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Role of NGOs in Child Development : A Study in Nilphamari District, Bangladesh

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Role of NGOs in Child Development: A Study in Nilphamari District, Bangladesh



*The Thesis Submitted for the Degree of Master of Philosophy in Population Science
and Human Resource Development in the University of Rajshahi, Rajshahi.
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CERTIFICATE

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I wish him a bright future and every success in life.

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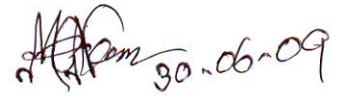


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I wish him a bright future and every success in life.

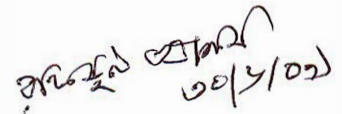

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DECLARATION

I do hereby declare that the thesis “**Role of NGOs in Child Development: A Study in Nilphamari District, Bangladesh**” submitted to the Department of Population Science and Human Resource Development, University of Rajshahi, Rajshahi, Bangladesh for the award of the Degree of Master of Philosophy is a record of original and independent research work as done by me under the supervision of Dr. Md. Nazrul Islam Mondal, Associate Professor, Department of Population Science and Human Resource Development, University of Rajshahi, Bangladesh. and Dr. Md. Nurul Islan, Professor, Department of Statistics, University of Rajshahi, Rajshahi, Bangladesh.

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***DEDICATED
TO
MY PARENTS***

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June, 2009

Researcher

CONTENTS

TITLE	PAGE NO.
TITLE PAGE	i
ACKNOWLEDGEMENTS	ii
CONTENTS	iii-vi
LIST OF TABLES	vii-viii
ABSTRACT	ix-x
ABBREVIATIONS	xi-xii
CHAPTER ONE: INTRODUCTION	1-21
1.1 Background of the study	1
1.2 Keywords	7
1.2.1 Child	7
1.2.2 Health	7
1.2.3 Height	7
1.2.4 Weight	7
1.2.5 Child Rights	8
1.2.6 Body Mass Index (BMI)	10
1.2.7 Education	10
1.2.8 Household	11
1.2.9 Literacy	11

1.2.10 Urban Area	11
1.2.11 Poor	11
1.3 Importance of the study	11
1.4 Review of Literature	12
1.5 Objective of the study	19
1.6 Layout of the study	20
CHAPTER TWO: DATA AND METHODOLOGY	22-39
2.1 Introduction	22
2.2 Types of study	22
2.3 Area selection of the study	23
2.4 Sampling technique and sample size	23
2.5 Population and Respondents	23
2.6 Sources and types of data	24
2.7 Data collection Methods	24
2.7.1 Preparation of Questionnaire	24
2.7.2 Data Collection	26
2.7.3 Data Processing and Analysis	27
2.7.4 Editing	27
2.7.5 Coding	27
2.7.6 Computerization	27
2.8 Fieldwork	28
2.9 Techniques of Analysis	28
2.10 Contingency Analysis	29

2.11 Logistic Regression Analysis	30
2.12 Interpretation of the Parameters	32
2.13 Computation of Probability (P_i)	34
2.14 Odds Ratio	35
2.15 Backward Regression Analysis	37
2.16 Software and Technical Support of the Study	38
2.17 Limitation of the Study	39
CHAPTER THREE: Background of NGOS	40-63
3.1 Introduction	40
3.2 Association for Social Advancement (ASA)	41
3.3 Bangladesh Rural Improvement Foundation (BRIF)	42
3.4 Bangladesh Rural Advancement Committee (BRAC)	44
3.5 Plan	52
3.6 Rangpur Dinajpur Rural Service (RDRS)	57
CHAPTER FOUR: Background Characteristics of Sample Related to Child and NGOs' Programs	64-72
4.1 Introduction	64
4.2 Child characteristics	65
4.3 Household Characteristics	65
4.4 NGOs Programs on Child Education	66
4.5 NGOs Programs on Child Health	71
CHAPTER FIVE: Child Development through Education	73-86
5.1 Introduction	73

5.2	Child Characteristics	75
5.3	Household Characteristics	77
5.4	Educational Characteristics of Children	81
5.5	Impact on School Attendance	84
CHAPTER SIX: Child Development through Health		87-93
6.1	Introduction	87
6.2	Child Characteristics	87
6.3	Household Characteristics	89
6.4	NGOs Characteristics on Child Health	91
6.5	Impact of some Key Factors on Body mass Index	92
CHAPTER SEVEN: Conclusion		94-97
7.1	Introduction	94
7.2	Summary and Discussions	94
7.3	Findings of the Study	96
7.4	Recommendations	97
BIBLIOGRAPHY		98-102
Questionnaire		103-105

LIST OF TABLES

Table No.	Title of Table	Page No
Table 1.1	Distribution of School Enrollment Rate	4
Table 1.2	Education Programs of BRAC	5
Table 2.1	Table for Odds Ratio Calculation	35
Table 3.1	Working Area at a Glance	55
Table 4.1	Frequency and Percentage Distribution of Child Characteristics	65
Table 4.2	Frequency and Percentage Distribution on Household Characteristics of Children.	67
Table 4.3	Frequency Distribution of NGOs programs on Child Education.	70
Table 4.4	Frequency Distribution of NGOs Programs on Child Health.	71
Table 5.1	Contingency Analysis on Still going to School with Child Characteristics.	76
Table 5.2	Contingency Analysis on Still going to School with Household Characteristics.	78
Table 5.3	Contingency on Still going to School with NGOs Characteristics on Child Education.	82
Table 5.4	Logistic Regression Analysis of Still Going to School on Some Selected Characteristics.	85

Table 6.1	Contingency Analysis on Body Mass Index with Child Characteristic	88
Table 6.2	Contingency Analysis Body Mss index with Household Characteristics	90
Table 6.3	Contingency Analysis on Body Mass Index with NGOs Characteristics on Child Health.	91
Table 6.4	Backward Regression Analysis of Body mass Index on Some Selected Characteristics.	93

ABSTRACT

This Thesis uses data from Nilphamari, a district in the northern part of Bangladesh, where hardcore poverty is a common scenario. The core objective of this study is to examine the impact of some key factors on child development through education and health. To complete the study we have used chi-square test, logistic regression analysis and backward regression analysis. The bivariate analysis explores the association between child development and age, family size, parents' education, parents' occupation, various NGOs' programs on child education and health and so on.

The data collected form a total of 1028 respondents. Among all respondents ,69.70% are still going to school of them 74.47% are going to NGOs school are learning in NGOs school. In our study, we found among the total children 31.80% read in BRAC schools 17.90%, in RDRS schools, and 12.00% in plan school Various NGOs helped 89.30% children among them 44.40%, 27.70% and 17.20% respondents are helped by BRAC, RDRS and Plan respectively. The study result reveal that 64.20% and 65.50% children are helped by financial and educational instrument respectively. Again 60.90% respondents are through helped treatment by various NGOs, 14.00% children or their family use open field latrine, only 0.10% check up their health regularly and 5.60% are suffering from chronic diseases. 92.30% children are playing regularly. 88.10% children are about knowledge of microbes spread by open latrine by NGOs and 84.60% children

have health awareness by NGOs where 6.20%, 39.80%, 24.90% and 13.20% children have health awareness by BRIF, BRAC, RDRS and Plan respectively. 90.90% and 89.40% children are washing hands after toilet and hand washing before taking meal respectively. Also 2.20% and 32.10% children are taking medical facilities by NGOs hospital and government hospitals respectively where 65.70% are going to village doctor for medical services. Family loan has negative significant effect on school attendance that means occurrence of school attendance is (1/10) as likely to occur among the respondents with family loan than the respondents without family loan. NGOs help by educational instruments has positive significant effect on school attendance and the occurrence of still going to school is 3.07 times more likely to occur among the respondents with NGOs help by educational instruments than without NGOs help by educational instruments. NGOs help by treatments has positive significant effect on school attendance and the occurrence of still going to school is 3.99 times more likely to occur among the respondents with NGOs help by treatments than without NGOs help by treatments. Financial help by NGOs has positive significant effect on school attendance and the occurrence of still going to school is 2.24 times more likely to occur among the respondents with financial help by NGOs than without financial help by NGOs. Encouraging by NGOs has positive significant effect on school attendance and the occurrence of still going to school is 4.24 times more likely to occur among the respondents with encourage by NGOs than without encourage by NGOs.

ABBREVIATIONS

ADP	Adolescent Development Program
ASA	Association for Social Advancement
BBS	Bangladesh Bureau of Statistics
BIDS	Bangladesh Institute of Development Studies
BMI	Body Mass Index
BRAC	Bangladesh Rural Advancement Committee
BAPS	BRAC Adolescent Primary School
BRIF	Bangladesh Rural Improvement Foundation
CLC	Child Labor Coalition
CEP	Child Education Program
CFPR	Challenging the Frontiers of Poverty Reduction
EHC	Essential Health Care
ECD	Early Childhood Development
ECDRC	Early Childhood Development Resource Center
EIC	Education for Indigenous Children
ESP	Education Support Program
FIVDB	Friends in Village Development Bangladesh
GPS	Government Primary School
ILO	International Labor Organization
IPEC	International Program for the Elimination of Child Labor
MS Word	Microsoft Word
MNCH	Maternal, Neonatal and Child Health
NCLS	National Child Labor Survey
NGO	Non-Government Organization
OLS	Ordinary Least Square
RDRS	Rangpur Dinajpur Rural Service
SPSS	Statistical Package for Social Sciences
TMSS	Tenghamara Mahila Shabuj Shangha
TUP	Targeting the Ultra Poor
UN	United Nations
UNCRC	United Nations Convention on Rights of Child

UNESCO	United Nations Educational Scientific and Cultural Organization
UNICEF	United Nations Children's Fund
USA	United States of America
WFCL	Worst Forms of Child Labor
WHO	World Health Organization
WTO	World Trade Organization
WASH	Water, Sanitation and Hygiene

CHAPTER-ONE

INTRODUCTION

Chapter One

Introduction

1.1 Background of the Study

Child is the hope and future of a nation. Child is the foundation of a family. It is the continuation of human civilization and bears the testimony of parenthood and generation. Child of today will lead the country tomorrow. So, welfare and progress of the country depend upon all kinds of their development. In Bangladesh a large number of children are not becoming good citizen due to the lack of parental care as well as proper guidance, wealth and education. In all aspects they are being neglected and are deprived of facilities as needed for them. For the purpose of their education, health care training and self-dependence both government organizations (GOs) and non-government organizations (NGOs) should come forward to extend facilities for those children so that they can play an important contribution in the society.

Bangladesh is the 9th most populous country in the world and third densely populated country in the Asia where population density is 867 per square km, (BBS, 2001). It is true that the population in Bangladesh is very high compared to her land and resources. In Bangladesh, out of total population about 42.4 million (31.8%) are child aged (5-17) years and 22.3% are in urban areas where as 77.7% are in rural areas (BBS, 2003a). Improving the wellbeing of children is a moral

duty. It is also a legal and political obligation. Government has signed up to numerous international human rights conventions and political declarations (most notably, the UN Convention on the Rights of the Child (UNCRC) and the UN Millennium Declaration) that require them to uphold children's rights. The UNCRC asserts that every child is entitled to an adequate standard of living, and the right to survive and develop to their full potential. All eight Millennium Development Goals (MDGs) arising from the Millennium Declaration agreed in 2000, are directly or indirectly relevant to children which are following:

- MDG1 commits countries to reduce the number of children who are underweight by half.
- MDG 2 is about extending educational opportunity for all children, with a particular emphasis on girls.
- MDG 3, who are more likely to drop out or not be enrolled in the first place.
- MDG 4 aims to reduce the under-five mortality rate by two-thirds by 2015.
- MDG 5 commitment made as part of MDG 1, as many as 143 million children are still malnourished, mostly in South Asia and sub-Saharan Africa.
- MDG 6 According to current trends, there will actually be more malnourished children in Africa by 2015 than there are today.

