87	135	23	58

As men do you face any challenges in accessing financial services (Ref. Q82)

Do men do you face any challenges in accessing financial services (Ref: Q62)													
	Union Name								Upazila Name		Gender		Total
	Baharchara	HNila	Jaliapalongo	Palongkhali	Rajapalongo	Rotnapalongo	Teknaf	Whykong	Teknaf	Ukhia	Female	Male	
No	55%	58%	57%	80%	48%	47%	70%	76%	65%	57%	60%	64%	61%
Yes	45%	42%	43%	20%	52%	53%	30%	24%	35%	43%	40%	36%	39%
Total	49	50	51	44	52	51	50	46	195	198	323	70	393

If yes, what challenges you face? (Ref Q83)

	Union Name								Upazila Name		Gender		Total
	Baharchara	HNila	Jaliapalong	Palongkhali	Rajapalong	Rotnapalong	Teknaf	Whykong	Teknaf	Ukhia	Female	Male	
Ownership of assets like land required	0%	0%	9%	0%	22%	30%	7%	9%	3%	19%	12%	8%	12%
Collaterals of assets required	0%	0%	5%	0%	7%	7%	0%	9%	1%	6%	5%	0%	4%
High interest rate	0%	0%	18%	0%	26%	7%	7%	9%	3%	15%	11%	4%	10%
Lack of credit worthiness	23%	5%	32%	22%	52%	30%	80%	0%	26%	36%	30%	40%	32%
Husband does not allow to take loans	0%	0%	5%	0%	4%	0%	0%	0%	0%	2%	2%	0%	1%
Lack of capacity to repay loan	91%	95%	86%	56%	78%	63%	53%	73%	81%	73%	74%	88%	77%
There is no regular source of income	73%	76%	68%	78%	74%	52%	20%	91%	65%	66%	64%	72%	66%
Base	22	21	22	9	27	27	15	11	69	85	129	25	154

Do you get credit/ financial services as per your requirement? (Ref. Q84)

	Union Name								Upazila Name		Gender		Total
	Baharchara	HNila	Jaliapalong	Palongkhali	Rajapalong	Rotnapalong	Teknaf	Whykong	Teknaf	Ukhia	Female	Male	
No	57%	82%	71%	84%	65%	82%	58%	59%	64%	75%	71%	66%	70%
Yes	43%	18%	29%	16%	35%	18%	42%	41%	36%	25%	29%	34%	30%
Total	49	50	51	44	52	51	50	46	195	198	323	70	393

If “Yes” what are sources? (Ref Q85)

	Union Name								Upazila Name		Gender		Total
	Baharchara	HNila	Jaliapalong	Palongkhali	Rajapalong	Rotnapalong	Teknaf	Whykong	Teknaf	Ukhia	Female	Male	
Relatives	90%	78%	87%	71%	78%	22%	100%	89%	91%	69%	81%	88%	82%
Friends	52%	89%	67%	43%	61%	33%	67%	84%	70%	55%	63%	67%	64%
Money lender	19%	22%	7%	29%	28%	11%	48%	11%	26%	18%	23%	21%	23%
Microfinance	29%	11%	20%	0%	22%	44%	10%	11%	16%	22%	16%	29%	18%
Buyers of your product	0%	0%	0%	0%	0%	0%	5%	5%	3%	0%	2%	0%	2%
Other	5%	0%	7%	14%	0%	0%	0%	0%	1%	4%	2%	4%	3%
Base	21	9	15	7	18	9	21	19	70	49	95	24	119

Do you have any loan at the moment (Ref. Q86)

	Union Name								Upazila Name		Gender		Total
	Baharchara	HNila	Jaliapalong	Palongkhali	Rajapalong	Rotnapalong	Teknaf	Whykong	Teknaf	Ukhia	Female	Male	
No	92%	96%	88%	84%	54%	76%	72%	80%	85%	75%	80%	80%	80%
Yes	8%	4%	12%	16%	46%	24%	28%	20%	15%	25%	20%	20%	20%
Total	49	50	51	44	52	51	50	46	195	198	323	70	393

Loan Amount & interest rate(Ref. Q86a & Q87)

	Union Name								Upazila Name		Gender		Total
	Baharchara	HNila	Jaliapalong	Palongkhali	Rajapalong	Rotnapalong	Teknaf	Whykong	Teknaf	Ukhia	Female	Male	
Amount	9,800	18,000	31,250	5,786	17,792	34,083	12,714	10,167	11,886	21,714	14,050	36,393	18,060
interest rate	32	56	4	4	4	4	6	8	14	4	7	11	8

