



Sustainable Economic Development through Inclusive Agricultural Marketing: A Study on Ethnic Community Groups in Three Hill Districts

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Abstract: The Chittagong Hill Tracts (CHT) region, home to eleven distinct ethnic groups, is a crucial area for sustainable economic growth. With an estimated ten billion people on the planet by 2050, agricultural growth is essential to combat extreme poverty and promote shared wealth. The region, consisting of three hill districts, has a high percentage of middle-aged farmers, with a higher marriage rate, lower single farmers, and lower divorce rates. The Chittagong Hill Tracts has a high percentage of illiterate and uneducated farmers, with 42.7% of respondents under twenty-five having completed secondary school. Joint families make up a larger percentage of the farming population (77.3%) than those from nuclear households (22.7%). Most respondents (53.3%) have incomes of less than one lakh, while 8.3% make between 3-5 lakh and above 5 lakhs. Sixty-two percent have rented land. Farmers aged 25 to 50 have better chances of economic growth than those under twenty-five, indicating that growing older may have a positive impact on the economy. Secondary and higher education also affect economic growth. Economic growth and family size are correlated, with joint-family farmers experiencing greater economic growth than nuclear-family farmers. Married farmers have a higher likelihood of economic growth compared to single farmers. Land ownership, time spent cultivating, and growing farming experience all contributed to the region's economic growth. Direct marketing can boost economic growth, and it is associated with a higher probability of doing so. To achieve this, the Bangladesh University Grants Commission can implement mandatory schooling in the CHT. By combining the experiences of more senior farmers with economic progress, policymakers can disseminate their results to younger farmers. To boost workforce availability, the government and non-governmental groups should undertake projects that facilitate easy ownership for farmers in the CHT. Non-governmental groups can organize seminars to inform farmers about the benefits of direct selling and motivate them to adopt this strategy. Addressing income disparities throughout the hills in the CHT is crucial, as farmers need to prepare for the potential to make money from hillsides.

Keywords: Economy; Economic growth; CHT; Ethnic Community; Jum agriculture.

1. Introduction

Promoting equitable agriculture for long-term economic growth is a crucial aspect of global development. It comprises creating a sustainable, beneficial, and inclusive economic growth strategy that benefits all stakeholders, especially underprivileged groups. According to the World Economic Forum, to create robust, inclusive, and sustainable economic growth, four key components are required: finance, investment, innovation, and policy. Marketing for inclusive agriculture is a key component of sustainable economic growth. Women, youth, and other marginalized groups can overcome barriers to engaging in and benefiting from market systems as workers, entrepreneurs, and producers by enacting policies that support better land tenure, encourage the development of market-based skills, encourage the formation of savings groups, aggregate production, and other evidence-based collective arrangements.

The World Bank recognized the significance that agriculture plays in reaching global development objectives. Aiming to feed a predicted ten billion people by 2050, agricultural growth is one of the most effective measures to reduce extreme

poverty and create shared prosperity.

Long practiced by Indigenous peoples, Jum agriculture is a kind of "shifting" or "rotational" slash and burn farming done in certain regions. 26 percent of the estimated 364,000 acres of cultivable land are used for Jum, 20 percent are farmed using a plow, 18 percent are set aside for homesteads, and 35 percent are either planted or kept fallow. Appropriate farming methods have not been implemented enough in recent times for a variety of reasons, including insufficient knowledge and experience, scarce resources, land scarcity, financial limitations, or challenging market accessibility. The most remote settlements in CHT as a result endure abject poverty and restricted access to supplies. Other development concerns include low literacy rates, a high underemployment rate, and a lack of economic opportunities.

The Chittagong Hill Tracts Development Facility (CHTDF) conducted a household survey in 2013 with a sample size of 2,500 families, using the direct calorie intake approach. 74% of CHT households, according to the report, are below the upper poverty line, while 52.4% are below the lower poverty line. To assist the long-term socioeconomic progress of the people living in the CHT, a number of governmental and non-governmental organizations are presently conducting a variety of inclusive agriculture marketing activities. To create revenue-generating activities within the initiative, such as growing mushrooms, beekeeping, and medicinal plants, ICIMOD and the projects cooperated. UNDP through funding from DANIDA has implemented the Agriculture and Food Security Project (AFSP) during 2009-2013 and 2013-2017 benefitting a total of 59,045 poor and marginal farmers through 2,490 Farmer Field Schools (FFS) in 121 Unions of 26 Upazilas of 3 Hill Districts in the light of Inclusive Agricultural Farm Management and improved farming practices on crops, fruits, vegetables, spices, livestock and fish.

2. Objectives of the study

The project's overarching goal is to promote inclusive agricultural marketing and the economic development of certain ethnic communities in three hill districts inside the Chittagong Hill Tracts (CHT). To lessen poverty and promote economic growth in these hilly areas, the project also focuses on the sustainable development of indigenous agricultural product marketing and income creation.

- a) To examine the profitability of ethnic farmers in three hill districts.
- b) To identify the existing marketing systems and linkages of ethnic farmers in three hill districts.
- c) To determine the relationship between two selected groups (on-farm and off-farm) with their economic growth and other heterogeneous socio-economic characteristics.
- d) To identify factors that affect economic growth in the study area.

3. Methodology

3.1 Study Area and Population

The three hill districts that comprise the Chittagong Hill Tracts (CHT) in southeast Bangladesh are Rangamati, Bandarban, and Khagrachari. Its 13,294 square kilometers are mostly made up of mountains. The population is estimated to be 1.6 million. In relation to its size, it is one of the most ethnically and culturally diverse regions in the world. The three most widely practiced religions are Christianity, Islam, and Buddhism. Half of the people living in the CHT are members of eleven distinct ethnic groups, each with its own language, customs, legal system, and way of life.

3.2 Unit of Analysis

One main bazaar and two smaller bazaars in each district will be used to identify ethnic farmers and their agricultural products, which are further divided into two categories: those with incomes derived from on-farm activities, such as growing fruits and vegetables, and those without incomes (off-farm), such as making clothes on a traditional handloom.

3.3 Sources of Data

Our goal was to evaluate the agricultural market's progress in the hill tracts of Chittagong. We selected the Chittagong hill tracts as the study region for this. For the research, both primary and secondary data were employed. The main source of secondary data was the Bangladesh Bureau of Statistics. We also made the use of Yearbook of Agricultural Statistics of Bangladesh.

3.3.1 Primary Data Collection Process

The survey states that the Bangladesh Bureau of Statistics (BBS) was responsible for choosing sampling frames for conducting surveys. We divided the Chittagong Hill tracts into 111 unions, each of which included three districts. Here, to reach the goal, we used a purposive sample. We selected 25 unions from three hilly regions through systematic random sampling. That amounts to about 33 percent of the union. By adding coverage to the poll, this procedure ensures that the result is nationally representative. The second phase involved the selection of communities from the estimated union.