There has been greater progress in relation to children's education with a big increase in primary school enrolment in many countries. But by 2015, it is

estimated that 58 countries will still not have met the goal of universal primary education (Save the Children UK, 2008).

Generally Child malnutrition is widespread across the developing world and is now a major barrier to improving children's wellbeing. Economic growth is a necessity but insufficient for improving children's wellbeing. More attention needs to be paid to the issue of equitable growth and development so that the poorest communities can contribute to economic activity and that its benefits are shared more widely – especially with children. Extending educational opportunities for girls and women and enhancing their rights and status are crucial for the wellbeing of children.

Lack of toilet facilities contributes to the spread of parasitic infection among workers. It is particularly dangerous and humiliating for girls who may be forced to choose between public urination- more obvious and awkward for females and urinary retention which can cause severe discomfort and urinary tract infection (HRW, 2005). In Bangladesh, drinking water is often unsafe, sanitary facilities are likely to be harmful and medical facilities are usually insufficient. Though 95.75% rural population are using tube –well water but during working hours the children are disadvantageous to drink purified water(BBS, 2003b).

Out of total children who were eligible for primary education 84% were enrolled and among the total children aged 0-17 years 4.4 millions are orphans (UNICEF, 2007). According to UNICEF (2007) the following feature is given:

Table 1.1: Distribution of School Enrollment Rate

	Enrollment ratio				Still going to school ratio	
	Gross		Net		Net	
	Male	Female	Male	Female	Male	Female
Primary School	107	111	92	95	82	86
Secondary School	49	54	45	51	33	41
	Enrollment rate of Female Compare with Male					
	Gross			Net		
Primary School	104			103		
Secondary School	110			113		

Source: UNICEF (2007)

Out of total children aged 5-14 years 7% are child laborers where 10% male and 4% female, (UNICEF 2006). The source of drinking water is 97.4 % of total population where 97% and 99% are rural and urban population (UNICEF 2003). The gross enrolment rate in the primary level has increased from 75.60% in 1991 to 96.60% in 2000 with a male to female ratio of approximately 51:49. However, the estimates show that approximately 70% of poor household head send their children to primary school, compared to 40% of very poor household head and the children of ethnic minorities are less likely to enroll in schools than those of the majority Bengali population (70.70% compared to 80%). In 2001 primary school enrolment expected to be 19.2 million was actually 17.0 million (www.brac.org).

As mentioned previously, primary education in Bangladesh is theoretically free and therefore, should be accessible to all regardless of economic status. However, average government of Bangladesh (GOB) spending for primary schooling per

child per year is Tk 730 and average parent spending is about Tk 1000 per year (www.brac.org).

Compared to enrolment rates, attendance rates give a much more accurate reflection of how many enrolled students actually attend school. Current attendance rates (adjusted for dropouts) have been placed at somewhere between 61% and 70%. Various government incentives including the Food-for-Education Programme and stipends require 85% attendance and create incentives to inflate attendance. The total feature of BRAC on education sector is given (www.brac.org).

Table 1.2: Education Programs of BRAC

Name of Schools	Year	Numbers
BRAC Primary Schools (BPS)	1985	20,803
BRAC Adolescent Primary Schools (BAPS)	1987	4,421
Urban (BPS)	1992	2,676
Education Support Program	1993	8,250
Subtotal (BPS/BAPS, EIC)	2000	30,000
Education for Indigenous Children (EIC)	2003	2,100
Total Primary Schools		38,250
Name of School	Numbers (Percentages of Female)	
BRAC Primary Schools (BPS)	660,671 (Female 64.30%)	
BRAC Adolescent Primary Schools (BAPS)	129,491 (Female 66.70%)	
Urban (BPS)	88,613 (Female 64.73%)	
Education for Indigenous Children (EIC)	51,702 (Female 56.63%)	
Education Support Program (ESP)	247,500 (Female 71.60%)	
Total	1,177,977 (Female 65.76%)	

Source: (www.brac.org).

After independence particularly after 1980s, the genesis and development of NGOs with institutional framework for poverty reduction and rural development including children health and education is significant. NGOs are implementing various types of programs and those are: income generating, creating self-

employment opportunities, agricultural development, health and sanitation, education, child development through education, health and mental activities etc. (Islam, 2006).

Many NGOs started their different strategies to improve the child health and education in Bangladesh after the liberation. So, the study attempts to examine the performances of the role of NGOs in child developments.

Child is the next father of nation. In Bangladesh, a large number of children are not becoming good citizen due to the lack of proper guardian health care, wealth and education. The present study is designed to make a broad analysis of the nature and dimension of child state in Bangladesh and examine the role of non government organizations (NGOs) in child development by an in-depth assessment. Childhood is the foundation of whole life. But the inverse situation of the formulation of the foundation is intractable problem. The persistence of pass over about childhood of children is reflected as a misleading nation.

1.2 Keywords

1.2.1 Child

The convention defines a child, as a person below the age of 18, unless the laws of a particular country set the legal age for adulthood younger. The committee on the right of the child, the monitoring body for the convention has encouraged states to review the age of majority if it is set below 18 and to increase the level of protection for all children under 18 year (Ahmed, et al., 2007).

1.2.2 Health

The widely accepted definition of health is that given by the (WHO, 1948) in the preamble to its constitution which is as: “Health is a state of complete physical, mental and social well-being and not merely an absence of disease or infirmity”.

1.2.3 Height

Stature is a major indicator of general body size and of bone length. It is important in screening for disease or malnutrition and in the interpretation of weight. Variations from the normal range can have social consequences, in addition to their associations with disease.

1.2.4 Weight

Weight is a composite measure of total body size. It is important in screening for unusual growth, obesity and under nutrition. It is the most commonly recorded improved; however, by attend to details of the measurement technique.

1.2.5 Child Rights

All human rights apply to all boys and girls. While societies may vary in their ideas on childhood and child development one thing that all can agree on is the importance of the well-being of children. It is well recognized everywhere that children need special care and protection for healthy development because of their special needs and vulnerability. The rights of the child as defined by the Child Right Convention (CRC) include four core principles as follows:

Equality – Like adults, children can be subject to discrimination which has a negative impact on a child's opportunities and condition to uphold these. For example:

- right to birth registration
- right to a name and nationality
- right to protection from all forms of abuse, neglect, discrimination and exploitation.

Right to survival and healthy development – Every child has a right to develop to his or her fullest potential, and are entitled to:

- right to basic needs including food, shelter and access to health care
- right to free primary education
- right to childhood – to rest and play and to have friends
- right to protection from economic exploitation or any work that interferes with education or that is hazardous and harmful to health, physical, mental and social development

- right to special assistance for children with special needs for example: child refugees, displaced children child victims of abuse and disabled children.

Participation – All girls and boys, according their age and maturity have the right to participate in making decision that affect them, Boys and girls should be envouraged to take part in decision making at home, in school and in their own community Key participation rights are:

- right to express views and opinions
- right to receive and give information in an accessible and understandable form
- right to be an active member of community – to enjoy own culture, to practice own religion and to use own language
- right to be a member of a group.

Best interest of the child – The two nations of children as competent human beings on the one hand, and as children who are vulnerable and need protection on the other hand, may conflict when deciding what is best for the child This principle provides the solution to this problem: all decisions that affect boys and girls must give primary considerations to them. In determining what is “hest” for them, it is important to seek the views of the affected girls and boys (Haspels and Suriyasarn, 2002). Bangladesh ratified the United Nations Convention on the Rights of the Child on August 3, 1990 and the Convention came into force on September 2 the following year.

1.2.6 Body Mass Index (BMI)

It is a number that shows body weight adjust for height. BMI is calculated by dividing a person's weight in kg by the square of his /her height in meters.

$$\text{BMI} = \frac{\text{Weight in kg}}{(\text{Height in meters})^2}.$$

BMI is the indicator of body fitness that indicates under weight, normal weight, over weight and obesity. National Heart, Lungs and Blood Institution and federal Government of USA (1998) assembles growth specification though BMI that can be exposed as follow:

Under weight	→	< 18.5 BMI (kg/m ²)
Normal weight	→	18.5—24.9BMI (kg/m ²)
Over weight	→	25—29.9 BMI (kg/m ²)
Obesity--1	→	30—34.9 BMI (kg/m ²)
Obesity--2	→	35—39.5 BMI (kg/m ²)
Extreme Obesity	→	40.0 BMI (kg/m ²).

1.2.7 Education

Education is an intrinsic value and must be available for all children through formal schools, whether rural or urban. The quality and content of education must have equal standards regardless of diversities in location, culture and the levels of development particularly a society is embedded in.

1.2.8 Household

Persons, either related or unrelated, living together and taking food from the same kitchen constitute a household. A single person living and eating alone forms 1-person household.

1.2.9 Literacy

It denotes ability to write a letter in any language. Literacy status assessment is made for population 5 years and over, 7 years and over, 15 years and over, and also for population of all ages (BBS, 2005).

1.2.10 Urban Area

It corresponds with area development around a central place having such amenities as metal made roads, improved communication, electricity, gas, water supply, sewerage, sanitation and also having comparatively higher density of population with majority population in non-agriculture occupation.

1.2.11 Poor

When we define poor, we think in terms of income. Income below a certain level but, not everybody with low incomes would be classed as poor.

1.3 Importance of the Study

Child is the future of a nation. Education is the backbone of a nation and healthy life is one of the top most requirements of every success in a life. So, child development means education and health development of a child in this study.

Bangladesh is one of the poorest countries in the world. Most of the people of this country can not fulfill their basic needs due to poverty. Hence, we can not provide necessary requirements for education and health of children. In this situation, many NGOs started their different strategies to improve the child health and education in Bangladesh after liberation. The study attempts to examine the performances of the role of NGOs on child developments.

A few studies that dealt with various aspects of the activities of different NGOs are not sufficient enough to give the entire picture in analyzing the causes beyond success and failure of NGOs on child development. In this circumstance, the study is undoubtedly appropriate one. The outcomes and suggestions begotten from the research may be helpful to the planners and policy makers to tackle various constraints of child development. Also this study plays an important role as a secondary source for next researcher, students and other studies.

1.4 Review of Literature

Many studies have been carried out on child development by individuals as well as by organizations. These studies discussed the different aspects of trends, levels and differentials of child development. A good number of studies have also been done related to the present study in Bangladesh perspective. Only the relevant literatures in the context of the present study are reviewed here.

