

# **Out of School Children in the Tea Gardens and Ethnic Minority Communities**

Final Report

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November 2005

BRAC Research Report



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## ACRONYMS

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BBS	Bangladesh Bureau of Statistics
BRAC	an NGO
BTB	Bangladesh Tea Board
CAMPE	Campaign for Popular Education
CEF	Commonwealth Education Fund
CHT	Chittagong Hill Tracts
EDI	EFA Development Index
EFA	Education For All
MDG	Millennium Development Goals
MoPME	Ministry of Primary and Mass Education
NGO	Non Government Organisation
PEDP II	Second Primary Education Development Programme
RED	Research and Evaluation Division of BRAC
ROSC	Reaching Out of School Children
UNESCO	United Nations Children's Fund
WCEFA	World Conference on Education For All

## EXECUTIVE SUMMARY

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### INTRODUCTION

Although many countries in the world have moved from compulsory primary education to compulsory secondary education and many increased the duration of primary and basic education from 4-5 years to more than six years, Bangladesh is still dealing with five years compulsory primary education. However, the strong commitment of the nation, has resulted in a gradual improvement in the situation regarding access to primary education and completing the full course. The improvements accelerated after the Jomtien initiative, where Bangladesh rightly responded to the international call for basic and primary education for all. Some affirmative actions taken by both the government and the non-governmental organisations made this improvement possible. However, at present, one in every five of the 6-15 years old children is out of school and nearly 30% of the enrolled children leave school before completing the full course of primary education. Gender parity, at the aggregate level, has been achieved in access to primary schooling.

In spite of this scenario of hope at the national level, it has been noticed that the improvements have not been distributed equally among all sections of the population. There is urban-rural as well as district-wise variation. Other research on poverty and education show that the worst situation exists in *char* lands, the tea gardens, ethnic minorities, people living in extreme poverty, street children, the disabled, domestic workers, children working in factories, children in jails and brothels, and those involved in crime. In order to achieve the educational goals of the MDGs (Millennium Development Goals) we must take care of the schooling of the children of above-mentioned groups. However, no study has looked deeply at each of the groups. This study for the first time looks at the situation of the out of school children in two sub-groups of population in Bangladesh. These are the people living in the tea gardens and the ethnic minorities in the country. Emphasis was given on estimating the volume of out of school children in the groups and their socioeconomic status, their workload at home and outside, and the ways they can be put back to school.

### Methodology

Two independent sample surveys were done – one in the tea gardens and another on the ethnic minorities. A structured questionnaire was used for this. In addition, based on preliminary analysis of survey data some issues were identified and investigated through qualitative research techniques (in-depth or group interview).

The two study groups are not mutually exclusive. A good proportion of the tea garden population belongs to a number of ethnic minority groups. Sampling of the tea gardens was done first including all ethnic groups living there. The ethnic minorities living in the tea gardens were excluded while sampling the ethnic minorities. Statistics produced by the Bangladesh Tea Board (2004) was used in sampling the tea gardens and census results of the small ethnic groups in Bangladesh done by BRAC Research and Evaluation Division (2004) was used for sampling the ethnic minorities. A total of 6,006 households from 136 clusters (tea gardens/villages/paras) were covered through the household survey where 6,785 children of age 6-15 years were identified. Of these children 3,456 were boys and 3,329 were girls; 3,716

from tea gardens and 3,069 from ethnic minority communities. In addition, 77 people were consulted (32 in the tea gardens and 45 among the ethnic minorities) during qualitative investigations.

## FINDINGS

**Socioeconomic status:** The two study groups we are dealing with are marginalized in many senses. Population in the tea gardens and in the Chittagong Hill Tracts (CHIT) live in separate and isolated areas. Ethnic minorities living in the plain land are also concentrated in some pocket areas. Due to isolated geographical locations, there were not much development activities for the improvement of their livelihoods. The Chittagong Hill tracts, where the largest portion of the ethnic minorities lives, were under military occupation for a long time. Custom and culture of these people are very different from that of the majority population in the country. For instance, as we found, whereas a majority of the people in Bangladesh practice Islam, it was only 10% in the tea gardens and a negligible portion among the ethnic minorities. All these may have a negative impact on their educational as well as other aspects of development. A summary of the socioeconomic status of the study population is provided below.

1. Livelihood of two thirds of the households in the tea gardens depended on the tea gardens and the others had some other choices for income. Nearly a quarter of the population in the tea gardens were Bangali.
2. Households mainly depending on tea gardens were less likely to have better livelihood than those had other choices of income. Again, overall socioeconomic status of the Bangalis was better than that of the ethnic minorities in the tea gardens.
3. Ethnic minorities in the Chittagong Hill Tracts were ahead of their fellows in the plain land, and in CHT, the Chakmas were advanced than the other ethnic minority groups.
4. Hinduism was the dominant religion in the tea gardens. Only one third of the Bangalies were Muslims. Christianity dominates among plain land ethnic minorities and Buddhism in CHT with over a quarter believing in Hinduism.

**Out of school children:** At the aggregate level, the ethnic minority children aged 6-15 years had equal opportunity to get enrolled in schools similar to that of the entire population in the country. However, the tea garden children in the same age group lagged much behind. One in every five ethnic minority children was out of school, which was double for the tea garden children. There was not much variation between the Bangalis and the ethnic minorities in the tea gardens; however, the children of the households mainly dependant on the tea gardens were more likely to be out of school than those who had other sources of income. On the other hand, the situation of the plain land ethnic minorities was better than that of the CHT, and again, it was better among the Chakmas than the other ethnic minority groups. This situation has a similarity with that of the socioeconomic conditions of the sub-groups and educational and literacy situation of the population within the sub-groups. Beyond this overall situation of the study groups and the sub-groups, a number of remote villages were found with high percentage of out of school children. In some tea gardens over 90% of the children were out of school.

Age of the children was found to be an important determinant of leaving school. The older children of both the study groups were less likely to stay in schools for long. While children's participation in work was common in the study groups, these older children were found extensively involved in work at home or outside. Some of these children earn for their households through working outside home. A good proportion of the children was involved in both schooling and work. When the issue was discussed with the parents, they explained that this is not only a poverty driven occurrence, but also a part of tradition, culture and lifestyle.

According to them, due to poverty they were not able to send their older children to schools. To many of them, 12-13 years is the right time to learn work for income. This practice has two benefits – bringing money for household feeding and improving skills of the children in income earning activities.

Contrary to the national situation, gender gap in access to school was observed in both the groups, where the girls were more likely to be out of school. When data were analysed by age of the children it showed gender parity among the primary school aged children (6-10 years), but not among those at secondary school age. This indicates the possibility of gender equity even in the small groups of population. Gender equity has also been seen among the Bangalis in the tea gardens and the children of the non-tea garden households, and among the plain land ethnic minorities. Specifically, the ethnic minorities in the tea gardens, and the Chakmas and others in the Chittagong Hill Tracts contained school enrolment related gender disparity against the girls.

There is a strong relationship between household socioeconomic status (which includes parental education, economic status, access to electricity, etc.) and out of schooling. Children of the never schooled parents and with deficit economic condition were more likely to be out of school than their peers living with better economic condition. Gender disparity also occurred in the poorer economic condition. Explaining the situation the parents, local elites and the school teachers mentioned that girls labour was vital for taking care of the younger siblings and cooking, especially in the poorer households where both the parents had to go outside for selling labour. The parents had to spend the whole day (from dawn to dusk) outside home for work, leaving the younger children and the household to the care of the older girls.

Children in the study population did not enrol in school at the right age. They were late in school enrolment due to many reasons. For instance, parents regarded children aged 6-8 years as “too young to go to school”. The level of parents’ awareness about the importance of schooling was also low. The school authority also refused to admit some children to school. A reflection of this can be seen in the household survey data, which shows that a majority of the secondary school aged children were currently enrolled in one of the primary classes. Again, the majority of the primary school students were found in the beginning classes. The above reasons as well as parental urgency to get the children involved in work ultimately force the elder children to drop out from schools without completing the full cycle of primary education. The data also shows that nearly three fourths or more of the dropout children dropped out before reaching class V. The girls dropped out before the boys. Talking with the parents and the community it was understood that it is not possible right now. If the children are enrolled in school at the right age they are likely to get enough time to complete the primary cycle before involving in work outside home; provided the schools are attractive and joyful to them. In order to achieve the second MDG we need to put emphasis on completion of full cycle of primary education along with enrolment in schools.

Poverty came out as the most important reason for dropping out, never enrolment, and gender disparity against girls. The households in the study areas need to be brought under poverty reduction programmes with social components such as awareness building for education and gender parity.

It was not only the Ministry of Primary and Mass Education of the government who created schooling opportunity in the study areas. The local and the national non-governmental organisations with their non-formal education programmes and the Christian missionaries played a very important role in this regard. A large portion of the primary school students – ranging from 35% to 51% - in the tea gardens and plain land ethnic minority areas were enrolled in these schools. Data shows that if these initiatives outside the government were not there, the volume of out of school children would have been doubled. The NGOs and the

Christian missionaries responded to the educational needs of the population, which has important implication to EFA. In this connection the example of plain land ethnic minority area is significant one. Here more than a half of the school-aged children were involved in work at home or outside and 86% of these working children were enrolled in schools. It was possible because the school authorities' understood the importance of child labour for household feeding and accordingly had flexible school time. In some areas the missionaries made basic medical services free and arranged free boarding of the students. Free supplementary teaching is also provided to some extent. Addressing the difference between the mother tongue and medium of instruction, one national NGO (BRAC) initiated two practices in their schools. Primarily they tried to appoint teachers from the same ethnic group. They were not fully successful mainly due to unavailability of qualified persons as teachers. In such cases two teachers were appointed in a class – one from the same ethnic group and the other from the Bangalis. This has two benefits – firstly, the ethnic minority teacher can bridge the language gap for the minority and secondly, both Bangali and minority students can be accommodated in the same class. Such initiatives may help in improving harmony among students of various ethnic groups. The parents and the community leaders also appreciated the approach.

## **POLICY RECOMMENDATIONS**

Following policy recommendations can be made based on the findings and above discussions.

1. More non-formal schools should be opened especially in the tea gardens as an immediate action to bring the out of school children to schools. Experienced national NGOs can be utilised in this. The ROSC (Reaching Out of School Children) project should operate in the tea gardens and the remote hilly areas.
2. In order to sustain current situation of school enrolment the number of formal schools should be increased in these areas. The government can establish its own schools or preferably encourage local initiatives particularly the ethnic minority groups for school establishment through providing financial support to them. Newly established formal schools would have to learn a number of lessons from the existing schools (i.e., two teacher concept, teacher from ethnic minority groups, flexible school timing, free education including stationeries etc.).
3. Dropout is seen as a major problem in the study areas. Poverty was found as a major obstacle to enrolment as well as completion. Pro-poor mindset would be needed to tackle the situation. A combination of a number of activities can improve the situation. These are
  - a. Introduction of poverty alleviation programmes for reduction of child labour,
  - b. Bringing children to schools at the right age, for which birth registration should be emphasised and utilised for school enrolment purpose.
  - c. Making schools child-friendly. School based planning with local community and its proper implementation can improve school-community relationship.
  - d. Taking lessons from the existing missionary schools in the study areas. Provision of school meal can be introduced. Mothers' groups can be given responsibility of its management. However, lessons can also be learned from the existing programmes in Jamalpur and other areas.
4. Special attention should be given to reduce discrimination against girls, who are affected by less participation in school and more participation in work. Attempts can be made to aware the parents in this regard. Successful poverty reduction programmes can reduce the load of girls' household work and make space for their schooling.

5. To ensure proper implementation of the plans and programmes, provision of separate allocation in the national budget can be considered.
6. Educational development of any population and its sustainability mostly depends on a number of enabling conditions and the environment created by the society and the nation at large. The issues of the ethnic minorities and the tea garden population or other disadvantaged groups' needs to be seriously dealt with considering them as an integral part of the nation.



# INTRODUCTION



*Starting with a global perspective of the need for education, this initial chapter presents information on international attempts to educational improvement including the values of education in human development and the volume of out of school children in the world. This was followed by the situation in Bangladesh and the rationale of this study. Organisation of this report is also described at the end.*

## **Global Perspective**

Education is a catalyst for human development. It provides people with the tools and knowledge needed to understand today's world and prepares them to participate meaningfully in their own development and the society at large. Education plays a key role to sustain human values that contribute to individual as well as collective well-being. It is recognised as a basic human right in several international declarations. Research shows that education not only ensures high economic return, but also guarantees political stability and democracy.

In the recent past, there have been many initiatives taken by the national governments and the international communities to prepare people for a better life. The reality is that in today's world a large proportion of the population have never stepped into any educational institutions. The majority of them are women and from the poorer communities (UNESCO 2000). The developing countries, especially those in the South Asia, suffer more than the others (Haq and Haq 1998).

The international calls, starting from the Jomtien Conference to Dakar Forum and then the United Nations Millennium Development Goals (MDG), clearly emphasised the need for universal access to meaningful education (WCEFA 1990, UNESCO 2000). Moreover, in the MDGs (second goal) importance was given to the completion of full cycle of primary education equally for boys and the girls. This means, there would be no out of school children. Elimination of gender disparity was urged at the secondary education level too, preferably by 2005 and at all levels of education no later than 2015 (third goal). Global initiative is there in order to help the nations in achieving the goals.

With all these national and international initiatives, the number of out of school children in the world is reducing slowly – over 4.5 million during the 1990s (UNESCO Institute of Statistics, 2003). Today, there are 104 million out of school children in the world, a majority of whom live in the developing countries (100 million). Region-wise, the sub-Saharan Africa is on the top of the list with 44 million out of school children, followed by South and West Asia (32 million). Globally, girls' school enrolment have increased faster than the boys, but still 57% of the total out of school children are girls. This is 66% in South and West Asia keeping it at the top of the list. The poor, girls, children in conflict ridden countries, the disabled, children living in remote and rural areas, children from households constantly on the move, and street children are the groups likely to be excluded from schools.

## The Bangladesh Situation

Bangladesh is committed to achieve the above-mentioned international goals. The national government, the private bodies and the non-governmental organisations (NGO) are collectively working for this. Initiatives such as implementation of the Compulsory Primary Education Act 1990 to the provision of stipend for poorer students of primary schools and for the girls up to higher secondary level show the commitment of the government to EFA. The NGOs set up over 40,000 non-formal primary schools for the poorer communities, where girls enrolment is given much emphasis than that of the boys.

Due to both government and non-governmental initiatives, Bangladesh has made some improvements in the primary education sector in the recent past. Three important achievements are improvement of enrolment and completion rates and gender parity in access. The net enrolment rate increased from 60% in 1990 to over 85% recently, and the cycle completion rate is nearly 75%. However, considering current enrolment and completion rates, one estimate shows that at the national level about 40% of the children cross their primary schooling age without completing the cycle (Chowdhury *et al* 2002). Those who complete do not acquire adequate skills and competencies – only two percent achieve all the required competencies and a third remain non-literate or semi-literate (Nath and Chowdhury 2002, Ahmed *et al* 2003).

Table 1.1. Proportion of out of school children in Bangladesh, 1998-2005

Year	Age group		Sex		All (6-15y)
	6-10y	11-15y	Boys	Girls	
1998	23.0	32.4	29.7	24.7	27.2
2000	20.2	30.9	26.7	23.7	25.3
2002	17.8	28.2	26.1	19.9	22.9
2005	13.2	28.3	22.8	18.1	20.5

Sources: Education Watch Databases 1999, 2001, 2002, and 2005

Proportion of out of school children has decreased in the country (Table 1.1). Among the children aged 6-15 years the rate of out of school children was 27.2% in 1998, which decreased to 20.5% in 2005 – an improvement of about one percentage points a year. The rate of improvement was much faster among primary school aged children than the secondary school aged children.

Access to education did not spread equally to every corner of the country. There are variations by area and sub-groups of population. Among the primary school age children, proportion of out of school children is 24% in rural Sylhet division and 9% in rural Khulna division. This is 11% in the economically well-off households and 35% in the deficit households (Chowdhury *et al* 2002). The situation is even worse in the marginalized groups and the ethnic minorities. An earlier study showed that in the hilly region of the country (Chittagong Hill Tracts) 45% of Chakma, 59.7% of Marma, 90.4% of Mro and 63.4% of Tripura children aged 6-15 years were out of school (Table 1.2). Another study explored that it was 39% among the children of extreme poor households in Nilphamari district (Nath and Khan 2004). Over 42% of the urban slum children of age 6-10 years were out of school (Chowdhury *et al* 2002). These figures clearly indicate deprivation and disadvantaged situation in the access to primary education, which is an obstacle to achieve the national and international goals.

Table 1.2. Proportion of out of school children in CIIT, 1998

Ethnic groups	6-10 years	11-15 years	All (6-15 years)
Bangali	34.4	38.6	36.0
Chakma	46.8	42.6	45.0
Marma	55.2	43.5	49.7
Mro	92.3	87.7	90.4
Tripura	67.8	57.4	63.4
All Boys	43.4	39.6	41.8
All Girls	43.0	45.7	44.1
Overall	43.2	42.7	43.0

Source: Database of Counting the Hills study, 2001

Most of the data available and presented above are at least four years old. Fresh survey is needed to have recent statistics. This year's *Education Watch* (2005) may provide such statistics at the national level. Again, the *Education Watch* studies provide gross statistics on the situation and parental opinion of causes behind out of schooling of their own children. However, the importance of the issue requires rigorous analysis based on data collected through both quantitative and qualitative methods. Moreover, it seems that the situation differs from one corner to another and among the population groups, which demands separate analysis of the groups.

The second Primary Education Development Programme (PEDP II) of the government is synonymous with the primary education development in the country. As a complement to the PEDP II the Ministry of Primary and Mass Education (MoPME) of the government of Bangladesh has recently started a new initiative called Reaching Out of School Children (ROSC) project. This initiative aims to serve two million out of school children. No in-depth information of the situation of these children is available to find the effective ways of deliberation of education to them. Considering their socio-economic condition, ecology and culture, ways of deliberation may be different for the groups. A separate study on them can fill such information gap.

The UNESCO released global monitoring report towards Dakar goals presented an EFA Development Index (EDI) based on information on primary school enrolment, gender parity, adult literacy, and survival to grade V (UNESCO 2004). Of the 127 countries rated, Bangladesh ranked 107, just behind India (106) and ahead of Pakistan (123) and Nepal (110). It was also projected that all these countries will fail to meet the goals if rate of progress does not accelerate.

### The Present Study

An earlier discussion between Commonwealth Education Fund (CEF) and the Campaign for Popular Education (CAMPE) identified a number of disadvantaged groups for investigation. These are the children in the tea gardens, ethnic minority children, street children, disabled children, children in jails and brothels, domestic workers, child workers in factories, and children involved in crime. Investigation of the situation of all the groups taking representative samples would require a large amount of resources and time. Considering the limited available

resources, it was decided to investigate only two groups based on primary data generated through representative sample surveys. These are the groups living in tea garden and ethnic minority groups. Following paragraphs present an overview of the situation of ethnic minorities and the people in the tea gardens in Bangladesh.

**The ethnic minorities:** Different estimates show various numbers of ethnic minorities live in Bangladesh. According to the Bangladesh Bureau of Statistics (BBS 1991), there are 29 ethnic minority groups in the country. However, controversy is there with this figure, some sources claim higher figures. The Research and Evaluation Division of BRAC has recently completed a census of small ethnic groups in Bangladesh. According to BRAC census, there are 69 ethnic minority groups in Bangladesh. The number of households of these groups is 410,408 and they spread over 9,388 villages of the country. Division wise, 45.4% of the ethnic minorities live in Chittagong, 24.7% in Rajshahi, 16% in Sylhet, 9.1% in Dhaka, 4.6% in Khulna, and 0.2% in Barisal. They comprised about a fifth of the total population of the villages they live in and only 1.6% of the total population of Bangladesh. Of the total ethnic minority population, 86.6% belongs to 11 groups. These are the Chakmas (31.8%), Marmas (14.9%), Bangli (9.6%), Tripuras (8.2%), Garos (6.8%), Santals (4.7%), Tanchangyas (2.7%), Oraons (2.7%), Rajbangshis (1.9%), Mundas (1.8%), and Pahans (1.5%). Of them, Banglis live in the tea gardens.

**The tea garden area:** According to the Bangladesh Tea Board (2004) there are 156 tea gardens in the country. Of these, 90 are located in Moulvibazar, 13 in Habiganj, 19 in Sylhet, 22 in Chittagong and one each in Brahmanbaria and Rangamati districts. This did not take into account the newly established tea gardens in North Bengal. Of these tea gardens 28 are under four different foreign companies and others owned by the Bangladeshis. A total of 3,59,080 people live in these tea gardens, 49.2% of which are females. There are 89,812 registered and 19,592 casual labourers working in these gardens. Among the registered labourers 44.1% are men, 43.8% women and 12.1% adolescents. Various types of 188 schools are in the tea gardens, in which 366 teachers teach and 25,966 students are enrolled. About half of these are one-teacher schools and a good number of them have two teachers. However, on an average, the teacher pupil ratio is 1:71 in these schools. According to above-mentioned BRAC census, only five ethnic minority groups live in the tea gardens, they are Bangli, Bhujpuri/Deshwali, Oriya, Saddri, and Telegu. They are nearly 14% of the total ethnic minorities and 0.22% of the total population in Bangladesh. The proportion of population living in the tea gardens is about 0.3% of the total population in the country.

So far as we know there is no study to estimate the volume of out of school children in the tea gardens or among the ethnic minorities as a whole. Various groups of the ethnic minorities have been covered in a number of studies, a majority of those are exploratory. The only statistically sound study is the *Counting the Hills* – which covered only four ethnic minority groups living in the Chittagong Hill Tracts (Nath 2001). In the present study we have decided to consider the tea garden community as a separate stratum (both Bangalis and the ethnic minorities together) and all the ethnic minorities (excluding those who live in the tea gardens) as another stratum.

## Report Outline

Including this introductory chapter this report comprises of eight chapters. The second chapter presents a brief description of methodology, instruments and analysis techniques used in this study. Chapter 3 provides background characteristics of the households and individuals under the study, which includes socio-demographic, economic, educational and literacy situation. Chapter 4 analyses the situation of out of school children along with their socio-economic differentials. The situation of the children currently enrolled in school is provided in Chapter 5.

Reasons of children being out of school and probable solution to bring them back to school are discussed in Chapter 6. Children's involvement in work is discussed in Chapter 7. The final chapter presents a discussion of the findings along with some policy suggestions.

## RESEARCH METHODOLOGY

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*This chapter starts with the objectives of the study followed with a description of the instruments used and their development. Following section describes the sampling procedure in brief followed by the field operations. Quality control mechanism is placed afterwards and then the strengths and limitations of the study.*

### Objectives

As already stated in the introduction, this study aims to analyse the situation of out of school children in the tea gardens and among the ethnic minority groups. The specific objectives are as follows:

- a. to estimate the net rate of out of school children (among aged 6-15),
- b. to explore the socioeconomic differentials of out of school children,
- c. to explore why children remain out of school,
- d. to explore out of school children's involvement in work, and
- e. to identify the ways of bringing these children back in schools.

In order to achieve the above objectives both quantitative and qualitative research techniques were used. Basic as well as major information was collected through household survey in the tea garden areas and among the ethnic minority communities. On preliminary analysis of the household survey data some issues were identified for further exploration through using qualitative research techniques.

### Instruments

A structured questionnaire was produced for the household survey after several trials in the study areas. A draft questionnaire was tested in three field trials in Sreemangal (tea garden), Rajshahi (plain land ethnic minority), and Rangamati (hill area ethnic minority). The field trials helped in constructing the pre-coded responses of some questions and to improve the whole questionnaire. The final household survey questionnaire has four sections as follows.

- Profile of the household members,
- Socioeconomic information of the households,
- Time use of the children aged 6-14 years, and
- Educational information of children aged 6-14 years.

A number of questions were put under each section. The following parts present each of the sections separately.

*Profile of the household members:* This part includes age, sex, years of schooling, literacy status, parental education, and occupation of all members of the households.

*Socioeconomic information:* Households' self rated economic status, main source of income, religion, ethnicity, availability of electric facilities at home, distance of residence from school, etc. were collected under this part.