Following the sampling procedure, the study's final interview candidates included nine villages from Rangamati, 10 villages from Khagrachari, and six villages from Bandarban. The last step involved using the Serpentine procedure to select the Bazar from the villages. Through this sampling procedure, the Bazar counts start from one side and go all the way to the desired number. The high response rate helped to lower the analysis's inaccuracy.

3.3.2 Bangladesh Bureau of Statistics

The Bangladesh Bureau of Statistics (BBS) created the Sample Vital Registration System (SVRS) in 1980 to track changes in the country's demographics over intercensal intervals. An integrated multi-purpose sample (IMPS) design, in conjunction with two separate systems, gathers notable events, such as births, deaths, marriages, divorces, and separations. Other significant events include in- and out-migration, the use of contraceptives, and handicaps.

3.4 Target Population

Three hill districts in the CHT were our choices: Rangamati, Khagrachari, and Bandarban. Each district has a main bazaar as well as two smaller ones where ethnic farmers were identified along with their agricultural products.

3.5 Sample Size

The first step in the process, known as sample size determination, is to select the appropriate sample size. We employed a probabilistic sampling technique, as detailed later, to obtain a representative sample size. Farmers in three districts of Bangladesh's Chittagong Hill Tracts region, which is part of the Chittagong Hill Tracts Rural Development Project. As such, it was logical to start by finding the proper size for the representative sample of respondents. We took care in selecting the sample to ensure its representativeness of the population. The current study selected ethnic farmers of equal size from three hill districts. For this project, we selected an estimated 300 ethnic farmers—100 from each district. Every sample was chosen with purpose.

3.6 Preparation of interview schedule

Data was gathered through in-person interviews with the ethnic farmers. A preliminary interview schedule was made. Final interview schedules with any required alterations, revisions, and adjustments were created after pre-testing.

3.7 Editing, processing and tabulation of data

When data collection was concluded, the collected data was analyzed thoroughly to detect errors and omissions. Following that, an excel sheet was used to house the data instead of the survey schedules. The analysis of the tabulated data will ultimately be guided by the objectives.

3.8 Data Processing

Throughout the data collection, tabulation, and analysis process, the objectives of the study were adhered to. We have used a variety of computer programs to streamline and expedite the analysis process. Both statistical and non-statistical packages are available. They were SPSS Version 23, MS Word 2016, R version 3.3.1, MS Excel 2016.

4. Data Analysis and Findings

4.1 Socio-Demographic Status of the respondents: (n=200)

Table 1: Age of the Farmers

			Age of the farmers			Total
			Below 25 years	Between 25 to 50 years	Above 50 years	
CHT region	Bandarban	Count	44	44	12	100
		Row (%)	44.0%	44.0%	12.0%	100.0%
		Column (%)	34.4%	34.1%	27.9%	33.3%
	Rangamati	Count	45	43	12	100
		Row (%)	45.0%	43.0%	12.0%	100.0%
		Column (%)	35.2%	33.3%	27.9%	33.3%
	Khagrachhari	Count	39	42	19	100
		Row (%)	39.0%	42.0%	19.0%	100.0%
		Column (%)	30.5%	32.6%	44.2%	33.3%
Total	Count	128	129	43	300	
	Row (%)	42.7%	43.0%	14.3%	100.0%	
	Column (%)	100.0%	100.0%	100.0%	100.0%	

The majority of respondents from the Chittagong Hill Tracts were middle-aged farmers (43%), who were between the ages of 25 and 50. In contrast, 42.7% of the respondents were younger (under 25), while 14.3% were older (over 50). Middle-aged farmers from Bandarban made up the largest percentage of them (44%), while those from Khagrachari made up the lowest (42%).

Table 2: Marital Status of the Farmers

		Marital Status			Total	
		Single	Married	Divorced		
CHT region	Bandarban	Count	21	79	0	100
		Row (%)	21.0%	79.0%	0.0%	100.0%
		Column (%)	33.9%	34.1%	0.0%	33.3%
	Rangamati	Count	21	77	2	100
		Row (%)	21.0%	77.0%	2.0%	100.0%
		Column (%)	33.9%	33.2%	33.3%	33.3%
	Khagrachhari	Count	20	76	4	100
		Row (%)	20.0%	76.0%	4.0%	100.0%
		Column (%)	32.3%	32.8%	66.7%	33.3%
Total		Count	62	232	6	300
		Row (%)	20.7%	77.3%	2.0%	100.0%
		Column (%)	100.0%	100.0%	100.0%	100.0%

The marriage percentage (77.3%) is higher among the farmers and 20.7% percentage of farmers are single and 2% farmers are divorced. Bandarban contains a higher percentage (34.1%) of married farmers and Rangamati contains less (33.2%).

Table 3: Educational Status of the Farmers

		Educational-Level								Total
		Illiterate	Illiterate but can sign	Primary	Secondary	Diploma/Technical	Graduation	Post graduation	Others	
Bandarban	Count	51	8	13	12	7	2	3	4	100
	Row (%)	51.0%	8.0%	13.0%	12.0%	7.0%	2.0%	3.0%	4.0%	100.0%
	Column (%)	35.7%	40.0%	48.1%	27.3%	20.0%	15.4%	37.5%	40.0%	33.3%
Rangamati	Count	41	7	7	16	17	6	2	4	100
	Row (%)	41.0%	7.0%	7.0%	16.0%	17.0%	6.0%	2.0%	4.0%	100.0%
	Column (%)	28.7%	35.0%	25.9%	36.4%	48.6%	46.2%	25.0%	40.0%	33.3%
Khagrachhari	Count	51	5	7	16	11	5	3	2	100
	Row (%)	51.0%	5.0%	7.0%	16.0%	11.0%	5.0%	3.0%	2.0%	100.0%
	Column (%)	35.7%	25.0%	25.9%	36.4%	31.4%	38.5%	37.5%	20.0%	33.3%
Total	Count	143	20	27	44	35	13	8	10	300
	Row (%)	47.7%	6.7%	9.0%	14.7%	11.7%	4.3%	2.7%	3.3%	100.0%
	Column (%)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

The respondents from the Chittagong Hill Tracts were primarily literate (47.7%), with no education. In contrast, 42.7% of the respondents were with secondary education (under 25), and 14.3% were with diploma. Bandarban and Khagrachhari produced the highest percentage of illiterate farmers (51%), and Rangamati produced the lowest percentage of illiterate farmers (41%).