Asaduzzaman, A. S. M. (2007) has studied that Early Childhood Development (ECD) prepares young children to participate in formal education beginning from

the primary school. ECD activities can be one of the best investments for education and human development. To carry out ECD activities, the Early Childhood Development Resource Centre (ECDRC) has been established at BU-IED with technical and financial support of Plan Bangladesh. The center has worked on initiating innovative models, programme approaches and resource materials in the field of child development. ECDRC operates in partnership with its stakeholders at home and abroad. It provides a forum for the exchange of ideas on child development and will play a supportive role in partner activities. BU-IED Institute of Educational Development Bangladesh Rural Advancement Committee (BRAC) University ECDRC became operational in January 2005. Its principal goal is to become an institutional base for creating and disseminating state-of-the-art knowledge on child development including related research, professional education, learning material development, networking, and policy and advocacy dialogue in Bangladesh and in the region.

Ahmed, M. *et al.* (2007) have studied that Friends in Village Development Bangladesh (FIVDB) is providing primary education in poor rural areas at a cost that compares favorably with the government system and other NGOs. The cost of providing primary education to each child, at the optimal scale of operation, is \$19 for one year and \$115 for the whole course of five-year primary education. Save the Children (SC) USA has adopted the methodology and Child Education Program (CEP) is running six primary schools in their impact area in the Brahmanbaria district. SC-USA is implementing a USAID supported project

aimed at building community, children and schools' preparedness for quality education for which the CEP schools are used as quality demonstration centers. SC-UK/Sweden is planning exploiting of the Community Based Education Information System in government and FIVDB school catchments focusing on inclusion and quality of education. FIVDB is implementing the SUCCEED program in Sylhet Sadar, Zakigonj and Sunamgonj Sadar with funding from USAID. The mission of the program is to bring innovation into the education system that enables all children including those disadvantaged by poverty, ethnicity and disability to be successful learners. SUCCEED has five components: ECD, Early Primary Education (EPE), Education Equity (EE), Communication and Advocacy (C&A), Monitoring and Research (M&R). SUCCEED currently operates 360 pre-schools with 8,046 children. FIVDB has implemented the Hard to Reach programme of the Directorate of Non-Formal Education, supported by UNICEF. It operates 100 centres in urban slums for working children. Moreover, in collaboration with UNICEF, FIVDB started the Urban Slum Children Education Programme in July 2004.

Khanam, R. (2006) in her study on school attendance and school attainment of working children in Bangladesh found that work has a substantial negative effect on child's school attendance and schooling progress measured by schooling-for-age though the detrimental effect of work is relatively lower on schooling progress than school attendance. She also found that parental education has much significant effect on schooling progress than current school enrolment. Father's

education appears to be more significant for school enrolment than mother's education. But mother's education has a stronger effect than father's education on schooling progress. Moreover, her study reveals that the probability of current school enrolment is lower by 8.4% points for male children whose father is day labour relative to the male children from farming household.

Mercer, A. *et al.* (2004) showed a rapid decline in infant mortality among the poorest from 1999–2002 reflects a reduction in neonatal mortality of about 50%. Allowing for some under-reporting and possible misclassification of deaths to the stillbirths category, neonatal mortality is relatively low in the NGOs areas. The lower child and maternal mortality for the NGO areas combined compared with estimates for Bangladesh in recent years, may at least in part be due to high coverage of reproductive and child health services. Other development programs implemented by many of the NGOs could also have contributed. Despite the limited resources available and the lower infant and child mortality already achieved, there appears to be scope for further prevention of deaths particularly those due to birth asphyxia, acute respiratory infection, diarrhoeal disease and accidents.

Varum Gauri (2002) summarized, the extent of evidence of NGOs in Bangladesh, reduced and showed that reduction of poverty is weak or mixed though micro credit program appears to have an impact on vulnerability to shocks and empowerment and the determinants of NGO program location remain

unexplored though there is evidence that the location of development programs is compensatory in some places but not in others. This paper looks at the determinants of NGO program location and the effect of NGOs in Bangladesh on community-level poverty rates.

Rosati and Rossi (2001) in their study on Pakistan and Nicaragua found that Parents' education has a significant negative effect on the probability of falling behind at education attainment. The more the parents are educated higher is the probability that the child is enrolled in the right grade. Mother's education affects more markedly than father's education in the child's performance at school. They also found that for a child working 3 hours the probability of falling behind is 5 points higher than for a child working one hour. Moreover, their study reveals that up to 2.5 hours, one additional hour of work increases the probability is negligible and above for hours the increase is about 2.7 point for each additional hour.

Khandker, S. R. et al. (1998) in their literature evaluating the impact of NGO programs on poverty at the household level in Bangladesh have focused largely on micro credit programs. They estimated the impact of participation in micro credit programs in Bangladesh on labor supply, schooling, household expenditure and assets. They used a "quasi-experimental" survey design to correct for the bias due to unobserved heterogeneity at the individual and village- level, using fixed-effect estimation in a limited information and maximum likelihood framework. They found that credit was a significant determinant of the outcome considered and

that credit provided to women was more likely to have influence on these behavior than that provided to men.

Bhalotra, S. and C. Heady (1998) in their study of rural Pakistan and Ghana found that only girls with mothers who have completed secondary education work less than other girls. In other studies, the education of the parents or the household head decreases the probability of working and increases the probability of working and increases the probability of schooling significantly.

Tzannatos, Z. (1998) in his econometric analysis on Thailand between 1985 and 1992 suggests that work and schooling decisions are significantly related to the education of the parents or the household head. There is a strong inter-generational transfer of human capital are more likely to keep their children in school and less likely to have child workers. He finds that the prime reason for not attending school at a young age appears to be the direct cost of education rather than the need for additional income from child work. He also found that constraints on the household's ability to finance education are significant.

Levison (1998) found that the child's relationship to the household head has a large effect on his/her schooling. If the child is son or daughter of the household head, he/she may be treated differently from other young relatives living with the family. The probability of working might be lower and the probability of attending school might be higher.

Husain, et al. (1998) in a World Bank (WB) study they produced evidences of wide-ranging impacts of micro finance on the condition of micro finance and the condition of the borrowers. They examined the programs of BRAC, Grameen Bank and Bangladesh Rural Development Board (BRDB), a public sector organization. The findings revealed that per capita expenditure increased due to micro finance among the borrowers of all these programs. Household's net worth increased too. A BRAC research examined the impact of poverty in wider dimension. The results showed that 52% of the BRAC member households were below the poverty line while a higher number (69%) of the overall households were lying below the line. The overall findings showed that among the BRAC members there had been gradual improvements in the indicators such as wealth, revenue earning assets, value of house structures, the level of cash earned, per capita expenditure on food and total household expenditure.

Bruntrup, M. et al. (1997) in an empirical studies on micro finance programs of two other large NGOs viz. Proshika and ASA produced similar positive impact. The impact assessment of Proshika conducted in 1998-99 found positive results of its programs in terms of increased income, savings, school enrollment rate, reduction in infant mortality and improvement in gender relations. The impact assessment of ASA's program on its participants also showed positive results indicating an annual growth of 5-7% compared to the control group, increase in food consumption, improvement in health and child education and higher increase in assets.

World Bank (1996) studied the vast networks of NGOs that have developed in Bangladesh and their reports show the experience in poverty alleviation efforts gained by them have created a unique opportunity to push forward the poverty alleviation agenda. The Government while providing the general policy directions for development has recognized its limitations in bringing about sustained improvements in the lives of the poor through its own efforts. The NGOs are now considered to offer the source of a tremendous resource potential to help addressing the vast poverty alleviation needs. A review of the collaboration indicates three major types of arrangements: (a) sub contract; (b) joint implementation and (c) Government as financier of NGO projects. The most common collaboration is the sub-contraction arrangement where Government agencies enter into contracts with NGOs. Joint implementation on a partnership arrangement where NGOs are involved either as co-financier or joint executing agency with the Government is least practiced. In the area of micro-credit there is an emerging trend for the Government to finance NGOs credit operations.

1.5 Objectives of Study

The contributions of NGOs in child development through education and health have been assessed on the basis of the response of the respondents who received different facilities from NGOs. The main objective of the study is to provide an evidence based information by analyzing nature and patterns present situation of child and initiatives of NGOs. The others specific objectives are given by:

- i) To identify the factors which are associated with child education and child health.
- ii) To examine the impacts of some key factors on child education.
- iii) To examine the impacts of some key factors on child health and
- iv) To provide some recommendations to policy makers in context of child development.

1.6 Layout of the Study

The study has been organized into seven chapters. This section contains an overview of this thesis.

Chapter One This chapter concentrates on the background of the study, a brief review of literature, objectives and importance of the study.

Chapter Two In this chapter we have discussed about the methodology and data sources of the study. Also the statistical software that are used to complete this study mentioned briefly in this chapter.

Chapter Three In this chapter we have discussed the background of various NGOs programs.

Chapter Four In this chapter we have discussed the various characteristics by frequency distribution of the respondents.

- Chapter Five** In this chapter we have discussed the various characteristics by bivariate frequency distribution and used chi-square test statistic to test the association of between various characteristics. Also we used logistic regression analysis to find the impact of various characteristics on still going to school.
- Chapter Six** In this chapter we have discussed the various characteristics by bivariate frequency distribution and used chi-square test statistic to test the association of between various characteristics. Also we used backward regression analysis to find the impact of various characteristics on health of children.
- Chapter Seven** Summary of the study, conclusion and policy implications have discussed in the final chapter.

CHAPTER-TWO

DATA AND METHODOLOGY

Chapter Two

Data and Methodology

2.1 Introduction

Research methodology is the philosophy of research to systematically solve the problems. In this methodology, a researcher studies the various steps that are generally adopted by him in studying his research problem along with the logic behind them. It is necessary for the researcher to understand not only the research methodology but also consider the logic behind the methods which is used in the context of the research study and explain the research is conducted. The present chapter is confined to indicate a brief description of the selected population, data i.e source of data, sample design, development of questionnaire, fieldworks and data processing and background characteristics, analytical methodology and all other issues relevant to the study.

2.2 Type of the Study

In reality the non experimental designs are applied by various procedures which are called research strategies. Depending on the application of research strategies, there are various non experimental research designs such as i) Case study; ii) Survey; iii) Cross-sectional study; iv) Longitudinal study; v) Content analysis and vi) Ethnographic research etc. Basis on the above procedure the present study may consider as cross-sectional study.

2.3 Area Selection of the Study

We have selected Nilphamari District of 1580.85 square kilometres as our study area. It has boundaries on the north by India, on the east by Lalmonirhat and Rangpur Districts, on the South by Rangpur and Dinajpur Districts and on the west by Panchagarh and Dinajpur Districts.

Nilphamari District consists of 6 upazilas, 4 municipalities, 42 wards, 65 mahallahs, 62 union parishads, 390 mouzas and 370 villages. The upazilas are Dimla, Domar, Jaldhaka, Kishoregonj, Nilphamari Sadar and Saidpur. Population 1550686, male 51.03%, female 48.90%, Muslim 82.64%, Hindu 17.10%, Christian 0.07% and others 0.10%.

The main occupations of this district are agriculture (45.28%), agriculture labor (27.80%), wage labor (3.42%), business (8.65%), service (6.07%) and others (8.77%) (Wikipedia, 2006).

2.4 Sampling Technique and Sample Size

This research was conducted to observe the present state of children. For this by using purposive sampling technique 1028 respondents were selected as sample.

2.5 Population and Respondents

In statistics, population is an aggregate of the elements possessing certain characteristics of interest in my particular investigation but in demography population means the human beings. Here in this study, the child of age 5-17 years in Nilphamari district were the selected population i.e the unit of study with

which this research is really made. Respondent means from which the data were collected. From each household the children aged 5-17 years old were considered as respondents in this present study.