*Time use of children:* Time spent by the children aged 6-14 years was collected under five different heads viz., school hour, study at home, games/gossip/leisure, work at home, and work outside home.

*Educational information:* Educational information of the children aged 6-14 years was included in this section. It has three sub-sections. Information on current grade of enrolment, school type, location of school, attendance, and reason of absenteeism were collected for those currently enrolled in school. Information on dropouts included grade during dropping out, type of school, age at enrolment, duration in school, whether repeated in any grade and reason of dropout. Reason of never enrolment was collected for those never enrolled in school. Finally, the ways of bringing the out of school children (both dropout and never enrolled) to schools were also collected. The household survey questionnaire along with the English version is provided in Annex 2.1.

Some of the issues discussed through qualitative investigation came out from the preliminary analysis of data and some emerged on the spot during fieldwork. The issues included importance of education in their life, overall life style and relationship with the majority group – the Bangalis, educational situation in the villages and the role of various stakeholders in it, social and family related barriers to schooling, barriers within the existing school system, reasons behind dropout and never-schooling, possibility of bringing children to school, etc. The checklists used in qualitative investigations are provided in Annex 2.2.

## **Sampling**

Current school enrolment status of the children was considered as the key variable in determining the sample size for household survey. Considering enrolment status of children as a dichotomous variable (currently enrolled or out of school) the minimum sample size for an estimate was calculated to be 768. We reached at this figure considering the rate of out of school children as 50% with 95% confidence limit and 5% precision level, and doubling the size to reduce the cluster effect. Again we wanted to have separate sex-wise estimates for primary and secondary school age group children. Thus, the required number of children for the whole study was (768 x 2 age groups x 2 sex groups x 2 study groups) 6,144.

Sampling of two groups of population was done separately. However, it was not easy to separate them. Because, a good portion of the tea garden population belongs to the ethnic minority. It was decided to consider all the tea gardens as a group and not to include them in the ethnic minority group. Thus, ethnic minority community in this study excludes those living in the tea gardens. Again, people from all the households living in the tea gardens are not involved in tea garden activities. However, we did not exclude them. All households living in the tea garden areas were included in the sampling frame.

A full list of the tea gardens in Bangladesh was available in a book called Statistics of Bangladesh Tea Industry (Bangladesh Tea Board 2004). The list includes 156 tea estates. Of these, 90 are located in Moulvibazar, 23 in Habiganj, 19 in Sylhet, 22 in Chittagong and one each in Brahminbaria and Rangamati districts. Thirty tea estates were randomly selected – 14 from Moulvibazar, 6 from Sylhet, 6 from Habiganj, 3 from Chittagong and one from Rangamati. From each tea estate, 100 households were selected through systematic random sampling starting from the northwest corner. Every second household was considered in the sample. If any estate was not big enough to cover the required number of households adjacent

one was selected to get the required number. Finally, 3,006 households were surveyed from 39 tea gardens (Table 2.1).

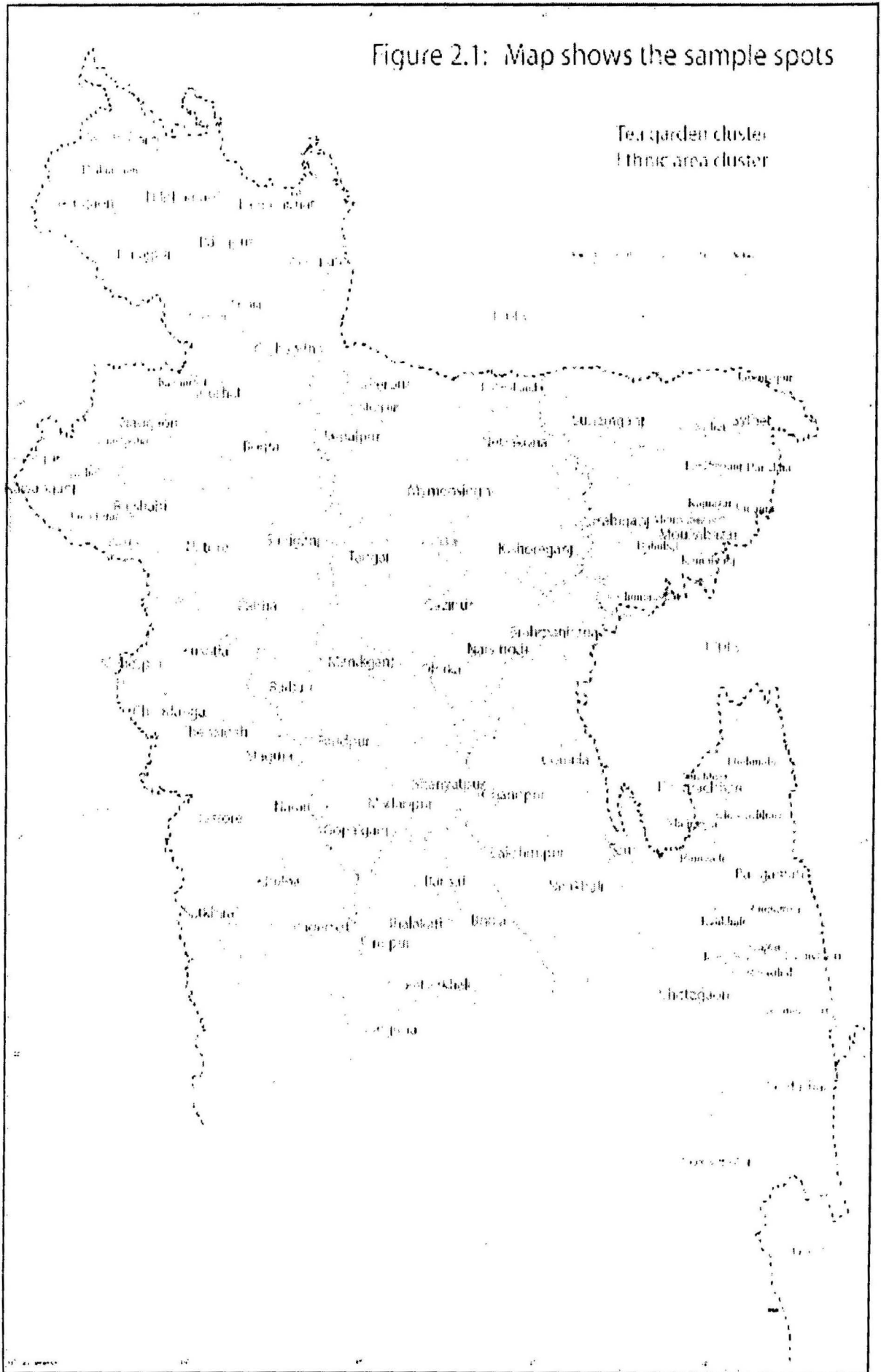
Table 2.1. Sample for household survey

Study group	Number of clusters	Number of households	Age group	Number of children		
				Boys	Girls	Both
Tea garden	39	3,006	6-10y	1,064	1,010	2,074
			10-15y	837	805	1,642
			Total	1,901	1,815	3,716
Ethnic minority	97	3,000	6-10y	854	819	1,673
			10-15y	701	695	1,396
			Total	1,555	1,514	3,069
Total	136	6,006		3,456	3,329	6,785

The Research and Evaluation Division of BRAC has recently conducted a census on the small ethnic groups in Bangladesh, and found 69 ethnic minorities in Bangladesh. This data set was used for sampling of the ethnic minority households. Considering the population size and location of residence, 10 major ethnic groups were selected. Six of them are from plain lands (Garo, Santal, Pahan, Oraon, Munda, and Rajbangshi) and four from Chittagong Hill Tracts (Chakma, Marma, Tanchanga, and Tripura). It was decided to survey 30 villages/paras proportionately distributed among 10 selected ethnic groups. In each village, 100 consecutive households were selected for survey starting from the northwest corner. In most of the cases the number of villages had to be increased to get the required number of households. Finally, 3,000 ethnic minority households were surveyed from 97 villages/paras (Table 2.1).



Figure 2.1: Map shows the sample spots



A total of 6,006 households from 136 clusters (tea gardens/villages/paras) were covered through the household survey where 6,785 children aged 6-15 years were identified. Of them, 3,456 were boys and 3,329 were girls; 3,716 from tea gardens and 3,069 from ethnic minority communities (Table 2.1). The sample sports are shown in a map is provided in Figure 2.1.

Six clusters, two each from the tea gardens, plain land and Chittagong Hill Tracts, with higher and lower rate of out of school children were selected for the qualitative part of the study. These clusters are located in four districts – Moulvibazar, Naogaon, Thakurgaon and Rangamati. Seventy-seven persons, 32 in the tea gardens and 45 in the ethnic minority communities, were consulted for information. They include schoolteachers, parents, common villagers, and local elites. Instead of random selection, a convenient sampling strategy was adopted to find them. Criteria for the persons consulted were pre-determined, but not the number of respondents. They were selected as they were available in the community during the fieldwork. Table 2.2 provides more on this.

Table 2.2. Techniques used and number of respondents in qualitative part of the study

Techniques used	Respondents	No. of respondents		
		Tea garden	Ethnic minority	Total
In-depth interview	Sarder, Tila Babu, labour union secretary, and ethnic community head (Mandal/Karbari)	9	8	17
	Head teachers of government and non-government schools, programme organisers of NGO schools, and teachers of missionary schools	6	6	12
	Parents of students and non-schooled children	6	7	13
Group interview	Union Parisad chairman and members, and learned persons in the community	4	5	9
	Teachers of government and non-government schools	2	3	5
	Common villagers	5	16	21
Total		32	45	77

## Fieldwork

Forty-eight research assistants belonging to four ethnic groups viz., Chakma, Marma, Tripura and Bangali were recruited for fieldwork. It was necessary because the language of the household survey respondents were not the same for all groups. The Bangali research assistants worked in the tea gardens and plain land ethnic minority areas and the others worked in the Chittagong Hill Tracts areas. The research assistants were trained in two batches – one for the Bangalis (in Madhupur) and the other for the others (in Chittagong). Each training session continued for five days including classroom discussion and field practice.

The research assistants were grouped in teams of two members, one of which was made team leader. Each team was given responsibility to conduct household survey in a number of clusters. The head of the household was the principal respondent. Head means the main decision maker in the household. In the absence of the head, his/her spouse was the first alternative. If neither was available, any adult member of the household was asked to provide information. In an ideal situation, the respondent with the help of other members of the

household and the neighbours provided information. When no suitable respondent was available at the first visit, the household was approached again in the evening or the following day. Some households (not more than 2-3%) could not be included due to unavailability of suitable respondent at home or the members refused to provide information. Age determination was the hardest and time-consuming task in the household survey. Event calendar was used to estimate age.

The research team members and five supervisors supervised all the field activities. This included supervising whether the teams worked in the right places as sampled and did the household survey as instructed during training. To check the quality of data, a team of five research assistants did resurvey on some selected indicators in a sub-sample of the households.

The household survey was conducted in three phases during May–June 2005 (from 1-18 May in the tea gardens, from 25 May to 13 June in plain land ethnic minority areas, and from 6-28 June in Chittagong Hill Tracts).

One member of the research team along with three research assistants did the fieldwork for the qualitative part of the study. They spent 3-4 days in each area. The respondents were contacted on arrival of their premises. However, they were interviewed according to the availability of their time. The fieldwork was done during 11-27 September 2005.

### **Data Quality Assessment**

Several steps were taken to maintain the quality of data. In a team of two members one was made leader, whose responsibility was to note the quality of data collected by the other member. Through random visits to the sample spots the supervisors checked the quality of data by re-interviewing a sample of households. They also checked whether the teams followed the instructions given to them during training. They also provided feedback to the teams based on to their observation. The research team also visited a number of spots to see the overall field operation. Tele-communication was used with the field teams during the field operation.

In addition, half of the clusters were selected for re-survey. In each cluster, 15 households from the already surveyed households were selected through a systematic random technique, totalling 450 households. Instead of the whole questionnaire, selected questions were asked in each household. These data were then matched with the survey data to see the reliability of data collected in the survey. For some variables, for instance sex, enrolment status, and religion, the rate of matching was very high. However, for others, it was slightly lower than expected (Table 2.3).

Table 2.3. Percentage of cases matched between survey and re-survey for selected indicators

Indicators	% matched
Sex of individuals	98.2
Age of individuals ( $\pm 1$ year)	83.9
Enrolment status	94.6
Reported literacy status	88.2
Current grade of enrolment	89.7
Type of school	86.0
School attendance	82.5
Self reported economic status of HH	79.4
Main source of income of HH	82.0
Religion	98.9

### Data Analysis

Major analyses moved around the two study groups. Gender-wise analyses were also done for each group. Besides, the study groups were broken down into a number of sub-groups. For instance, the areas where the ethnic minority people live were divided into two – plain land and the Chittagong Hill Tracts (CHT). On the other hand, the households in the tea gardens were categorised in two different ways. Firstly, respondents of some of the households claimed that their ethnic identity was Bangali and a majority said that it was not. According to them they belonged to many different ethnic groups. In this consideration the households were divided into two sets – Bangali and ethnic minority. Secondly, not all the households depend only on the tea gardens for their livelihood. There are a good number of households whose main source of income was something other than selling labour in the tea gardens. The members of these households actually shifted their occupation due to various reasons. The households in the tea gardens were categorised into two – purely tea garden household and non-tea garden household. Separate analyses were done for each of the sub-groups. Bi-variate analyses with appropriate statistical tests were mostly done to find various estimates of out of school children and significance of differences among the estimates. In addition, multiple regression analysis was done to predict out of schooling. Probability of a child being out of school was also calculated from the regression models.

### Strengths and Limitations

Like any other survey-based study, this study also has strengths as well as some limitations. The strengths and limitations of this study are presented below.

#### Strengths

1. This study deals with a crucial issue for achieving international goals and targets of educational development including the MDGs. Moreover, in terms of socioeconomic advancement the two study groups are marginalized in Bangladesh. Studies and programmes on marginalized communities are needed in order to achieve EFA goal.

2. This study is the first attempt to explore the educational situation in the tea gardens through a representative sample survey. A study on CHT was done five years back, but this study included the ethnic minorities from both plain land and CHT.
3. This study not only explored the situation of out of school children, but also those who are currently in schools and the overall educational attainment and literacy of the population under the study.
4. In addition to the study groups, analyses included different sub-groups of households among them, gender dimension, and socio-economic and demographic correlates. These increased the merit of the study.
5. The sample survey through structured questionnaire produced statistical estimates of the various groups and sub-groups of the study population. Investigation through qualitative research techniques was an added and interesting component of this study. It is mainly because the qualitative investigation was done after first round analysis of the quantitative data. Such an attempt helped us to provide more explanation of the existing situation.

### **Limitations**

1. It was not possible to consider all the ethnic minorities in the country. Only 10 were considered based on population size<sup>1</sup>. In this sense, the study may not be claimed as a comprehensive one for all the ethnic minority communities in the country.
2. The major estimates of this study – the proportions of out of school children – were based on correct determination of the age of the population. However, age determination was the hardest job for the interviewers. This was mainly because the respondents in many cases were quite unfamiliar with the usual event calendar that is used in national surveys. Though the interviewers tried to use local events familiar to the respondents, some errors could not be overcome.
3. Custom and culture of the study population are different from those of the majority in Bangladesh. It was not always possible to appoint interviewers from the same language and culture. There were difficulties in communicating the questions to the respondents and receiving answers from them. Some errors due to such situation cannot be ruled out. Some indication of this can be found in the matching operation of survey and resurvey data (Table 2.3).

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<sup>1</sup> These groups collectively comprised of nearly 87% of the total ethnic minority population in the country.

## BACKGROUND CHARACTERISTICS

*This chapter presents the background characteristics of the households under survey. It has two sections viz., socio-demographic characteristics of the households and education and literacy of the population. The socio-demographic characteristics include age and sex composition of population, household economic status and main income source, religion, and availability of electricity at home. Years of schooling completed by each individual and reported literacy status of the population are two parts of the education section.*

### Socio-demographic Characteristics

**Age and sex composition:** There were 15,197 individuals in the 3,006 households surveyed in the tea gardens and 13,590 individuals lived in the 3,000 households surveyed in the ethnic minority communities. This means that the average household size was 5.1 for tea gardens and 4.5 for ethnic minorities. The sex ratio (number of males against 100 females) was found 104 for tea garden community and 102 for ethnic minorities (Table 3.1). The average household size in the tea gardens was larger than that of the national average of 4.9 (BBS 2003). However, sex ratio was lower in both the study groups than the national average of 106 (BBS 2003).

Average household size was smaller in the purely tea garden households than the non-tea garden households (4.9 vs. 5.4). Again, it was slightly larger in the Bangali households than the ethnic minorities in the tea gardens (Annex 3.1). On the other hand, the size of the households was bigger in the ethnic minorities living in the Chittagong Hill Tracts (CHT) than those living in the plain land (Annex 3.2). In the CHT, Chakma households were bigger in size than those of others. The sex ratio was higher in the non-tea garden households than the purely tea garden households and among the ethnic minorities than the Bangalis in the tea garden areas. Sex ratio was equal among the ethnic minorities in plain land and the CHT, however it was higher among Chakmas than the other groups in the CHT.

Age of nearly 18% of the tea garden population and 14.7% of ethnic minority community was five years or below. The proportion of primary school aged children (6-10 years) was 13.6% in the tea gardens and 12.3% in the ethnic minority communities. The proportion of secondary school aged children was over 10% in both the study groups. A small difference was observed in the age distribution of the population of various sub-groups (Annex 3.1 and 3.2).

Table 3.1. Socio-demographic characteristics of the households

Issues	Tea garden	Ethnic minority
Number of households	3,006	3,000
Total population	15,197	13,590
Average household size	5.1	4.5
Sex ratio <sup>1</sup>	104	102
<u>Age distribution (%)</u>		
≤ 5 years	17.9 (2,722)	14.7 (1,993)
6-10 years	13.6 (2,074)	12.3 (1,673)
11-15 years	10.8 (1,642)	10.3 (1,396)
16+ years	57.6 (8,759)	62.8 (8,528)
<u>Economic status (%)</u>		
Always in deficit	20.4 (614)	14.9 (447)
Sometimes in deficit	29.3 (880)	36.6 (1,097)
Breakeven	31.9 (958)	29.3 (878)
Surplus	18.4 (553)	19.0 (571)
<u>Main source of income (%)</u>		
Service	8.6 (260)	8.5 (254)
Business	5.8 (175)	8.5 (256)
Agriculture	8.5 (357)	51.7 (1,550)
Labour sale outside tea gardens	11.3 (340)	30.0 (900)
Labour sale in the tea gardens	64.5 (1,939)	-
Others	1.2 (35)	1.3 (39)
<u>Religion (%)</u>		
Buddhism	0.1 (4)	54.0 (1,620)
Christianity	3.2 (9.6)	26.1 (782)
Islam	9.9 (298)	0.1 (3)
Hinduism	86.8 (2,607)	19.8 (594)
<u>Electricity facility at home (%)</u>		
Yes	13.4 (403)	14.5 (436)
No	86.6 (2,603)	85.5 (2,564)

<sup>1</sup> Number of males against 100 females

Figures in the parentheses indicate number of individuals for age distribution and number of households for others

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

**Economic status and source of income:** Regarding the overall income and expenditure of all the members during the last one-year, self-rated economic status of the households was collected. A four-point scale was used; those which are always in deficit, those which are sometimes in deficit, those which are breakeven, and those which considered themselves having surplus. On average, about half of the households in both the study groups was rated as always or sometimes in deficit. A fifth of the households in the tea garden areas was rated as always in deficit and 29.3% as sometimes in deficit. These rates were respectively 14.9% and 36.6% for ethnic minority communities. Less than a fifth of the households themselves reported in surplus economic status.

Information on the main source of income of the households was collected. Not all, but a majority of the households in the tea gardens lived on selling labour in the tea gardens or outside. The livelihood of 64.5% of the households depended on the tea gardens and others had some other sources of income like service (8.6%), business (5.8%), agriculture (8.5%), and selling labour outside the tea gardens (11.3%). On the other hand, 51.7% of the ethnic minority households lived on agriculture, 30% on labour selling, 8.5% on service, and another 8.5% on business.

A significant variation in the household economic status was observed when tea garden data were segregated by main source of income or the ethnic identity. Economic status of the 58.6% of the purely tea garden households was always or sometimes in deficit, which was only 33.7% among the non-tea garden households. Again, over a half of the ethnic minority households in the tea gardens fell in this category, which came to 43.4% among the Bangalis in the same areas. On the other hand, household economy was better among the ethnic minorities living in the plain lands than those in the CHT. Surprisingly, it was worse among Chakmas than the other communities in the CHT.

### **Box 3.1. Switching of profession in the tea gardens**

The tea estate owners provide each registered worker a small piece of free land with a house of 80 square feet (10'x 8') to live with family. They are offered two options and can choose any one for family maintenance. They can either take a *bigha* of land for cultivation of their own for which they are to pay Tk. 1,400-1,600 yearly or they can receive three and a half kilograms of wheat flour per week at a cost of Tk. 5. The workers also get some free medical facilities. However, they complained that the facilities are not ample and quality of these services is very poor.

An adult tea garden worker can hardly earn Tk. 165 weekly, which is by no means enough for maintenance of their families. So, there is a tendency for the other members of the families to find job outside the tea gardens. These include rickshaw/van pulling, labour selling in cropland and betel leaf fields, shop keeping, agriculture and service in nearby towns. Income from these activities is often better than working in the tea gardens.

The forefathers of the ethnic minorities in the tea gardens came from various provinces of India. They are not interested to belong to the tea gardens. Many of them still consider themselves as foreigners and anxious to have better life if that depends on leaving this place. So, their strategy is to keep at least one member of the household involved with the tea gardens and search job for other members elsewhere.

Nearly a third of the non-tea garden households in the tea garden areas lived mainly on manual labour selling in other places rather than the tea gardens. The main source of income of a quarter of these households was service and for another quarter it was agricultural activities. Two-thirds of the ethnic minority and 60% of the Bangali households were mainly depending on income from selling labour in the tea gardens. The second choice in this regard was selling manual labour outside tea gardens for the ethnic minorities and service for the Bangalis. On the other hand, the main source of income of the majority of the ethnic minority households in the plain lands was selling manual labour (58%), however, it was agricultural activities in the CHT (68.8%). Over a quarter of the plain land ethnic minority households lived on agricultural activities. Although agricultural activities were the main source of income for all groups in



CHT, but business came out as the second important activity for Chakmas and selling manual labour for other groups.

**Religion:** Hinduism was practiced in majority of the households in the tea gardens (86.8%), while it was Buddhism among the ethnic minority communities (54%). The members of nearly 10% of the households in the tea gardens practiced Islam, 3.2% practiced Christianity and only 0.1% practiced Buddhism. Among the ethnic minorities, Islam was practiced in only 0.1% of the households, Hinduism in 19.8% and Christianity in 26.1% of the households.

Different religious composition was observed when data were analysed by sub-groups of population. For instance, although people in 86.8% of the households in the tea gardens practiced Hinduism, it was nearly 94% among the ethnic minorities and 64.2% among the Bangalis. Again, while the aggregate figure shows 10% as practice Islam, nearly 2% of the ethnic minorities and 35.2% of the Bangalis practice Islam there. Similarly, nearly two-thirds of the plain land ethnic minorities were Christian and a third Hindu, but 88.7% of the ethnic minorities in CHT practiced Buddhism. Again, mostly all the Chakmas in CHT practiced Buddhism, but it was 71.1% for the other groups. Nearly 29% of the non-Chakmas in the CHT practiced Hinduism. These indicate a strong correlation between ethnicity and religion practiced, especially among the ethnic minorities. This occurred irrespective of place of residence of the population.

The findings, stated above, clearly show that the study population by no means fall in the category of majority of the country's population in terms of religious belief. According to the latest census, nearly 90% of the country's population believe in Islam (BBS 2003). Of the non-Muslims, only 11.5% believe in Buddhism, Christianity or any other religion and the majority practice Hinduism.