Who decides on availing loans? (Ref. Q103)

	Union Name								Upazila Name		Gender		Total
	Baharchar a	HNila	Jaliapalon g	Palongkhal i	Rajapalon g	Rotnapalon g	Tekna f	Whykon g	Tekna f	Ukhia	Femal e	Male	
Husband	50%	0%	17%	57%	33%	42%	50%	56%	48%	37%	45%	21%	41%
Wife	0%	0%	0%	29%	4%	25%	7%	11%	7%	12%	11%	7%	10%
both	50%	100%	33%	43%	58%	33%	43%	67%	55%	47%	48%	57%	50%
Self	0%	0%	50%	14%	17%	17%	14%	0%	7%	20%	14%	21%	15%
Chele	0%	0%	0%	0%	0%	8%	0%	0%	0%	2%	2%	0%	1%
Base	4	2	6	7	24	12	14	9	29	49	64	14	78

Is any women member of your family have any loan at the moment? (Ref. Q88)

	Union Name								Upazila Name		Gender		Total
	Baharchar a	HNila	Jaliapalo ng	Palongkhal i	Rajapalong	Rotnapalon g	Teknaf	Whykon g	Teknaf	Ukhi a	Female	Male	
No	100%	100%	100%	100%	92%	100%	98%	98%	99%	98%	98%	100%	98%
Yes	0%	0%	0%	0%	8%	0%	2%	2%	1%	2%	2%	0%	2%
Total	49	50	51	44	52	51	50	46	195	198	323	70	393

Other women member loan amount (Ref. Q88a)

	Union Name								Upazila Name		Gender		Total
	Baharch ara	HNil a	Jaliapal ong	Palongkh ali	Rajap along	Rotnapal ong	Teknaf	Whykon g	Teknaf	Ukhia	Fem ale	Ma le	
Average loan amount	12,500	.	15,000	5,000	10,000	12,500	11,6 67	.	11,667

What risk involved in managing finance? (Ref. Q89)

	Union Name								Upazila Name		Gender		Total
	Baharchara	HNil	Jaliapalong	Palongkhali	Rajapalong	Rotnapalong	Teknaf	Whykong	Teknaf	Ukhia	Female	Male	
Pick-pocketing while travelling	4%	0%	0%	2%	0%	2%	2%	0%	2%	1%	1%	4%	1%
stealing	24%	6%	14%	2%	13%	4%	30%	13%	18%	9%	15%	9%	13%
snatching	14%	2%	16%	5%	17%	14%	24%	9%	12%	13%	13%	13%	13%
loss of capital due to death of birds/animal purchased with borrowed money	0%	2%	0%	9%	8%	0%	2%	0%	1%	4%	3%	0%	3%
None	63%	90%	71%	84%	75%	80%	50%	78%	70%	77%	72%	80%	74%
Don't know	0%	0%	0%	2%	2%	0%	0%	0%	0%	1%	1%	0%	1%
Total	49	50	51	44	52	51	50	46	195	198	323	70	393

What are the challenges in receiving financial access for ultra-poor? (Ref. Q90)

	Union Name								Upazila Name		Gender		Total
	Baharchara	HNil	Jaliapalong	Palongkhali	Rajapalong	Rotnapalong	Teknaf	Whykong	Teknaf	Ukhia	Female	Male	
Complicated procedure	0%	4%	4%	7%	10%	10%	0%	0%	1%	8%	4%	4%	4%
Lack of understanding of loan interest and payment	4%	18%	33%	52%	46%	27%	10%	22%	13%	39%	26%	30%	26%
Lack of collateral	6%	6%	35%	45%	44%	47%	24%	7%	11%	43%	28%	24%	27%
Unable to pay instalment on time	65%	64%	96%	89%	98%	80%	54%	52%	59%	91%	73%	83%	75%
The amount of loan is very small	8%	2%	4%	5%	21%	14%	8%	9%	7%	11%	10%	4%	9%
Loan facilities far from my home	0%	0%	2%	0%	2%	0%	0%	7%	2%	1%	2%	0%	1%
Nothing	24%	34%	0%	2%	0%	0%	30%	41%	32%	1%	17%	13%	16%
Total	49	50	51	44	52	51	50	46	195	198	323	70	393