Table 4: Family Type of the Farmers

		Type of family		Total	
		Nuclear	Joint		
CHT region	Bandarban	Count	21	79	100
		Row (%)	21.0%	79.0%	100.0%
		Column (%)	30.9%	34.1%	33.3%
	Rangamati	Count	23	77	100
		Row (%)	23.0%	77.0%	100.0%
		Column (%)	33.8%	33.2%	33.3%
	Khagrachhari	Count	24	76	100
		Row (%)	24.0%	76.0%	100.0%
		Column (%)	35.3%	32.8%	33.3%
Total		Count	68	232	300
		Row (%)	22.7%	77.3%	100.0%
		Column (%)	100.0%	100.0%	100.0%

The percentage of farmers who are from joint family (77.3%) is larger than the percentage of farmers who are from nuclear family (22.7%). The proportion of farmers who are from joint families in Bandarban is higher (79%) and lower in Khagrachhari (76%).

Table 5: Land Size of the Farmers

			Size of lands				Total
			Below 1 acre	1-3 acres	3.01-5 acres	Above 5 Acres	
CHT region	Bandarban	Count	17	26	57	0	100
		Row (%)	17.0%	26.0%	57.0%	0.0%	100.0%
		Column (%)	19.5%	45.6%	45.2%	0.0%	33.3%
	Rangamati	Count	59	0	29	12	100
		Row (%)	59.0%	0.0%	29.0%	12.0%	100.0%
		Column (%)	67.8%	0.0%	23.0%	40.0%	33.3%
	Khagrachhari	Count	11	31	40	18	100
		Row (%)	11.0%	31.0%	40.0%	18.0%	100.0%
		Column (%)	12.6%	54.4%	31.7%	60.0%	33.3%
Total		Count	87	57	126	30	300
		Row (%)	29.0%	19.0%	42.0%	10.0%	100.0%
		Column (%)	100.0%	100.0%	100.0%	100.0%	100.0%

The percentage of farmers who have 3.01-5 acres (77.3%) is larger than the percentage of single farmers who have below 1 acres of land (29%), 1-3 acres (19%), and above 5 acres (10%). The proportion of farmers who have 3.01-5 acres in Bandarban is higher (57%) and lower in Rangamati (29%).

Table 6: Annual Income of the Farmers

			Annual Income				Total
			Below 1 Lakh	Between 1-3 Lakh	Between 3-5 Lakh	Above 5 Lakh	
CHT region	Bandarban	Count	63	20	7	10	100
		Row (%)	63.0%	20.0%	7.0%	10.0%	100.0%
		Column (%)	39.4%	22.2%	28.0%	40.0%	33.3%
	Rangamati	Count	52	33	9	6	100
		Row (%)	52.0%	33.0%	9.0%	6.0%	100.0%
		Column (%)	32.5%	36.7%	36.0%	24.0%	33.3%
	Khagrachhari	Count	45	37	9	9	100
		Row (%)	45.0%	37.0%	9.0%	9.0%	100.0%
		Column (%)	28.1%	41.1%	36.0%	36.0%	33.3%
Total		Count	160	90	25	25	300
		Row (%)	53.3%	30.0%	8.3%	8.3%	100.0%
		Column (%)	100.0%	100.0%	100.0%	100.0%	100.0%

The income of the majority of responders from the Chittagong Hill Tracts (53.3%) was below 1 lakh. On the other hand, 30% of respondents had income between 1-3 lakh, and 8.3% of respondents had income between 3-5 lakh and above 5 lakhs.

Table 7: Banking Status of the Farmers

			Have Any Bank Account		Total
			Yes	No	
CHT region	Bandarban	Count	0	100	100
		Row (%)	0.0%	100.0%	100.0%
		Column (%)	0.0%	47.4%	33.3%
	Rangamati	Count	0	100	100
		Row (%)	0.0%	100.0%	100.0%
		Column (%)	0.0%	47.4%	33.3%
	Khagrachhari	Count	89	11	100
		Row (%)	89.0%	11.0%	100.0%
		Column (%)	100.0%	5.2%	33.3%
Total		Count	89	211	300
		Row (%)	29.7%	70.3%	100.0%
		Column (%)	100.0%	100.0%	100.0%

The percentage of farmers who do not have bank accounts (70.3%) is larger than the farmers who have bank accounts (29.7%).

Table 8: Classification based on the Land Type regarding CHT (three hill districts)

		Land Type		Total	
		Owned	Rented		
CHT region	Bandarban	Count	37	63	100
		Row (%)	37.0%	63.0%	100.0%
		Column (%)	32.5%	33.9%	33.3%
	Rangamati	Count	36	64	100
		Row (%)	36.0%	64.0%	100.0%
		Column (%)	31.6%	34.4%	33.3%
	Khagrachhari	Count	41	59	100
		Row (%)	41.0%	59.0%	100.0%
		Column (%)	36.0%	31.7%	33.3%
Total		Count	114	186	300
		Row (%)	38.0%	62.0%	100.0%
		Column (%)	100.0%	100.0%	100.0%

The percentage of farmers who took land as rent (62%) is larger than the percentage of farmers who have owned land (38%). The rent percentage is higher in Rangamati and is lower in Rangamati.

Table 9: Time span in farming

		Engaged in Farming				Total	
		Below 3 years	3-6 years	7-10 years	Above 10 years		
CHT region	Bandarban	Count	33	5	55	7	100
		Row (%)	33.0%	5.0%	55.0%	7.0%	100.0%
		Column (%)	70.2%	4.0%	70.5%	14.0%	33.3%
	Rangamati	Count	0	57	0	43	100
		Row (%)	0.0%	57.0%	0.0%	43.0%	100.0%

Table 10: Experience in farming

		Farming Experience			Total	
		High	Low	Medium		
CHT region	Bandarban	Count	34	38	28	100
		Row (%)	34.0%	38.0%	28.0%	100.0%
		Column (%)	28.3%	42.2%	31.1%	33.3%
	Rangamati	Count	55	17	28	100
		Row (%)	55.0%	17.0%	28.0%	100.0%
		Column (%)	45.8%	18.9%	31.1%	33.3%
	Khagrachhari	Count	31	35	34	100
		Row (%)	31.0%	35.0%	34.0%	100.0%
		Column (%)	25.8%	38.9%	37.8%	33.3%
Total		Count	120	90	90	300
		Row (%)	40.0%	30.0%	30.0%	100.0%
		Column (%)	100.0%	100.0%	100.0%	100.0%

The majority of responders from the Chittagong Hill Tracts (41.7%) have experience of 3-6 years in farming. On the other hand, 50.4% of respondents had experience of 3-6 years, and 29.8% of respondents had experience of below 3 years farming.