**Electricity at home:** Contrary to the national average of 31.5% of the households using electricity (BBS 2003) only 13.4% of the tea garden households and 14.5% in ethnic minority community had electricity supply. These figures are even lower than the national average for rural areas and similar to that of the national average found 14 years ago. This means that the study groups, in this regard, are one and a half decade behind than the other population in the country. Electricity facility was significantly lower in the purely tea garden households than the non-tea garden households (9.2% vs. 21.1%). Again, the Bangalis in the tea gardens were ahead of the other ethnic groups there (19.1% vs. 11.6%). In case of the ethnic minorities, households located in the CHT were significantly ahead of those in the plain land (17% vs. 10.9%), and in CHT the Chakmas were ahead of the other minority groups (18.9% vs. 14.6%).

A strong correlation between household economic status and access to electricity at home was observed (Annex 3.3). For instance, in the tea gardens, whereas over 29% of the surplus households had access to electricity it was true of only 6% in the always in deficit households. Again, only 4.3% of the always in deficit households among ethnic minorities had access to electricity, which gradually increased to 9.2% in sometimes in deficit households, 14.3% in break-even households, and 33.5% in surplus households.

## **Education and Literacy**

**Educational attainment:** Educational attainment of the total population of the surveyed households is presented in Table 3.2. Experience of schooling was higher among the ethnic minorities than the tea garden population. Over 60% of the population in the tea gardens and 46.4% of those among ethnic minorities did not have a single year of schooling. About a fourth of the population in both the study groups enrolled in school but dropped out before completing the full course of primary education (grades I to V). Only 15.6% of the population

in the tea gardens and 27.8% in ethnic minority communities had five or more years of schooling. A very small portion of the study population had completed secondary education – 1.4% in the tea gardens and 5.6% in ethnic minority.

Table 3.2. Percentage distribution of household members by years of schooling completed, study group and sex

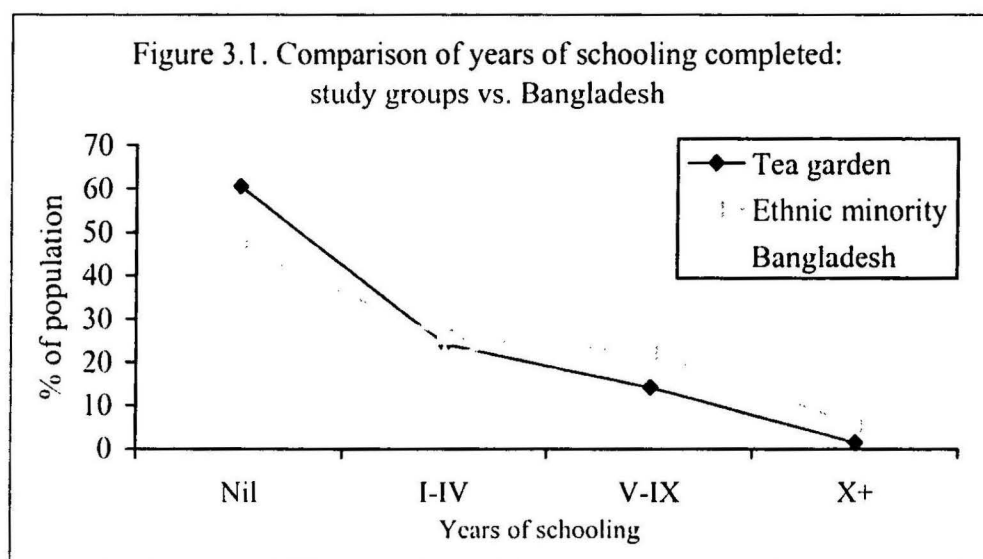
Years of schooling	Tea garden			Ethnic minority		
	Males (7,565)	Females (7,407)	Both (14,972)	Males (6,814)	Females (6,713)	Both (13,527)
Nil	50.6	70.4	60.4	38.6	54.3	46.4
I – IV	28.6	19.4	24.1	28.4	23.1	25.8
V – IX	18.9	9.3	14.2	25.8	18.5	22.2
X+	1.9	0.9	1.4	7.2	4.0	5.6
Total	100.0	100.0	100.0	100.0	100.0	100.0

Figures in the parentheses indicate number of individuals in the households

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

The females of both the study groups were lagging much behind than their male counterparts in educational attainment. A half of the males and 70% of the females in the tea garden areas never went to school ( $p < 0.001$ ). This rate was 38.6% among the males and 54.3% among the females of ethnic minorities ( $p < 0.001$ ). A third of the ethnic minority males and 22.5% of the females of the same group had five or more years of schooling. Such level of education was 20.8% for the males and 10.2% for the females in the tea gardens.

Figure 3.1 provides comparison of educational attainment of the study population with that of the national estimates (from unpublished data of *Education Watch 2005*). It shows that the study groups are lagging behind the overall population of Bangladesh. Proportion of people who completed the full cycle of primary education and beyond was lower in the study population than that of the overall Bangladesh population.



Sources: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005  
Education Watch Household Survey, 2005

A wide variation was observed in school attainment among the population of the purely tea garden households and the other households in the tea garden areas. Over two-thirds of the population of purely tea garden households had not completed a single year of schooling, which was the case for a half of the other population in the same area. On the other hand, not much variation was observed in educational attainment when data were segregated by ethnic identity of the population in the tea gardens (Bangali vs. ethnic minority). Again, the ethnic minorities of the plain lands and the Chittagong Hill Tracts had similar level of exposure to education. However, the Chakmas were more likely to attain more education than the other groups in CHT – 34.5% of the Chakmas and only 20.8% of the other ethnic groups had completed primary education or attained more. Gender difference favouring the males was observed irrespective of the study groups and sub-groups (Annexes 3.4 to 3.7).

**Literacy:** Literacy status of the household members was assessed through using the definition and method used in the national censuses (BBS 2003). The definition was *ability to read and write a simple letter* and in each household a single respondent reported the literacy status (in a dichotomous scale – literate or non-literate) of all members of the household. Following the prevalent census custom, we analysed literacy status of two sub-sets of population – a) aged 7 years and above, and b) aged 15 years and above (adult literacy).

Not much variation was found in the literacy rate of the population aged 7 years and above and the adult literacy rate (Tables 3.3 and 3.4). However, in both the cases the ethnic minorities were significantly ahead of the population in tea gardens. The literacy rate of the population aged 7 years and above was 33% in the tea garden area and 42.2% among the ethnic minorities. On the other hand, the adult literacy rates were respectively 33.6% and 43.6% for the two study groups. These clearly shows that the ethnic minorities were 10 percentage points ahead of the tea garden population in literacy assessment.

Table 3.3. Literacy rate of population aged 7 years and above by study group and sex

Study group	Sex			Level of significance
	Males	Females	Both	
Tea garden	44.2 (6,177)	21.3 (5,931)	33.0 (12,108)	p<0.001
Ethnic minority	51.5 (5,672)	32.8 (5,600)	42.2 (11,272)	p<0.001
Level of significance	p<0.001	p<0.001	p<0.001	

Figures in the parentheses indicate population aged 7 years and above

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

Table 3.4. Adult (15 years and above) literacy rate by study group and sex

Study group	Sex			Level of significance
	Males	Females	Both	
Tea garden	47.8 (4,653)	18.9 (4,496)	33.6 (9,149)	p<0.001
Ethnic minority	54.8 (4,433)	32.2 (4,402)	43.6 (8,835)	p<0.001
Level of significance	P<0.001	p<0.001	p<0.001	

Figures in the parentheses indicate adult population

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

Literacy rate was significantly higher for the males than the females in both the study groups ( $p < 0.001$ ). Among the population aged 7 years and above, the males of the tea gardens were 22.9 percentage points ahead of the females in the same area (44.2% vs. 21.3%;  $p < 0.001$ ) and the ethnic minority males were 18.7 percentage points ahead of their female counterparts (51.5% vs. 32.8%;  $p < 0.001$ ). The highest literacy rate was found among the ethnic minority males and the lowest was among the females in the tea gardens. The difference is noticeable. Whereas more than a half of the ethnic minority males were literate it was only 21.3% among the females in the tea gardens. Similar variations can be seen in case of the adults too.

The literacy rate of the Bangalis was significantly higher than the ethnic minorities in the tea gardens (34.5% vs. 32.4%;  $p < 0.001$ ). This difference occurred due to the difference among the literacy rates of the females of these two sub-groups of population. Again, compared to the purely tea garden households, literacy situation was much better in those households whose livelihood was independent of working in the tea gardens. Both the males and the females of the later group were ahead of their counterparts in the former group. Gender gap in literacy was a common phenomenon in all the four groups (Annex 3.8).

Ethnic minorities living in the Chittagong Hill Tracts were much advanced in literacy than their counterparts in the plain land – the rates were respectively 45.7% and 36.3% ( $p < 0.001$ ) – a difference of 12.4 percentage points (Annex 3.9). Again, in CHT, the Chakmas were 11 percentage points ahead of the other groups (50.4% vs. 39.4%;  $p < 0.001$ ). The females were lagging behind the males in all groups. Literacy rate was found more than 50% in some groups; they are ethnic minority males in CHT (Chakma 61.5% and others 50.7%), and the males of non-tea garden households living in the tea garden areas (56.9%). The worst literacy situation was found among the females in purely tea garden households, who are the main force there in tea plucking. Only 14.3% of them were reported to be literate. Similar analysis with adult literacy rate is provided in Annexes 3.10 and 3.11.

If literacy is considered as one of the primary basis for development, it would be interesting to know the proportion of households having at least one literate person. Such households can be called as 'literate household'. The majority of the households under study was found as literate – 62.4% of the tea garden and 70% of the ethnic minority households had at least one literate person. In the tea garden areas, 55% of the purely tea garden households and three-fourths of the non-tea garden households fell in this category. The ethnic minorities living in CHT were ahead of those in the plain land, the rates were respectively 74% and 63.7% among them. Again in CHT, no literate person was found in 21% of Chakma and 34% of other ethnic minority households.

## OUT OF SCHOOL CHILDREN AND THEIR SOCIOECONOMIC DIFFERENTIALS

# 4

*This chapter provides estimates of out of school children by various sub-groups of the study population followed by socioeconomic differentials of these estimates. Comparison with the relevant recent national statistics was also done. Years of schooling completed by the dropped out children and their repetition in the same class while they were students are two added section of this chapter. Finally, logistic regression analysis was performed in order to predict out of schooling.*

### The Out of School Children

Information on the current school enrolment status of the children aged 6-15 years was collected. A child was determined as currently enrolled if s/he attended school at least for a day during last three months. The duration was counted back from the day of interview of the respective household. Children falling outside this definition were considered as out of school children.

Table 4.1. Proportion of out of school children among aged 6-15 years by study group and sex

Study group	Sex			Level of significance
	Boys	Girls	Both	
Tea garden	38.7 (1,901)	41.4 (1,815)	40.0 (3,716)	p<0.05
Ethnic minority	18.1 (1,554)	22.4 (1,513)	20.2 (3,067)	p<0.01
Level of significance	p<0.001	p<0.001	p<0.001	

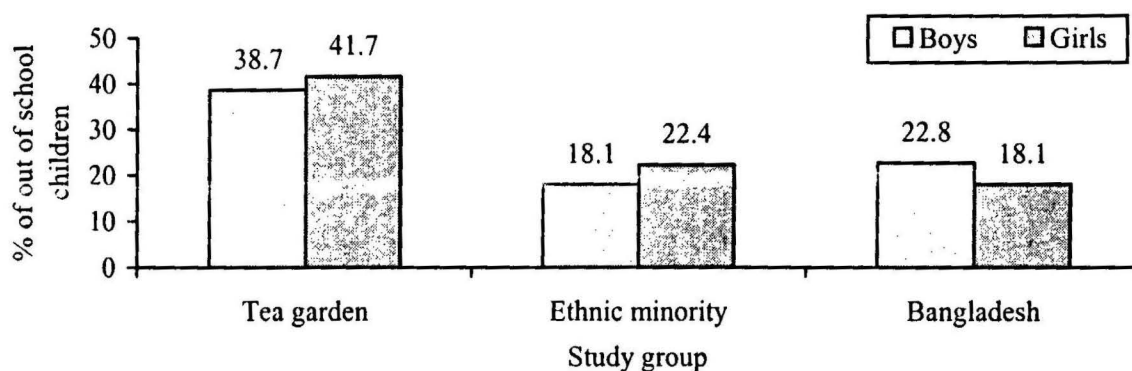
Figures in the parentheses indicate number of children under survey

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

In general, the children of ethnic minority communities were more likely to be enrolled in schools than those of the tea gardens. According to the definition applied, the net enrolment rate for the children aged 6-15 years was found to be 79.8% and 60% respectively in these two study groups. Thus, the proportion of out of school children was 40% in the tea gardens and 20.2% among the ethnic minorities (p<0.001) (Table 4.1). Boys of both the groups were ahead of their peer girls in school enrolment. Thus, proportionately more girls were found to be out of school than the boys in both the study groups. Table 4.1 shows, 38.7% of the boys and 41.4% of the girls in the tea gardens were out of school (p<0.05), while it was 18.1% for the boys and 22.4% for the girls of ethnic minorities (p<0.01).

The out of school children can be categorised into two – dropout and never enrolled. The children who were admitted in school at least once in their lifetime but did not attend classes for even a day during the last three months of the interview were considered as dropped out. The children who were not admitted to school ever were considered as never enrolled. Among the out of school children in the tea gardens, more than half never enrolled in any school and the rest went to school but were not there during the survey. They were respectively 21.3% and 18.8% in the total child population of age 6-15 years in the tea gardens. These figures were respectively 9.7% and 10.6% among the children of ethnic minorities (Annex 4.1). One important feature in the tea gardens is that the rate of never enrolment was higher than the dropout rate among the girls, which is reverse in case of the boys. A quarter of the girls and 17.7% of the boys aged 6-15 years in the tea gardens never enrolled in any school. Not much variation was found in dropout and never enrolment rates among the children of ethnic minorities. Further analysis of this is provided in Annex 4.2.

Figure 4.1 Proportion of out of school children by sex: study groups vs. national estimates



Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

The rate of out of school children among the ethnic minorities was similar to that of the national average found in *Education Watch 2005* (unpublished data). But the tea garden children were more deprived than the other children in the country. During the qualitative investigation, many respondents in the tea gardens opined that they are very much isolated from other parts of the country. As they are to follow the rules and regulations of the tea estates, they cannot take any initiative of their own. The tea estate owners, in general, did not take much initiative for education of the children in the areas. There was no campaign to raise awareness among the parents. In some cases, because of unwillingness of the tea estate owners, no NGO was allowed to establish school in the tea garden areas. Many children were found engaged in plucking tea leaves with their mothers, cleaning the bushes of the hills, and nursing the tea saplings. Khashia children engage in plucking betel leaves from the betel fields. One important difference with the national estimates was that whereas at the national level more boys were out of school than the girls, it was the girls who lagged behind the boys in both the study groups (Figure 4.1). The mothers are the main earning members of the households in both the study groups. They often sought the help of their children. The tea garden children engaged in plucking tea leaves and ethnic minority children in the CHT worked in *Jhum* cultivation for 9 to 11 hours daily. During interviews, the teachers, the community heads and the learned persons mentioned that the mothers kept their girl children at home to cook and to look after the younger children of the family.

## Age and Out of Schooling

A wide variation was observed in enrolment rates when data were segregated by the age of the children (Table 4.2). The proportion of out of school children significantly increased from age group 6-10 years to 11-15 years. Among the primary school aged children (6-10 years) over a quarter of the tea garden (27.7%) and 11.1% of the ethnic minorities were out of school. This was respectively 56% and 31.3% among the secondary school aged children (11-15 years). No gender difference was observed in school enrolment among the primary school age children. Thus, an equal proportion of out of school children was found among them. On the other hand, statistically significant gender variation disfavouring the girls occurred among children aged 11-15 years. Proportionately more girls than boys of this age group were found to be out of school in both the study groups (Table 4.2).

Table 4.2. Proportion of out of school children by study group, age and sex

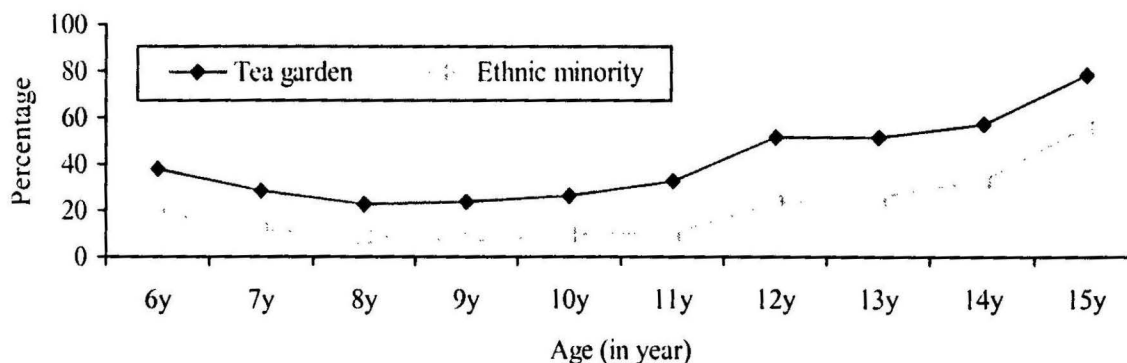
Study group and age	Sex			Level of significance
	Boys	Girls	Both	
<u>6-10 years</u>				
Tea garden	27.1 (1,064)	27.7 (1,010)	27.4 (2,074)	ns
Ethnic minority	11.0 (854)	11.1 (819)	11.1 (1,673)	ns
<u>11-15 years</u>				
Tea garden	53.5 (837)	58.5 (805)	56.0 (1,642)	p<0.01
Ethnic minority	26.9 (700)	35.7 (694)	31.3 (1,394)	p<0.01

Figures in the parentheses indicate number of children under survey

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

Figure 4.2 shows the proportion of out of school children by age separately for each study group. A statistically significant age variation was observed in the rate of out of school children. It shows that the tendency of being out of school was lowest for children aged 7-9 years. In the tea gardens, the rate of out of school children was 37.7% for age six, which gradually decreased to 23.5% at age nine and increased significantly with the increase of age of the children. Over a half of the children aged 12-14 years was out of school, this jumped to 78.6% among the children aged 15 years. On the other hand, nearly a fifth of the ethnic minority children of age six was out of school, the rate gradually decreased to 6.7% at age nine and then increased significantly with the increase of age of the children. It was observed that a quarter of the ethnic minority children of age 13 years, a third of age 14 years and 56.5% of age 15 years were out of school. A similar pattern was observed when data were analysed for boys and the girls separately (Annex 4.3).

Figure 4.2. Proportion of out of school children by study group and age



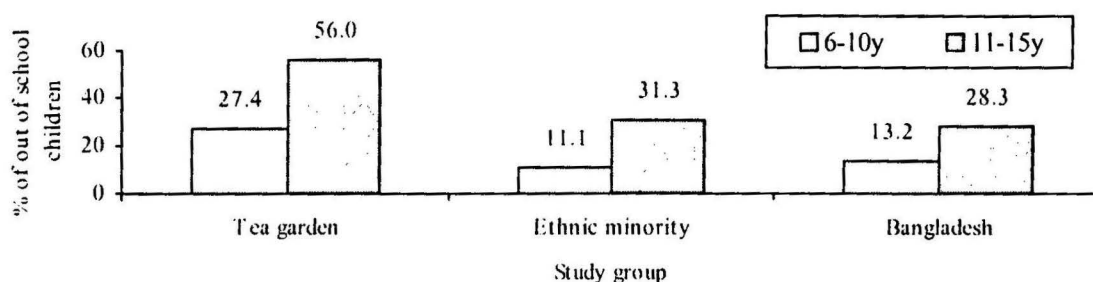
Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

The respondents in the qualitative investigation mentioned the following reasons for the increasing rate of out of school children after the age of 10 years.

- The poor parents consider this age as the high time to engage children in work.
- In the absence of the working mothers, the adolescent girls are required to look after the younger siblings and cook at home.
- Many children aged 10-12 years are qualified to study in secondary schools. The parents are not financially able to support their children's education at this stage, so they stop schooling after grade V.
- The children become addicted to alcohol by this age, which gradually sap their interest in studies. At first they discontinue schooling and then stop it in the long run.

Figure 4.3 compares the proportion of out of school children with that of the national estimates. The ethnic minority children belonging to primary school age were less likely to be kept them out of school than the similar aged children in the country. The situation was just opposite for the primary school aged children in the tea gardens. On the other hand, secondary school aged children of both the study groups were more likely to keep them out of school than all children in the country. In both the age groups, the proportion of out of school children was double in the tea gardens than the national estimates.

Figure 4.3. Proportion of out of school children by age group: study group vs. national estimates



Sources: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005  
Education Watch Household Survey, 2005



## Parental Education and Out of Schooling

The rate of children's being out of school significantly varied with the variation in their parental education (Table 4.3). As expected, a negative relationship between parental education and children's being out of school was observed. Parents with secondary or more education were more likely to send their children to school than those with primary or no education.

In the tea gardens, 43.7% of the children of the mothers with no education, 26.2% of the children with primary educated mothers and 12% of the children of the mothers with secondary or more education were out of school. These rates were 47.8%, 34.8% and 21.6% respectively against no education, primary, and secondary or more educated fathers of the same group of children. On the other hand, for ethnic minorities, a quarter of the children of the mothers with no education, 12.6% of those with primary educated mothers and 2.3% of those with secondary or more educated mothers were out of school. These proportions were 28.7%, 18.1% and 5.8% respectively against no, primary, and secondary or more educated fathers of the ethnic minority children. Statistically significant difference between the children of the tea gardens and ethnic minority groups was also observed in this case. Proportionately more children of the tea gardens were found outside the schools than those of ethnic minorities irrespective of the parental level of education.

A similar trend was observed for all groups of children when data were analysed separately for primary and secondary school aged children – compared to the non-schooled parents, educated parents were less likely to keep their children out of school (Annex 4.4). Separate analysis for boys and the girls also produced the same result (Annex 4.5).

Table 4.3. Proportion of out of school children among aged 6-15 years by parental education and study group

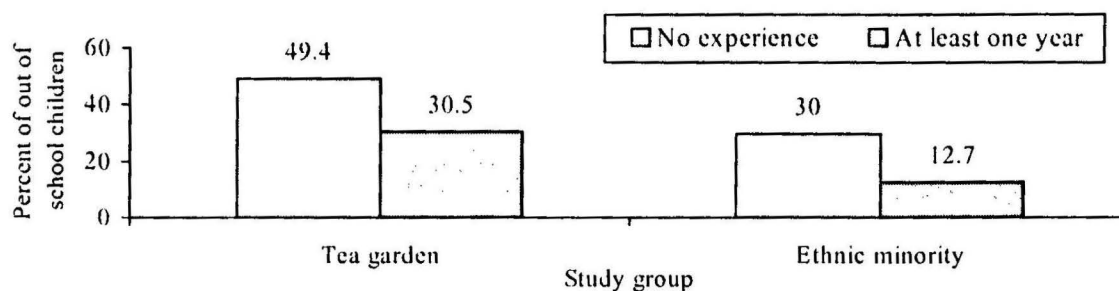
Parental education	Study groups		Level of significance
	Tea garden	Ethnic minority	
<b>Mothers education</b>			
Nil	43.7 (2,936)	24.9 (2,111)	p<0.001
Primary	26.2 (516)	12.6 (516)	p<0.001
Secondary +	12.0 (166)	2.3 (396)	p<0.001
Level of significance	p<0.001	p<0.001	
<b>Fathers education</b>			
Nil	47.8 (1785)	28.7 (1,374)	p<0.001
Primary	34.8 (1151)	18.1 (857)	p<0.001
Secondary +	21.6 (515)	5.8 (760)	p<0.001
Level of significance	p<0.001	p<0.001	

Figures in the parentheses indicate number of children under survey

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

Both the parents of 48% of the children of tea garden areas and 41% of the children of ethnic minorities had no experience of schooling. Figure 4.4 shows that the children with at least one year of schooling of any of the parents were more likely to enrol in school than those with the parents without any schooling experience (p<0.001). More analysis of this is provided in Annexes 4.6 to 4.8.