Do Ultra-poor (women face any specific challenges in accessing financial services? (Ref. Q91)

	Union Name								Upazila Name		Gender		Total
	Baharchara	HNil a	Jaliapal ong	Palongk hali	Rajapal ong	Rotnapal ong	Teknaf	Whykong	Teknaf	Ukhi a	Female	Male	
Complicated procedure	0%	4%	2%	11%	12%	4%	6%	2%	3%	7%	6%	3%	5%
Lack of understanding of loan interest and payment	2%	20%	41%	50%	40%	25%	10%	22%	13%	39%	25%	30%	26%
Lack of collateral	2%	12%	6%	9%	10%	2%	24%	9%	12%	7%	7%	17%	9%
Unable to pay instalment on time	61%	62%	78%	73%	94%	80%	44%	57%	56%	82%	67%	76%	69%
The amount of loan is very small	4%	4%	4%	2%	23%	18%	10%	7%	6%	12%	10%	6%	9%
Staff of the organizations are not supportive to the poor	8%	4%	33%	36%	40%	31%	6%	0%	5%	35%	22%	10%	20%
Loan facilities far from my home	8%	0%	4%	2%	10%	4%	0%	2%	3%	5%	4%	1%	4%
Women perceived as a risk customer	2%	0%	14%	2%	15%	8%	2%	0%	1%	10%	4%	11%	6%
Nothing	24%	34%	0%	0%	0%	4%	32%	41%	33%	1%	17%	16%	17%
Total	49	50	51	44	52	51	50	46	195	198	323	70	393

Do women in your household contribute to family livelihood e.g, washing, cleaning, and sorting? (Ref. Q92)

	Union Name								Upazila Name		Gender		Total
	Baharchar a	HNila	Jaliapalon g	Palongkhal i	Rajapalon g	Rotnapalon g	Teknaf	Whykon g	Teknaf	Ukhia	Female	Male	
No	14%	40%	65%	66%	63%	59%	38%	43%	34%	63%	45%	64%	49%
Yes	86%	60%	35%	34%	37%	41%	62%	57%	66%	37%	55%	36%	51%
Total	49	50	51	44	52	51	50	46	195	198	323	70	393

If "Yes" are they able to benefit from their livelihoods activities. i.e. Are women paid or unpaid for their work? (Ref. Q93)

	Union Name								Upazila Name		Gender		Total
	Baharchar a	HNila	Jaliapalon g	Palongkhal i	Rajapalon g	Rotnapalon g	Teknaf	Whykon g	Teknaf	Ukhia	Female	Male	
No	0%	0%	0%	7%	5%	0%	0%	0%	0%	3%	1%	4%	1%
Yes	100%	100%	100%	93%	95%	100%	100%	100%	100%	97%	99%	96%	99%
Base	42	30	18	15	19	21	31	26	129	73	177	25	202

Is female worker getting wage for their work or not? (Ref. Q93a)

	Union Name								Upazila Name		Gender		Total
	Baharchar a	HNila	Jaliapalon g	Palongkhal i	Rajapalon g	Rotnapalon g	Teknaf	Whykon g	Teknaf	Ukhia	Female	Male	
No	71%	83%	28%	7%	11%	33%	94%	58%	77%	21%	53%	80%	56%
Yes	29%	17%	72%	93%	89%	67%	6%	42%	23%	79%	47%	20%	44%
Base	42	30	18	15	19	21	31	26	129	73	177	25	202

If “Yes” what is the main activity within the value chain they do? (Ref. Q94)

	Union Name								Upazila Name		Gender		Total
	Baharchar a	HNil a	Jaliapalon g	Palongkha li	Rajapalon g	Rotnapalon g	Tekna f	Whykon g	Tekna f	Ukhi a	Femal e	Mal e	
Processing	64%	83%	44%	27%	11%	33%	65%	62%	68%	29%	50%	80%	54%
Packaging	0%	0%	6%	7%	5%	0%	3%	0%	1%	4%	2%	4%	2%
transportati on	0%	0%	11%	0%	0%	10%	3%	0%	1%	5%	2%	4%	2%
Storage	2%	0%	6%	0%	5%	5%	0%	12%	3%	4%	4%	0%	3%
Labor	7%	3%	22%	53%	63%	24%	0%	12%	5%	40%	20%	0%	18%
Other	5%	3%	17%	7%	16%	29%	0%	8%	4%	18%	10%	4%	9%
Base	42	30	18	15	19	21	31	26	129	73	177	25	202