2.6 Sources and Types of Data

The sources of data are from where data is obtained. According to nature, the source of data can be two types such as primary source and secondary source. When the data are collected from the specific person(s) or actual situation is called primary source. On the other hand, in a study various types of documents are used as secondary source. In this present study both sources were used.

According to the source, there are two types of data such as i) Primary data and ii) Secondary data. The data are collected from primary source is called primary data. The data are obtained from secondary source is called secondary data. In this present study, both types of data are used.

2.7 Data Collection Methods

Data collection methods means by which and by how the data were obtained from the respondents. In this the required steps are following:

2.7.1 Preparation of Questionnaire

According to the goal of this research problem a questionnaire was made. Data has been collected through individual questionnaire. The questionnaire was designed considering the following characteristics:

- Number of questions in the questionnaire should be limited;
- A respondent should adequately be assumed that his identity will not be against his interest;
- Avoid long and confusing questions and formulate simple and short question;
- Start with easy questions then slowly put the difficult ones.

To avoid unnecessary trouble and hazardous situation pre-testing of the schedule was done and modification of the contents of the schedule was made in the light of pre-testing. A draft questionnaire was first prepared and pre-testing of the same was completed. It was then finalized for field survey by eliminating the anomalous and inconsistencies present in the draft questionnaire. Questions are arranged in logical sequence and all questions relating to one aspect are grouped under one sub-head. Most of the questions are close-ended and the answers chosen by the respondents were indicated by the tick mark. Some open-ended questions are included to find out the opinions of the respondents with having space provided for writing in answers. Considering the difficulties of analysis of open-ended questions, we kept the number of open-ended to minimum. While designing the questionnaire, attention was given to the wording of the questions so that the respondents found it simple and understand easily. In certain situation local dialect of some terminologies are used.

2.7.2 Data Collection

The data should be collected keeping in view the objectives of the study. The editing of the completed questionnaires helped in amending and recording errors or eliminating data that are obviously erroneous and inconsistent. All kinds of mistakes have been corrected where it was found in questionnaires and all answers have been observed carefully. As a result there is no irrelevant information. The tendency should not collect too many data, but the important one and some of which are never subsequently examined and analyzed. In this survey the method of direct interview was used. The enumerators were mainly responsible to collect information and recorded them properly. Attention was given to record factual and true statement made by the respondents.

In any survey enumerator's role is the most significant with respect to coverage and reliability of data collection. The success and failure of the enumerators in eliciting relevant responses are largely and exclusively dependent on their efficiency, capability and responsibility. In this survey 6 enumerations are in 3 groups. A wide discussion about the coverage and contents was made with the enumerators. They were given necessary instruction regarding ways of collecting data and in the art of putting questions in such fact flu way that maximum responses and reasonable accurate information could be obtained under all circumstances. All concepts and definitions used were clearly explained and information actually to be collected was vividly shown to the enumerators by

users of clear illustration and direct interview. In order to obtain ready solutions to the problem, which had been faced during enumeration, the enumerators were advised to contact with me, so that I could solve the problems with the consolation of my supervisor.

2.7.3 Data Processing and Analysis

The easiest procedure of analyzing the data is to use computer program. At present nobody thinks to analyze the data without a suitable computer program. No other alternative is available to analyze the data quickly, easily and correctly. So, we have selected a suitable computer program for data entry and analysis. For the data processing and analysis following stages are followed:

2.7.4 Editing

The data are edited rigorously to make collection of any existing inconsistencies in data and to minimize non-sampling error of the study. After editing the questionnaires have been ready for coding.

2.7.5 Coding

After editing the questionnaire the data were coded according to code plan. After the completion of coding, the data are ready for processing in the computer.

2.7.6 Computerization

Edited and coded data are next processed in the computer. Entire computerization of data has been performed by a computer package named SPSS (Statistical Package for Social Sciences) for windows version 11.5. The convenient

program for data analysis for social sciences Microsoft Excel and Microsoft Word are used for completing the research. To analyze the data all the qualitative variables were coded.

2.8 Fieldwork

In November 2006 we have started our fieldwork for the collection of data. Fieldwork started on November 27, 2006 and was completed on March 30, 2006.

2.9 Technique of Analysis

In this study for assessment of the impact of some key factors on school attendance and health of children, contingency and multivariate analyses were undertaken. When we examine each independent variable individually, it can only provide a preliminary idea of how important each variable is by itself. So, the relative importance of all the variables has to be examined simultaneously by multivariate analysis. Multivariate analysis such as logistic regression analysis and backward regression analysis were performed to assess main effects of the independent variables.

As there has been a criticism over the use of school enrolment or attendance as an appropriate measure of potential harm of child on education, this study also uses body mass index to measure health status.

2.10 Contingency Analysis

In this section, we present contingency analysis, which is designed to test any association between different phenomenous that could useful in the socio-economic condition of the child labour. For contingency analysis, we assume the hypothesis of independence or homogeneity as the null hypothesis (Gupta and Kapoor, 1994). The expected frequency under the hypothesis is calculated as:

$$E_{ij} = \frac{O_i \times O_j}{N}$$

where, O_i = number of elderly at the i th row of respective contingency table.

O_j = number of elderly at the j th column of respective contingency table

N = total number of elderly.

All the contingency tables are prepared on the basis of classification of variables. From each contingency table examination of association between component and the various segment of the component are made by computing chi—square using the formula given by:

$$\chi^2 = \sum_{ij} \frac{O_{ij}^2}{E_{ij}} - N$$

which follows chi-square distribution with $(r-1) \times (c-1)$ degrees of freedom,

where, O_{ij} = The observed number of elders in (i, j) th cell

E_{ij} = The expected number of elders in (i,j) th cell

r = number of rows

c = number of columns.

2.11 Logistic Regression Analysis

There are a variety of multivariate techniques that can be used to predict a binary dependent variable from a set of independent variables. Multiple regression analysis and discriminant analysis are two related techniques but these techniques are applicable only when the dependent and independent variables are measured in interval scale under the assumption that they are distributed normally with equal variances. However, in most of applications dependent variable may be dichotomous and one or more explanatory variables are qualitative or measured in nominal or ordinal scales and the assumption of normality is violated. To overcome this problem a very interesting and appropriate technique is the logistic regression method was illustrated by Wolker and Duncun (1967) and Cox himself (1970) More recently Lee (1980) and Fox (1984) have further illustrated the Cox's model.

The logistic regression method does not require any distributional assumption. This regression is useful when the dependent variable is dichotomous. Since it does not require any distributional assumptions, unlike many other multivariate techniques (i.e. the variables are normally distributed with equal variances), it can appropriately handle situations in which the independent variables are qualitative or measured in nominal and ordinal scale. The logistic regression model can be used not only to identify risk factors but also to predict the probability of success. This model expresses a qualitative dependent variable as a function of several independent variables both qualitative and quantitative (Fox, 1984).

Let Y_i denote the dichotomous dependent variable for the i -th observation and

$Y_i = y_i = 1$, if the i -th individual is a success and $Y_i = y_i = 0$, if the i -th individual is a failure.

$$\text{So that, } P_i = E \{Y_i = 1 / X_i\} = \frac{1}{1 + e^{-(\beta_0 + \beta_i X_i)}} \dots\dots\dots (2.11.1)$$

where, X_i is explanatory variable and

$$\begin{aligned} 1 - P_i = E \{Y_i = 0 | X_i\} &= 1 - \frac{1}{1 + e^{-(\beta_0 + \beta_i X_i)}} \\ &= \frac{e^{-(\beta_0 + \beta_i X_i)}}{1 + e^{-(\beta_0 + \beta_i X_i)}} \\ &= \frac{1}{1 + e^{(\beta_0 + \beta_i X_i)}} \dots\dots\dots (2.11.2) \end{aligned}$$

Therefore we can write

$$\frac{P_i}{1 - P_i} = e^{(\beta_0 + \beta_i X_i)} \dots\dots\dots (2.11.3)$$

Now if we take natural log of the equation (2.11.3) we obtain

$$L_i = \log_e \left(\frac{P_i}{1 - P_i} \right) = \beta_0 + \beta_i X_i \dots\dots\dots (2.11.4)$$

Here, $\frac{P_i}{1-P_i}$ given in (2.11.3) is simply the odds ratio and L_i given in (2.11.4) is known as log-odds.

Instead of single explanatory variable, we can count two or more explanatory variables. Let $X_{i1}, X_{i2} \dots X_{ik}$ the vector of k independent explanatory variables for the i -th response. The logarithm of the ratio P_i and $(1 - P_i)$ gives the linear function of X_{ij} and the model (2.11.4) becomes.

$$L_i = \log \left(\frac{P_i}{1-P_i} \right) = \sum_{j=0}^k \beta_j \cdot X_{ij} \dots\dots\dots (2.11.5)$$

Where we consider $X_{i0} = 1$ and β_j is the parameter relating to X_{ij}

The function (2.11.5) is a linear function of both the variables X and the parameter β . L_i is called the logit and hence the model (2.11.5) is called logistic regression model.

2.12 Interpretation of the Parameters

Interpretation of the Parameters in logistic model is not so straight forward as in linear regression model. So, it is relevant to present a little discussion about it.

Since the logit transformation $L_i = \log_e \left(\frac{P_i}{1-P_i} \right)$ is linear in parameters, we can

interpret the parameters using arguments of linear regression. Thus the interpretation may be described as follows:

We have, $P_i = \frac{e^{\beta_0 + \beta_1 X_1 + \dots + \beta_k X_k}}{1 + e^{\beta_0 + \beta_1 X_1 + \dots + \beta_k X_k}}$ is a linear in parameter,

$$\text{i.e., } L_i = \log_e \left(\frac{P_i}{1 - P_i} \right) = \beta_0 + \beta_1 X_1 + \dots + \beta_k X_k \dots \dots \dots (2.11.6)$$

So, arguing analogously as in the case of linear model we can say that β_j

($j=1,2,\dots$) represent the rate of change in $\log_e \left(\frac{P_i}{1 - P_i} \right)$ for one unit change in

X_j (other variables remaining constant).

The interpretation of the parameter in logistic regression has another interesting aspect. In fact, this is the proper interpretation for the parameters of qualitative variable coefficient. To describe this, we first consider that the independent variable (X_j) is dichotomous. This case is not only simplest but also it gives the conceptual foundation for all other situations. The description is given below.

$$\text{We have } \log_e \left(\frac{P_i}{1 - P_i} \right) = \beta_0 + \beta_1 X_1 + \dots + \beta_j X_j + \dots + \beta_k X_k$$

Now if W_j is a dichotomous variable taking values 0 and 1, then the odds ration 'O' (say) for $X_j = 1$ against $X_j = 0$ is (keeping all other X's fixed)

$$\begin{aligned}
 & \frac{P_i(Y_i = 1 | X, X_j = 1)}{1 - P_i(Y_i = 1 | X, X_j = 1)} \\
 & \frac{P_i(Y_i = 1 | X, X_j = 0)}{1 - P_i(Y_i = 1 | X, X_j = 0)} \\
 & = \frac{e^{\beta_0 + \beta_1 X_1 + \dots + \beta_k X_k}}{e^{\beta_0 + \beta_1 X_1 + \dots + \beta_k X_k}} \\
 & \Rightarrow \log_e O = \beta_j
 \end{aligned}$$

So, we can directly estimate the coefficients of a logistic regression model as $\log_e O$ and hence can interpret. If a qualitative independent variable has m categories, we introduce only $(m-1)$ dummy variables and the remaining one is taken as reference category.