Figure 4.4. Proportion of out of school children aged 6-15 years by study group and parental experience of schooling



Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

### Household Economic Status and Out of Schooling

The economic status of the surveyed households were assessed by asking the respondents to identify their households in one of the four categories viz., always in deficit, sometimes in deficit, breakeven, and surplus. They identified it considering overall income and expenditure of the household members during the preceding year of the survey. Statistically significant negative relationship was found between household economic status and out of schooling of the children (Table 4.4). For instance, a half of the children of the tea gardens from household of 'always in deficit' status was out of school, which decreased to 40.1% for those of 'sometimes in deficit' status, 37.6% for those of 'breakeven' status, and 30.4% for those of 'surplus' economic status ( $p < 0.001$ ). A similar trend was also observed among the ethnic minorities. A third of the ethnic minority children with 'always in deficit' economic status and 13.7% of those with 'surplus' economic status were out of school. A half of the children of deficit households in the tea gardens and a third of them in ethnic minorities keeping them out of school clearly indicates a situation of deprivation in school enrolment of the children in the study communities. The girls were more deprived in this case – for instance, nearly 55% of the children in 'always in deficit' households in the tea gardens and 38% of those in ethnic minorities were out of school (Annex 4.9).

Table 4.4. Proportion of out of school children among aged 6-15 years by household economic status and study group

Economic status	Study groups		Level of significance
	Tea garden	Ethnic minority	
Always in deficit	50.2 (813)	33.1 (505)	$p < 0.001$
Sometimes in deficit	40.1 (1190)	20.5 (1231)	$p < 0.001$
Breakeven	37.6 (1128)	16.0 (806)	$p < 0.001$
Surplus	30.4 (582)	13.7 (510)	$p < 0.001$
Level of significance	$p < 0.001$	$p < 0.001$	

Figures in the parentheses indicate number of children under survey

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

Gender difference in enrolment was not equally persistent in all the economic groups. It occurred in the poorer households only – both types of deficit households of ethnic minorities

and 'always in deficit' households in the tea gardens (Annex 4.9). The girls were more likely of being out of school than the boys in all the three cases. A similar analysis by age group is provided in Annex 4.10.

### Religion and Out of Schooling

Although the Hindus were the majority in the tea gardens, the children of these households were more likely to be out of school compared to the other religious groups. Over 42% of the eligible Hindu children in the tea gardens were out of school, and this rate was 29.6% in the Muslim households and 22.8% in the Christian households (Table 4.5). A similar situation was also found among the ethnic minorities. Here the Buddhist children topped the rank in being out of school (23.1%), followed by Hindus (18.8%) and the Christians (14.4%). The differences in estimates were statistically significant in both the study groups. Statistically significant gender difference was found only among the Buddhists in the ethnic minority group.

Table 4.5. Proportion of out of school children by religion and study group

Religion	Study groups	
	Tea garden	Ethnic minority
Buddhism	-	23.1 (1,719)
Christianity	22.8 (127)	14.4 (727)
Islam	29.6 (493)	-
Hinduism	42.4 (3,092)	18.8 (617)
Level of significance	p<0.001	p<0.001

Figures in the parentheses indicate number of children under survey

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

### Access to Electricity and Out of Schooling

Having electricity at home is an indicator of economic progress of the households and hence it was assumed that a positive relationship might exist between access to electricity and school enrolment of children. Table 4.6 shows that children of the households having access to electricity were less likely to be out of school than those had no access to such facility.

Table 4.6. Proportion of out of school children by study group and access to electricity at home

Study group	Having access to electricity at home		Level of significance
	Yes	No	
Tea garden	24.9 (522)	42.6 (3,172)	p<0.001
Ethnic minority	10.4 (431)	21.8 (2,620)	p<0.001
Significance	p<0.001	p<0.001	

Figures in the parentheses indicate number of children under survey

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

### Out of School Children by Sub-groups

The areas where the ethnic minority people live can be divided into two – plain land and the Chittagong Hill Tracts (CHT). A statistically significant variation was found in the proportion of out of school children in these two areas – 22.2% of the children aged 6-15 years in CHT areas and 16.8% of those in plain lands were out of school (p<0.001) (Table 4.7). Again, in CHT, the Chakmas were ahead of the other groups in school enrolment – 19% of the Chakma children aged 6-15 years were out of school, which was 26.2% for the other ethnic groups (p<0.001) (Annex 4.11). It was observed that in addition to the general educational provisions of the State and the NGOs, Christian missionaries are active in the plain land ethnic minority areas. Along with other welfare activities they have strong commitment to education, which is not the case in CHT. This has major contribution in reducing the rate of out of school children among the ethnic minorities in the plain land. There is also scarcity of NGO run non-formal schools in the CHT.

Although there was no gender difference among the plain land children, the girls of CHT were more likely to be out of school than their peer boys (25.8% vs. 18.6%; p<0.001). A quarter of the CHT girls aged 6-15 years were out of school, which was over 31.4% for the non-Chakma girls. Age group wise analysis shows that the proportion of out of school children among aged 6-10 years was only 6.8% in plain land and 13.6% in CHT areas. This was 30.2% in plain land and 31.8% in CHT areas among the children aged 11-15 years (Annex 4.12).

Table 4.7. Proportion of out of school children in the ethnic minority community by area of residence and sex

Area of residence	Sex			Level of significance
	Boys	Girls	Both	
Plain land	17.4 (569)	16.1 (528)	16.8 (1091)	ns
Chittagong Hill Tracts	18.6 (991)	25.8 (985)	22.2 (1976)	p<0.001
Level of significance	ns	p<0.001	p<0.001	

Figures in the parentheses indicate number of children under survey

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

The proportion of out of school children was found to be higher than the average in some ethnic groups. According to the survey definition, nearly 35% of the Tanchanga and 29.6% of

the Marma children in the CIIT areas, and 23.5% of the Pahan children in plain land were out of school.

On the other hand, the households in the tea gardens can be categorised in two different ways. Firstly, based on their ethnic identity – Bangali and ethnic minority. Secondly, based on main source of income of the households – purely tea garden household and non-tea garden household. The analysis shows no significant variation between Bangali and ethnic minority children regarding the rate of out of schooling (Table 4.8). Forty-two percent of the Bangali and 39.3% of the ethnic minority children aged 6-15 years in the tea gardens were out of school. A statistically significant gender difference favouring the boys was found among the ethnic minority children ( $p<0.05$ ), not among the Bangali children. On the other hand, the rate of out of school children was found to be much higher in those households mostly depend on selling labour in the tea gardens – 45.8% of the children of these households were out of school. This rate was 30.5% among the children of those households who mainly depend on other sources of income. No gender difference was found in this group of children. However, the girls of the purely tea garden households were more likely to be out of school than their peer boys (48.6% vs. 43.1%;  $p<0.01$ ).

Table 4.8. Proportion of out of school children in the tea garden community by sub-groups, and sex

Sub-groups	Sex			Level of significance
	Boys	Girls	Both	
Ethnic minority	37.7 (1,411)	41.0 (1,301)	39.3 (2,712)	$p<0.05$
Bangali	41.6 (490)	42.4 (514)	42.0 (1,004)	ns
Level of significance	ns	ns	ns	
Purely tea garden household	43.1 (1,192)	48.6 (1,125)	45.8 (2,371)	$p<0.01$
Non-tea garden household	31.3 (709)	29.6 (690)	30.5 (1,399)	ns
Level of significance	$p<0.001$	$p<0.001$	$p<0.001$	

Figures in the parentheses indicate number of children under survey

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

Age group-wise analysis of the above shows that the rate of out of school children among the primary school aged population was 26.8% in the ethnic minorities and 29.1% in Bangali community (Annex 4.13). Nearly a third of the same aged children in the purely tea garden households and a fifth of those in non-tea garden households were out of school. Over 55% of the secondary school aged (11-15 years) children of Bangali community and 57.3% of those in ethnic minorities were out of school. This rate was 63.8% among the children of purely tea garden households and 43.8% in non-tea garden households.

The proportion of out of school children varied from village to village and tea garden to tea garden. This study covered 97 villages/paras of ethnic minorities and 39 tea gardens. Of the 97 villages covered for ethnic minorities, there was no out of school children in 15 villages and it was less than 10% in additional 16 villages. On the other hand, not a single tea garden was found where proportion of out of school children was below 10%. The proportion of out of school children was found 40-50% in eight ethnic minority villages and more than half of the children of the same community were out of school in four villages. Otherwise, 40-50% of

eligible children were out of schools in 10 tea gardens and half of the children in 12 tea gardens were out of school.

### The Dropped Out Children

Information on years of schooling completed by the dropped out children was also collected. The children dropped out at various stages of their educational life. Over 17% of the dropped out children in the tea gardens and 6.2% in the ethnic minority communities left school before completing a single grade (Table 4.9). Additional 2.9% in the tea gardens and 8.8% in the ethnic minorities completed only the pre-primary course. These children, although enrolled in school, dropped out before entering at the primary level. Attempts can be made to bring back them into schools. More serious problem lies with the dropout of the students from primary schools. A large portion of them left school before completing the full cycle of primary education. They were nearly 60% of the total dropout students in both the study groups.

Nearly 26% of the dropped out children in the ethnic minorities completed the full cycle of primary education, of which three-fifth did not go beyond primary education. The rate of primary school completers was 21.8% in the tea gardens, only a fourth of which moved to secondary education. Gender difference was found among them. The girls of both the study groups were less likely to complete primary education than the boys. For instance, in the tea gardens, 18.5% of the currently dropped out girls completed primary education, whereas it was 24.2% for the boys. Again, 31% of the dropped out boys and 21.5% of the dropped out girls completed primary education (Table 4.9).

Table 4.9. Percentage distribution of the dropped out children by last class passed, study group and sex

Last class passed	Tea garden			Ethnic minority		
	Boys (301)	Girls (217)	Both (518)	Boys (87)	Girls (107)	Both (194)
Nil	14.7	21.2	17.2	8.0	4.7	6.2
Pre-primary	2.7	3.2	2.9	4.6	12.1	8.8
Class I-IV	58.8	57.1	58.1	56.3	61.7	59.3
Class V	17.9	12.0	15.4	20.7	11.2	15.5
Class VI-VIII	6.3	6.5	6.4	10.3	10.3	10.3
Total	100.0	100.0	100.0	100.0	100.0	100.0

Figures in the parentheses indicate number of children under survey

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

No difference was observed in this regard between the Bangalis and the ethnic minorities in the tea garden areas (Annex 4.14). However, difference was found between the children of purely tea garden households and non-tea garden households. The rate of primary school completers was lower among the dropouts of purely tea garden households. The ethnic minorities living in the plain lands were ahead of those in the Chittagong Hill Tracts (Annex 4.15).

Before dropping out from schools 13.4% of these children repeated the same class at least once during their schooling years (Annex 4.16). Not much variation was observed in this regard by

gender or by study group. However, the rate of repetition was higher for non-tea garden dropouts than the purely tea garden dropouts (16% vs. 12.4%), and again among the Bangalis than the ethnic minorities (19% vs. 11%). The repetition rate was higher among the dropouts in the plain land ethnic minorities than those in the Chittagong Hill Tracts (20.8% vs. 10.6%). Higher repetition rate was counted in other ethnic minority groups rather than the Chakmas in CHT.

## Multivariate Analysis

### *Regression models*

In order to predict the probability of children being out of school a multivariate analysis was felt needed beyond the bivariate analyses already presented in earlier sections of this chapter. It is important because it would help us to understand the influence of a particular variable on out of schooling by controlling the influences of others. Considering the dichotomous nature of the intended variable (children being out of school or enrolled in school) logistic regression analysis was thought to be suitable for this (Menard 1995, Hosmer and Lemeshow 1989). The model is as follows.

$$\ln [p / (1 - p)] = a + \sum b_i x_i$$

Where,  $p$  is the probability of a child being out of school;  $a$  is the constant;  $b_i$  values are estimated regression coefficients; and  $x_i$  are the background characteristics of the children.

Two separate models were built for two groups of study population. The explanatory variables were selected carefully. For instance, parental education, household economic status and access to electricity at home were found to be correlated with each other. Again, religious belief of the population was not independent of area of residence or ethnicity. Thus, to avoid multicollinearity one variable was chosen from each group. These are parental education and household category based on area of residence and ethnicity. The other variables considered in the regression analysis are age and sex of the children. A description of the variables is provided in Annex 4.17. A stepwise approach was used and the models were selected by a combination of forward selection and backward elimination. In addition to the regression coefficients, odds ratios of the coefficients and their range with 95% confidence interval are also provided as output of the analyses (Annexes 4.18 and 4.19).

Of the five variables taken for the regression analysis, the model for the tea gardens finally considered three (Table 4.10 and Annex 4.18). Sex of the children and ethnicity did not come out as predictors of children being out of school in the tea gardens. This indicates that there is no significant difference in out of schooling regarding sex and ethnicity of these children. As age of the children increased the chance of their being out of school also increased significantly. Children with some education of the parents and those living in the non-tea garden households were less likely to keep them out of school than the others. Age came out as the most important predictor of out of schooling of the children in tea gardens, followed by parental education and household category.

On the other hand, regression model for the ethnic minorities considered all four variables in the model (Table 4.10 and Annex 4.19). The girls were more likely to be out of school than the boys. Again, the chance of schooling was higher for the children with some parental education than those with never schooled parents. There was no difference between the children aged 6-8 years and 9-12 years. However, the children aged 13-15 years were more likely to be out of school than the other children. In terms of household category, the CHT children were more likely to be out of school than those living in the plain lands and in CHT, the Chakmas had

higher chance to enrol in schools than the other ethnic minorities in the area. Here also, age became the most important predictor of out of schooling of the ethnic minority children, followed by parental education, household category and sex of the children.

Table 4.10. Logistic regression analysis predicting out of schooling

Explanatory variables	Tea garden		Ethnic minority	
	Regression coefficient	Odds ratio	Regression coefficient	Odds ratio
<u>Gender</u>	Na			
Boys			0	1.00
Girls			0.25	1.28 <sup>φ</sup>
<u>Age of children</u>				
6-8y	0	1.00	0	1.00
9-12y	0.25	1.29 <sup>φ</sup>	-0.05	0.95
13-15y	1.64	5.13*	1.52	4.59*
<u>Parental education</u>				
Nil	0	1.00	0	1.00
Some	-0.81	0.44*	-1.15	0.32*
<u>Household category</u>	Nc			
Plain land			0	1.00
Chakma in CHT			0.19	1.21
Others in CHT			0.56	1.76*
<u>Household category</u>			nc	
Purely tea garden	0	1.00		
Non-tea garden	-0.67	0.51*		
Constant	-0.31	0.08*	-1.70	0.18*
- 2 log likelihood	4077.6		2561.89	
Cox & Snell R <sup>2</sup>	0.136		0.126	
Nagelkerke R <sup>2</sup>	0.184		0.200	

<sup>φ</sup> = p<0.01, \* = p<0.001

na = not appeared in the model, nc = not considered in the analysis

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

### ***Estimated probabilities***

Table 4.11 presents the probabilities of children being out of school. Characteristics of the children were selected in such a way that the readers can understand those for which the lowest and the highest probabilities of being out of school occurred. In the tea gardens, the chance of being out of school was lowest for children aged 6-8 years, where any of the parents has some education, and the households income do not depend on tea garden. On the other hand, it was highest for those aged 13-15 years, where parents have no education, and livelihood mainly depends on working in the tea gardens. In ethnic minority communities, the probability of being out of school was lowest for the plain land boys aged 9-12 years with some years of parental education. It was highest for the non-Chakma girls aged 13-15 years with no parental education.



Table 4.11. Estimation of probabilities of children being out of school

Characteristics	Probability
<u>Tea garden children</u>	
Age 6-8 years, parents have some years of education, and household income does not depend on tea garden	0.14
Age 13-15 years, parents have no education, and household income depends on working in tea garden	0.79
<u>Ethnic minority children</u>	
Boys of age 9-12 years, parents have some years of education, and plain land ethnic minority	0.05
Girls of age 13-15 years, parents have no education, and non-Chakmas in Chittagong Hill Tracts	0.65

Probabilities are calculated from the co-efficients of the respective regression models in Tables 4.10 and 10.11 by using the following equation.

$$p = \exp(a + \sum b_i x_i) / [1 + \exp(a + \sum b_i x_i)]$$

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

## THE CURRENTLY ENROLLED CHILDREN

*Detailed schooling information of the currently enrolled children of age 6-14 years were collected. The information includes grade of enrolment, school type, location of school, attendance and reason of absenteeism.*

### Grade of Enrolment

Although the age range includes both primary and secondary levels, but surprisingly a majority of the students were found currently enrolled in any grade at primary level (classes I-V). Eighty-two percent of the currently enrolled children aged 6-14 years in the tea gardens and 75.5% of those in ethnic minorities were studying at primary level (Table 5.1). Although they crossed their pre-schooling age, nearly 5% of the children in the tea gardens and 6.6% in ethnic minorities were enrolled in pre-primary classes. Nearly 13% of these children in tea gardens and 18% in ethnic minorities were enrolled in any grade at secondary level (classes VI-X). No gender difference was found in any of the study groups.

Table 5.1. Percentage distribution of currently enrolled children of age 6-14 years by level of education, study group and sex

Level of education	Tea garden			Ethnic minority		
	Boys (1,112)	Girls (1,027)	Both (2,139)	Boys (1,197)	Girls (1,109)	Both (2,306)
Pre-primary	4.3	5.3	4.8	6.0	7.2	6.6
Primary	82.2	82.0	82.0	75.2	75.9	75.5
Secondary	13.1	12.6	12.9	18.8	16.9	17.9
Religious	0.4	0.2	0.3	-	-	-
Total	100.0	100.0	100.0	100.0	100.0	100.0

Figures in the parentheses indicate number of primary school students

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

A similar pattern was observed when the above analysis was separately done for different sub-groups of population (Annex 5.1). However, the groups differ in percentage points. The proportion of students enrolled at the secondary level was the largest in the CHT (21.3%) followed by non-tea garden households in the tea garden areas (17.8%). This was smallest among the students of purely tea garden households (9.1%). Nearly 10% of the plain land ethnic minority children aged 6-14 years enrolled in pre-primary class, which was only 2.5% for those in non-tea garden households in the tea garden areas. This indicates the opportunity of pre-primary schooling was more among the plain land ethnic minorities than any other study population.

Among the currently enrolled children aged 6-10 years, 6.6% in the tea gardens and 10% in the ethnic minorities were enrolled in pre-primary class. In the tea garden areas, this figure was 8.5% for the purely tea garden households and 3.4% for the non-tea garden households. The proportion of pre-primary students in the primary school aged students was 13.7% among the plain land ethnic minorities and 7.6% among those in CHT.

A good portion of the secondary school aged children was found in various classes of the primary schools. This was 56.8% in the tea gardens and 50.7% among the ethnic minorities. This proportion was significantly higher in the purely tea garden households than the non-tea garden households (64.8% vs. 48.7%;  $p < 0.001$ ). On the other hand, 60% of the secondary school aged ethnic minority children living in the plain land and 46% in the CHT also fall in this category ( $p < 0.001$ ).

The percentage distribution of the children currently enrolled at primary level by grade of enrolment is presented in Table 5.2. It shows that over a half of the primary school students were currently studying in the first two grades (55.4% in the tea gardens and 51.4% in ethnic minority). The rate gradually decreased as the grade went up in both the study groups and reached nearly 13% in grade V. A similar pattern was observed for both the boys and the girls. More analysis on this is provided in Annex 5.2. The national scenario in this regard is slightly different. Below 50% of the primary school students enrol in first two grades and the proportion of students in class V is nearly 16%.

Table 5.2. Percentage distribution of children currently enrolled at primary level by grade, study group and sex

Grade	Tea garden			Ethnic minority		
	Boys (913)	Girls (842)	Both (1,755)	Boys (900)	Girls (842)	Both (1,742)
I	28.0	27.1	27.6	26.9	24.2	25.6
II	27.4	28.3	27.8	24.3	27.3	25.8
III	18.2	20.2	19.1	19.2	20.4	19.8
IV	14.7	10.5	12.6	15.7	17.0	16.3
V	11.7	14.0	12.8	13.9	11.0	12.5
Total	100.0	100.0	100.0	100.0	100.0	100.0

Figures in the parentheses indicate number of primary school students

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

### Students by School Type

The percentage distribution of the primary school students by type of school is presented in Table 5.3. The scenario does not match with that of the other parts of the country. The current pattern in Bangladesh is to enrol two-thirds of the primary school students in the state owned primary schools, nearly 20% in the registered and non-registered schools, and 7-8% in the NGO run non-formal schools (Chowdhury *et al* 2002). Contrary to this, the majority of the primary school students in the tea gardens (42.8%) were enrolled in NGO run non-formal primary schools or the missionary schools, 28.4% of them enrolled in government primary schools, and 21.4% enrolled in non-government registered or un-registered primary schools. On the other hand, among the primary school students of the ethnic minorities, 55.7% enrolled in government primary schools, 25.4% in NGO run non-formal primary schools or the missionary schools, and 13.1% in non-government registered or non-registered primary

schools. The rest of the children were enrolled in other types of schools including community, satellite, and primary section of non-government high schools.

Table 5.3. Percentage distribution of primary level students by school type, study group and sex

Type of school	Tea garden			Ethnic minority		
	Boys (913)	Girls (842)	Both (1755)	Boys (900)	Girls (842)	Both (1,742)
Government primary	32.2	24.2	28.4	56.0	55.3	55.7
Non-govt. primary	23.0	19.6	21.4	13.6	12.7	13.1
Non-formal primary	37.3	48.5	42.8	24.4	26.5	25.4
Community/satellite	5.0	5.6	5.3	1.9	2.0	2.0
Others	2.5	2.1	2.1	4.1	3.5	3.8
Total	100.0	100.0	100.0	100.0	100.0	100.0

Figures in the parentheses indicate number of primary school students

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

Over two-fifths of the primary school students of ethnic minorities in the tea gardens, whether they fall in purely tea garden or non-tea garden sub-groups, enrolled in NGO run non-formal primary schools. Nearly 36% of the Bangali children in the tea gardens and over half of the children of plain land ethnic minorities enrolled in similar kind of schools. The scenario was very much different for the ethnic minorities in Chittagong Hill Tracts (CHT). Here about three quarters of the primary school students enrolled in government primary schools, 15% in non-government registered or non-registered primary schools, and only 9% in NGO run non-formal primary schools (Annex 5.3).

The above statistics signifies the presence of NGOs in promoting primary education in the tea garden areas and among the ethnic minorities. All of these schools here in the study areas are not run by the national NGOs. However, presence of national NGOs is significant, but good portion of the schools run by the Christian Missionary NGOs. Additional emphasis of the NGOs on girls education also be seen there, especially in the tea gardens – over 48% of them were enrolled in the NGO run non-formal primary schools. Other important issue regarding education in the tea gardens is the absence of adequate number of government primary schools there, which is not the case for ethnic minorities especially for those living in CHT. Children living in the tea gardens and belonging to ethnic minorities in the plain lands were more deprived of getting government support in primary education. The NGOs and the missionaries came forward in both the areas and established non-formal primary schools as a significant channel for provision of education. Annex 5.3 shows that more than half of the total primary school students of the plain land ethnic minorities enrolled in the non-formal schools. This means, if there were no missionary or NGO schools the net enrolment rate would have been dropped to a half. The scenario in the CHT was just opposite. Government primary schools were very much present in the CHT with about three-quarters of the students. Not much space was there for the NGOs to open schools.

## Location of School

The respondents of the household survey provided four different answers when they were asked about the location of the schools where the children enrolled. These are own village, nearly village under the same union, next union under the same upazila, and other upazilas. The majority of the children enrolled in a school, which was located in their own village. Nearly three-quarters of the tea gardens and 64.4% of the ethnic minority students (both primary and secondary) enrolled in schools located in their own villages (Table 5.4). Over 80% of the primary school students in the tea gardens and 73% among those in the ethnic minority communities enrolled in schools located in their own villages. In the tea garden areas, the Bangali students were more likely to enrol in schools outside the village where they live in. Similar trend was observed among the ethnic minorities in the plain land and Chakmas in the Chittagong Hill Tracts. Annexes 5.4 to 5.8 provide more analysis on this aspect.