Who is responsible for making major decisions (i.e. what is generally accepted in this community) in your household? (Ref. Q95)

	Union Name								Upazila Name		Gender		Total
	Baharcha ra	HNil a	Jaliapalo ng	Palongkh ali	Rajapalo ng	Rotnapalo ng	Tekn af	Whykon g	Tekn af	Ukhi a	Femal e	Mal e	
Male Household head	14%	6%	12%	20%	12%	14%	20%	13%	13%	14%	9%	34%	14%
Female Household head	16%	8%	14%	5%	6%	14%	18%	17%	15%	10%	15%	0%	12%
Husband	12%	26%	35%	23%	21%	45%	18%	26%	21%	31%	29%	10%	26%
Wife	6%	4%	10%	9%	2%	16%	6%	9%	6%	9%	7%	9%	8%
Making decision jointly	55%	66%	33%	32%	48%	24%	36%	57%	53%	34%	42%	53%	44%
Self	2%	2%	8%	23%	12%	0%	6%	0%	3%	10%	7%	4%	6%
Other	2%	0%	6%	0%	6%	6%	2%	0%	1%	5%	2%	6%	3%
Total	49	50	51	44	52	51	50	46	195	198	323	70	393

Who makes decisions about how money is spent in your household? (Ref. Q96)

	Union Name								Upazila Name		Gender		Total
	Baharchara	HNil a	Jaliapalo ng	Palongkh ali	Rajapalo ng	Rotnapalo ng	Teknaf	Whykong	Teknaf	Ukhi a	Female	Male	
Male Household head	10%	6%	8%	20%	12%	14%	16%	11%	11%	13%	8%	30%	12%
Female Household head	16%	10%	14%	7%	6%	12%	18%	17%	15%	10%	15%	0%	12%
Husband	18%	28%	37%	20%	15%	41%	18%	24%	22%	29%	29%	9%	25%
Wife	12%	6%	18%	14%	6%	22%	4%	2%	6%	15%	12%	3%	10%
Making decisions jointly	57%	58%	29%	30%	56%	29%	40%	50%	51%	36%	41%	54%	44%
Self decisions	2%	2%	4%	11%	13%	0%	6%	0%	3%	7%	6%	1%	5%
Q96other_ind	2%	0%	4%	0%	0%	4%	0%	0%	1%	2%	1%	4%	1%
Total	49	50	51	44	52	51	50	46	195	198	323	70	393

Who decides on major purchases (livestock, land...) in your household? (Ref. Q97)

	Union Name								Upazila Name		Gender		Total
	Baharchara	HNil a	Jaliapalo ng	Palongkh ali	Rajapalo ng	Rotnapalo ng	Teknaf	Whykong	Teknaf	Ukhi a	Female	Male	
Male Household head	12%	4%	8%	20%	12%	14%	14%	9%	10%	13%	7%	31%	11%
Female Household head	16%	10%	14%	7%	6%	10%	18%	17%	15%	9%	15%	0%	12%
Husband	20%	26%	35%	20%	13%	37%	22%	33%	25%	27%	30%	9%	26%
Wife	14%	8%	12%	9%	0%	18%	12%	11%	11%	10%	11%	9%	10%
Making decisions jointly	55%	70%	31%	36%	52%	37%	44%	59%	57%	39%	47%	54%	48%
Self decisions	2%	2%	4%	7%	13%	0%	6%	0%	3%	6%	5%	1%	4%
Q96other_ind	2%	0%	4%	0%	4%	2%	0%	0%	1%	3%	1%	4%	2%
Total	49	50	51	44	52	51	50	46	195	198	323	70	393

Who decides on schooling/education in your household? (Ref. Q98)

	Union Name								Upazila Name		Gender		Total
	Baharchara	HNila	Jaliapaloning	Palongkhali	Rajapaloning	Rotnapaloning	Teknaf	Whykong	Teknaf	Ukhia	Female	Male	
Male Householdhead	6%	6%	6%	20%	6%	12%	12%	4%	7%	11%	6%	21%	9%
Female Householdhead	16%	10%	14%	7%	4%	12%	18%	15%	15%	9%	15%	0%	12%
Husband	20%	26%	24%	14%	2%	18%	20%	24%	23%	14%	20%	9%	18%
Wife	22%	22%	14%	11%	6%	27%	10%	24%	19%	15%	19%	10%	17%
Making decisions jointly	61%	82%	47%	39%	69%	41%	48%	76%	67%	49%	55%	70%	58%
Self decisions	2%	2%	2%	9%	13%	8%	6%	0%	3%	8%	7%	0%	5%
Q98other_ind	2%	0%	4%	0%	2%	0%	0%	0%	1%	2%	0%	4%	1%
Total	49	50	51	44	52	51	50	46	195	198	323	70	393