2.13 Computation of Probability (P_i)

We can compute the probability p_i from the estimated odds ratio. This calculation is very simple. Given a data set of X variables in equation (2.11.5), where of course β 's are estimated from fitted model, then we have

$$\log_e \frac{P_i}{1 - P_i} = c \text{ (Some constant).}$$

$$\Rightarrow \frac{\hat{p}_i}{1-\hat{p}_i} = e^c \dots\dots\dots(2.11.7)$$

From this equation (2.11.7) p_i can be computed easily.

2.14 Odds Ratio

Goodman and Kruskal (1954, 1959) present a great many measures of association for 2×2 table that are not function of X^2 and give their statistical properties in their research work named odds ratio. The odds ratio is a way of comparing whether the probability of a certain event is the same for two groups. The odds ratio takes values between zero and infinity. One is the natural value and means that there is no difference between the groups two, if the opposite is true the odds ratio of 1 implies that the event is equally in both groups. An odds ratio is greater than one implies that the event is more likely in the first group. An odd ratio is less than one implies that the event is less likely in the first group.

For more details, let us consider the following typical 2×2 tables;

Table 2.1: 2×2 Tables for Odds Ratio Calculation

	X-	X+	Total
Y-	a	b	a+b
Y+	c	d	c+d
Total	a+c	b+d	a+b+c+d

In the above table, the odds for row Y- are a/b . The odds for row Y+ are c/d . The odds ratio (OR) is simply the ratio of the two odds given by

$OR = \frac{a/b}{c/d}$ which can be simplified as $OR = \frac{ab}{cd}$ hence it is clear that if the odds are

the same in each row, then the odds ratio is 1.

The odds themselves are also a ratio. To explain this will take an example with probability. Let's say that the probability of success is $p = 0.8$, then the probability of failure is $q = 1 - p = 0.2$, then the odds of success is defined as 'odds (success)' = $p/q = 0.8/0.2 = 4$, that is the odds of success are 4 to 1. Then the odds of failure would be odds (failure)' = $q/p = 0.2 / 0.8 = 0.25$, that is the odds of failure are 1 to 4. Next, let's compute the odds ratio by $OR = \text{odds (success)}/\text{odds (failure)} = 4/0.25 = 16$, the interpretation of this odds ratio would be that the odds of success are 16 times than for failure. Now if we had formed the odds ratio the other way around with odds of failure in the numerator, we would have gotten something like this, $OR = \text{odds (failure)}/\text{odds (success)} = 0.25/4 = 0.0625$, interestingly enough, the interpretation of this odds ratio is nearly the same as the one above. Here the interpretation is that the odds of failure are one-sixteenth the odds of success. In fact, if we take the reciprocal of the first odds ratio we get $1/16 = 0.0625$.

The study uses two dependent variables one is for school attendance; the other is for body mass index. School attendance is a dichotomous variable taking the value 1, if the child is still going to school and 0, if otherwise. Body mass index was used as continuous dependent variables.

2.15 Backward Regression Analysis

Backward Regression is a variable selection procedure in which all variables are entered into the equation and then sequentially removed. The variable with the smallest partial correlation with the dependent variable is considered first for removal. If it meets the criterion for elimination, it is removed. After the first variable is removed, the variable remaining in the equation with the smallest partial correlation is considered next. The procedure stops when there are no variables in the equation that satisfy the removal criteria. The significant values in output are based on fitting a single model. Therefore, the significant values are generally invalid when a backward method is used. All variables must pass the tolerance criterion to be entered in the equation, regardless of the entry method specified. The default tolerance level is 0.0001. Also, a variable is not entered if it would cause the tolerance of another variable already in the model to drop below the tolerance criterion. All independent variables selected are added to a single regression model.

2.16 Software and Technical Support of the Study

Data used in this study contain information of 1028 children. Since this is large set of data, a suitable technological support is necessary for performing these analyses. In this study entire analysis is done in personal computer which is now one of the most effective and wonderful technological inventions.

Different software has been used to complete this study. The entire analysis of the study is done by a well-known statistical package named SPSS (Statistical Package for Social Sciences) for windows (version 11.5) SPSS can take data from almost any type of the file and use them to generate tabulated reports charts and plots of distributions and trends, descriptive statistics and complex analysis. Survey data is input in the SPSS for windows format. Hence, it is found to be much easier to read the data through this software. Different variables are computed as well as recorded with it. Some first hand analyses such as frequencies, cross tabulations construction of different tables, descriptive analysis chi-sequences, tests are performed through this software. The binary logistic regression procedure builds logistic regression models which used to analyze the complex relationships of the study is also performed by SPSS (version 11.5) Microsoft Excel (2005) is used to calculate body mass index. Microsoft Word (2005) is used to prepare all the outputs that are presented in this study.

2.17 Limitations of the Study

There are some limitations in conducting the study. Some of these are as follows:

- i) The time and the cost were insufficient for this study and only the children aged 5-17 years were considered. i.e., the category study only and neither work nor study was ignored.
- ii) Many respondents did not know their exact age and gave an inappropriate age on which we had to depend. As a result age of the respondent may be subject to error.
- iii) In many cases they did not understand about the aim of the study and they did not give interview before clearance about it. For this reason, we needed huge time to get desirable information.
- iv) The survey data are not seasonally adjusted because it was assumed that all economic activities were performed regularly or uniformly throughout the year.
- v) Data on age recording and digit preference are as existing without smoothing.
- vi) As our respondents were children, it was very difficult for them to provide information about household income and expenditure.

CHAPTER-THREE
BACKGROUND OF NGOs

Chapter Three

Background of NGOs

3.1 Introduction

Bangladesh is one of the poorest and most densely populated countries of the world. It is also one of the countries most prone to natural disasters, notably devastating annual floods and frequent typhoons that account for hundreds of thousands of deaths and billions of pounds of crop and property damage. The country is largely surrounded by India and is crossed by three major rivers and their tributaries which have a significant effect on the landscape creating high soil fertility favorable for agriculture.

Most Bangladeshi's earn their living from rice and jute farming, and garment production also increased through the 1990's. Basic education facilities now exist in most regions of the country since 1992 when compulsory primary education was introduced. However, the supply of teachers, basic materials, and other technical resources is still limited.

Many families that live on marginal lands in structures that is unsafe. The most serious problems that families face are unsafe drinking water and a lack of sanitary facilities. Nearly 80% of all preventable illnesses in Bangladesh are due to water related diseases ([www. plan-Bangladesh. org](http://www.plan-Bangladesh.org)) severe malnutrition is common.

NGOs work for in these above reasons, Bangladesh can develop its child by improving its Education and Health. This type of work of child development can be done by government or NGOs or institutions and individuals. Since the task accelerating the works of Child Development is very important so it is needed to know the contribution of all the government and non-government organizations. But with our limited scope, an attempt has been made to study the role of NGOs.

3.2 Association for Social Advancement (ASA)

ASA which means “Hope” in several South Asian languages is non-profit women’s organization committed to end all forms of violence against women and enhance the status of South Asian women living in the metropolitan Washington DC area. (South Asia includes Bangladesh, India, Pakistan, Nepal, Sri Lanka and Bhutan.) ASA founded in 1989 is the only organization in the Washington, DC area dedicated to providing culturally specific, multi-lingual support and referral services to women of South Asian descent.

ASA is a volunteer organization composed of members who are committed to ending violence and abuse and enhancing the status of South Asian women living in the U. S. ASA volunteers do not give professional advice but offer sympathetic, nonjudgmental support and provide information and resources to enable women to make their own

decision. Women can talk about their situations and discuss their options without fear of criticism or shame.

- i) ASA's Regular Activities
- ii) Monthly Organizational Meetings
- iii) Educational Seminars and Workshops
- iv) Fundraising and Networking
- v) Annual Volunteer and Advocates' Training and Activities
- vi) Support group for survivors (current and past ASA)

3.3 Bangladesh Rural Improvement Foundation (BRIF)

BRIF is an attempt to make contribution for eradication of extreme hunger and poverty, elimination of all types of discrimination and violence against women, disadvantages community of Northwest region district of Bangladesh, emergence in 1984 as non-Government, non-political and voluntary organization tempered with the philanthropic efforts of some like minded social worker organized under of Mr. Shah Ahsan Habib a professional social worker Singing song of good reputation and trusteeship relations are the potential belongings of BRIF that people reckon it as their own organization.

BRIF has its best singing song of good reputation and trusteeship relation with the project participants/ development partners, different

stakeholders, especially with the Local Government and Government line department, patrons, volunteers and donors community across the nation and trans boundary.

Vision

Peace, prosperity and just society where all people live with full of dignity

Mission

Establishment of human rights, equal dignity and quality of (like and) livelihoods of all segments of people especially for the poor vulnerable through introducing and implementing innovative and community consultative multi dimensional development approaches, community based institution building, making congenial society and affordable capacity of poor vulnerable by means of providing pragmatic and procedural assistance, issue based net working, allies making and over sighting

Legal Status

BRIF is registered with following:

- i) Directorate of Social welfare Registration number: 395/88
- ii) NGO Affairs Bureau Registration number: 907/95

Principles of BRIF

- Service to men kind and prioritize to the poor vulnerable
- Capacity building of community based institutions.

- Addressing innovative ideas.

Norms and values

- Gender friendly and advancing women and men.
- Solidarity for greater interest of poorer class and respect to freedom fights.
- Participatory and integrated approach of development
- Good Governances in practice.
- Equal dignity to all.

3.4 Bangladesh Rural Advancement Committee (BRAC)

Founded in the aftermath of Bangladesh's War of Liberation, BRAC began as a small scale relief and rehabilitation project in 1972, aimed at helping people overcome the devastation and trauma of the war. BRAC soon redirected its efforts toward long-term issues of poverty alleviation and empowerment of the poor.

Today, BRAC has emerged as the range and scope of its programs and the world, in terms of the range and scope of its programs and the size of its workforce. BRAC's pioneering holistic model of development includes programs in health, education, social and economic development as well as human rights and legal services.

BRAC now reaches an estimated 110 million people across 64 districts of Bangladesh and in recent years it has set new standards in south-south cooperation, taking its range of interventions to several countries in Asia and Africa.

Vision

Just, enlightened, healthy and democratic societies free from hunger, poverty, environmental degradation and all forms of exploitation based on age, sex religion and ethnicity.

Mission

- Work with poor, especially women and children
- Engage in multifaceted development interventions
- Strive to promote positive changes in quality of life
- Work towards attaining socially, financially and environmentally sustainable programmes
- Actively promote human rights, dignity and gender equity
- Help shape national and global policies on poverty reduction and social progress
- Foster the development of human potential
- Offer professional development opportunities to BRAC staff. and encourage commitment to the goals and values of the organization

Economic Development

Microfinance

- i) BRAC started its microfinance program in Bangladesh in 1974. Today it is the largest poverty focused microfinance provider in the world with 8 million members and \$ 630 million in outstanding loan.
- ii) The microfinance program has achieved this success by
 - a) Implementing a model that focuses on building the structure and system for sustainable microfinance with the ability to reach scale.
 - b) Organizing the poor in a manner that enables them to form a compact for empowerment and growth through microfinance.
- iii) recognizing the heterogeneity amongst the poor, BRAC Microfinance program has developed specific products and services. These are-
 - a) CFPR (Challenging the Frontiers of Poverty Reduction). TUP (Targeting the Ultra Poor.) which is targeted at the extreme poor.
 - b) Dabi which is targeted at the moderate poor women.