Table 11: Type of Labor Utilization during Farming

		Labor Utilization		Total	
		Yes	No		
CHT region	Bandarban	Count	44	56	100
		Row (%)	44.0%	56.0%	100.0%
		Column (%)	27.8%	39.4%	33.3%
	Rangamati	Count	46	54	100
		Row (%)	46.0%	54.0%	100.0%
		Column (%)	29.1%	38.0%	33.3%
	Khagrachhari	Count	68	32	100
		Row (%)	68.0%	32.0%	100.0%
		Column (%)	43.0%	22.5%	33.3%
Total		Count	158	142	300
		Row (%)	52.7%	47.3%	100.0%
		Column (%)	100.0%	100.0%	100.0%

52.7% percent of respondents from the Chittagong Hill Tracts reported utilizing labor. The labor utilization is higher in Khagrachhari (68%) and lower in Bandarban (44%).

Table 12: Marketing Technique for Selling Agri Product

			Marketing Action to Sell Agri Product		Total
			Direct Marketing	Indirect marketing	
CHT region	Bandarban	Count	54	46	100
		Row (%)	54.0%	46.0%	100.0%
		Column (%)	34.2%	32.4%	33.3%
	Rangamati	Count	41	59	100
		Row (%)	41.0%	59.0%	100.0%
		Column (%)	25.9%	41.5%	33.3%
	Khagrachhari	Count	63	37	100
		Row (%)	63.0%	37.0%	100.0%
		Column (%)	39.9%	26.1%	33.3%
Total		Count	158	142	300
		Row (%)	52.7%	47.3%	100.0%
		Column (%)	100.0%	100.0%	100.0%

Out of those surveyed, 52.7 percent of farmers utilize the direct marketing approach. The utilization of direct marketing is higher in Khagrachhari and lower in Rangamati.

Table 13: Classification of Middleman

			Middleman Type				Total
			Bapari	Foria	Wholesaler	Retailer	
CHT region	Bandarban	Count	51	2	26	21	100
		Row (%)	51.0%	2.0%	26.0%	21.0%	100.0%
		Column (%)	39.8%	7.4%	42.6%	25.0%	33.3%
	Rangamati	Count	26	25	35	14	100
		Row (%)	26.0%	25.0%	35.0%	14.0%	100.0%
		Column (%)	20.3%	92.6%	57.4%	16.7%	33.3%
	Khagrachhari	Count	51	0	0	49	100
		Row (%)	51.0%	0.0%	0.0%	49.0%	100.0%
		Column (%)	39.8%	0.0%	0.0%	58.3%	33.3%
Total		Count	128	27	61	84	300
		Row (%)	42.7%	9.0%	20.3%	28.0%	100.0%
		Column (%)	100.0%	100.0%	100.0%	100.0%	100.0%

The majority of respondents (42.7%) went to Bapari while the percentage is decreasing for Retailer (28%), whole sealer (20.3%), and Foria (9%).

Table 14: Consumer Types

			Consumer Types				Total
			Local area people	Beside local area	Whole Bangladesh management	Other methods	
CHT region	Bandarban	Count	23	50	2	25	100
		Row (%)	23.0%	50.0%	2.0%	25.0%	100.0%
		Column (%)	20.9%	56.2%	5.7%	37.9%	33.3%
	Rangamati	Count	48	39	12	1	100
		Row (%)	48.0%	39.0%	12.0%	1.0%	100.0%
		Column (%)	43.6%	43.8%	34.3%	1.5%	33.3%
	Khagrachhari	Count	39	0	21	40	100
		Row (%)	39.0%	0.0%	21.0%	40.0%	100.0%
		Column (%)	35.5%	0.0%	60.0%	60.6%	33.3%
Total		Count	110	89	35	66	300
		Row (%)	36.7%	29.7%	11.7%	22.0%	100.0%
		Column (%)	100.0%	100.0%	100.0%	100.0%	100.0%

The consumption of the products is higher among the local people (36.7%), following consumers beside the local area (29.7%), others (22%), and the whole of Bangladesh (11.7%).

The findings from the on-firming income group, a larger percentage of farmers are illiterate (47.3%), and the scenario is also the same for the off-firming income group (48%).

Table 19: Family Type of the Farmers

			Type of family		Total
			Nuclear	Joint	
Farmer Types	On Firm	Count	56	92	148
		Row (%)	37.8%	62.2%	100.0%
		Column (%)	49.1%	49.5%	49.3%
	Off Firm	Count	58	94	152
		Row (%)	38.2%	61.8%	100.0%
		Column (%)	50.9%	50.5%	50.7%
Total		Count	114	186	300
		Row (%)	38.0%	62.0%	100.0%
		Column (%)	100.0%	100.0%	100.0%

About 62% of the sample, or most of the respondents, came from joint households in the firming income category. In the off-firming income group, the percentage is almost identical.

Table 20: Land Size of the Farmers

			Size of lands				Total
			Below 1 acre	1-3 acres	3.01-5 acres	Above 5 Acres	
Farmer Types	On Firm	Count	25	25	71	27	148
		Row (%)	16.9%	16.9%	48.0%	18.2%	100.0%
		Column (%)	28.7%	43.9%	56.3%	90.0%	49.3%
	Off Firm	Count	62	32	55	3	152
		Row (%)	40.8%	21.1%	36.2%	2.0%	100.0%
		Column (%)	71.3%	56.1%	43.7%	10.0%	50.7%
Total		Count	87	57	126	30	300
		Row (%)	29.0%	19.0%	42.0%	10.0%	100.0%
		Column (%)	100.0%	100.0%	100.0%	100.0%	100.0%

Most respondents (53.3%) from the on-firm income group had land size between 3.01 and 5 acres. In the off-firm income group, the farmers had less land, and the size of the land was below 1 acre.

Table 21: Annual Income of the Farmers

			Annual Income				Total
			Below 1 Lakh	Between 1-3 Lakh	Between 3-5 Lakh	Above 5 Lakh	
Farmer Types	On Firm	Count	76	55	14	3	148
		Row (%)	51.4%	37.2%	9.5%	2.0%	100.0%
		Column (%)	47.5%	61.1%	56.0%	12.0%	49.3%
	Off Firm	Count	84	35	11	22	152
		Row (%)	55.3%	23.0%	7.2%	14.5%	100.0%
		Column (%)	52.5%	38.9%	44.0%	88.0%	50.7%
Total		Count	160	90	25	25	300
		Row (%)	53.3%	30.0%	8.3%	8.3%	100.0%
		Column (%)	100.0%	100.0%	100.0%	100.0%	100.0%

In the on-firm income group, the higher portion of farmers (approximately 61%) earned between 1-3 lakh taka annually. However, the yearly income was below 1 lakh (around 55%) for the majority of the farmers in the off-firming income group.