How would you describe your economic situation today compared with 12 months ago? (Ref. Q99)

	Union Name								Upazila Name		Gender		Total
	Baharchara	HNila	Jaliapaloning	Palongkhali	Rajapaloning	Rotnapaloning	Teknaf	Whykong	Teknaf	Ukhia	Female	Male	
As before	22%	12%	39%	14%	17%	27%	26%	22%	21%	25%	20%	33%	23%
Better than ever	29%	6%	6%	2%	0%	6%	34%	17%	22%	4%	11%	17%	12%
Much better than before	2%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%
Much worse than before	12%	12%	6%	18%	8%	12%	10%	7%	10%	11%	11%	6%	10%
Worse than before	35%	70%	49%	66%	75%	55%	30%	54%	47%	61%	56%	44%	54%
Total	49	50	51	44	52	51	50	46	195	198	323	70	393

How would you describe your social situation today compared with 12 months ago? (Ref. Q100)

	Union Name								Upazila Name		Gender		Total
	Baharchara	HNila	Jaliapaloning	Palongkhali	Rajapaloning	Rotnapaloning	Teknaf	Whykong	Teknaf	Ukhia	Female	Male	
As before	37%	40%	75%	77%	79%	67%	26%	39%	35%	74%	53%	64%	55%
Better than ever	41%	22%	12%	2%	0%	0%	48%	24%	34%	4%	18%	23%	19%
Much worse than before	0%	8%	0%	2%	2%	2%	4%	4%	4%	2%	3%	1%	3%
Worse than before	22%	30%	14%	18%	19%	31%	22%	33%	27%	21%	26%	11%	24%
Total	49	50	51	44	52	51	50	46	195	198	323	70	393

Are you or a member of your household is involved in any organisation? (Ref. Q101)

	Union Name								Upazila Name		Gender		Total
	Baharchara	HNila	Jaliapaloning	Palongkhali	Rajapaloning	Rotnapaloning	Teknaf	Whykong	Teknaf	Ukhia	Female	Male	
No	92%	98%	96%	100%	88%	92%	96%	96%	95%	94%	95%	91%	95%
Yes	8%	2%	4%	0%	12%	8%	4%	4%	5%	6%	5%	9%	5%
Total	49	50	51	44	52	51	50	46	195	198	323	70	393

If yes please mention the type of organisation (Ref. Q102)

	Union Name								Upazila Name		Gender		Total
	Baharchara	HNila	Jaliapaloning	Palongkhali	Rajapaloning	Rotnapaloning	Teknaf	Whykong	Teknaf	Ukhia	Female	Male	
NGO organised group	0%	100%	50%	0%	67%	80%	0%	50%	22%	69%	44%	67%	50%
Women Affairs organised groups	100%	0%	50%	0%	33%	20%	100%	50%	78%	31%	56%	33%	50%
Base	4	1	2	0	6	5	2	2	9	13	16	6	22

Who decides on marriage of children from the household? (Ref. Q104)

	Union Name								Upazila Name		Gender		Total
	Baharchara	HNil a	Jaliapalo ng	Palongkh ali	Rajapalo ng	Rotnapalo ng	Tekna f	Whykon g	Tekna f	Ukhi a	Femal e	Mal e	
Husband	16%	22%	18%	18%	6%	16%	24%	28%	23%	14%	20%	11%	18%
Wife	18%	20%	6%	2%	2%	20%	24%	28%	23%	8%	15%	16%	15%
Joint decision making	57%	88%	51%	27%	60%	49%	64%	61%	68%	47%	54%	73%	58%
Own(children)	10%	4%	10%	25%	25%	20%	4%	11%	7%	20%	15%	9%	13%
Household head	24%	10%	24%	25%	21%	16%	14%	15%	16%	21%	19%	16%	19%
Self	6%	2%	8%	18%	13%	16%	6%	7%	5%	14%	9%	10%	9%
Total	49	50	51	44	52	51	50	46	195	198	323	70	393

Do you participate in social and community programme?