Table 5.4. Percentage distribution of currently enrolled students of age 6-14 years by location of school, study group and sex

Location of school	Tea garden			Ethnic minority		
	Boys (1,112)	Girls (1,027)	Both (2,139)	Boys (1,197)	Girls (1,109)	Both (2,306)
Own village	72.1	77.4	74.7	64.0	64.8	64.4
Other village	20.9	16.7	18.8	25.1	23.6	24.4
Other union	6.4	5.8	6.1	8.9	9.6	9.2
Other upazila	0.6	0.1	0.4	2.1	1.8	2.0
Total	100.0	100.0	100.0	100.0	100.0	100.0

Figures in the parentheses indicate number of currently enrolled students

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

## Attendance and Reason of Absenteeism

Students school attendance rate was found unbelievably higher in both the study groups. Over 90% of the students were reported to be present in classes during the day before the household survey. No significant variation was observed in this regard among different groups and sub-groups of population. During qualitative exploration it was understood that parents in general were not aware whether their children actually attended school or not.

The respondents reported a number of reasons regarding absenteeism of the students. These include family demand for work at home and outside, unwillingness of the students, visiting relatives, and illness. Illness came out as the most prominent cause of absenteeism followed by unwillingness of students to go to school and demand for child labour for household work (Table 5.5). More analysis of this is provided in Annexes 5.9 to 5.13.

Table 5.5. Percentage distribution of the absentee students (aged 6-14 years) by reason of absenteeism, study group and sex

Reason of absenteeism	Tea garden			Ethnic minority		
	Boys (67)	Girls (78)	Both (145)	Boys (95)	Girls (79)	Both (174)
Had to work at home	14.9	21.8	18.6	25.3	32.9	28.7
Had to work outside	1.5	-	0.7	3.2	1.3	2.3
Unwillingness of student	29.9	19.2	24.1	37.9	22.8	31.0
Went to visit relatives	9.0	10.3	9.7	8.4	7.6	8.0
Illness	44.8	48.7	46.9	25.3	35.4	47.7
Total	100.0	100.0	100.0	100.0	100.0	100.0

Figures in the parentheses indicate number of absentee students in the sample  
 Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

## REASONS OF OUT OF SCHOOLING AND SUGGESTED MEASURES TO BRING CHILDREN BACK TO SCHOOL

# 6

*Respondents' opinions regarding why children were out of school and what measures can be taken to bring them back to school are two issues discussed in this chapter. Gender as well as study group wise analyses were done.*

### **Reasons Behind Out of Schooling**

There might be more than one reason for a child to be out of school, but the respondents of household survey were asked to cite the prominent one against each child. The respondents mentioned ten specific reasons behind children's being out of school (Table 6.1). The list includes the reasons of both dropping out and never enrolment. The most cited reason of out of schooling was poverty. Fifty percent of the out of school children in ethnic minority communities and 47.4% of those in the tea gardens dropped out or did not enrol in school at all due to parents'/guardians' inability to meet the financial needs of schooling (mostly indirect, but in some cases may be direct) or the demand for child labour for household work. The gender difference was prominent here in case of ethnic minorities – poverty was shown as a cause of out of schooling for 56% of the girls and 43.3% of the boys of this group (Annex 6.1). A good portion of the children (nearly 16% in the tea gardens and 12.3% in ethnic minority groups), majority of whom are essentially girls, were kept out of school because they were required to work at home. Both the causes are interlinked. Generally, the poorer households need child labour for survival. The poverty related reasons were cited more for the children aged 11-15 years than those aged 6-10 years (Annex 6.1).

Another substantial portion of the children (11% in the tea gardens and 12% in ethnic minorities) were out of school because they did not like the overall environment of the schools. These children have some years of schooling, however they could not find it enjoyable and as such did not continue. This may be due to the overall school system as it exists or the teaching learning culture of the schools, which could not attract this particular section of the children. Language difference between home and school might be another reason behind this; however, the respondents in household survey did not mention it. On the other hand, the teachers and the local educated persons during qualitative investigation gave a hint to this issue. Some of them, however, strongly recommend the importance of mother tongue in primary education. Age and sex wise analysis of this did not find much difference between the primary and secondary school aged children (Annex 6.1). However, boys were more likely to be out of school due to such reason than girls (Table 6.1).

Table 6.1. Percentage distribution of out of school children by reason of non-enrolment, study group and sex

Reason behind out of school	Tea garden			Ethnic minority		
	Boys (594)	Girls (575)	Both (1169)	Boys (201)	Girls (238)	Both (439)
School is far away from home	4.2	3.3	3.8	9.0	6.3	7.5
Scarcity of money	48.8	45.9	47.4	43.3	55.9	50.1
School authority refused	3.2	3.0	3.1	6.5	3.4	4.8
No benefit of education	1.3	0.9	1.1	0.5	1.7	1.1
Needs to work at home	12.3	19.7	15.9	9.5	14.7	12.3
Child does not like school	13.1	9.0	11.1	18.9	6.3	12.1
Too young to go to school	8.1	7.0	7.5	7.0	8.0	7.5
Social insecurity	0.5	2.1	1.3	1.0	0.8	0.9
Unsafe road communication	2.9	3.3	3.1	-	-	-
Disabled	1.9	1.6	1.7	3.5	1.3	2.3
Others	3.7	4.3	4.0	1.0	1.7	1.4
Total	100.0	100.0	100.0	100.0	100.0	100.0

Figures in the parentheses indicate number of out of school children under survey

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

In the case of 7.5% of the out of school children in both the study groups, although they fall in the official age range of primary schooling, the parents thought that they were too young to enrol in school. Nearly 5% of the out of school children of ethnic minorities and 3% in the tea gardens could not enrol in schools as the school authorities refused to take them. The proportions would be much higher if only the children aged 6-10 years were considered in the analysis. Such an analysis is worthwhile because the reason was mentioned mainly for them (Annex 6.1). Over 4% of the out of school children in the tea gardens were not in school because of social insecurity or unsafe road communications. Moreover, the school was far away from their home for another 3.8% of the children. During discussion with the teachers and parents in some tea gardens, they said that there were a number of canals on the ways to school. Due to flood in the rainy season children faced difficulty in crossing the canals. This hampered schooling for 2-3 months each year. Such long gaps in schooling distracted attention of the children from education and the result was dropout from school. On the other hand, social insecurity was an obstacle to school enrolment for only a small portion of the children of ethnic minorities, but 7.5% of them could not enrol in school due to scarcity of school at their reach.

The above-mentioned reasons did not occur equally for all types of households under study. For instance, in the tea garden areas, half of the out of school children of purely tea garden households were not in school because of poverty, which was the case for 38.8% of those in non-tea garden households. Poverty came out as a reason of dropout for 48.7% of the ethnic minorities and 44% of the Bangalis in the tea gardens with a difference of about five percentage points. Unsafe road communication and social insecurity were the reasons of keeping children out of school for about 13% of the Bangalis in the tea gardens, whereas these were not that much important for the ethnic minorities there – only 1% of the respondents mentioned these (Annex 6.2).

Similar type of difference was found between the ethnic minorities in plain land and the CHT. Poverty was the reason of out of schooling for 57% of the children in the Chittagong Hill Tracts, whereas it was a cause for 28.3% of those in the plain land. Nearly 10% of the CHT children did not enrol in school because of long distance between home and school. None of



the plain land respondents saw this as an obstacle to sending children to school. Long distance between school and home was a problem for the children in CHT, especially for the young ones. It came out from the *karbaries* and the parents that the number of schools was limited in CHT, which causes increased distance between school and some of the localities. In some areas, boats were the only transport to the schools located in other hills. Parents were not willing to send their children to school crossing through such a dangerous way. Children's unwillingness to go to school came out as a major cause of non-enrolment in the plain land. Another 12.3% of the guardians thought that their children were not grown up enough for schooling. A small portion of the respondents in the Chittagong Hill Tracts reported the causes presented later (Annex 6.2).

#### **Box 6.1. Reasons of dropout and non-schooling**

The followings reasons of dropout and non-schooling came out through discussion with various stakeholders at village level:

1. Poor parents are unable to meet the expenses of the schools
2. Children need to work outside home by age 10 years
3. The first generation learners do not get adequate help in school or at home
4. Teaching learning process does not attract some students
5. School language is different than home language, students face difficulty with Bangla
6. Girls are involved in cooking and taking care of the younger siblings at home
7. The boys start drinking alcohol at very early age, which hampers schooling and ultimately causes dropout

A separate analysis of reasons behind out of schooling was done for the dropouts and never enrolled children. The respondents mentioned only four reasons behind dropout of children from schools (Annex 6.3). The most cited reason is poverty (58% for tea garden and 55.7% for ethnic minorities), followed by a demand for children's labour at home, children's unwillingness to go to school, and unavailability of school within their reach. The respondents added three more reasons in this list when they were asked to identify causes behind never enrolment (Annex 6.4). In the case of more than 13% of the never enrolled children the respondents thought that they were too young to enrol in school, and for 5-7% of the children the reasons given was that school authorities refused to admit them. When asked to provide the causes behind this sort of refusal the parents mentioned two reasons. Firstly, as the parents could not show the vaccination cards of the children, the head teachers refused to admit them. However, according to the parents, these children were at the right age to enrol in school. Secondly, the schools refused some children because the parents were not able to provide them with appropriate school dress. This is also linked with poverty. As the respondents mentioned, the parents/guardians did not attempt to admit about 3% of the never enrolled children in school due to various types of disability of the children.

#### **Measures Suggested by stake holders to Bring Children to School**

The respondents were asked about their opinion on the measures that could be taken to bring back the out of school children to school. The respondents provided such information for each of the dropped out and never enrolled children. A total of eight suggestions came out from

them (Table 6.2). Considering poverty as the principal reason of being children out of school, the most cited measure for bringing them to school is to provide them financial assistance in the form of *Upabritti* (scholarship) or any other suitable way. Some of the stake holders especially in the hilly areas pointed out that *Upabritti* is provided to a small portion of the students. Considering the poverty situation in the areas they suggested increasing the proportion of beneficiaries in each school. Along with this suggestion the parents, teachers, *Karbari/Mandals* and other respondents in qualitative investigation suggested that like the non-formal schools, stationeries should be supplied to the students in all types of schools. Nearly a half of the respondents in ethnic minority households and 46.4% in the tea gardens mentioned this measure. Awareness building of the parents and the community people came out as the second important measure in bringing children to school. A fifth of the respondents in the tea gardens and 15% of ethnic minorities suggested this measure. The teachers and the local elites also strongly recommended awareness campaign, especially among the mothers. According to about 10% of the respondents, reducing work load at home could be the measure of bringing back the out of school children to schools and another 7% suggested establishing more schools in the areas in order to make schools within the reach of the children. In this connection, the educated persons in the communities suggested establishing non-formal schools in their areas. According to them, these small schools are suitable especially for the hilly areas and the tea gardens. Some of them also praised the supervision mechanism of these schools. A majority of those respondents who mentioned children's unwillingness to go to school as a cause of out of schooling thought that proper guidance at home and in school can help them continuing their education. They were 6.6% of the respondents in the tea gardens and 8.4% of those in ethnic minority areas. However, 3% of the ethnic minority respondents and 1.5% of those in the tea gardens pointed out that creating joyful environment in schools especially child centred teaching learning environment in the classrooms could be helpful to bring these children to the schools. As already mentioned that nearly 3% of the never schooled children did not enrol in school because of various types of disability. In order to bring them to school, some respondents suggested promoting inclusive education in the existing schools.

Table 6.2. Percentage distribution of parents by their opinion regarding measures of bringing out of school children to school

Suggested measures of bringing out of school children to school	Tea garden			Ethnic minority		
	Boys (594)	Girls (575)	Both (1169)	Boys (201)	Girls (238)	Both (439)
Providing financial support	47.5	45.4	46.4	43.8	54.6	49.7
Reducing work pressure at home	8.6	12.3	10.4	7.5	10.9	9.3
Creating joyful environment in school	1.5	1.6	1.5	2.0	3.8	3.0
Awareness building of parents	19.4	21.6	20.4	17.4	13.0	15.0
Awareness building in the community	0.8	1.7	1.3	2.0	2.5	2.3
Proper guidance of the child	8.9	4.2	6.6	11.9	5.5	8.4
Establishing school nearer to home	7.1	7.7	7.4	8.0	5.9	6.8
Promoting inclusive education	1.9	1.6	1.7	3.5	1.3	2.3
Measures unknown	4.4	4.0	4.2	4.0	2.5	3.2
Total	100.0	100.0	100.0	100.0	100.0	100.0

Figures in the parentheses indicate number of out of school children under survey  
Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

Not much gender variation was observed in the suggested measures for bringing the out of school children to school. The majority of the respondents who suggested reducing workload at home suggested it for the girls. Again, a majority of the respondents who sought proper guidance to the children wanted it for the boys. Provision of financial support was suggested

for more girls of ethnic minorities. Sub-group wise analysis of the suggestions also shows mostly similar findings for each sub-group of population (Annex 6.5).

One interesting observation was that none of the respondents in household survey mentioned about the language barrier in schools. This is because, the respondents might not be aware of this. However, during qualitative investigation, teachers, fathers of the Missions and the local educated persons claimed that due to language barrier in schools many ethnic minority students face difficulty to cope with the school curriculum. Some of them especially the teachers mentioned their own experiences regarding this. In this connection they made two alternative suggestions – introducing community language as medium of instruction in schools or provision of a co-teacher from the same ethnic group to help the students in understanding language. Some of them mentioned the example of BRAC schools where they saw two teachers teach in a class.

The discussants in the tea gardens opined that night schools can be established for the illiterate parents, this would help them realize the importance of education and thus they will be caring to their children's schooling. They also suggested for forming literacy committees at the community level to motivate the parents and the children to go to school. The schoolteachers, *sarders*, *ponchaet* secretary, parents, and the educated youths can be the members of the committees. All the stakeholders of the remote tea gardens suggested building bridges on the canals to make communications easy for the young students.

## CHILDREN AT WORK

*Children's involvement in work is the main theme of this chapter. Along with estimating the rate of the children involved with work at home and outside, it deals with average time spent in work and income from working outside home. Finally, a multivariate analysis of predicting children's participation in work was done with an estimation of the probabilities of such participation.*

### Children's Involvement in Work

Although the respondents of the household survey mentioned the need of child work for family survival as a cause of out of schooling for 16% of the tea garden and 12% of the ethnic minority children, but in reality, a good proportion of the children in the study groups were involved with work, whether at home, outside or both. The age of these children ranges from 6 to 14 years and they belong to both gender. Children's working for their families was so common in some of the communities that the parents' were sometimes offended to refer to it this as child labour. It should be mentioned that the benefit of any work directly consumed by the household members was considered as household work whether it was done at home or outside. Wage earning (cash or kind) activities were considered as work outside home.

Table 7.1 Percentage distribution of children by their status of studentship and involvement in work

Status	Tea gardens			Ethnic minority		
	Boys (1,706)	Girls (1,602)	Both (3,308)	Boys (1,398)	Girls (1,347)	Both (2,745)
Only student	53.5	44.7	49.2	61.8	46.8	54.5
Student + labour	11.7	19.5	15.4	23.8	35.5	29.5
Only labour	20.3	22.0	21.2	8.9	13.1	10.9
None	14.5	13.9	14.2	5.5	4.6	5.1
Total	100.0	100.0	100.0	100.0	100.0	100.0

Figures in the parentheses indicate number of children under survey

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

Table 7.1 presents the percentage distribution of the children aged 6-14 years according to their status of school enrolment and work. Four categories were considered – only student, students involved in work, involved in work without going to school, and doing nothing. Nearly half of the children in the tea gardens and 54.5% among those in ethnic minorities are currently enrolled in school and are not involved in work. Proportion of children involved in labour was 36.6% in the tea gardens and 40.4% among the ethnic minorities. A majority of these children in ethnic minorities were student cum labourer, most of them were however labourers in the tea

gardens. Nearly a quarter of the students in the tea gardens and 35% of those in ethnic minorities were involved with work at home or outside. This rate was 43% among the girls living in the tea gardens. The proportion of children doing nothing (schooling or work) was 14.2% in the tea gardens and 5.1% among ethnic minorities.

The girls in both the study groups were more likely to be involved in work than their brothers belonging to the same group. A similar trend was found when data were segregated by their schooling status. This means that enrolment in school did not exempt girls from working at home or outside – 41.5% of the girls in the tea gardens and 48.6% of them in ethnic minorities were involved with work. These rates were respectively 32% and 32.7% for the boys of the study groups.

The relationship between out of schooling and children's participation in work was found significantly positive (Table 7.2). For instance, in the tea gardens, the rate of participation in work was only 23.9% among those currently enrolled in school, which was nearly 60% among the out of school children ( $p < 0.001$ ). Similarly, among ethnic minorities, 35.2% of the school children and 68.3% of the out of school children have participated in work at home or outside ( $p < 0.001$ ). A similar relationship was also observed when data were analysed for boys and girls separately. However, girls' participation in work was higher than the boys irrespective of their schooling status.

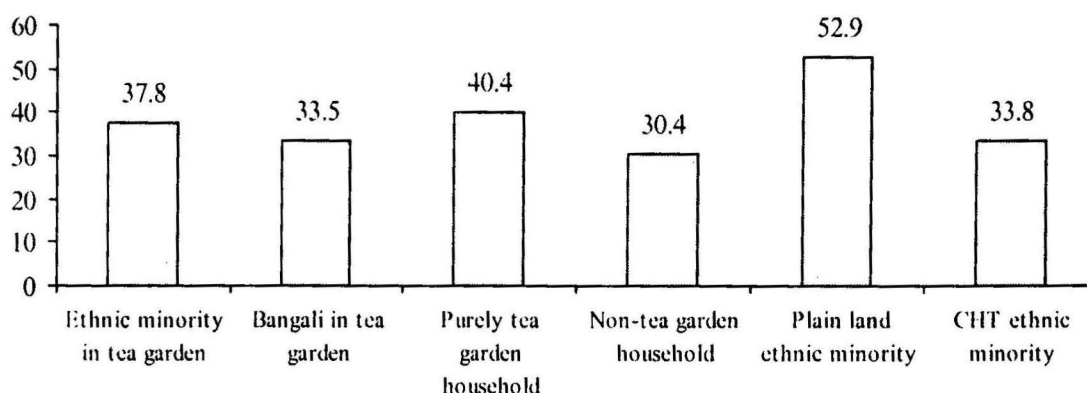
Table 7.2. Proportion of children in work by schooling status, study group, and sex

Schooling status	Tea garden			Ethnic minority		
	Boys	Girls	Both	Boys	Girls	Both
Currently enrolled	18.0	30.3	23.9	27.8	43.1	35.2
Out of school	58.2	61.4	59.8	61.7	73.9	68.3
All	32.0	41.4	36.6	32.7	48.6	40.5
Level of significance	$p < 0.001$	$P < 0.001$	$p < 0.001$	$p < 0.001$	$P < 0.001$	$p < 0.001$

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

The proportion of children involved in work varied by sub-groups of study population. For instance, 40.4% of the children in the purely tea garden households and 30.4% of those in non-tea garden households were involved in work (Figure 7.1). This rate was 37.8% among the ethnic minorities and 33.5% among the Bangalis in the tea gardens. On the other hand, a wide variation was observed among the ethnic minority children. Over half of the plain land ethnic minority children and a third in the hilly areas were involved in work. The proportion of children doing both school and work was highest among the ethnic minority children in the plain land (45.7%) and lowest in the tea garden children (15-16%). This rate was 54.6% among the ethnic minority girls in the plain land (Annex 7.1). Not much variation was observed between Chakmas and other ethnic minorities in the CHT.

Figure 7.1 Proportion of children involved in work at home or outside



Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

A segregated analysis by age shows that compared to the younger children the elder children were more likely to be involved in work rather than schooling (Table 7.3). Some differences also exist between the study groups. One in three children aged 11-14 years in the tea gardens were in school and another one involved only in work at home or outside. One in five of these children were involved in schooling and at work as well. On the other hand, in ethnic minorities, 38.8% of the children of this age group were enrolled in school, 37.5% in both and 20.4% were engaged in work only.

Table 7.3 Percentage distribution of children by their status of studentship and involvement in work, study group and age

Status	Tea garden		Ethnic minority	
	6-10 y (2,070)	11-14 y (1,238)	6-10 y (1,673)	11-14 y (1,072)
Only student	59.0	32.8	64.5	38.8
Student + labour	13.5	18.7	24.4	37.5
Only labour	12.0	36.3	4.8	20.4
None	15.4	12.2	6.2	3.3
Total	100.0	100.0	100.0	100.0

Figures in the parentheses indicate number of children under survey

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

The above analyses included all children in the study groups whether they were enrolled in school or not. Table 7.2 shows that proportionately more children from out of school group were involved in work than their peers in schools. The following section provides an analysis of the situation of out of school children.

## The Out of School Children at Work

Of the total out of school children in the study groups, nearly 60% in the tea gardens and 68.3% among the ethnic minorities were involved in work at home or outside (Table 7.4). The participation of girls was significantly higher than that of the boys. Seventy four percent of the girls and 61.7% of the boys in ethnic minorities were involved in work. This was 61.4% among the girls and 58.2% among the boys in the tea gardens.

Table 7.4. Proportion of out of school children involved with work by study group and sex

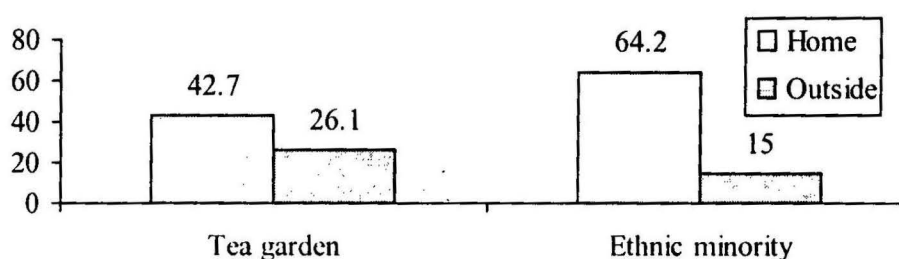
Study group	Sex			Level of significance
	Boys	Girls	Both	
Tea garden	58.2 (594)	61.4 (575)	59.8 (1169)	ns
Ethnic minority	61.7 (201)	74.0 (238)	68.3 (439)	p<0.01
Level of significance	p<0.001	p<0.001	p<0.001	

Figures in the parentheses indicate number of out of school children

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

Among the out of school children, 42.7% in the tea gardens and 64.2% in the ethnic minorities were involved in work at home (p<0.001). The rates were much lower in case of children's working outside home. A fourth of the children in the tea gardens and 15% in the ethnic minorities were engaged in work outside home (Figure 7.2). In case of involvement in household work, the girls of both the study groups were significantly ahead of their brothers. A reverse result was observed in case of children's involvement in work outside home. The boys were more likely to do so than their sisters (Annexes 7.2 and 7.3).

Figure 7.2. Proportion of children involved in work by place of work and study group



Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

Forty eight percent of the ethnic minority children in the tea gardens and 29.5% of the Bangali children in the same area were involved in work at home (Annex 7.4). These rates were 44% among the children living in households mainly depending on tea gardens and 39.3% in the other households. Children's involvement in household work was much more noticeable in the ethnic minority households than the tea garden households. Over 60% of the ethnic minority children aged 6-14 years were involved in household work (Annex 7.5). The rate was five percentage points higher among the children in the CHT than those in plain land. The girls were significantly ahead of the boys irrespective of sub-groups of population. Over 70% of the ethnic minority girls was involved in household works.

The rate of children working outside home was much lower than the rate of children working at home. A similar trend was found irrespective of sub-groups of population. The highest rate of involvement in work outside home was found among the ethnic minority children in plain land (30.2%) and lowest in those living in the hilly areas (10.2%). This rate was 27.5% among the ethnic minorities in the tea gardens and 22.6% among the Bangalis. This rate was 26.6% among the purely tea garden households and 24.8% among the non-tea garden households (Annexes 7.6 and 7.7).