Table 22: Banking Status of the Farmers

			Have Any Bank Account		Total
			Yes	No	
Farmer Types	On Firm	Count	47	101	148
		Row (%)	31.8%	68.2%	100.0%
		Column (%)	52.8%	47.9%	49.3%
	Off Firm	Count	42	110	152
		Row (%)	27.6%	72.4%	100.0%
		Column (%)	47.2%	52.1%	50.7%
Total		Count	89	211	300
		Row (%)	29.7%	70.3%	100.0%
		Column (%)	100.0%	100.0%	100.0%

For both income groups (on-firm and off-firm), a total of 68% and 52% of farmers did not keep bank accounts, which covers the majority of farmers.

Table 23: Classification based on the Land Type

		Land Type		Total	
		Owned	Rented		
Farmer Types	On Firm	Count	37	111	148
		Row (%)	25.0%	75.0%	100.0%
		Column (%)	54.4%	47.8%	49.3%
	Off Firm	Count	31	121	152
		Row (%)	20.4%	79.6%	100.0%
		Column (%)	45.6%	52.2%	50.7%
Total		Count	68	232	300
		Row (%)	22.7%	77.3%	100.0%
		Column (%)	100.0%	100.0%	100.0%

While the majority of people had rented land in the both on-firm and off-firm income groups.

Table 24: Time span in farming

		Engaged in Farming				Total	
		Below 3 years	3-6 years	7-10 years	Above 10 years		
Farmer Types	On Firm	Count	32	45	53	18	148
		Row (%)	21.6%	30.4%	35.8%	12.2%	100.0%
		Column (%)	68.1%	36.0%	67.9%	36.0%	49.3%
	Off Firm	Count	15	80	25	32	152
		Row (%)	9.9%	52.6%	16.4%	21.1%	100.0%
		Column (%)	31.9%	64.0%	32.1%	64.0%	50.7%
Total		Count	47	125	78	50	300
		Row (%)	15.7%	41.7%	26.0%	16.7%	100.0%
		Column (%)	100.0%	100.0%	100.0%	100.0%	100.0%

About 68% of the sample, or most of the respondents, had engaged in farming below three years in the on-farming income group. In the off-firm income group, a total of 53% of farmers have been engaged in farming for 3-6 years.

Table 25: Experience in farming

		Farming Experience			Total	
		High	Low	Medium		
Farmer Types	On Firm	Count	69	49	30	148
		Row (%)	46.6%	33.1%	20.3%	100.0%
		Column (%)	57.5%	54.4%	33.3%	49.3%
	Off Firm	Count	51	41	60	152
		Row (%)	33.6%	27.0%	39.5%	100.0%
		Column (%)	42.5%	45.6%	66.7%	50.7%
Total		Count	120	90	90	300
		Row (%)	40.0%	30.0%	30.0%	100.0%
		Column (%)	100.0%	100.0%	100.0%	100.0%

Approximately 58% of the farmers from the on-firm income group had high experience in farming. Majority of the farmers had medium experience in off-farming income group.

Table 26: Type of Labor Utilization during Farming

		Labor Utilization		Total	
		Yes	No		
Farmer Types	On Firm	Count	98	50	148
		Row (%)	66.2%	33.8%	100.0%
		Column (%)	62.0%	35.2%	49.3%
	Off Firm	Count	60	92	152
		Row (%)	39.5%	60.5%	100.0%
		Column (%)	38.0%	64.8%	50.7%
Total		Count	158	142	300
		Row (%)	52.7%	47.3%	100.0%
		Column (%)	100.0%	100.0%	100.0%

In the on-firm income group, the majority of farmers used labor, which is 66%. Nonetheless, the majority of farmers (about 61%) in the off-farming income group did not use labor.

Table 27: Marketing Technique for Selling Agri Product

			Marketing Action to Sell Agri Product		Total
			Direct Marketing	Indirect marketing	
Farmer Types	On Firm	Count	73	75	148
		Row (%)	49.3%	50.7%	100.0%
		Column (%)	46.2%	52.8%	49.3%
	Off Firm	Count	85	67	152
		Row (%)	55.9%	44.1%	100.0%
		Column (%)	53.8%	47.2%	50.7%
Total		Count	158	142	300
		Row (%)	52.7%	47.3%	100.0%
		Column (%)	100.0%	100.0%	100.0%

Half of the farmers from the on-firming income group followed indirect marketing whereas almost 60% farmers used direct marketing in off-firming income group.

Table 28: Classification of Middleman

			Middleman Type				Total
			Bapari	Foria	Wholesaler	Retailer	
Farmer Types	On Firm	Count	67	2	34	45	148
		Row (%)	45.3%	1.4%	23.0%	30.4%	100.0%
		Column (%)	52.3%	7.4%	55.7%	53.6%	49.3%
	Off Firm	Count	61	25	27	39	152
		Row (%)	40.1%	16.4%	17.8%	25.7%	100.0%
		Column (%)	47.7%	92.6%	44.3%	46.4%	50.7%
Total		Count	128	27	61	84	300
		Row (%)	42.7%	9.0%	20.3%	28.0%	100.0%
		Column (%)	100.0%	100.0%	100.0%	100.0%	100.0%

A total of 45% and 40% farmers from on-firm and off-firm used Bapari as middleman.

Table 29: Consumer Types

			Consumer Types				Total
			Local area people	Beside local area	Whole Bangladesh management	Other methods	
Farmer Types	On Firm	Count	75	34	21	18	148
		Row (%)	50.7%	23.0%	14.2%	12.2%	100.0%
		Column (%)	68.2%	38.2%	60.0%	27.3%	49.3%
	Off Firm	Count	35	55	14	48	152
		Row (%)	23.0%	36.2%	9.2%	31.6%	100.0%
		Column (%)	31.8%	61.8%	40.0%	72.7%	50.7%
Total		Count	110	89	35	66	300
		Row (%)	36.7%	29.7%	11.7%	22.0%	100.0%
		Column (%)	100.0%	100.0%	100.0%	100.0%	100.0%

Half of the local people supported the product from the on-firm income groups, whereas the off-firm income group did not specify their consumer type. A total of 32% of people used off-firming income groups' products.

Table 30: Types of Storage place

			Storage Place		Total
			Yes	No	
Farmer Types	On Firm	Count	90	58	148
		Row (%)	60.8%	39.2%	100.0%
		Column (%)	43.5%	62.4%	49.3%
	Off Firm	Count	117	35	152
		Row (%)	77.0%	23.0%	100.0%
		Column (%)	56.5%	37.6%	50.7%
Total		Count	207	93	300
		Row (%)	69.0%	31.0%	100.0%
		Column (%)	100.0%	100.0%	100.0%

On-firming income group, majority preserved their production in the storage place and the scenario where same for off-firming income group.