	Union Name								Upazila Name		Gender		Total
	Baharchar a	HNil a	Jaliapalon g	Palongkhal i	Rajapalon g	Rotnapalon g	Teknaf	Whykon g	Teknaf	Ukhia	Female	Male	
No	18%	12%	16%	14%	12%	31%	28%	22%	20%	18%	23%	1%	19%
Yes	82%	88%	84%	86%	88%	69%	72%	78%	80%	82%	77%	99%	81%
Total	49	50	51	44	52	51	50	46	195	198	323	70	393

Who decides on participation in social and community programs?

	Union Name								Upazila Name		Gender		Total
	Baharchara	HNil a	Jaliapalo ng	Palongkh ali	Rajapalo ng	Rotnapalo ng	Tekna f	Whykon g	Tekna f	Ukhi a	Femal e	Mal e	
Husband	35%	45%	40%	34%	28%	46%	39%	44%	41%	36%	42%	28%	39%
Wife	23%	27%	12%	0%	2%	26%	39%	31%	29%	9%	21%	12%	19%
Jointly decisions making	73%	82%	42%	29%	63%	37%	67%	67%	72%	44%	55%	68%	58%
Self	5%	2%	12%	37%	9%	11%	6%	0%	3%	17%	9%	13%	10%

Other	0%	0%	7%	5%	2%	3%	3%	3%	1%	4%	3%	3%	3%
Base	40	44	43	38	46	35	36	36	156	162	249	69	318

Do you think the women of your household can move freely within the village/community?

	Union Name								Upazila Name		Gender		Total
	Baharch ara	HNila	Jaliapal ong	Palong khali	Rajapal ong	Rotnapa long	Teknaf	Whykong	Teknaf	Ukhila	Female	Male	
No	2%	6%	0%	0%	4%	4%	12%	2%	6%	2%	4%	3%	4%
Yes	98%	94%	100%	100%	96%	96%	88%	98%	94%	98%	96%	97%	96%
Total	49	50	51	44	52	51	50	46	195	198	323	70	393

If no, please mention the reason

	Union Name								Upazila Name		Gender		Total
	Baharch ara	HNila	Jaliapal ong	Palong khali	Rajapal ong	Rotnapa long	Teknaf	Whykong	Teknaf	Ukhila	Female	Male	
Social norms does not accept free movement of women	0%	100%	0%	0%	100%	50%	83%	0%	67%	100%	69%	100%	73%
It is not safe for women to freely move in the village	100%	100%	0%	0%	0%	0%	0%	100%	42%	0%	38%	0%	33%
Religious aspects does not allow them	0%	0%	0%	0%	0%	50%	50%	0%	25%	33%	23%	50%	27%
Women are vulnerable to sexual harassment and should stay at home	100%	100%	0%	0%	0%	0%	33%	0%	50%	0%	46%	0%	40%
Base	1	3	0	0	2	2	6	1	12	3	13	2	15

Are there practices of child marriage in your community?

	Union Name								Upazila Name		Gender		Total
	Baharchar a	HNilā	Jaliapalon g	Palongkhal i	Rajapalon g	Rotnapalon g	Teknaf	Whykon g	Teknaf	Ukhia	Female	Male	
No	39%	74%	59%	32%	56%	59%	34%	11%	40%	52%	44%	54%	46%
Yes	61%	26%	41%	68%	44%	41%	66%	89%	60%	48%	56%	46%	54%
Total	49	50	51	44	52	51	50	46	195	198	323	70	393

Are you aware of laws that restrict child marriage?

	Union Name								Upazila Name		Gender		Total
	Baharchar a	HNilā	Jaliapalon g	Palongkhal i	Rajapalon g	Rotnapalon g	Teknaf	Whykon g	Teknaf	Ukhia	Female	Male	
No	27%	20%	25%	23%	12%	6%	40%	35%	30%	16%	23%	24%	23%
Yes	73%	80%	75%	77%	88%	94%	60%	65%	70%	84%	77%	76%	77%
Total	49	50	51	44	52	51	50	46	195	198	323	70	393

Are there practices of dowry in your community?