- c) Unnoti which offers loan products for smaller and marginal farmers and agro entrepreneurs; and
 - d) Progoti which supports the growth of micro entrepreneurship critical for sustainable employment generation and poverty reduction.
 - iv) BRAC's microfinance program also provides other services. They are-
 - a) Customized products for different socially excluded and vulnerable groups of the population such as the ultra poor, adolescent girls and retired state owned enterprise workers.
 - b) Value added economic and social services in the form of skills development, market information and linkages, sub sector development and technology transfer so that the poor can improve the productivity of their businesses.
 - v) Members of BRAC microfinance groups also receive human rights and legal education so that they can be legally empowered.
- **Microenterprise Development Service and Programme Support Enterprises**
 - i) To maximize the return form their investment, BRAC helps low-income members of microfinance programs to be productively engaged in six sectors; poultry, fishery, livestock, sericulture, agriculture and agro

forestry through integrated services including training in improved techniques, provision of improved breeds and technologies, continuous technical assistance and support and marketing of finished goods.

ii) BRAC has also developed a range of enterprises of its own to provide support to the micro-enterprises through backward and forward linkages like providing quality day old chicks to the poultry rearers and linking the vegetable producers with the international markets.

- **Challenging the Frontiers of Poverty Reduction: Targeting the Ultra Poor (CFPR-TUP)**

i) Initiated in 2002, BRAC; Ultra Poor Programme is specifically designed to meet the needs of Ultra poor women who are too poor to access or benefit from traditional development interventions such as microfinance.

ii) The program has two main approaches a grant based approach for specially targeted Ultra poor and a grant plus loan based approach for other targeted ultra Poor.

Education

- **Primary Education**

- i) 38,250 one-room primary schools presently impart education to 1.17 million children. 3.80 million students have already graduated from these schools.
- ii) These schools enrol children often deprived of the option of continuing schooling due to poor economic backgrounds, ethnic backgrounds, disabilities etc.
- iii) The schools employ local women as teachers and above 60% of the students are girls
- iv) Pre-primary intervention through 24.750 pre-primary schools, prepare children for government or non government primary schools.
- v) Parents and community are frequently consulted to bring improvements in the schools.

- **Adolescent Development Program (ADP)**

Kishori Kendro (adolescent girls centre) and special life skill courses for both adolescent boys and girls at the village level provide scope for socialization, give access to reading materials, and develop leadership skills. There are 8,772 ADP centers all over the country.

- **Government of Bangladesh Partnership Unit**

In view of an increasing interdependence between BRAC and the government, particularly in primary and secondary Education, BRAC has established this unit to strengthen the relationship towards a better education system in Bangladesh. As of today BRAC has been working with 18,800 government primary schools (GPS)/registered non-government primary schools. BRAC also runs 43 government community schools and is working to increasing community participation.

- **Post Primary Basic and Continuing Education**

- i) Post primary basic education intervention develops the capacity of rural secondary school teachers in core subject areas and the school management in their efficiency through training and workshops.

- ii) This intervention also works to increase the self-esteem among students by engaging them in co and extra curricular activities that again contribute towards improving the quality of education.

- iii) The multi purpose community learning centers (*Gonokendro*). Provide continued learning and Information Technology (IT) facilities for all of the people in the community with minimum education and foster community contribution in spreading education. In co-

operation with the Directorate of Youth these centers also provide training on employable skills. There are now 1,854 learning centres with 762,407 (female 49.31%) members. 520 centres are separated by rickshaws/vans based mobile libraries to reach women. The number of Gonokendros with IT facilities now comes to 800.

- **Essential Health Care (EHC)**

- i) BRAC offers preventive, curative and reproductive health services to more than 100 million people in rural Bangladesh and urban slums.

- ii) A cadre of 78,000 trained health volunteers (Shasthya Shebika) makes door-to-door visits to spread awareness about basic health and hygiene issues and treat common diseases. More than 6,000 trained health workers (Shasthya Kormi) directly supervise the work of Shasthya Shebika, Conduct health forums and provide ante natal care services.

- **Maternal, Neonatal and Child Health (MNCH)**

- i) Manoshi is a community based program earned to reduce maternal, neonatal and child mortality and morbidity in urban slums of 6 City Corporations and some metropolitan areas through development and delivery of integrated package of maternal, neonatal and child health care activities.

ii) MNCH-Rural program is being implemented in Nilphamari, Rangpur, Gaibandha and Mymensingh districts offering integrated maternal, neonatal and child health services and will be expanded in other rural areas of the country.

- **Water, Sanitation and Hygiene (WASH)**

WASH, an integrated initiative with the government, intends to ensure improved water supplies and sanitation facilities in individual households, schools and communities, promote sustainable safe hygiene practices to contribute to achievement of the MDG for water and sanitation by implementing the programme at all levels involving different stakeholders and corporate. WASH programme will ensure access to sanitation services for 17.5 million people living in 150 upazilas, hygiene education for 37.5 million people and safe water services for 8.5 million people in the rural areas of Bangladesh.

3.5 Plan

Plan was founded in 1937. Read the story that led us to become one of the world's largest development organizations working at grass-roots levels to improve children's lives in 49 countries. Plan exists because millions of children live in conditions of extreme poverty across the world and we can do something to help. Plan does this by working with children, their families and the wider community to help them achieve

positive change in their own lives. For more than 60 years we have stood for the rights of children and helped millions of children to have the opportunity to contribute to their societies in a positive way.

Plan has long recognized that children are not passive recipients of aid. We believe that long-term improvements and change can only be sustained if children are development actors: they participate, voice their opinions are listened to and taken seriously because their opinions count.

Children in the communities we work with are often involved directly in planning, implementing and monitoring projects which benefit themselves their families and their communities be a part of it, sponsor a child and support work to make poverty history. Sponsorship supports long-term community development projects helping continue its vital work.

Plan's Mission

Plan aims to achieve lasting improvements in the quality of life of deprived children in developing countries through a process that unites people across cultures and add meaning and value to their lives, by:

i) enabling deprived children their families and their families and their communities to meet their basic needs and to increase their ability to participate and benefit from their societies.

ii) building relationships to increase understanding and unity among peoples of different cultures and countries.

iii) Promoting the rights and interests of the world's children

Plan's vision

Plan's Vision is of a world in which all children realize their full potential in societies which respect people's rights and dignity.

Product and Services

Plan's work is broadly based around **five key areas:**

Education

All children, young people and adults deserve access to learning and life skills that enable them to realize their potential.

Health

Everyone has the right to grow up healthy.

Habitat

Improving living conditions to provide a safe environment for all.

Livelihood

Working out ways for families to improve their income.

Building relationships

Creating a worldwide community working improves children's lives.

Jaldhaka Program Unit of Plan Bangladesh

Jaldhaka is one of the Upazilla of Nilphamari District in Bangladesh, situated in the north. The climate is moderate, throughout the Summer and winter temperature sometimes reaches to extreme. The main occupation is agriculture. Most people sell labors in agriculture sector. In a year 3-4 months day laborers remain unemployed. As regular phenomena, women and children are victims of food crisis. The poorer sections have less access to development initiatives and decision making process. Due to ignorance, poor people show reluctance to participate in development initiatives through collective effort. Social issues like early marriage and dowry are prominent.

To address the above situation Jaldhaka Program Unit (PU) started its activities in January 1996.

Table 3.1: Working Area at a Glance

Area	303 sq kilometer
Union	Koimari, Khutamara, Mirgonj
Total population	Koimari: 7000 Khutamara: 7071 Murganj: 5301
Total Sponsored children	6000
Communiyt Based Organization	22
Children Organizations	22
Partners	06

Development Education and Awareness

Building awareness on CRC and other development needs & opportunity, matches with their situation & context to enable them to take collective action for development.

Pre-School

5-6 years old children participate within a learning environment for schooling and to develop physical, mental, social and cognitive areas.

School Quality Improvement/ Model School

Demonstration of modern teaching learning pedagogy for strengthening mainstream education system.

Human Resources Development

Skill development of human resources in connection of service providers and capacity building of community people to manage health program.

Water and Environmental Sanitation

- a. Support Bangladesh Government to achieve millennium development goal through increasing awareness and transferring technology and skill of low cost latrine model.
- b. Capacity enhancement of Local Government and community to manage program.

Integrated Nutrition Project

- a. Massive awareness development of community on nutrition need.
- b. Capacity enhancement of Local Government and community to manage and enhance nutrition status.

3.6 Rangpur Dinajpur Rural Service (RDRS)

History

Originally established as the Bangladesh field programmed of the Lutheran World Federation in 1972, RDRS was developed from the Cooch Behar Refugee Service which had assisted Bangladesh refugees during their War of Liberation. During its first five years, we provided a relief-and-rehabilitation services to all affected in the war-ravaged corner of north-west Bangladesh.

In 1976 changing needs among its clients determined that the Rangpur Dinajpur Rural service be refashioned into a rural development program. Over the next three decades, their programs and projects were regularly reworked to ensure a high quality of provision to meet the ever-growing aspirations of the rural poor. In 1997, they finally became an independent, national NGO, yet remaining an Associate Program of Department for world Service.

As RDRS expanded in human, technical and financial resources, they learnt from their successes and failures and adapted our programs to meet the changing demands of donors and Government and to incorporate new and better ideas from the development arena. Consequently, over time transformations have taken place in the infrastructural and agricultural landscapes of north-west Bangladesh, advances have been made in the health, nutrition, education and social conditions of poor communities and many people have been able to find their way out of landlessness, under-employments and poverty.

Throughout its existence, RDRS has been influential in the field of rural development in Bangladesh introducing new ideas and practices onto the global stage over the years. They have supported practical ventures, such as house building, road construction and new technologies. Constantly modifying social, health and educational provision have made it easy for our clients to benefit fully from the best development ideas and practices. Access to loans, grants and most recently micro-finance facilities have allowed clients to use the skills and information acquired from RDRS in a practical and useful way. From the beginning they have encouraged women's advancement and the development of democratic, grassroots-based organizations. Increasingly they have focused on raising people's awareness and confidence, enabling their clients to have control of their own destinies. Throughout RDRS has ensured the commodities receive

the relevant expertise and resources essential for sustainable economic and social growth. Down the years, the experiences gained from providing emergency relief and rehabilitation have allowed them to create local structures which can mitigate the impact of both natural and human disasters in the area.

Vision

It is their vision to see the rural poor achieve meaningful political, social and economic empowerment, peace and justice and through their individual and collective efforts, the creation of a positive and sustainable environment.

Mission

It is their mission to work with the rural poor and their organizations as they claim their rights as citizens. They strive to build capacity and confidence among the poorest communities for greater empowerment. They promote good governance and greater access to opportunities, resources and services.

Strategic Aims

RDRS strategic aims are to ensure the exercise of their rights by the rural poor in northern Bangladesh and for them to enjoy the full benefits of citizenship. They challenge exclusion, discrimination and exploitation in particular against the landless women, char dwellers and tribal people.