4.3 The profitability of Ethnic Farmers in the Three hill district

4.3.1 The Scenario of Profitability of Ethnic Farmers in Three Hill District

Table 31: Perception of Transportation Cost

			Perception of Transportation cost		Total
			Low	High	
CHT region	Bandarban	Count	54	46	100
		Row (%)	54.0%	46.0%	100.0%
		Column (%)	33.1%	33.6%	33.3%
	Rangamati	Count	47	53	100
		Row (%)	47.0%	53.0%	100.0%
		Column (%)	28.8%	38.7%	33.3%
	Khagrachhari	Count	62	38	100
		Row (%)	62.0%	38.0%	100.0%
		Column (%)	38.0%	27.7%	33.3%
Total		Count	163	137	300
		Row (%)	54.3%	45.7%	100.0%
		Column (%)	100.0%	100.0%	100.0%

Nearly half of the farmers felt that there was a low sense of the expense of transportation. The lowest percentage was found in Rangamati (47%) while the highest percentage was found in Khagrachhari (62%).

Table 32: Perception of Storage Cost

			Perception of Storage Cost		Total
			Low	High	
CHT region	Bandarban	Count	49	51	100
		Row (%)	49.0%	51.0%	100.0%
		Column (%)	32.0%	34.7%	33.3%
	Rangamati	Count	54	46	100
		Row (%)	54.0%	46.0%	100.0%
		Column (%)	35.3%	31.3%	33.3%
	Khagrachhari	Count	50	50	100
		Row (%)	50.0%	50.0%	100.0%
		Column (%)	32.7%	34.0%	33.3%
Total		Count	153	147	300
		Row (%)	51.0%	49.0%	100.0%
		Column (%)	100.0%	100.0%	100.0%

Almost half of the farmers thought that people's perceptions of the cost of storage were high. Rangamati had the lowest percentage (46%) and Bandarban had the greatest percentage (51%).

Table 33: Perception of Labor Cost

			Perception of Labor Cost		Total
			Low	High	
CHT region	Bandarban	Count	56	44	100
		Row (%)	56.0%	44.0%	100.0%
		Column (%)	37.1%	29.5%	33.3%
	Rangamati	Count	50	50	100
		Row (%)	50.0%	50.0%	100.0%
		Column (%)	33.1%	33.6%	33.3%
	Khagrachhari	Count	45	55	100
		Row (%)	45.0%	55.0%	100.0%
		Column (%)	29.8%	36.9%	33.3%
Total		Count	151	149	300
		Row (%)	50.3%	49.7%	100.0%
		Column (%)	100.0%	100.0%	100.0%

The perception of labor cost was low was endorsed by half of the local population. The high percentage was observed from Bandarban (56%), and low percentage was found from Khagrachhari (45%).

Table 34: Perception of Profit

			Comment on Profit		Total
			No	Yes	
CHT region	Bandarban	Count	63	37	100
		Row (%)	63.0%	37.0%	100.0%
		Column (%)	37.1%	28.5%	33.3%
	Rangamati	Count	41	59	100
		Row (%)	41.0%	59.0%	100.0%
		Column (%)	24.1%	45.4%	33.3%
	Khagrachhari	Count	66	34	100
		Row (%)	66.0%	34.0%	100.0%
		Column (%)	38.8%	26.2%	33.3%
Total		Count	170	130	300
		Row (%)	56.7%	43.3%	100.0%
		Column (%)	100.0%	100.0%	100.0%

A total of 58% of farmers said that they did not get a profit, which is almost more than half of the participants.

4.4 The Scenario of Profitability of Ethnic Farmers Based on Two Groups (on-farm and off-farm)

Table 35: Perception of Transportation Cost

			Perception about Transportation cost		Total
			Low	High	
Farmer Types	On Firm	Count	85	63	148
		Row (%)	57.4%	42.6%	100.0%
		Column (%)	52.1%	46.0%	49.3%
	Off Firm	Count	78	74	152
		Row (%)	51.3%	48.7%	100.0%
		Column (%)	47.9%	54.0%	50.7%
Total		Count	163	137	300
		Row (%)	54.3%	45.7%	100.0%
		Column (%)	100.0%	100.0%	100.0%

On the on-farming income group, a total of 57% of farmers said that the transportation cost was low in the Chittagong Hill tract.

Table 36: Perception of Storage Cost

			Perception of Storage Cost		Total
			Low	High	
Farmer Types	On Firm	Count	68	80	148
		Row (%)	45.9%	54.1%	100.0%
		Column (%)	44.4%	54.4%	49.3%
	Off Firm	Count	85	67	152
		Row (%)	55.9%	44.1%	100.0%
		Column (%)	55.6%	45.6%	50.7%
Total		Count	153	147	300
		Row (%)	51.0%	49.0%	100.0%
		Column (%)	100.0%	100.0%	100.0%

It is observed that a high percentage of farmers (54%) mentioned that the storage cost was high from the on-farming income group. In the off-firm income group, the scenario was different, where half of the farmers reported that storage costs were low.

Table 37: Perception of Labor Cost

			Perception of Labor Cost		Total
			Low	High	
Farmer Types	On Firm	Count	93	55	148
		Row (%)	62.8%	37.2%	100.0%
		Column (%)	61.6%	36.9%	49.3%
	Off Firm	Count	58	94	152
		Row (%)	38.2%	61.8%	100.0%
		Column (%)	38.4%	63.1%	50.7%
Total		Count	151	149	300
		Row (%)	50.3%	49.7%	100.0%
		Column (%)	100.0%	100.0%	100.0%

Remarkably, a high percentage of farmers (63%) claimed that the on-firm income group incurred low labor expenses. Things were different for the farmers in the off-firm income group; a total of 62% of farmers claimed that storage costs were high.

4.5 Marketing System

4.5.1 The Situation of the Marketing System Based on CHT Location

Table 38: Product Selling Process

		Product Selling Process									Total
		Directly to consumers	Retailers	Wholesalers	Processors	Government corporation	Exporters	Farmers market	Contracted group	Others	
Bandarba	Count	11	11	10	10	11	17	16	1	13	100
	Row (%)	11.0%	11.0%	10.0%	10.0%	11.0%	17.0%	16.0%	1.0%	13.0%	100%
	Column (%)	22.9%	33.3%	17.2%	28.6%	100.0%	47.2%	44.4%	3.3%	100.0%	33.3%
Rangama	Count	24	22	22	0	0	19	0	13	0	100
	Row (%)	24.0%	22.0%	22.0%	0.0%	0.0%	19.0%	0.0%	13.0%	0.0%	100%
	Column (%)	50.0%	66.7%	37.9%	0.0%	0.0%	52.8%	0.0%	43.3%	0.0%	33.3%
Khagrach	Count	13	0	26	25	0	0	20	16	0	100
	Row (%)	13.0%	0.0%	26.0%	25.0%	0.0%	0.0%	20.0%	16.0%	0.0%	100%
	Column (%)	27.1%	0.0%	44.8%	71.4%	0.0%	0.0%	55.6%	53.3%	0.0%	33.3%
Total	Count	48	33	58	35	11	36	36	30	13	300
	Row (%)	16.0%	11.0%	19.3%	11.7%	3.7%	12.0%	12.0%	10.0%	4.3%	100%
	Column (%)	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

A majority of the farmers supported the whole selling process.