The analysis by age-group shows that the elder children were more likely to be involved in work at home and outside than the younger children. Whereas 36.6% of the tea garden children aged 6-10 years were involved in household work, it was 48.4% among the children aged 11-14 years. Again, 41% of the ethnic minority children aged 6-10 years was in work at home which doubled for the children aged 11-14 years. On the other hand, in case of working outside home the participation rate was four times higher for the children aged 11-14 years than the children aged 6-10 years (Annexes 7.8 and 7.9).

### Time Spent in Work

On an average, the out of school children in the tea gardens were involved with work for five and a half hours a day, which was about five hours for the ethnic minority children. In both groups, the boys were involved in work for longer hours than the girls.

Table 7.5. Mean amount of time (in hour) spent in work together at home and outside

Study group	Sex		Age group		Both
	Boys	Girls	6-10y	11-14y	
Tea garden	5.5 (2.9)	5.3 (3.2)	4.0 (2.8)	6.2 (2.8)	5.4 (3.0)
Ethnic minority	5.3 (3.3)	4.6 (2.4)	3.5 (2.3)	5.4 (2.8)	4.9 (2.8)

The numbers in the parenthesis indicate standard deviations

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

The older children (11-14 years) of the tea garden areas worked over six hours a day, which was two hours less for the younger children (6-10 years). On the other hand, the older children of the ethnic minority group, on an average, worked for five and a half hours a day, which was again two hours less for the younger children of the same group.

### Income from Work

Children's work at home does not produce any income. Those who work outside home earn some amount of money for their labour. The average income of the ethnic minority children was higher than those of the tea gardens. On an average, the ethnic minority children earned Tk. 38 per day, which was Tk. 30 for the children living in the tea gardens. The girls of both the study groups earned lesser amount of money than their brothers of the same group. Income of the older children was slightly higher than that of the younger children.



Table 7.6. Average income (in Taka) of children working outside

Study group	Sex		Age group		Both
	Boys	Girls	6-10y	11-14y	
Tea garden	32	28	27	31	30
Ethnic minority	42	33	30	39	38

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

### Multivariate analysis

A logistic regression analysis was performed to explore the predictors of children's participation in work. As was done before, the predicting variable (here Children's participation in work) was considered as dichotomous – participated in work or not. Here also, two separate models were built for the population of two study groups. The explanatory variables considered here are the same as those considered for exploring the predictors of out of schooling. Description of the variables is provided in Annex 4.17. Current school enrolment status of the children is not included in the list, because it may raise multi-co-linearity due to its strong relationship with other explanatory variables. A stepwise approach was used and the modes were selected by a combination of forward selection and backward elimination. The results of the regression analysis are provided in Annexes 7.10 and 7.11, and Table 7.7. The mathematical expression of the model is

$$\ln [p / (1 - p)] = a + \sum b_i x_i$$

Where,  $p$  is the probability of a child being participate in work;  $a$  is the constant;  $b_i$  values are estimated regression coefficients; and  $x_i$  are the background characteristics of the children.

Table 7.7. Logistic regression analysis predicting children's participation in work

Explanatory variables	Tea garden		Ethnic minority	
	Regression coefficient	Odds ratio	Regression coefficient	Odds ratio
<u>Gender</u>				
Boys	0	1.00	0	1.00
Girls	0.52	1.68*	0.80	2.22*
<u>Age of children</u>				
6-8y	0	1.00	0	1.00
9-12y	1.38	3.95*	1.27	3.55*
13-14y	1.94	6.98*	2.13	8.43*
<u>Parental education</u>				
Nil	0	1.00	0	1.00
Some	-0.48	0.62*	-0.46	0.63*
<u>Ethnicity</u>			nc	
Ethnic minority	0	1.00		
Bangali	-0.29	0.75 <sup>o</sup>		
<u>Household category</u>	ns			
Plain land			0	1.00
Chittagong Hill Tracts			-1.02	0.36*
<u>Household category</u>				
Purely tea garden	0	1.00	nc	
Non-tea garden	-0.51	0.60*		
Constant	-1.32		-0.89	
-2 log likelihood	3537.68		3068.81	
Cox & Snell R <sup>2</sup>	0.14		0.18	
Nagelkerke R <sup>2</sup>	0.19		0.24	

<sup>o</sup> = p<0.01, \* = p<0.001

nc = not considered in the analysis

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

The final models for predicting participation in work of the tea garden and ethnic minority children considered all the explanatory variables put in the analyses. The explanatory variables in the tea garden model are sex and age of the children, parental education, ethnicity, and household category. On the other hand, sex and age of children, parental education, and area of residence are the variables considered in the model for ethnic minorities. In both the cases the girls were found more likely to participate in work than their brothers, when the influences of other variables were controlled. As age of the children increased they were more likely to participate in work. Parents with some schooling were less likely to send their children to work than those never schooled. In the tea garden areas, Bangalis as well as those who had alternative source of income were less likely to send their children to work than their counterparts. Again, the CHT ethnic minority children were less likely to participate in work compared to their counterparts in plain land.

#### **Estimated probabilities**

Probabilities of children participating in work were calculated from the above regression models. Table 7.8 presents a selection of these estimates. It provides the characteristics of the lowest and highest probabilities of children's participation in work. In the tea gardens, the Bangali boys aged 6-8 years with parents having some years of schooling and whose household

income do not depend on tea garden had the lowest chance of participating in work. The ethnic minority girls aged 13-14 years with parents having no education and whose household income depends on working in tea garden had the highest probability of engaging in work at home or outside. On the other hand, ethnic minority boys of 6-8 years old living in CHT with parents having some years of schooling had the lowest chance of being involved in work. While the girls aged 13-14 years living in plain land with no parental education carried the highest probability of participating in work at home or outside.

Table 7.8. Estimation of probabilities of children's participation in work

Characteristics	Probability
<u>Tea garden children</u>	
Bangali boys of age 6-8 years, parents have some years of education, and household income does not depend on tea garden	0.07
Ethnic minority girls of age 13-14 years, parents have no education, and household income depends on working in tea garden	0.76
<u>Ethnic minority children</u>	
Ethnic minority girls of age 13-14 years, parents have no education, and household income depends on working in tea garden	0.09
Girls of age 13-14 years living in plain land, and parents and no education	0.88

Probabilities are calculated from the coefficients of the respective regression models in Table 7.7 by using the following equation.  $p = \exp(a + \sum b_i x_i) / [1 + \exp(a + \sum b_i x_i)]$   
 Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

## DISCUSSION AND CONCLUSIONS

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Although many countries in the world have moved from compulsory primary education to compulsory secondary education and many increased the duration of primary and basic education from 4-5 years to more than six years, Bangladesh is still dealing with five years compulsory primary education. However, due to strong commitment of the nation, the situation regarding access to primary education and completing the full course has been improving. The improvements have been noticed to a great extent after the Jomtien initiative, where Bangladesh rightly responded to the international call for basic and primary education for all. Some affirmative actions taken by both the government and the non-governmental organisations made it possible to improve. However, at present, one in every five of the 6-15 years old children is out of school and nearly 30% of the enrolled children leave school before completing the full course of primary education. Gender parity, at the aggregate level, has been achieved in access to primary schooling.

In spite of this scenario of hope at the national level, it has been noticed that the improvements have not been made equally to all sections of the population. Urban-rural as well as district-wise variation is there. There is a sense from other research on poverty and education that worst situation exists in *char* lands, the tea gardens, ethnic minorities, people living with extreme poverty, street children, disabled, domestic workers, children working in factories, children in jails and brothels, and those involved in crime. In order to achieve the educational goals of the MDGs we must take care of the schooling of the children of above-mentioned groups. However, no study has deeply looked at each of the groups. This study for the first time looks at the situation of out of school children in two sub-groups of population in Bangladesh. These are people living in the tea gardens and the ethnic minorities in the country. Emphasis was given on estimating the volume of out of school children in the groups and its socioeconomic dimensions, causes behind out of schooling, their workload at home and outside, and the ways they can be put back to school.

Regarding methodology, the intention was to have two separate as well as representative samples of the study groups. First problem faced was in defining the groups. In reality, tea garden and ethnic minority are not two mutually exclusive groups – five ethnic minority groups live in the tea gardens. Moreover, a good portion of the people living in the tea gardens came from the major ethnic group in the country (i.e., Bangali). The problem was sorted out considering the tea garden population as a stratum first, and then the ethnic minorities as another excluding those living in the tea gardens. This helped having a representative sample of the tea gardens but not of the ethnic minorities. However, one can get a representative estimate of the ethnic minorities through pulling the data of the tea garden ethnic minorities with that of the rest of the country using weighting factors. This was not done in this report. Secondly, it was a hard job to find a representative sample of the ethnic minority population. Only 410,408 households spread over 9,388 villages throughout the country – on an average, 44 households per village. Many of these villages have very small number of minority households and a good portion with large population size indicating a wide dispersion among the villages. The rate of out of school children among ethnic minorities may vary with the variation in density of ethnic minorities (or the ratio of minority and majority) in the villages. Although, the study was started with an intention to cover 30 ethnic minority villages, finally

97 villages had to be covered to reach adequate number of households. Such an increase has financial implications to fieldwork. Villages with low density of ethnic minorities were not possible to include in the study. On the other hand, although the study covered the ethnic groups containing 87% of the total ethnic minority population in the country, but it was not possible to catch the extremely small ethnic groups. For instance, 22 of the 69 groups had less than 100 households throughout the country, and more 15 groups had less than 500 households. It was a hard job to have a true representative sample covering all types of villages and all the small ethnic groups. Thirdly, there was scarcity among the ethnic minorities to find research assistants with Bachelor degree. In this case, people with higher secondary school certificate had to be considered. Again, these people had no or very little experience in fieldwork required in this study. Moreover, the Bangali research assistants and the supervisors had some sort of limitations in understanding the language of the respondents. This, in some cases, created barrier in rapport building, respondents' understanding the questions, and understanding the answers to the questions asked. This may hamper in quality data collection. A reflection of this can be seen in Table 2.3 of the methodology section. In order to have better estimates, future surveys of this kind should take care of the above-mentioned sampling and non-sampling errors.

The two study groups we are dealing with are marginalized. Population in the tea gardens and in the Chittagong Hill Tracts (CHT) live in separate and isolated areas. Ethnic minorities living in the plain land are also concentrated in some pocket areas. Due to isolated geographical locations not much development activities were there for the improvement of their livelihoods. The Chittagong Hill tracts, where the largest portion of the ethnic minorities lives, were under military occupation for long. Custom and culture of these people are very much different than that of the majority population in the country. For instance, as we found, whereas majority people in Bangladesh practice Islam, it was only 10% in the tea gardens and a negligible portion among the ethnic minorities. In general, these people have fear in integration with the majority Bangalis. All these may have negative impact on their educational as well as other development. As was found in this study, livelihood of the majority of the study population depends on labour selling or on agricultural activities (84.3% in tea gardens and 81.7% among ethnic minorities). Again, proportion of households having access to electricity facilities was as low as it was one and a half decade ago in Bangladesh. These indicate a significant distance of the study population from entire population in the country.

Summary of the socioeconomic status of the study population is provided below.

5. Households mainly depending on tea gardens were less likely to have better livelihood than those had other choices of income. Again, overall socioeconomic status of the Bangalis was better than that of the ethnic minorities in the tea gardens.
6. Ethnic minorities in the CHT were ahead of their fellows in the plain land, and in CHT, the Chakmas were advanced than the other ethnic minority groups.
7. Hinduism was the dominating religion in the tea gardens with a third Muslims among the Bangalis there. Christianity dominates among plain land ethnic minorities and Buddhism in CHT with over a quarter believing Hinduism.

Table 8.1. Education and literacy of the study population

Gender	Tea garden area		Tea garden area		Ethnic minority		Chittagong Hill Tracts	
	Purely tea garden	Non tea garden	Ethnic minority	Bangali	Plain land	CHT	Chakma	Others
<u>% Without schooling</u>								
All	66.9	49.6	60.8	59.1	48.1	45.4	40.8	53.7
Male	56.7	40.6	50.6	50.3	43.3	35.8	31.9	43.0
Female	77.3	58.6	71.3	67.5	50.0	55.1	50.0	64.4
Gender gap (F–M)	20.6	18.0	20.7	17.2	6.7	19.3	18.1	21.4
<u>Adult literacy rate</u>								
All	25.6	46.1	33.0	35.5	38.6	46.4	51.9	39.0
Male	39.8	59.7	47.7	48.0	46.6	59.8	65.5	52.1
Female	11.6	31.1	17.8	22.5	31.2	32.9	37.9	26.2
Gender gap (M–F)	28.2	28.6	29.9	25.5	15.2	26.9	27.6	25.9

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

In spite of socioeconomic backwardness, the educational situation of the entire population of the ethnic minorities was found to be much nearer to that of the overall population of the country, which was not the case in the tea gardens. For instance, 46.4% of the total ethnic minority population had never been to school against 41.5% in the whole population. Again, the adult literacy rate of the ethnic minorities was 43.6% – 3.4 percentage points lower than the entire population found in the latest national survey (BBS 2003). On the other hand, the tea garden people were much behind than the ethnic minorities as well as the national estimates. Over 60% of the tea garden population had no experience of schooling and only a third of the adults were literate. A wide variation also exists in the educational attainment of different sub-groups of study population. For instance, the proportion of Chakmas having no schooling was below the national average, which was nearly 67% among the tea garden population depending on selling manual labour there. A similar pattern could be found in the case of adult literacy.

The summary of the educational situation of the study population follows:

1. There was not much variation between Bangalis and the ethnic minorities in the tea gardens. However, the households whose livelihood depends mainly on working in the tea gardens were more deprived than those who had other income choices.
2. The ethnic minorities in the Chittagong Hill Tracts were ahead of their fellows living in the plain land. Again, in CHT, the Chakmas were advanced than the other ethnic minority groups.
3. Male domination and a large gender gap were common phenomena across the sub-groups. However, the gap was found lesser among the plain land ethnic minorities than the others.

At the aggregate level, the ethnic minority children aged 6-15 years had an equal opportunity to get enrolled in schools similar to that of the entire population. However, the tea garden children with similar age were much behind to them. One in every five ethnic minority children was out of school, which was double for the tea garden children. There was not much variation between the Bangalis and the ethnic minorities in the tea gardens; however, the children of the households mainly depending on the tea gardens were more likely to be out of school than those had other sources of income. On the other hand, the situation of the plain land ethnic minorities was better than that of the CHT, and again, it was better among the Chakmas than the other ethnic minority groups. This situation has a similarity with that of the socioeconomic

conditions of the sub-groups and educational and literacy situation of the population within the sub-groups. Beyond this overall situation of the study groups and the sub-groups, a number of remote villages were found with high percentage of out of school children. In some tea gardens over 90% of the children were out of school.

Table 8.2. Proportion of children out of school and involved in work

Gender	Tea garden area		Tea garden area		Ethnic minority		Chittagong Hill Tracts	
	Purely tea garden	Non tea garden	Ethnic minority	Bangali	Plain land	CHT	Chakma	Others
<b>Out of school (%)</b>								
All	45.8	30.5	39.3	42.0	16.8	22.2	19.1	26.2
Boys	43.1	31.3	37.7	41.6	17.4	18.6	16.7	21.0
Girls	48.6	29.6	41.0	42.4	16.1	25.8	21.6	31.4
Gender gap (G-B)	5.5	-1.7	3.3	0.8	-1.3	7.2	4.9	10.4
<b>Involve in work (%)</b>								
All	40.4	30.4	37.8	33.5	52.9	33.8	32.6	35.5
Boys	35.6	25.8	31.8	32.7	44.5	26.2	27.0	25.2
Girls	45.6	35.0	44.3	34.3	62.0	41.0	38.3	46.1
Gender gap (G-B)	10.0	9.2	12.5	1.6	17.5	14.8	11.3	20.9

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

Age of the children was found to be an important determinant of leaving school. The older children of both the study groups were less likely to stay in schools for long. On the other hand, although children's participation in work was common in the study groups, these older children were found extensively involved in work at home or outside. Some of these children earn for their households through working outside home. A good proportion of the children was involved in both schooling and work. When the issue was discussed with the parents, they explained the situation as an obvious one. It was not only a poverty driven occurrence, but also a part of tradition, culture and lifestyle. According to them, due to poverty they were not able to send their older children to schools. To many of them, 12-13 years is the right time to learn work for income. It has two benefits – brings money for household maintenance and improves the skills of the children necessary for income earning activities.

Contrary to the national situation, gender gap in access to school was observed in both the groups, where the girls were more likely to be out of school. When data were analysed by age of the children it showed gender parity among the primary school aged children (6-10 years), but not among those who have reached at secondary schooling age. It has a strong implication to EFA, which indicates the possibility of gender equity even in the small groups of population. Gender equity has also been seen among the Bangalis in the tea gardens and the children of the non-tea garden households, and among the plain land ethnic minorities. Specifically, the ethnic minorities in the tea gardens, and the Chakmas and others in the Chittagong Hill Tracts contained school enrolment related gender disparity against the girls.

A strong relationship exists between household socioeconomic status (which includes parental education, economic status, access to electricity, etc.) and out of schooling. Children of the never schooled parents and with deficit economic condition were more likely to be out of school than their peers living with better economic condition. Gender discrimination against girls also occurred in the poorer economic condition. Explaining the situation the parents, local

elites and the school teachers mentioned that girls labour was very much needed for taking care of the younger siblings and cooking, especially in the poorer households where both the parents were to go outside for selling labour. The parents were to spend the whole day (from dawn to dusk) outside home for work.

Children in the study population did not enrol in school at the right age. They were late in school enrolment due to many reasons including lack of awareness of the parents and their consideration of children aged 6-8 years as 'too young to enrol in school'. The school authority also refused to admit some children. A reflection of this can be seen in the household survey data, which shows that majority of the secondary school aged children currently enrolled in any one of the primary classes. Again, majority of the primary school students were found in the beginning classes. The above reasons as well as parental urgency to involve in work ultimately created a barrier for the older children to be dropped out from schools without completing the full cycle of primary education. The data also shows that three quarters or more of the dropout children dropped out before reaching at class V. The girls dropped out before the boys. It is important to keep children out of work before the right age to do so. However, talking with the parents and the community it was understood that it is not possible right now. As an alternative, if the children are enrolled in school at the right age they will be able to complete the primary cycle before involving in work outside home. In order to achieve the second MDG we need to put an emphasis on completion of full cycle of primary education along with enrolment in schools.

Poverty came out as the most important obstacle to schooling, contributing to dropping out, never enrolment, and gender discrimination against girls. The households in the study areas need to be brought in under poverty reduction programmes with social components like awareness building for education and gender parity.

It was not only the Ministry of Primary and Mass Education of the government who created schooling opportunity in the study areas. The local and the national non-governmental organisations with their non-formal education programmes and the Christian missionaries played a very important role in this regard. A large number of the primary school students – ranges from 35% to 51% - in the tea gardens and plain land ethnic minority areas were enrolled in these schools. Data shows that if these initiatives outside the government were not there, the volume of out of school children would have been doubled. The NGOs and the Christian missionaries rightly responded to the educational needs of the population, which has important implication to EFA. In this connection the example of plain land ethnic minority area is a significant one. Here, more than half of the school-aged children were involved in work at home or outside and 86% of these working children were enrolled in schools. It possibly due to the school authorities' understood the reality of the need for child labour for household maintenance and having flexible school time. In some areas the missionaries offered free basic medical services and arranged free boarding of the students. Free supplementary teaching is also provided to some extent. Considering the difference between home and school languages, BRAC initiated two things in their schools. Primarily they tried to appoint teachers from the same ethnic group. They were not fully successful mainly due to unavailability of qualified persons as teachers. In such cases two teachers were appointed in a class – one from the same ethnic group and the other from the Bangalis. It has two benefits – firstly, the ethnic minority teacher can bridge language gap and secondly, both Bangali and minority students can be accommodated in the same class. Such initiatives may help in improving harmony among students of various ethnic groups. The parents and the community leaders also appreciated the approach.



## Policy Recommendations

Following policy recommendations can be made based on the findings and above discussion.

7. More non-formal schools should be opened especially in the tea gardens as an immediate action to bring the out of school children to schools. Experienced national NGOs can be utilised in this. The ROSC (Reaching Out of School Children) project should operate in the tea gardens and the remote hilly areas.
8. In order to sustain the current situation of school enrolment the number of formal schools should be increased in the areas. The government can establish its own schools or preferably encourage local initiatives particularly the ethnic minority groups for school establishment through providing financial support to them. Newly established formal schools would have to learn a number of things from the existing schools (i.e., two teacher concept, teacher from ethnic minority groups, flexible school timing, free education including stationeries etc.).
9. Dropout was shown as a major problem in the study areas. Poverty was found as a major obstacle to schooling, leading to non-enrolment as well as dropout. Pro-poor mindset would be needed to tackle the situation. A combination of a number of activities can improve the situation. These are
  - a. Introduction of poverty alleviation programmes aiming to reduce child labour,
  - b. Bringing children to schools at the right age, for which birth registration activities should be emphasised and utilised for school enrolment purpose,
  - c. Make schools child-friendly. School based planning with local community and its proper implementation can improve school-community relationship, and
  - d. Taking lessons from the existing missionary schools in the study areas, provision of school meal can be introduced. Mothers' groups can be given the responsibility of its management. However, lessons can also be learned from the existing programmes in Jamalpur and other areas.
10. Special attention should be given to reduce gender discrimination against girls, who are affected by less participation in school and more participation in work. Attempts can be made to aware the parents in this regard. Successful poverty reduction programmes can reduce girls load of household work and make space for their schooling.
11. In order to ensure proper implementation of the plans and programmes, the provision of separate allocation in the national budget can be considered.
12. Educational development of any population and its sustainability mostly depends on a number of enabling conditions and the environment created by the society and the nation at large. The issues of the ethnic minorities and the tea garden population or other disadvantaged groups' need to be seriously dealt with, considering them as an important part of the nation.

## BIBLIOGRAPHY

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- Ahmed M, Nath SR and Ahmed KS (2003). *Literacy in Bangladesh, need for a new vision*. Dhaka: Campaign for Popular Education.
- Bangladesh Bureau of Statistics (2003). *Population census 2001 national report* (provisional). Dhaka: Bangladesh Bureau of Statistics.
- Bangladesh Tea Board (2004). *Statistics of Bangladesh Tea Industry*. Moulvibazar: Project Development Unit, Bangladesh Tea Board.
- Chowdhury AMR, Nath SR, Choudhury RK, Ahmed M (2002). *Renewed hope daunting challenges, state of primary education in Bangladesh*. Dhaka: Campaign for Popular Education and University Press Limited.
- Haq M and Haq K (1998). *Human Development in South Asia 1998*. Karachi: Oxford University press.
- Hosmer DW and Lemeshow S (1989). *Applied logistic regression*. NY: John Wiley & Sons.
- Hossain N (2004). Access to education for the poor and girls: educational achievements in Bangladesh. Paper presented in 'Scaling up poverty reduction: a global learning process and conference' held in Shanghai May 25-27, 2004.
- Menard S (1995). *Applied logistic regression analysis*. Sage university paper series on quantitative applications in the social sciences, 07-106. Thousand, CA: Sage.
- Nath SR (2001). Enrolment and literacy. In Rafi M and AMR Chowdhury (eds.) *Counting the hills, assessing development in Chittagong Hill Tracts*. Dhaka: University press Limited. pp 59-71.
- Nath SR and Chowdhury AMR (2002). *A question of quality - state of primary education in Bangladesh*. Vol. II: Achievement of competencies. Dhaka: University Press Limited and Campaign for Popular Education.
- Nath SR and Khan KA (2004): Schooling and literacy. In HS Ahmed (ed.) *Towards a profile of the ultra poor in Bangladesh: findings from CFPR/TUP baseline survey*. Dhaka and Ottawa: BRAC and AKF Canada. pp. 133-149.
- UNESCO (2000). *The Dakar framework for action*. Paris: UNESCO.
- UNESCO (2005). *EFA monitoring report 2005*. Paris: UNESCO.
- WCEFA (1990). *World conference on education for all: meeting the learning needs*. Jomtien, Paris: UNESCO.