They support their clients in their demand for access to sustainable livelihoods, social services, security and in their efforts to organize, be represented at local, regional and national levels and to have their voices heard. Their strategic aims have been developed inline with the MDGs and take into account the priorities and capabilities of RDRS and its constituency.

Working Area, Clientele and Facilities

The Working Area: This covers over 17,204 sq. km in 512 Unions in 59 Upazila or sub-districts of 11 Districts. Nine of these-Panchagarh, Thakurgaon, Dinajpur, Nilphamari, Rangpur, Gaibandha, Laimonirht, Kurigram and Jamalpur-are in the north-west with just two, Moulvi Bazaar and Habiganj, located in the north-east.

Local Population ad Clients: The population of the working area is 14m of which 1.95 people from 354,016 households, are direct programme participants. Another million people utilise RDRS health, educational, disaster-response and other services as required.

A Rights-based Approach

The conceptual foundation of their work is based on a rights-based approach to development based on international human rights standards, promotion and protection. They challenge the inequalities in the social, economic and physical environments in today's Bangladesh under which

the poor languish. The services and resources they offer villagers offer them the skills and resources required to improve their situation themselves. At present we focus upon four areas:

- i) Social Empowerment
- ii) Community Health
- iii) Livelihoods
- iv) Micro-finance

Program Priorities

Their development priorities include ensuring every child going to primary school, families enjoying basic health standards and households having nutritional and food security. They encourage their clients to improve their working skills to make the best use of improved technologies and ever-widening access to markets. There is access to their financial services and support for even the poorest villagers through their pro-poor disaster-management programs they are reducing the physical vulnerability of those communities who live in exposed situations. They encourage the inclusion of tribal minorities and char dwellers into mainstream society. They encourage the inclusion of tribal minorities and char dwellers into mainstream society. They see women's empowerment as central to the success of everything we do. All their work is done through an organizational structure centered upon democratic and

effective community-based organizations-the Union Federations with advocacy by, with and for the rural poor a growing and vital part of their program activities.

Education and Training

After many years of support, most RDRS Members' children go to primary school and increasing numbers go on to primary school and increasing numbers go on to secondary and tertiary institutions. With better-educated clients, they can offer a wider range and higher level of courses at our training centers.

Health

The importance of proper nutrition, clean water, latrines and family planning are among the issues we discuss with our clients and among the wider community to raise living standards. In the Community Health Program we also provide preventive and curative care to supplement Government Provision in reproductive health, leprosy and TB, STD and HIV/AIDS and eye care.

Agriculture and the Rural Economy:

To improve rural livelihood options on-and off-farm, we keep farmers and farm workers up to date with advances in agricultural techniques, tools and knowledge. Through field-based projects, small and marginal

farmers and their laborers improve their agricultural skills and expand their resources, thereby increasing incomes and raising living standards.

Micro-finance (MF)

RDRS' financial support system last modified in 2004 provides credit and support to program participants to expand their earning opportunities.

The present MF program is intended to become self-financing through efficient and intelligent use of surplus funds. In terms of client numbers and sums involved their financially self-reliant and relatively independent.

MF Program is one of the largest and most successful in Bangladesh.

CHAPTER-FOUR

**BACKGROUND CHARACTERISTICS OF
SAMPLE RELATED TO CHILD AND
NGOs' PROGRAMS**

Chapter Four

Background Characteristics of Sample Related to Child and NGOs' Programs

4.1 Introduction

In any research, it is important to know the background characteristics of the study or target population or nature of the data. This assessment leads to the interpretation of results and to examine any cause-effect relationship among the study variables. For statistical analysis of the impact of some key factors on school attendance or still going to school in Nilphamari District, it is necessary to study some basic demographic and socioeconomic characteristics of the children. In order to study the background characteristics of different variables, it is important to focus on the frequency distribution of the considered variables. Frequency distribution shows the pattern of distribution and observations in different groups. Thus important preliminary step of this study is to examine the frequency distribution of some considered variables. In this section we will examine some important selected independent variables which are considered to be important in relation to the schooling of children through their perspective frequency distribution. The selected variables can broadly be grouped into four groups: child characteristics, households' characteristics, NGOs' programs on child education and NGOs' programs on child health.

4.2 Child Characteristics

Some important demographic and socioeconomic characteristics of children are given in the following table.

Table 4.1: Frequency and Percentage Distribution of Child Characteristics

Characteristics	Frequency (%)	Characteristics	Frequency (%)
Age (in years)		Religion	
5-8	441 (42.9)	Muslim	862 (83.9)
8-11	301 (29.2)	Non Muslim	166 (16.1)
11-14	275 (26.8)	Total	1028 (100)
14-17	11 (1.1)	Education	
Total	1028 (100)	Illiterate	185 (18)
Sex		Class i-Class ii	296 (28.7)
Male	530 (51.6)	Class iii--Class iv	234 (22.8)
Female	498 (48.4)	Class v-Class vi	188 (18.3)
Total	1028 (100)	Class vii and above	125 (12.2)
Height(in cm)		Total	1028 (100)
90-110	173 (16.8)	Involvement with Any Work	
110-130	407 (39.6)	No	937 (91.1)
130-150	374 (36.4)	Yes	91 (8.9)
150-170	74 (7.2)	Total	1028 (100)
Total	1028 (100)	Working Place	
Weight(in k.g)		No Working	937 (91.1)
10-20	361 (35.1)	Workshop	13 (1.3)
20-30	355 (34.5)	Hotel	33 (3.2)
30-40	229 (22.3)	Farming	2 (.2)
40-50	74 (7.2)	Mill/Factory	14 (1.4)
50-60	9 (.9)	Others	29 (2.8)
Total	1028 (100)	Total	1028 (100)

We studied 1028 children. Of whom, 51.60% are males and 48.40% are females.

Although there are many religions communities and minorities in Bangladesh, our study proclaims a greatest share (83.90%) of Muslim children (Table 4.1).

Age is measured by number of completed years at last birthday. For example, a person aged 15 years, 10 months and 18 days has been recorded as 15 years (BBS,

2007). Table-4.1 depicts that largest part of child (42.90%) are in 5-8years age group. Higher aged child in our study is too little (1.10%).

Table-4.1 reveals that among the respondents 39.60% are in 110-130 cm height group and 36.40% are in 130-150 cm. In the case of weight the percentages are decreasing with respect to increasing the weight and largest part of child (35.10%) are in 10-20 k.g group as well as 34.50% are in 20-30 k.g group.

We observed that a countable part of children (18.00) are illiterate that means they does not go to school and large number of children (92%) are still going to school. Among them 28.70% are reading in class one to class two. The percentages of children those are reading in above class seven is so small (12.20%).

In Table-4.1, among those children approximately 9.00% children are involve in various hazardous work and of whom 1.30% are working in various workshop and rest are involving in various hotel, firm, mill, factory and other working places.

4.3 Household Characteristics

While working with children, it is very important to have sufficient information on household characteristics of children. The household characteristics include family size, income of household head, household expenditure, family loan, occupation of parents, education of parents etc. Some important household characteristics are presented in the following table.

Table 4.2: Frequency and Percentage Distribution on Household Characteristics of Children

Characteristics	Frequency (%)	Characteristics	Frequency (%)	Characteristics	Frequency (%)
Place of Resident		Father's Qualification		Monthly Expenditure (in Taka.)	
Rural	825 (80.3)	illiterate	523 (50.9)	1500-3500	691 (67.2)
Urban	203 (19.7)	Class (i-v)	235 (22.9)	3500-5500	281 (27.3)
Total	1028 (100.0)	Class(vi-x)	193 (18.8)	5500-7500	39 (3.8)
Types of House		S.S.C	46 (4.5)	7500-9500	4 (.4)
Pucca	136 (13.2)	H.S.C	14 (1.4)	9500+	13 (1.3)
Kacha	892 (86.8)	Bachelor-Masters	17 (1.7)	Total	1028 (100.0)
Total	1028 (100.0)	Total	1028 (100.0)	Land of Household Head	
Types of Family		Mother's Qualification		No	345 (33.6)
Separate	15 (1.5)	Illiterate	700 (68.1)	Yes	683 (66.4)
Joint	1013 (98.5)	Class (i-v)	199 (19.4)	Total	1028 (100.0)
Total	1028 (100.0)	Class(vi-x)	103 (10.0)	Family Loan	
Family Head		S.S.C	18 (1.8)	No	284 (27.6)
Father	988 (96.1)	H.S.C	4 (.4)	Yes	744 (72.4)
Mother	38 (3.7)	Bachelor-Masters	4 (.4)	Total	1028 (100.0)
Brother	2 (.2)	Total	1028 (100.0)	Loan Provider NGOs	
Total	1028 (100.0)	Father's Occupation		BRIF	1 (.1)
Number of Family Members		Farmer	236 (23.0)	BRAC	198 (19.3)
1-4	237 (23.1)	Small Business	268 (26.1)	RDRS	19 (1.8)
5-7	676 (65.8)	Day Labor	253 (24.6)	ASA	314 (30.5)
8-10	96 (9.3)	Rickshaw Puller	120 (11.7)	Others	212 (20.6)
11-13	17 (1.7)	Teacher	13 (1.3)	Total	744 (72.3)
14+	2 (.2)	Others	138 (13.4)	No Loan	284 (27.6)
Total	1028 (100.0)	Total	1028 (100.0)	Total	1028 (100.0)
Father Alive		Mother's Occupation		Amount of Loan (in Taka.)	
No	36 (3.5)	Housewife	942 (91.6)	2000-4000	65 (6.3)
Yes	992 (96.5)	Day Labor	47 (4.6)	4000-6000	134 (13.0)
Total	1028 (100.0)	Maid-servant	9 (.9)	6000-8000	181 (17.6)
Mother Alive		Teacher	3 (.3)	8000-10000	70 (6.8)
No	13 (1.3)	Others	27 (2.6)	10000+	59 (5.7)
Yes	1015 (98.7)	Total	1028 (100.0)	Total	509 (49.4)
Total	1028 (100.0)	Monthly Income (in Taka.)		0	519 (50.5)
		1500-3500	562 (54.7)	Total	1028 (100.0)
		3500-5500	366 (35.6)		
		5500-7500	82 (8.0)		
		7500-9500	9 (.9)		
		9500+	9 (.9)		
		Total	1028 (100.0)		

In this study (Table-4.2), 80.30% of total respondents are from rural area and 86.80% of total houses are kacha. Also 96.10% of child reported their father as household head. 98.50% of children are come from combined family. Family size (i.e. the total number of members in a family) is a determinant of poverty. Our sample shows that most of the children are from large family as 65.80% of the respondents reported their family size as 5-7. The presence of parents for children

is the most important factor and in our sample 96.50% fathers as well as 98.70% mother are alive where the percentage of mother is greater than father.

Education is backbone of a nation and hence, the educational qualification of parents is a vital indicator for still going to school of children. In Table-4.2 it is found that 50.90% fathers and 68.10% mothers are illiterate where the illiterate mothers are large. Also 22.90% fathers and 19.40% mothers have completed their primary education where the percentages are decreasing with the increasing of educational levels.