4.5.2 The Situation of the Marketing System Based on two selected groups (on-farm and off-farm)

Table 39: Product Selling Process

		Product Selling Process									Total	
		Directly to consumer										
Farmer Types	On Firm	Count	14	11	23	10	5	23	26	27	9	148
		Row (%)	9.5%	7.4%	15.5%	6.8%	3.4%	15.5%	17.6%	18.2%	6.1%	100.0%
		Column (%)	29.2%	33.3%	39.7%	28.6%	45.5%	63.9%	72.2%	90.0%	69.2%	49.3%
	Off Firm	Count	34	22	35	25	6	13	10	3	4	152
		Row (%)	22.4%	14.5%	23.0%	16.4%	3.9%	8.6%	6.6%	2.0%	2.6%	100.0%
		Column (%)	70.8%	66.7%	60.3%	71.4%	54.5%	36.1%	27.8%	10.0%	30.8%	50.7%
Total	Count	48	33	58	35	11	36	36	30	13	300	
	Row (%)	16.0%	11.0%	19.3%	11.7%	3.7%	12.0%	12.0%	10.0%	4.3%	100.0%	
	Column (%)	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	

4.6 Contract Farming

4.6.1 The Consequences of Contract Farming Based on CHT Location

Table 40: The Statistic about the increase in income after Contract Farming

			Increase of Income		Total
			No	Yes	
CHT region	Bandarban	Count	51	49	100
		Row (%)	51.0%	49.0%	100.0%
		Column (%)	36.7%	30.4%	33.3%
	Rangamati	Count	40	60	100
		Row (%)	40.0%	60.0%	100.0%
		Column (%)	28.8%	37.3%	33.3%
	Khagrachhari	Count	48	52	100
		Row (%)	48.0%	52.0%	100.0%
		Column (%)	34.5%	32.3%	33.3%
Total		Count	139	161	300
		Row (%)	46.3%	53.7%	100.0%
		Column (%)	100.0%	100.0%	100.0%

A total of 54% of farmers thought their income was increased in the Chittagong Hill tracts. The majority of the farmers were from Rangamati, and most of the farmers were from Bandarban.

Table 41: The Statistic about the increase in productivity after Contract Farming

			Increase of Productivity		Total
			No	Yes	
CHT region	Bandarban	Count	58	42	100
		Row (%)	58.0%	42.0%	100.0%
		Column (%)	49.2%	23.1%	33.3%
	Rangamati	Count	36	64	100
		Row (%)	36.0%	64.0%	100.0%
		Column (%)	30.5%	35.2%	33.3%
	Khagrachhari	Count	24	76	100
		Row (%)	24.0%	76.0%	100.0%
		Column (%)	20.3%	41.8%	33.3%
Total		Count	118	182	300
		Row (%)	39.3%	60.7%	100.0%
		Column (%)	100.0%	100.0%	100.0%

A majority of farmers reported that production was increased (61%). A total of 76% of farmers agreed with the statement.

Table 42: The Statistic about improve product quality after Contract Farming

			Improve of Product Quality		Total
			No	Yes	
CHT region	Bandarban	Count	47	53	100
		Row (%)	47.0%	53.0%	100.0%
		Column (%)	46.1%	26.8%	33.3%
	Rangamati	Count	6	94	100
		Row (%)	6.0%	94.0%	100.0%
		Column (%)	5.9%	47.5%	33.3%
	Khagrachhari	Count	49	51	100
		Row (%)	49.0%	51.0%	100.0%
		Column (%)	48.0%	25.8%	33.3%
Total		Count	102	198	300
		Row (%)	34.0%	66.0%	100.0%
		Column (%)	100.0%	100.0%	100.0%

A total of 66% of farmers found that the product quality was improved, which covered the majority. A higher percentage of farmers was from Rangamati, and a lower percentage was from Khagrachhari.

Table 43: The Statistic about the increased adoption of new technologies after Contract Farming

			Adoption of New Technologies		Total
			No	Yes	
CHT region	Bandarban	Count	37	63	100
		Row (%)	37.0%	63.0%	100.0%
		Column (%)	46.8%	28.5%	33.3%
	Rangamati	Count	19	81	100
		Row (%)	19.0%	81.0%	100.0%
		Column (%)	24.1%	36.7%	33.3%
	Khagrachhari	Count	23	77	100
		Row (%)	23.0%	77.0%	100.0%
		Column (%)	29.1%	34.8%	33.3%
Total		Count	79	221	300
		Row (%)	26.3%	73.7%	100.0%
		Column (%)	100.0%	100.0%	100.0%

A total of 74% of farmers adopt new technologies where majority came from Rangamati, and lower percentage came from Bandarban.

Table 44: The Statistic about improve living standards after Contract Farming

			Improve Living Standards		Total
			No	Yes	
CHT region	Bandarban	Count	49	51	100
		Row (%)	49.0%	51.0%	100.0%
		Column (%)	35.8%	31.3%	33.3%
	Rangamati	Count	54	46	100
		Row (%)	54.0%	46.0%	100.0%
		Column (%)	39.4%	28.2%	33.3%
	Khagrachhari	Count	34	66	100
		Row (%)	34.0%	66.0%	100.0%
		Column (%)	24.8%	40.5%	33.3%
Total		Count	137	163	300
		Row (%)	45.7%	54.3%	100.0%
		Column (%)	100.0%	100.0%	100.0%

More than half of the farmers agreed that the living standard improved in the Chittagong Hill tract. The percentage was higher from Khagrachhari (66%) and lower from lower from Rangamati (46%).

4.7 The Consequences of Contract Farming Based on two selected groups (on-farm and off-farm)

Table 45: The Statistic about the increase in income after Contract Farming

			Increase of Income		Total
			No	Yes	
Farmer Types	On Firm	Count	68	80	148
		Row (%)	45.9%	54.1%	100.0%
		Column (%)	48.9%	49.7%	49.3%
	Off Firm	Count	71	81	152
		Row (%)	46.7%	53.3%	100.0%
		Column (%)	51.1%	50.3%	50.7%
Total		Count	139	161	300
		Row (%)	46.3%	53.7%	100.0%
		Column (%)	100.0%	100.0%	100.0%

In the on-farming income group, a total of 54% of farmers supported the statement that the income was increased in the Chittagong Hill Tract. Almost half of the farmers also agreed with the statement from the off-farming income group.