ANNEXES

Annex 2.1. The household survey questionnaire (English version)

**Exploration of the Situation of Out of School Children in the  
Tea gardens and Ethnic Minority Areas**

Household Survey Questionnaire

Household Head: \_\_\_\_\_ HH No.: \_\_\_\_\_

Village/para: \_\_\_\_\_ Union: \_\_\_\_\_ Upazila: \_\_\_\_\_ Zila: \_\_\_\_\_

Stratum: Tea garden = 1, Ethnic minority = 2; Name of tea garden: \_\_\_\_\_ Cluster: \_\_\_\_\_

Area: Rural = 1, Urban = 2; Ethnicity (mention): \_\_\_\_\_

**Educational Information of All Members**

Line	Name	Sex	Age (in year)	Whether can read and write letter	Enrolm ent status	Class passed	Parental education		Occup ation
							Father	Mother	
1	2	3	4	5	6	7	8	9	10
<b>3. Sex</b> 1 = Boys 2 = Girls		<b>6. Enrolment</b> 1 = Currently enrolled 2 = Dropout (not a single day during last three months) 3 = Never enrolled 8 = Not known			<b>7, 8, 9, 30. Class passed</b> 0 = Nil 33 = Pre-primary 1 = Class I 2 = Class II ..... 10 = SSC 12 = HSC 14 = BA 16 = MA 50 = Religious education 88 = Not known		<b>10. Occupation</b> 1 = Service 2 = Business 3 = Agriculture 4 = Labour sale 5 = Tea garden labour 6 = Do not work 7 = Others 8 = Not known 9 = Students		

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### Socioeconomic Information

Serial	Questions	Code
11	Household economic status	Always in deficit 1 Sometimes in deficit 2 Breakeven 3 Surplus 4
12	What is the principal source of income in this household?	Service 1 Business 2 Agriculture 3 Labour sale 4 Tea garden labour 5 Others 6
13	Religion of the members of this household.	Muslim 1 Hindu 2 Buddha 3 Christian 4
14	Ethnicity	Ethnic minority 1 Bangali 2
15	Distance between home and the nearest primary school (in km)	
16	Distance between home the nearest secondary school (in km)	
17	Access to electricity facility at home	Yes 1 No 2

### Time Spent of Children Aged 6-14 Years

Line	Name	Enrolment status	Various activities					
			In school	Study at home	Games and gossip	Work (in hour)		
						At home	Outside	Income (in Tk.)
1	2	6	18	19	20	21	22	23

**Educational Information of Children Aged 6-15 Years**

Line	Name	Enrolment status	For currently enrolled children			For dropped out children				Reason of never enrolment	Suggested way of re enrolment				
			Class	School type	School location	Attendance (yesterday)	Reason of non attendance	School type	Age at enrolment in school			Duration in school	Whether repeated	Last class	Reason of dropout
1	2	6	24	25	26	27	28	29	30	31	32	33	34	35	36
<b>22, 26. School type</b> 1 = Government primary 2 = Non-govt. primary 3 = Non-formal 4 = community/satellite 5 = Madrassa 6 = Hafezia/kawmi/kharizi 7 = Other religious 8 = Kindergarten 9 = High school 10 = College/ university 11 = Others 88 = Not known			<b>23. School location</b> 1 = Own village 2 = Same union 3 = Other union 4 = Other upazila 8 = Not known <b>24. Attendance</b> 1 = Yes 2 = No <b>25. Reason for absenteeism</b> 1 = Need to work at home 2 = Need to work outside 3 = Child does not like 4 = Went to relatives house 5 = Illness 8 = Not known 9 = Not applicable			<b>31, 32. Reason of out of schooling</b> 1 = School is away from home 2 = Scarcity of money 3 = School authority rejects 4 = No benefit of education 5 = Needs to work at home 6 = Child does not like 7 = School does not teach mother tongue 8 = Too young for school enrolment 9 = Social insecurity 10 = Unsecured road communications 11 = Marriage 12 = Disabled 13 = Others 88 = Not known				<b>28. Repetition</b> 1 = yes, 2 = No, 8 = Not known		<b>32. Possible measures to bring back child to school</b> 1 = Financial help (upabrithi) 2 = Reduce workload at home 3 = Improve school environment with necessary supplies 4 = Motivation of the parents 5 = Motivation of the community people 6 = Proper guidance to the child 7 = Establish school nearer to home 8 = Introduce mother tongue as medium of instruction 9 = Stop child marriage 10 = Promoting inclusive education 11 = Ensure work after education			

Name of interviewer: \_\_\_\_\_

Date: \_\_\_\_\_

## Annex 2.2. Checklist for qualitative investigation (English version)

This is a common checklist used for various types of respondents. It was certainly modified to make it relevant to the respective respondent or group of respondents.

1. Give us a short description of the socio-cultural and economic situation of your area/ community.
2. What value adds education in your society (specify the areas)?
3. Do you have any idea about the out of school children in your area/ community (specify their number and characteristics)?
4. Explain in brief, the reasons of children being out of school. (reasons might be related to household, society, community, ethnicity, institutions, geography, etc.). How can such a problem be predicated? What role(s) various stakeholders can play?
5. What is the reason of children's dropping out from school before completing primary education? How can such a problem be predicated? What role(s) various stakeholders can play?
6. What role the government plays in your area to enrol all children to school? What more could be done?
7. What role the non-government organisations or the missionary organisation play in education? What more could be done?
8. What roles do the existing educational institutions play in this regard? What are the drawbacks of these institutions?
9. Why the girls are lagging behind the boys in school enrolment?
10. Give some inspiring examples of educational initiatives in your area.
11. Any other issue(s).

Annex 3.1. Background information of the tea garden households

Issues	Main source of income		Ethnicity	
	Tea garden	Others	Ethnic minority	Bangali
Number of households	1,939	1,067	2,280	726
Total population	9,445	5,752	11,391	3,806
Average household size	4.9	5.4	5.0	5.2
Sex ratio <sup>1</sup>	102.7	105.8	105.2	101.1
<u>Age distribution (%)</u>				
≤ 5 years	19.0 (1796)	16.1 (926)	17.8 (2025)	18.3 (697)
6-10 years	14.0 (1319)	13.1 (755)	13.4 (1531)	14.3 (543)
11-15 years	10.6 (998)	11.2 (644)	10.4 (1181)	12.1 (461)
16+ years	56.5 (5332)	59.6 (3427)	58.4 (6654)	55.3 (2105)
<u>Economic status (%)</u>				
Always in deficit	26.5 (513)	9.5 (101)	21.7 (195)	16.4 (119)
Sometimes in deficit	32.1 (622)	24.2 (258)	30.0 (684)	27.0 (196)
Break even	30.3 (587)	34.8 (371)	30.5 (696)	36.1 (262)
Surplus	11.1 (216)	31.6 (337)	17.8 (405)	20.4 (148)
<u>Main source of income (%)</u>				
Service	-	24.4 (260)	7.1 (163)	13.4 (97)
Business	-	16.4 (175)	4.9 (112)	8.7 (63)
Agriculture	-	24.1 (257)	8.9 (203)	7.4 (54)
Labour sale	-	31.9 (340)	12.1 (277)	8.7 (63)
Tea gardening	100.0 (1939)	-	65.9 (1502)	60.2 (437)
Others	-	3.3 (35)	1.0 (23)	1.7 (12)
<u>Electricity facility at home (%)</u>				
Yes	9.2 (178)	21.1 (225)	11.6 (264)	19.1 (139)
No	90.8 (1761)	78.9 (842)	88.4 (2016)	80.9 (587)
<u>Religion (%)</u>				
Buddhism	0.1 (2)	0.2 (2)	0.1 (2)	0.3 (2)
Christianity	2.2 (43)	5.0 (53)	4.1 (94)	0.3 (2)
Islam	6.9 (133)	15.5 (165)	1.9 (43)	35.2 (255)
Hinduism	90.8 (1760)	79.4 (847)	93.9 (2141)	64.2 (466)

<sup>1</sup> Number of males against 100 females

Figures in the parentheses indicate number of individuals for age distribution and number of households for others

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

Annex 3.2. Background information of the ethnic minority households

Issues	Area of residence		CIIT	
	Plain land	CHT	Chakma	Others
Number of households	1,201	1,799	999	800
Total population	5,114	8,476	4,825	3,651
Average household size	4.3	4.7	4.8	4.5
Sex ratio <sup>1</sup>	101.9	101.9	103.3	100.1
<u>Age distribution (%)</u>				
≤ 5 years	15.4 (789)	14.2 (1204)	13.7 (663)	14.8 (541)
6-10 years	12.3 (628)	12.3 (1045)	12.1 (583)	12.7 (462)
11-15 years	9.1 (463)	11.0 (933)	11.3 (546)	10.6 (387)
16+ years	63.2 (3234)	62.5 (5294)	62.9 (3033)	61.9 (2261)
<u>Economic status (%)</u>				
Always in deficit	11.7 (141)	17.0 (156)	15.5 (743)	19.3 (702)
Sometimes in deficit	28.7 (345)	41.8 (752)	48.0 (2306)	35.0 (1274)
Break even	34.1 (410)	26.0 (468)	26.5 (1270)	24.4 (891)
Surplus	25.2 (303)	14.9 (268)	10.0 (481)	21.3 (778)
<u>Main source of income (%)</u>				
Service	8.2 (98)	8.7 (156)	8.0 (388)	8.7 (319)
Business	5.6 (67)	10.5 (189)	14.0 (674)	6.3 (231)
Agriculture	26.0 (312)	68.8 (1238)	71.5 (3496)	67.5 (2463)
Labour sale	58.7 (705)	10.8 (195)	4.9 (238)	16.8 (612)
Tea gardening	-	-	-	-
Others	1.6 (19)	1.1 (20)	0.5 (26)	0.7 (26)
<u>Electricity facility at home (%)</u>				
Yes	10.9 (131)	17.0 (305)	18.9 (904)	14.6 (534)
No	89.1 (1070)	83.0 (1494)	81.1 (3876)	85.4 (3112)
<u>Religion (%)</u>				
Buddhism	2.1 (25)	88.7 (1595)	99.7 (4811)	71.1 (2597)
Christianity	64.9 (780)	0.1 (2)	-	0.3 (11)
Islam	0.2 (3)	-	-	-
Hinduism	32.6 (392)	11.2 (202)	0.3 (14)	28.6 (1043)

<sup>1</sup> Number of males against 100 females

Figures in the parentheses indicate number of individuals for age distribution and number of households for others

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005



Annex 3.3. Proportion of households having access to electricity facility by household economic status and study group

Economic status of household	Tea garden	Ethnic minority
Always in deficit	6.0 (613)	4.3 (446)
Sometimes in deficit	9.0 (874)	9.2 (1089)
Breakeven	13.1 (952)	14.3 (877)
Surplus	29.4 (551)	33.5 (571)
Level of significance	p<0.001	p<0.001

Figures in the parentheses indicate number of households under survey

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

Annex 3.4. Percentage distribution of household members by years of schooling completed and study sub-group

Years of schooling	Tea garden area <sup>1</sup>		Tea garden area <sup>2</sup>		Ethnic minority Area		CHT	
	Tea garden	Others	Ethnic minority	Bangali	Plain land	CHT	Chakma	Others
Nil	66.9	49.6	60.8	59.1	48.1	45.4	40.8	53.7
I – IV	23.1	25.8	24.2	23.7	26.3	25.5	24.9	25.5
V – IX	9.7	21.6	13.9	14.9	21.4	22.6	26.6	16.3
X+	0.4	3.1	1.1	2.3	4.1	6.5	7.8	4.5
n	9,327	5,645	11,210	3,762	5,091	8,436	4,794	4,035

<sup>1</sup> Category by main source of income      <sup>2</sup> Category by ethnicity

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

Annex 3.5. Percentage distribution of the household members in the tea garden areas by year of schooling completed, study sub-group and sex

Years of schooling	Main source of income				Ethnicity			
	Tea garden		Others		Ethnic minority		Bangali	
	Males	Females	Males	Females	Males	Females	Males	Females
Nil	56.7	77.3	40.6	58.9	50.6	71.3	50.3	67.5
I – IV	28.7	17.4	28.6	22.9	29.0	19.3	27.7	19.7
V – IX	14.1	5.2	26.8	16.2	18.9	8.7	18.7	11.1
X+	0.6	0.1	4.0	2.1	1.5	0.6	3.1	1.6
n					5,697	5,513	1,868	1,894

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

Annex 3.6. Percentage distribution of the household members of the ethnic minorities by year of schooling completed, study sub-group and sex

Years of schooling	Plain land		CHT	
	Males	Females	Males	Females
Nil	43.3	53.0	35.8	55.1
I – IV	27.5	25.2	29.0	21.9
V – IX	23.7	19.1	27.0	18.2
X+	5.5	2.7	8.3	4.8
n				

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

Annex 3.7. Proportion of population without any experience of schooling

Sub-groups	Males	Females	Both	Significance
Tea garden area				
Ethnic minority	50.6	71.3	60.8	p<0.001
Bangali	50.5	67.5	59.1	p<0.001
	ns	p<0.001	Ns	
Tea garden area				
Tea garden	56.7	77.3	66.9	p<0.001
Others	40.6	58.9	49.6	p<0.001
	p<0.001	p<0.001	P<0.001	
Ethnic minority				
Plain land	43.3	53.0	48.1	p<0.001
Chittagong Hill Tracts	35.8	55.1	45.4	p<0.001
	p<0.001	p<0.001	P<0.01	
Chittagong Hill Tracts				
Chakma	31.9	50.0	40.8	p<0.001
Others	43.0	64.4	53.7	p<0.001
	p<0.001	p<0.001	P<0.001	

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

Annex 3.8. Literacy rate of tea garden population 7 years and above by study sub-group and sex

Study group	Sex			Level of significance
	Males	Females	Both	
Ethnicity				
Ethnic minority	43.9 (4658)	20.4 (4421)	32.5 (9087)	p<0.001
Bangali	44.9 (1519)	24.1 (1510)	34.5 (3029)	p<0.001
Level of significance	ns	p<0.001	p<0.001	
Main source of income				
Tea garden	36.9 (3739)	14.3 (3677)	25.7 (7416)	p<0.001
Others	55.3 (2438)	32.8 (2254)	44.5 (4692)	p<0.001
Level of significance	p<0.001	p<0.001	p<0.001	

Figures in the parentheses indicate number of individuals aged 7 years and above

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

Annex 3.9. Literacy rate of ethnic minority population aged 7 years and above by study sub-group and sex

Study group	Sex			Level of significance
	Males	Females	Both	
Area				
Plain land	42.6 (2129)	30.0 (2095)	36.3 (4224)	p<0.001
Chittagong Hill Tracts	56.9 (3543)	34.4 (3505)	45.7 (7048)	p<0.001
Level of significance	p<0.001	p<0.001	p<0.001	
Chittagong Hill Tracts				
Chakma	61.5 (2042)	39.2 (2000)	50.4 (4042)	p<0.001
Others	50.7 (1501)	28.1 (1505)	39.4 (3006)	p<0.001
Level of significance	p<0.001	p<0.001	p<0.001	

Figures in the parentheses indicate number of individuals aged 7 years and above  
 Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

Annex 3.10. Adult literacy rate in the tea gardens by study sub-group and sex

Study group	Sex			Level of significance
	Males	Females	Both	
<u>Ethnicity</u>				
Ethnic minority	47.7 (3538)	17.8 (3397)	33.0 (6935)	p<0.001
Bangali	48.0 (1115)	22.5 (1099)	35.3 (2214)	p<0.001
Level of significance	ns	p<0.001	p<0.001	
<u>Main source of income</u>				
Tea garden	39.8 (2782)	11.6 (2802)	25.6 (5584)	p<0.001
Others	59.7 (1871)	31.1 (1694)	46.1 (3565)	p<0.001
Level of significance	p<0.001	p<0.001	p<0.001	

Figures in the parentheses indicate number of adult population  
 Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

Annex 3.11. Adult literacy rate among ethnic minorities by study sub-group and sex

Study group	Sex			Level of significance
	Males	Females	Both	
Area				
Plain land	46.6 (1682)	31.2 (1682)	38.6 (3364)	P<0.001
CHT	59.8 (2751)	32.9 (2720)	46.4 (5471)	p<0.001
Level of significance	p<0.001	ns	p<0.001	
CHT				
Chakma	65.5 (1591)	37.9 (1539)	51.9 (3130)	p<0.001
Others	52.1 (1160)	26.2 (1181)	39.0 (2341)	p<0.001
Level of significance	p<0.001	P<0.001	p<0.001	

Figures in the parentheses indicate number of adult individuals  
 Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

Annex 4.1. Percentage distribution of children aged 6-15 years by enrolment status, study group and sex

Enrolment status	Tea garden			Ethnic minority		
	Boys (1901)	Girls (1815)	Both (3716)	Boys (1554)	Girls (1513)	Both (3067)
Currently enrolled	61.3	58.6	60.0	81.9	77.6	79.8
Dropout	21.0	16.4	18.8	9.9	11.3	10.6
Never enrolled	17.7	25.0	21.3	8.2	11.1	9.7

Figures in the parentheses indicate number of children aged 6-15 years under study

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

Annex 4.2. Percentage distribution of children aged 6-15 years by enrolment status and sub-groups

Enrolment status	Tea garden		Tea garden		Ethnic minority	
	Livelihood mostly based on tea garden (2317)	Livelihood based on other sources (1399)	Ethnic minority (2712)	Bangali (1004)	Plain land (1091)	Chittagong Hill Tracts (1976)
Currently enrolled	54.2	69.5	60.7	58.0	83.2	77.8
Dropout	20.1	16.5	17.8	21.4	10.8	10.5
Never enrolled	25.7	13.9	21.5	20.6	6.0	11.7

Figures in the parentheses indicate number of children aged 6-15 years under study

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

Annex 4.3. Proportion of out of school children by age and study group

Age (in years)	Tea garden		Ethnic minority	
	Boys	Girls	Boys	Girls
6	38.7	36.7	21.7	16.2
7	28.3	28.2	11.1	11.9
8	22.2	23.0	7.1	11.2
9	24.4	22.5	8.7	4.5
10	23.8	29.2	7.5	11.0
11	32.4	32.8	7.3	13.8
12	47.0	56.8	19.1	27.9
13	54.3	48.7	17.5	33.8
14	58.7	55.9	32.6	34.2
15	73.8	82.9	51.9	60.8

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

Annex 4.4. Proportion of out of school children by age, study group and parental education

Parental education	6-10 years		11-15 years	
	Tea garden	Ethnic minority	Tea garden	Ethnic minority
<b>Mothers education</b>				
Nil	30.5 (1663)	13.6 (1129)	61.0 (1273)	37.9 (982)
Primary	14.9 (275)	8.1 (296)	39.0 (241)	18.6 (220)
Secondary and above	8.8 (91)	1.3 (232)	16.0 (75)	3.7 (164)
Level of significance	p<0.001	p<0.001	p<0.001	p<0.001
<b>Fathers education</b>				
Nil	34.6 (1021)	15.5 (735)	65.4 (764)	43.8 (639)
Primary	23.0 (657)	10.7 (468)	50.4 (494)	27.0 (389)
Secondary and above	11.9 (268)	3.5 (433)	32.0 (247)	8.9 (327)
Level of significance	p<0.001	p<0.001	p<0.001	p<0.001

Figures in the parentheses indicate number of children in the sample

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

Annex 4.5. Proportion of out of school children by parental education, study group and sex

Parental education	Tea garden		Ethnic minority	
	Boys	Girls	Boys	Girls
<b>Mothers education</b>				
Nil	41.9 (1519)	45.6 (1417)	22.1 (1052)	27.8 (1059)
Primary	27.0 (248)	25.4 (268)	14.0 (265)	11.2 (251)
Secondary and above	14.0 (86)	10.0 (80)	1.9 (215)	2.8 (181)
Level of significance	p<0.001	p<0.001	p<0.001	p<0.001
<b>Fathers education</b>				
Nil	45.2 (910)	50.5 (875)	26.9 (683)	36.4 (691)
Primary	36.0 (580)	33.5 (571)	15.7 (428)	20.5 (428)
Secondary and above	22.1 (280)	20.9 (235)	4.9 (408)	6.8 (351)
Level of significance	p<0.001	p<0.001	p<0.001	p<0.001

Figures in the parentheses indicate number of children in the sample

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

Annex 4.6. Proportion of out of school children by age, study group and parental schooling experience

Parental schooling experience	6-10 years		11-15 years	
	Tea garden	Ethnic minority	Tea garden	Ethnic minority
No experience	36.5 (940)	16.5 (644)	66.9 (695)	45.1 (579)
At least one year	19.2 (984)	7.3 (985)	44.6 (790)	19.7 (765)
Significance	p<0.001	p<0.001	p<0.001	p<0.001

Figures in the parentheses indicate number of children in the sample

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

Annex 4.7. Proportion of out of school children of tea garden community by age, sub-groups and parental schooling experience

Age and parental schooling experience	Sub-groups of tea garden community			
	Ethnic minority	Bangali	Mostly depend on tea garden	Other income source
6-10 years				
No experience	37.0 (691)	34.9 (249)	38.3 (699)	31.1 (241)
At least one year	17.4 (127)	24.4 (254)	25.2 (527)	12.3 (457)
Significance	p<0.001	p<0.01	p<0.001	p<0.001
11-15 years				
No experience	66.3 (493)	68.3 (202)	70.4 (504)	57.6 (191)
At least one year	44.4 (577)	45.1 (213)	54.1 (407)	34.5 (383)
Significance	p<0.001	p<0.001	p<0.001	p<0.001

Figures in the parentheses indicate number of children in the sample

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

Annex 4.8. Proportion of out of school children of the ethnic minority community by age, area of residence and parental schooling experience

Parental schooling experience	6-10 years		11-15 years	
	Plain land	Chittagong Hill Tracts	Plain land	Chittagong Hill Tracts
No experience	10.8 (268)	20.5 (376)	41.0 (227)	47.7 (352)
At least one year	3.5 (343)	9.3 (642)	19.9 (221)	19.7 (544)
Significance	p<0.001	p<0.001	p<0.001	p<0.001

Figures in the parentheses indicate number of children in the sample

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

Annex 4.9. Proportion of out of school children among aged 6-15 years by economic status of household, study group and sex

Economic status	Tea garden			Ethnic minority		
	Boys	Girls	Significance	Boys	Girls	Significance
Always in deficit	46.2	54.8	p<0.01	27.9	38.1	p<0.01
Sometimes in deficit	39.5	40.7	ns	17.3	23.6	p<0.01
Break even	37.1	38.1	ns	16.5	15.4	ns
Surplus	29.5	31.4	ns	13.3	14.2	ns
Level of significance	p<0.001	p<0.001		p<0.001	p<0.001	

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

Annex 4.10. Proportion of out of school children by age, study group and economic status of household

Economic status	6-10 years		11-15 years	
	Tea garden	Ethnic minority	Tea garden	Ethnic minority
Always in deficit	39.2 (474)	21.8 (285)	65.5 (339)	47.7 (220)
Sometimes in deficit	27.5 (662)	11.5 (654)	55.9 (528)	30.7 (577)
Break even	23.7 (636)	7.3 (455)	55.5 (492)	27.4 (351)
Surplus	16.3 (301)	5.2 (267)	45.6 (281)	23.0 (243)
Level of significance	p<0.001	p<0.001	p<0.001	p<0.001

Figures in the parentheses indicate number of children in the sample

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

Annex 4.11. Proportion of out of school children in CHT by their ethnic identity and sex

Ethnicity	Boys	Girls	Both	Level of significance
Chakma	16.7 (563)	21.6 (565)	19.1 (1128)	p<0.05
Others	21.0 (428)	31.4 (420)	26.2 (848)	p<0.001
Level of significance	ns	p<0.01	P<0.001	

Figures in the parentheses indicate number of children in the sample

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

Annex 4.12. Proportion of out of school children in the ethnic minority community by age, area of residence and sex

Area of residence	Boys	Girls	Both	Level of significance
6-10 years				
Plain land	8.4 (320)	5.2 (308)	6.8 (628)	ns
Chittagong Hill Tracts	12.5 (534)	14.7 (511)	13.6 (1045)	ns
Level of significance	ns	p<0.001	p<0.001	
11-15 years				
Plain land	29.2 (243)	31.4 (220)	30.2 (463)	ns
Chittagong Hill Tracts	25.6 (457)	37.8 (474)	31.8 (931)	p<0.001
Level of significance	ns	ns	ns	