	Union Name								Upazila Name		Gender		Total
	Baharchar a	HNilā	Jaliapalon g	Palongkhal i	Rajapalon g	Rotnapalon g	Teknaf	Whykon g	Teknaf	Ukhia	Female	Male	
No	20%	8%	8%	0%	0%	0%	14%	0%	11%	2%	5%	13%	6%
Yes	80%	92%	92%	100%	100%	100%	86%	100%	89%	98%	95%	87%	94%
Total	49	50	51	44	52	51	50	46	195	198	323	70	393

Are there any occurrences of sexual harassment in your community?

	Union Name								Upazila Name		Gender		Total
	Baharchar a	HNil a	Jaliapalon g	Palongkhal i	Rajapalon g	Rotnapalon g	Teknaf	Whykon g	Teknaf	Ukhia	Female	Male	
No	84%	92%	90%	86%	77%	90%	78%	85%	85%	86%	85%	87%	85%
Yes	16%	8%	10%	14%	23%	10%	22%	15%	15%	14%	15%	13%	15%
Total	49	50	51	44	52	51	50	46	195	198	323	70	393

If any occurrence of sexual harassment happens, what do you do? (Ref. Q111)

	Union Name								Upazila Name		Gender		Total
	Baharch ara	HNil a	Jaliapal ong	Palongk hali	Rajapalo ng	Rotnapal ong	Tekn af	Whyko ng	Tekn af	Ukhi a	Fema le	Mal e	
Report to police	25%	0%	20%	0%	17%	0%	9%	0%	10%	11%	6%	33%	10%
Report to Union Parishad	63%	50%	80%	100%	67%	60%	9%	29%	33%	75%	55%	44%	53%
Go to village leaders	25%	0%	100%	83%	92%	60%	0%	14%	10%	86%	45%	56%	47%
Do not report as it is a matter of prestige	25%	50%	0%	0%	0%	0%	82%	57%	57%	0%	31%	22%	29%
Base	8	4	5	6	12	5	11	7	30	28	49	9	58

Do you have any secondary occupation? If yes what is that?

	Union								Upazila		Gender		Total
	Baharc hara	HNila	Jaliapa long	Palong khali	Rajapa long	Rotnap along	Teknaf	Whyko ng	Teknaf	Ukhia	Female	Male	
House Maid	0%	0%	0%	0%	0%	0%	18%	13%	10%	0%	7%	0%	5%
Wood collection and selling	38%	29%	67%	45%	0%	0%	29%	0%	25%	43%	31%	38%	33%
Day Labor	63%	14%	0%	0%	17%	0%	47%	13%	38%	3%	19%	29%	21%
Vegetable cultivation, agricultural work	0%	0%	7%	36%	17%	67%	6%	25%	8%	23%	13%	19%	15%
Vickels helper	0%	0%	0%	9%	0%	33%	0%	0%	0%	6%	4%	0%	3%
Cow rearing (others people)	0%	0%	0%	0%	0%	33%	0%	0%	0%	3%	0%	5%	1%
Work of cutting wood	0%	0%	0%	0%	0%	0%	12%	0%	5%	0%	2%	5%	3%
Tailor	13%	0%	0%	0%	17%	0%	0%	13%	5%	3%	6%	0%	4%
Rikshaw	0%	0%	7%	9%	17%	0%	0%	0%	0%	9%	6%	0%	4%
Fisherman/catching fish	0%	0%	13%	0%	0%	0%	0%	0%	0%	6%	2%	5%	3%
Collecting oyster	0%	0%	7%	0%	0%	0%	0%	0%	0%	3%	2%	0%	1%
Corn Businesss	0%	14%	0%	0%	0%	0%	0%	0%	3%	0%	2%	0%	1%
Making product by bamboo	0%	0%	0%	0%	17%	0%	0%	0%	0%	3%	2%	0%	1%
Rearing poultry	0%	14%	0%	0%	17%	0%	0%	0%	3%	3%	4%	0%	3%
Cow rearing (own)	0%	0%	0%	0%	0%	0%	0%	13%	3%	0%	2%	0%	1%
Service/Job	0%	0%	0%	0%	0%	0%	0%	13%	3%	0%	2%	0%	1%
Ferryman	0%	0%	0%	0%	0%	0%	0%	13%	3%	0%	2%	0%	1%
Salon	0%	14%	0%	0%	0%	0%	0%	0%	3%	0%	0%	5%	1%
Electrician	0%	14%	0%	0%	0%	0%	0%	0%	3%	0%	2%	0%	1%
Base	8	7	15	11	6	3	17	8	40	35	54	21	75