Table 46: The Statistic about the increase in productivity after Contract Farming

			Increase of Productivity		Total
			No	Yes	
Farmer Types	On Firm	Count	60	88	148
		Row (%)	40.5%	59.5%	100.0%
		Column (%)	50.8%	48.4%	49.3%
	Off Firm	Count	58	94	152
		Row (%)	38.2%	61.8%	100.0%
		Column (%)	49.2%	51.6%	50.7%
Total		Count	118	182	300
		Row (%)	39.3%	60.7%	100.0%
		Column (%)	100.0%	100.0%	100.0%

A total of 60% farmers from on-firm income group reported that the productivity increased in the Chittagong Hill Tract. The findings for the off-firm income group were similar.

Table 47: The Statistic about improving product quality after Contract Farming

			Improve of Product Quality		Total
			No	Yes	
Farmer Types	On Firm	Count	51	97	148
		Row (%)	34.5%	65.5%	100.0%
		Column (%)	50.0%	49.0%	49.3%
	Off Firm	Count	51	101	152
		Row (%)	33.6%	66.4%	100.0%
		Column (%)	50.0%	51.0%	50.7%
Total		Count	102	198	300
		Row (%)	34.0%	66.0%	100.0%
		Column (%)	100.0%	100.0%	100.0%

A total of 66% farmers had the opinion that the product quality was improved in the Chittagong Hill Tract in both on-firming and off-firming income groups.

Table 48: The Statistic about the increase adoption of new technologies after Contract Farming

			Adoption of New Technologies		Total
			No	Yes	
Farmer Types	On Firm	Count	34	114	148
		Row (%)	23.0%	77.0%	100.0%
		Column (%)	43.0%	51.6%	49.3%
	Off Firm	Count	45	107	152
		Row (%)	29.6%	70.4%	100.0%
		Column (%)	57.0%	48.4%	50.7%
Total		Count	79	221	300
		Row (%)	26.3%	73.7%	100.0%
		Column (%)	100.0%	100.0%	100.0%

The adoption of new technologies was higher in both the on-firm and off-firm income group.

Table 49: The Statistic about improving living standards after Contract Farming

			Improve Living Standards		Total
			No	Yes	
Farmer Types	On Firm	Count	64	84	148
		Row (%)	43.2%	56.8%	100.0%
		Column (%)	46.7%	51.5%	49.3%
	Off Firm	Count	73	79	152
		Row (%)	48.0%	52.0%	100.0%
		Column (%)	53.3%	48.5%	50.7%
Total		Count	137	163	300
		Row (%)	45.7%	54.3%	100.0%
		Column (%)	100.0%	100.0%	100.0%

4.8 Identify Factors for Economic Growth

Table 50: Associated Factors of Economic Growth

	AOR	(95% CI)
Age	-	
Below 25 years (R.C.)	1.00	
25 to 50	1.62	(1.48-1.78)
Above 50	2.26	(1.03-2.52)
Education	-	
Illiterate (R.C.)	1.00	
Up to Primary	1.20	(1.10-1.85)
Up to Secondary	1.55	(1.50-1.60)
Up to higher secondary	2.38	(2.33-2.43)
Type of family	-	
Nuclear (R.C.)	1.00	
Joint	1.41	(1.25-1.58)
Marital status	-	
Single (R.C.)	1.00	
Married	1.80	(1.59-2.03)
Divorced	1.48	(1.06-2.99)
Land Type	-	
Rented (R.C.)	1.00	
Owned	1.05	(1.01-1.27)
Engaged in Farming	-	
Below 3 years (R.C.)	1.00	
3-6 years	1.25	(1.10-1.78)
7-10 years	1.80	(1.05-2.17)
Above 10 years	2.56	(1.96-3.29)
Experience in Farming	-	
Low (R.C.)	1.00	
Medium	1.50	(1.26-3.17)
High	2.35	(1.02-3.28)
Labor Utilisation	-	
No (R.C.)	1.00	
Yes	1.43	(0.10-2.18)
Marketing Technique for Agri Product	-	
Indirect (R.C.)	1.00	
Direct	1.57	(1.06-2.38)

Farmers from age 25 to 50 years had higher odds of economic growth than those below 25 years; the findings suggested that the increase of age helped to grow the economy. Farmer with primary education were 1.20 times more likely to get economic growth compared to illiterate farmers. Secondary and higher education also had the impact on economic growth which was observed from the table. Family size was associated with economic growth as the economic growth was higher for joint-family farmers compared to nuclear family farmers. Married farmers were more likely to have economic growth compared to single farmers. Land ownership influenced economic growth; land ownership increased economic growth. The time engaged in farming also has a vital impact on economic growth. Economic growth was developed with the increase of experience in farming. Hiring labor in farming work was used to increase economic growth. The probability of higher economic growth was related to direct marketing; it increased economic growth.

5. Conclusion

In conclusion, promoting inclusive agriculture in a way that fosters sustainable economic growth is crucial to global development. Investment, innovation, policy, and financing are all necessary components of an inclusive and sustainable economic growth strategy that benefits all parties involved, especially the underprivileged. The 1.6 million residents of the Chittagong Hill Tracts (CHT) region, 70% of whom live in rural areas, are home to 11 different ethnic groups in addition to the main Bengali population. Currently, it consists of three hill districts: Bandarban, Rangamati, and Khagrachhari. Across the three districts that comprise the CHT, 5,811 villages are under the jurisdiction of 25 upazilas. Over 20 years of warfare ended in 1997 with the signing of a Peace Accord, yet the majority of the population still lives in extreme poverty. Destructive events like landslides, flash floods, deforestation, and seasonal water scarcity are becoming more common because of the region's residents feeling the effects of climate change and environmental degradation more and more on their way of life and means of subsistence.

6. Recommendation

- a) This can be done by implementing compulsory education in the Chittagong Hill Tract. University Grants Commission of Bangladesh can play an essential role in ensuring agricultural education at the school level. Consequently, this strategy can play a crucial part in improving economic growth in the Chittagong Hill Tract.
- b) Policymakers can aggregate older farmers' experiences with economic growth and share their findings with young farmers.
- c) To increase the availability of labor in the Chittagong Hill Tract is very crucial.
- d) Government and non-government organizations should take projects so that ownership will be easy for the farmers.
- e) Various non-governmental organizations might organize varied workshops to inform farmers about the benefits of direct marketing and motivate them to employ this method.
- f) Therefore, income imbalances across hills in Chittagong Hill Tract need attention from the government and different non-government organizations.
- g) For the farmers, opportunities for revenue based on hillsides must be planned.
- h) Attaining and maintaining regional equilibrium is crucial.

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