Figures in the parentheses indicate number of children in the sample

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

Annex 4.13. Proportion of out of school children in the tea garden community by age, sub-groups and sex

Sub-groups in tea garden community and age	Boys	Girls	Both	Level of significance
<b>6-10 years</b>				
Ethnic minority	25.7 (807)	28.0 (724)	26.8 (1531)	ns
Bangali	31.5 (257)	26.9 (286)	29.1 (543)	ns
Level of significance	ns	ns	ns	
Purely tea garden household	31.6 (690)	32.8 (629)	32.1 (1319)	ns
Non-tea garden household	18.7 (374)	19.4 (381)	19.1 (755)	ns
Level of significance	p<0.001	p<0.001	p<0.001	
<b>11-15 years</b>				
Ethnic minority	53.8 (604)	57.2 (577)	55.5 (1181)	ns
Bangali	52.8 (233)	61.8 (228)	57.3 (461)	p<0.05
Level of significance	ns	ns	ns	
Purely tea garden household	59.0 (502)	68.8 (496)	63.8 (998)	p<0.001
Non-tea garden household	45.4 (335)	42.1 (309)	43.8 (644)	ns
Level of significance	p<0.001	p<0.001	p<0.001	

Figures in the parentheses indicate number of children in the sample

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

Annex 4.14. Percentage distribution of the dropped out children in the tea gardens by last class passed and study sub-group

Last class passed	Main source on income		Ethnicity	
	Tea garden (355)	Others (163)	Ethnic minority (355)	Bangali (163)
Nil	18.6	14.1	17.2	17.2
Pre-primary	3.1	2.5	2.8	3.1
Class I-IV	60.0	54.0	58.3	57.7
Class V	14.1	18.4	15.5	15.3
Class VI-VIII	4.2	11.0	6.2	6.7

Figures in the parentheses indicate number of dropout children in the sample

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

Annex 4.15. Percentage distribution of the dropped out ethnic minority children by last class passed and study sub-group

Last class passed	Ethnic minority		CHT	
	Plain land (53)	CHT (141)	Chakma (80)	Others (61)
Nil	1.9	7.8	7.5	8.2
Pre-primary	5.7	9.9	12.5	6.6
Class I-IV	64.2	57.4	55.0	60.7
Class V	15.1	15.6	18.8	11.5
Class VI-VIII	13.2	9.2	6.3	13.1

Figures in the parentheses indicate number of dropout children in the sample

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005



Annex 4.16. Repetition rates

Study group	Sex			Level of significance
	Boys	Girls	Both	
Tea garden	14.3 (301)	12.4 (217)	13.4 (514)	
Ethnic minority	13.8 (87)	13.1 (107)	13.4 (194)	

Purely tea garden 12.4 (355)	Plain land 20.8 (53)
Non-tea garden 16.0 (163)	CHT 10.6 (141)
Adibashi 11.0 (355)	Chakma 8.8 (80)
Bangali 19.0 (163)	Others 13.1 (61)

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

Annex 4.17. Description of the variables used in the multivariate analysis

Variables	Description
<u>Dependent variable</u> Schooling status	1= Out of school, 0= Enrolled in school
<u>Explanatory variables</u> Sex	1 = Boy, 2 = Girl
Age	1 = 6-8y, 2 = 9-12y, 3 = 13-15y
Parental education	1= Both never schooled (Nil), 2= At least one had at least one year of schooling (Some)
Household category (for tea garden)	1 = Purely tea garden, 2 = Non-tea garden
Household category (for ethnic minority)	1= Plain land ethnic minority, 2= Chakmas in CHT, 3 = Other ethnic minorities in CHT
Ethnicity (for tea garden only)	1 = Ethnic minority, 2 = Bangali

Annex 4.18. Logistic regression analysis predicting out of schooling among the tea garden children aged 6-15 years

Explanatory variables	Regression coefficient	Wald statistics	Odds ratio	95% CI of odds ratio
<u>Age of children</u>				
6-8y	0		1.00	
9-12y	0.25	8.3	1.29 <sup>o</sup>	1.09 – 1.53
13-15y	1.64	260.4	5.13*	4.20 – 6.25
<u>Parental education</u>				
Nil	0		1.00	
Some	- 0.81	109.1	0.44*	0.38 – 0.52
<u>Household category</u>				
Purely tea garden	0		1.00	
Non-tea garden	- 0.67	65.7	0.51*	0.44 – 0.60
Constant	- 0.31	17.0	0.08*	
- 2 log likelihood	4077.6			
Cox & Snell R <sup>2</sup>	0.136			
Nagelkerke R <sup>2</sup>	0.184			

<sup>o</sup> = p<0.01, \* = p<0.001

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

Annex 4.19. Logistic regression analysis predicting out of schooling among the ethnic minority children aged 6-15 years

Explanatory variables	Regression coefficient	Wald statistics	Odds ratio	95% CI of odds ratio
<u>Gender</u>				
Boys	0		1.00	
Girls	0.25	6.18	1.28 <sup>φ</sup>	1.05 – 1.56
<u>Age of children</u>				
6–8y	0		1.00	
9–12y	- 0.05	0.15	0.95	0.74 – 1.23
13–15y	1.52	151.75	4.59*	3.60 – 5.85
<u>Parental education</u>				
Nil	0		1.00	
Some	- 1.15	126.61	0.32*	0.26 – 0.39
<u>Household category</u>				
Plain land	0		1.00	
Chakma in CHT	0.19	2.32	1.21	0.95 – 1.54
Others in CHT	0.56	20.87	1.76*	1.38 – 2.24
Constant	- 1.70	155.82	0.18*	
- 2 log likelihood	2561.89			
Cox & Snell R <sup>2</sup>	0.126			
Nagelkerke R <sup>2</sup>	0.200			

<sup>φ</sup> = p<0.01, \* = p<0.001

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

Annex 5.1. Percentage distribution of currently enrolled children of age 6-14 years by level of education and study sub-group

Level of education	Tea garden		Tea garden		Ethnic minority	
	Mostly depend on tea garden (1214)	Other sources of income (925)	Ethnic minority (1582)	Bangali (557)	Plain land (851)	CHT (1451)
Pre-primary	6.5	2.5	4.7	4.8	9.8	4.7
Primary	84.2	79.4	83.2	78.8	78.3	74.0
Secondary	9.1	17.8	12.0	15.3	12.0	21.3
Religious	0.2	0.3	-	1.1	-	-

Figures in the parentheses indicate number of currently enrolled children in the sample

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

Annex 5.2. Percentage distribution of children currently enrolled at primary level by grade and study sub-group

Grade	Tea garden		Tea garden		Ethnic minority	
	Mostly depend on tea garden (1021)	Other sources of income (734)	Ethnic minority (1316)	Bangali (439)	Plain land (666)	CHT (1074)
I	30.8	23.2	26.1	31.9	27.6	24.3
II	26.7	29.3	28.6	25.3	30.0	23.1
III	20.0	18.0	19.1	19.1	19.2	20.2
IV	11.5	14.3	13.5	10.0	14.6	17.4
V	11.1	15.3	12.5	13.7	8.6	15.0

Figures in the parentheses indicate number of primary school students

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

Annex 5.3. Percentage distribution of primary level students by school type and study sub-group

Type of school	Tea garden		Tea garden		Ethnic minority	
	Mostly depend on tea garden (1021)	Other sources of income (734)	Ethnic minority (1316)	Bangali (439)	Plain land (666)	CHT (1074)
Government primary	28.0	28.9	28.5	28.0	24.9	74.7
Non-govt. primary	21.5	21.1	19.5	27.1	10.2	15.0
Non-formal primary	42.7	43.1	45.2	35.8	51.7	9.2
Community/satellite	7.0	3.0	4.6	7.5	4.8	0.2
Others	0.8	3.9	2.2	1.6	8.4	0.9

Figures in the parentheses indicate number of primary school students

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

Annex 5.4. Percentage distribution of the primary school students by study group and location of school

Location of school	Tea garden			Ethnic minority		
	Boys (913)	Girls (842)	Both (1755)	Boys (900)	Girls (842)	Both (1742)
Own village	80.4	85.5	82.8	73.3	72.7	73.0
Other village	15.3	12.4	13.9	19.1	20.2	19.6
Other union	3.8	2.1	3.0	5.9	5.6	5.7
Other upazila	0.4	-	0.2	1.7	1.5	1.6

Figures in the parentheses indicate number of primary school students

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

Annex 5.5. Percentage distribution of the currently enrolled students aged 6-14 years by study sub-groups and location of school, Tea garden

Location of school	Main source of income		Ethnicity	
	Tea garden (1214)	Others (925)	Ethnic minority (1582)	Bangali (557)
Own village	79.2	68.8	77.4	66.8
Other village	16.1	22.4	16.7	25.0
Other union	4.5	8.2	5.6	7.7
Other upazila	0.2	0.6	0.3	0.5

Figures in the parentheses indicate number of primary school students

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

Annex 5.6. Percentage distribution of the currently enrolled students aged 6-14 years by study sub-groups and location of school, Ethnic minority

Location of school	Area of residence		CHT	
	Plain land (851)	CHT (1454)	Chakma (856)	Others (598)
Own village	61.2	66.3	59.7	75.6
Other village	33.5	19.1	22.6	13.9
Other union	4.5	12.0	16.8	5.2
Other upazila	0.8	2.6	0.7	5.4

Figures in the parentheses indicate number of currently enrolled children

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

Annex 5.7. Percentage distribution of the primary school students by study sub-groups and location of school, Tea garden

Location of school	Main source of income		Ethnicity	
	Tea garden (1021)	Others (734)	Ethnic minority (1316)	Bangali (439)
Own village	85.1	79.7	85.4	75.2
Other village	12.2	16.2	11.1	22.3
Other union	2.5	3.7	3.2	2.5
Other upazila	0.1	0.4	0.3	-

Figures in the parentheses indicate number of primary school students

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

Annex 5.8. Percentage distribution of the primary school students by study sub-groups and location of school, Ethnic minority

Location of school	Area of residence		CHT	
	Plain land (666)	CHT (1076)	Chakma (599)	Others (477)
Own village	65.9	77.4	74.5	81.1
Other village	29.6	13.5	15.7	10.7
Other union	4.1	6.8	9.7	3.1
Other upazila	0.5	2.3	0.2	5.0

Figures in the parentheses indicate number of primary school students

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

Annex 5.9. Percentage distribution of the absentee students by reason of absenteeism, study group and sex

Reason of absenteeism	Tea garden			Ethnic minority		
	Boys (48)	Girls (52)	Both (100)	Boys (65)	Girls (58)	Both (123)
Had to work at home	14.6	21.2	18.0	21.5	25.9	23.6
Had to work outside	-	-	-	3.1	1.7	2.4
Unwillingness of student	27.1	15.4	21.0	40.0	24.1	32.5
Went to visit relatives	10.4	11.5	11.0	6.2	6.9	6.5
Illness	47.9	51.9	50.0	29.2	41.4	35.0

Figures in the parentheses indicate number of absentee students

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

Annex 5.10. Percentage distribution of the absentee students by reason of absenteeism and study sub-group, Tea garden

Reason of absenteeism	Main source of income		Ethnicity	
	Tea garden (86)	Others (59)	Ethnic minority (86)	Bangali
Had to work at home	17.6	20.3	17.4	20.3
Had to work outside	-	1.7	-	1.7
Unwillingness of student	26.7	20.3	17.4	33.9
Went to visit relatives	8.1	11.9	10.5	8.5
Illness	47.7	45.8	54.7	35.6

Figures in the parentheses indicate number of absentee students

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

Annex 5.11. Percentage distribution of the absentee students by reason of absenteeism and study sub-group, Ethnic minority

Reason of absenteeism	Area of residence		CHT	
	Plain land (67)	CHT (107)	Chakma (55)	Others (52)
Had to work at home	20.9	33.6	41.8	25.0
Had to work outside	1.5	2.8	3.6	1.9
Unwillingness of student	32.8	29.9	25.5	34.6
Went to visit relatives	14.9	3.7	3.6	3.8
Illness	29.9	29.9	25.5	34.6

Figures in the parentheses indicate number of absentee students

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

Annex 5.12. Percentage distribution of the absentee students by reason of absenteeism and study sub-group, Tea garden

Reason of absenteeism	Main source of income		Ethnicity	
	Tea garden (59)	Others (41)	Ethnic minority (59)	Bangali (41)
Had to work at home	15.3	22.0	15.3	22.0
Had to work outside	-	-	-	-
Unwillingness of student	25.4	14.6	15.3	29.3
Went to visit relatives	6.8	17.1	11.9	9.8
Illness	52.5	46.3	57.6	39.0

Figures in the parentheses indicate number of absentee students

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

Annex 5.13. Percentage distribution of the absentee students by reason of absenteeism and study sub-group, Ethnic minority

Reason of absenteeism	Area of residence		CHT	
	Plain land (40)	CHT (83)	Chakma (36)	Others (47)
Had to work at home	10.0	30.1	36.1	25.5
Had to work outside	2.5	2.4	2.8	2.1
Unwillingness of student	35.0	31.3	27.8	34.0
Went to visit relatives	15.0	2.4	-	4.3
Illness	37.5	33.7	33.3	34.0

Figures in the parentheses indicate number of absentee students

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

Annex 6.1. Percentage distribution of out of school children by reason of non-enrolment, sex and age group

Reason of being out of school	Tea garden				Ethnic minority			
	Boys		Girls		Boys		Girls	
	6-10y	11-15y	6-10y	11-15y	6-10y	11-15y	6-10y	11-15y
School is far away from home	4.5	3.9	5.0	1.7	14.9	3.7	6.6	6.1
Scarcity of money	34.7	62.1	37.9	53.6	34.0	51.4	44.0	63.3
School authority refused	5.2	1.3	5.7	0.3	11.7	1.9	5.5	2.0
No benefit of education	2.1	0.7	0.7	1.0	-	0.9	-	2.7
Needs to work at home	10.4	14.1	17.9	21.4	6.4	12.1	12.1	16.3
Child does like school	13.9	12.4	9.6	8.5	16.0	21.5	5.5	6.8
Too young to go to school	16.7	-	12.1	2.0	12.8	1.9	19.8	0.7
Social insecurity	1.0	-	0.7	3.4	1.1	0.9	-	1.4
Unsafe road communication	4.2	1.6	4.3	2.4	-	-	-	-
Disabled	2.4	1.3	2.1	1.0	2.1	4.7	3.3	-
Others	4.9	2.6	3.9	4.7	1.1	0.9	3.3	0.7

Figures in the parentheses indicate number of out of school children

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

Annex 6.2. Percentage distribution of out of school children by reason of non-enrolment and study sub-group

Reason of being out of school	Tea garden		Tea garden		Ethnic minority	
	Mostly depend on tea garden (843)	Other sources of income (326)	Ethnic minority (833)	Bangali (336)	Plain land (106)	CHT (333)
School is far away from home	4.4	2.1	4.0	3.3	-	9.9
Scarcity of money	50.8	38.7	48.7	44.0	28.3	57.1
School authority refused	2.8	3.7	3.5	2.1	8.5	3.6
No benefit of education	0.8	1.8	1.2	0.9	1.9	0.9
Needs to work at home	15.4	17.2	15.8	16.1	14.2	11.7
Child does like school	10.1	13.8	11.8	9.5	29.2	6.6
Too young to go to school	7.5	7.7	8.5	5.1	12.3	6.0
Social insecurity	1.2	1.5	0.6	3.0	-	1.2
Unsafe road communication	1.9	6.1	0.4	9.8	-	-
Disabled	1.5	2.1	1.7	1.8	2.8	2.1
Others	3.6	5.2	3.8	4.5	2.8	0.9

Figures in the parentheses indicate number of out of school children

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

Annex 6.3. Percentage distribution of dropout children by reason of dropping out and study group

Reason of dropout	Tea garden (518)	Ethnic minority (194)
School is far away from home	3.1	4.6
Scarcity of money	58.1	55.7
Needs to work at home	14.9	15.5
The child does not like school	10.6	17.0
Others	13.3	7.2

Figures in the parentheses indicate number of dropout children

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

Annex 6.4. Percentage distribution of never enrolled children by reason of non-enrolment and study group

Reason of non-enrolment	Tea garden (651)	Ethnic minority (245)
School is far away from home	4.3	9.8
Scarcity of money	38.9	45.7
School authority refused	5.2	7.3
Needs to work at home	16.7	9.8
Child does not like school	11.5	8.2
Too young to go to school	13.4	13.5
Disabled	2.9	3.3
Others	7.1	2.4

Figures in the parentheses indicate number of never enrolled children

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

Annex 6.5. Percentage distribution of parents by their opinion on the measures could be taken to bring the out of school children to school

Suggested measures of bringing out of school children to school	Tea garden		Tea garden		Ethnic minority	
	Mostly depend on tea garden (843)	Other sources of income (326)	Ethnic minority (833)	Bangali (336)	Plain land (106)	CHT (333)
Providing financial support	50.2	36.8	47.2	44.6	56.2	47.3
Reducing work pressure at home	9.6	12.6	10.3	10.7	8.1	10.1
Creating joyful environment in school	1.2	2.5	2.0	0.3	3.6	1.9
Awareness building of parents	20.4	20.6	22.0	16.7	11.4	19.0
Awareness building in the community	1.2	1.5	0.7	2.7	1.5	1.6
Proper guidance of the child	5.1	10.4	6.6	6.5	5.1	7.1
Establishing school nearer to home	6.8	8.9	4.6	14.3	9.0	7.2
Promoting inclusive education	1.4	2.5	1.7	1.8	2.1	1.9
Measures unknown	4.2	4.3	4.9	2.4	3.0	3.9

Figures in the parentheses indicate number of out of school children

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

Table 7.1 Percentage distribution of children by their status of studentship and involvement in work and sub-groups of population

Status	Tea garden				Ethnic minority	
	Purely tea garden household	Non-tea garden household	Ethnic minority	Bangali	Plain land	CHT
Only student	43.7	58.4	50.1	46.7	43.3	60.5
Student + labour	15.4	15.6	15.4	15.7	45.7	20.9
Only labour	25.0	14.8	22.4	17.8	7.2	12.9
None	16.0	11.3	12.1	19.8	3.9	5.7

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

Annex 7.2. Proportion of out of school children engaged in household work by study group and sex

Study group	Boys	Girls	Both	Level of significance
Tea garden	35.9 (594)	49.7 (575)	42.7 (1169)	p<0.001
Ethnic minority	56.2 (201)	71.0 (238)	64.2 (439)	p<0.001
Level of significance	p<0.001	p<0.001	p<0.001	

Figures in the parentheses indicate number of out of school children

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005



Annex 7.3. Proportion of out of school children engaged in work outside home by study group and sex

Study group	Boys	Girls	Both	Level of significance
Tea garden	29.5 (594)	22.6 (575)	26.1 (1169)	p<0.001
Ethnic minority	17.9 (201)	12.6 (238)	15.0 (439)	ns
Level of significance	p<0.001	p<0.001	p<0.001	

Figures in the parentheses indicate number of out of school children

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

Annex 7.4. Proportion of out of school children working at home in the tea gardens by sub-groups and sex

Study group	Ethnicity		Occupation	
	Ethnic minority	Bangali	Tea garden	Non-tea garden
Boys	39.9 (424)	25.9 (170)	37.0 (427)	32.9 (169)
Girls	56.5 (409)	33.1 (166)	51.2 (416)	45.9 (159)
Both	48.0 (833)	29.5 (336)	44.0 (843)	39.3 (326)

Figures in the parentheses indicate number of out of school children

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

Annex 7.5. Proportion of out of school ethnic minority children working at home by sub-groups and sex

Study group	Area of residence	
	Plain land	CHT
Boys	51.7 (60)	58.2 (141)
Girls	71.7 (46)	70.8 (192)
Both	60.4 (106)	65.5 (333)

Figures in the parentheses indicate number of out of school children

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

Annex 7.6. Proportion of out of school children working at home in the tea gardens by sub-groups and sex

Study group	Ethnicity		Occupation	
	Ethnic minority	Bangali	Tea garden	Non-tea garden
Boys	30.2 (424)	28.2 (170)	28.6 (427)	31.1 (169)
Girls	24.9 (409)	16.9 (166)	24.3 (416)	18.2 (159)
Both	27.5 (833)	22.6 (336)	26.6 (843)	24.8 (326)

Figures in the parentheses indicate number of out of school children

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

Annex 7.7. Proportion of out of school ethnic minority children working at home by sub-groups and sex

Study group	Area of residence	
	Plain land	CHT
Boys	28.3 (60)	13.5 (141)
Girls	32.6 (46)	7.8 (192)
Both	30.2 (106)	10.2 (333)

Figures in the parentheses indicate number of out of school children

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

Annex 7.8. Proportion of out of school children working at home by age group, study group and sex

Age group	Tea garden			Ethnic minority		
	Boys	Girls	Both	Boys	Girls	Both
6 – 10 y	33.0 (288)	40.4 (280)	36.6 (568)	37.2 (94)	45.1 (91)	41.1 (185)
11 – 14y	38.6 (306)	58.6 (295)	48.4 (601)	72.9 (107)	87.1 (147)	81.1 (254)
Level of significance	ns	p<0.001	p<0.001	p<0.001	p<0.001	p<0.001

Figures in the parentheses indicate number of out of school children

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

Annex 7.9. Proportion of out of school children working outside home by age group, study group and sex

Age group	Tea garden			Ethnic minority		
	Boys	Girls	Both	Boys	Girls	Both
6 – 10 y	10.8 (288)	10.4 (280)	10.6 (568)	5.3 (94)	6.6 (91)	5.9 (185)
11 – 14y	47.1 (306)	34.2 (295)	40.8 (601)	29.0 (107)	16.3 (147)	21.7 (254)
Level of significance	ns	p<0.001	p<0.001	p<0.001	p<0.001	p<0.001

Figures in the parentheses indicate number of out of school children

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

Annex 7.10. Logistic regression analysis predicting children's participation in work in the tea gardens

Explanatory variables	Regression coefficient	Wald statistics	Odds ratio	95% CI of odds ratio
<u>Gender</u>				
Boys	0		1.00	
Girls	0.52	40.0	1.68*	1.43 – 1.97
<u>Age of children</u>				
6–8y	0		1.00	
9–12y	1.38	209.14	3.95*	3.28 – 4.76
13–15y	1.94	244.67	6.98*	5.47 – 8.90
<u>Parental education</u>				
Nil	0		1.00	
Some	-0.48	33.51	0.62*	0.52 – 0.73
<u>Ethnicity</u>				
Ethnic minority	0		1.00	
Bangali	-0.29	9.84	0.75 <sup>o</sup>	0.62 – 0.90
<u>Household category</u>				
Purely tea garden	0		1.00	
Non-tea garden	-0.51	34.44	0.60*	0.50 – 0.71
Constant	-1.32	183.13	0.27*	
- 2 log likelihood	3537.68			
Cox & Snell R <sup>2</sup>	0.14			
Nagelkerke R <sup>2</sup>	0.19			

<sup>o</sup> = p<0.01, \* = p<0.001

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005

Annex 7.11. Logistic regression analysis predicting ethnic minority children's participation in work

Explanatory variables	Regression coefficient	Wald statistics	Odds ratio	95% CI of odds ratio
<u>Gender</u>				
Boys	0		1.00	
Girls	0.80	81.11	2.22	1.86 – 2.64
<u>Age of children</u>				
6–8y	0		1.00	
9–12y	1.27	155.02	3.55	2.91 – 4.34
13–15y	2.13	264.00	8.43	6.52 – 10.90
<u>Parental education</u>				
Nil	0		1.00	
Some	-0.46	26.91	0.63	0.53 – 0.75
<u>Household category</u>				
Plain land	0		1.00	
Chittagong Hill Tracts	-1.02	120.54	0.36	0.30 – 0.43
Constant	-0.89	59.65	0.41	
- 2 log likelihood	3068.81			
Cox & Snell R <sup>2</sup>	0.18			
Nagelkerke R <sup>2</sup>	0.24			

<sup>o</sup> = p<0.01, \* = p<0.001

Source: Household Survey in the Tea Gardens and among Ethnic Minorities, 2005