Occupation of parents is an important indicator for schooling of children. Table-4.2 shows that 26.10% fathers of total respondents are small businessman and 91.6% mothers are housewives; also 24.60% and 11.70% fathers' occupations are day labor and rickshaw puller respectively. Hence, it is clear that children comes from poor family.

Income is a strong determinant of living standard as well as social status which is closely related to the child education and health of a family. In our study (Table-4.2) 54.70% and 35.60% household heads are earned 1500-3500 taka and 3500-5500 taka per month as well as the percentages of their expenditure among the above ranges is 67.20% and 27.30% respectively.

Landless of household heads are 33.60%, family loan are 27.60% are found in our study. In our sample 30.50% families have taken loan from ASA and the highest

percentage of loan taken by the household between tk. 6000-8000 taka which is 17.60%.

4.4 NGOs Programs on Child Education

Now a day NGOs play an important role on child development through education and health. NGOs programs include education, still going to school, study in different NGOs school, financial helps by NGOs, NGO helps by educational instruments, NGOs help, encourage going to school, help of various NGOs, dropout from schools, learning in NGOs' school etc. The following table gives percentage distribution of NGOs programs on child Education.

Table 4.3: Frequency Distribution of NGOs Programs on Child Education

Characteristics	Frequency (%)	Characteristics	Frequency (%)	Characteristics	Frequency (%)	Characteristics	Frequency (%)
Still Going to School		Study in Different NGOs School		Financial Helps by NGOs		NGO Helps by Educational Instruments	
No	311 (30.3)	BRAC	327 (31.8)	No	368 (35.8)	No	355 (34.5)
Yes	717 (69.7)	RDRS	184 (17.9)	Yes	660 (64.2)	Yes	673 (65.5)
Total	1028 (100)	Plan	123 (12)	Total	1028 (100)	Total	1028 (100)
Learn in NGOs' School		Others	83 (8.1)	NGOs Help		Knowledge of child labor forbidden by NGOs	
No	394 (38.3)	No Education	311 (30.3)	No	110 (10.7)	BRIF	69 (6.7)
Yes	634 (61.7)	Total	1028 (100)	Yes	918 (89.3)	BRAC	178 (17.3)
Total	1028 (100)	Encourage to Go to School		Total	1028 (100)	RDRS	82 (8.0)
		Elite Person	11 (1.1)	Help of Various NGOs		PLAN	48 (4.7)
		NGO	906 (88.1)	BRAC	456 (44.4)	others	16 (1.6)
		Parents	76 (7.4)	RDRS	285 (27.7)	Total	391 (38.0)
		Relatives	17 (1.7)	Plan	177 (17.2)	No Knowledge	635 (61.8)
		Others	18 (1.8)	No Help	110 (11.3)	Total	1028 (100)
		Total	1028 (100)	Total	1028 (100)		

The above table reveals that among all respondents 69.70% are still going to school where 61.70% of total children and 74.47% of still going to school are learning in NGOs school. In our study we found among the total children 31.80% children read in BRAC School and 17.90%, 12.00% are reading in RDRS and Plan NGO.

Table-4.3 indicates that 89.30% children are helped by various NGOs where 44.40%, 27.70% and 17.20% are helped by BRAC, RDRS and plan. We get 64.20% and 65.50% children are helped by financial and educational instrument respectively. Different NGOs aware the children about bad impact of child labor and among them 6.70%, 17.30%, 8.00% and 4.70% are awarded by BRIF, BRAC, RDRS and Plan respectively.

4.5 NGOs Programs on Child Education

Different NGOs take various initiatives to develop the child health in Bangladesh.

Here we discuss some NGOs programs on child health. The following table gives percentage distribution of NGOs programs on child health.

Table 4.4: Frequency Distribution of NGOs Programs on Child Health

Characteristics	Frequency (%)	Characteristics	Frequency (%)	Characteristics	Frequency (%)	Characteristics	Frequency (%)
Weight(in k.g)		Types of Latrine		Knowledge of Microbes Spread by Open Latrine		Hand Washing by Soap before Meal	
10-20	361 (35.1)	Kacha	696 (67.7)	No	122 (11.9)	No	109 (10.6)
20-30	355 (34.5)	Brick-Build	188 (18.3)	Yes	906 (88.1)	Yes	919 (89.4)
30-40	229 (22.3)	Open Filed	144 (14.0)	Total	1028 (100)	Total	1028 (100)
40-50	74 (7.2)	Total	1028 (100)	Health Awareness by NGOs		Treatment Place	
50-60	9 (.9)	Regular Health Checkup		No	158 (15.4)	NGO Hospital	23 (2.2)
Total	1028 (100.0)	No	1027 (99.9)	Yes	870 (84.6)	Govt. Hospital	330 (32.1)
Source of Drinking Water		Yes	1 (.1)	Total	1028 (100.0)	Village Doctor	675 (65.7)
Tube well	1027 (99.9)	Total	1028 (100.0)	Health Awareness by Various NGOs		Total	1028 (100.0)
Ring	1 (.1)	Suffering from Long Time Diseases		BRIF	64 (6.2)	Regular Playing	
Total	1028 (100.0)	No	970 (94.4)	BRAC	409 (39.8)	No	79 (7.7)
Vaccination		Yes	58 (5.6)	RDRS	256 (24.9)	Yes	949 (92.3)
Full	1023 (99.5)	Total	1028 (100.0)	Plan	136 (13.2)	Total	1028 (100.0)
Partial	3 (.3)	NGO Helps through Treatment		Others	5 (.5)	Washing Hands After Toilet	
Not at all	2 (.2)	No	402 (39.1)	Total	870 (84.6)	No	94 (9.1)
Total	1028 (100.0)	Yes	626 (60.9)	No Awareness	158 (15.4)	Yes	934 (90.9)
		Total	1028 (100.0)	Total	1028 (100)	Total	1028 (100.0)

We observe that there are no mentionable problems in the cases of daily meal taking, sources of drinking water and vaccination. Though various healths related initiatives are taken and 60.90% respondents are getting treatment helped by various NGOs, 14.00% children or family use open field latrine, only 0.10% check their health regularly and 5.60% are suffering from chronic diseases. 92.30% children are playing regularly. 88.10% children are awarded about knowledge of

microbes spread by open latrine by NGOs and 84.60% children have health awareness by NGOs where 6.20%, 39.80%, 24.90% and 13.20% children have health awareness by BRIF, BRAC, RDRS and Plan respectively. 90.90% and 89.40% children are washing hands after toilet and hand washing before taking meal respectively. Also 2.20% and 32.10% children are taking medical facilities by NGOs hospital and government hospitals respectively where 65.70% are going to village doctor for medical services.

CHAPTER-FIVE

**CHILD DEVELOPMENT
THROUGH EDUCATION**

Chapter Five

Child Development through Education

5.1 Introduction

School attendance is the most powerful indicators to assess overall schooling situation of children in a society. It may vary with different characteristics of child, parent and household. This variation may be employed in explaining differentials of school attendance. In this chapter we have discussed result due to Chi-square test statistic and Logistic regression method. Firstly, by using Chi-square statistic we have tried to get a preliminary idea of independency of socioeconomic and demographic characteristics with school attendance. Since an empirical association between two variables also not necessarily imply a causal relationship between them, it is essential to adjust for the effect of correlated variables in order to determine more precisely the net effect that any particular factor has on school attendance of children. In order to estimate independent effects of each variable with other variables controlled, we have further analyzed the data within a multivariate framework. There are various statistical methods for multivariate analysis use for the dichotomous schooling data. These are log-linear, logistic, probit and transformed equation models, path analysis etc. In this study we used

binary logistic regression analysis to identify the significant variables which have important effects on school attendance of children. Due to dichotomous nature of the dependent variables and it does not require distributional assumptions unlike many other multivariate techniques. It can deal with situations in which the independent variables are qualitative or measured in nominal or ordinal scale. It can also be used to examine the risk factors as well as predict the probability of success. For categorical variables, by estimating the logarithm of the value of success (P_i) to failure ($1 - P_i$) and relation is to the independent variables, the logistic parameters can easily be interpreted in terms of odds ratio. Relative odds can be estimated for the categories of each independent categorical variable or combination of these variables.

We would like to study whether there is any association between schooling (school attendance) of children and different phenomena like age, income of household head and educational qualification of parents and so on. For this reason we have used Chi-square statistic for testing any association between the above variables. So, the hypothesis,

H_0 : There is no association between still going to school of children and different phenomena.

H_1 : H_0 is not true.

5.2 Child Characteristics

Table 5.1 shows that among the total children 69.70% are currently attending school. That means only 30.30% of our collected sample are not currently attending school. Where as, country's overall school attendance rate in the age group 5-17 years is 78.60% (BBS, 2003). There are some key factors which are hindering the schooling of children. In our contingency analysis we have found such factors and those are described below.

Table 5.1 reflects that age of children has high association with school attendance. The percent of children who is attending school increases gradually with the progress of age up to 11 years and decreases after 11 years old. Among the children in 8-11 years age group, highest 81.70% are currently attending school. But the percentage is quite low for 5-8 years age group (54.20%) and 14-17 years age group (72.70%) as well as 11-14 years age group 81.50%. The value of unadjusted χ^2 statistic with 3 degrees of freedom (df) is observed to be 88.93 and contingency coefficient is 0.28 for school attendance which is asymptotically significant at zero percent level of significance.

Table 5.1 reflects that sex of children has no significant association with school attendance. 70.80% percent of children who are attending school is boy where as 68.70% is girl. Among girls a low tendency of still going to school is observed. The value of unadjusted χ^2 statistic with 1 df is observed to be 0.52 and contingency coefficient is 0.02 for school attendance which are asymptotically insignificant at 46% percent level of insignificance.

Table 5.1: Contingency Analysis on Still Going to School with Child

Characteristics

Characteristics	Still Going to School			Values of χ^2 , df and α	Value of Contingency Coefficient C and α
	No (%)	Yes (%)	Total (%)		
Age					
5-8 (in years)	45.8	54.2	100	$\chi^2 = 88.93$ df = 3 $\alpha = 0.00$	C = 0.28 $\alpha = 0.00$
8-11	18.3	81.7	100		
11-14	18.5	81.5	100		
14-17	27.3	72.7	100		
Total	30.3	69.7	100		
Sex					
Boy	29.2	70.8	100	$\chi^2 = 0.52$ df = 1 $\alpha = 0.46$	C = 0.02 $\alpha = 0.46$
Girl	31.3	68.7	100		
Total	30.3	69.7	100		
Religion					
Muslim	31.2	68.8	100	$\chi^2 = 2.30$ df = 1 $\alpha = 0.12$	C = 0.04 $\alpha = 0.12$
Non Muslim	25.3	74.7	100		
Total	30.3	69.7	100		
Height					
90-110 (in cm)	78.6	21.4	100	$\chi^2 = 236.03$ df = 3 $\alpha = 0.00$	C = 0.43 $\alpha = 0.00$
110-130	24.3	75.7	100		
130-150	16.8	83.2	100		
150-170	17.6	82.4	100		
Total	30.3	69.7	100		
Weight					
10-20 (in k.g)	52.6	7.4	100	$\chi^2 = 133.57$ df = 4 $\alpha = 0.00$	C = 0.33 $\alpha = 0.00$
20-30	18.9	81.001	100		
30-40	16.2	83.8	100		
40-50	18.9	81.1	100		
50-60	33.3	66.7	100		
Total	30.3	69.7	100		
Involve with Any Work					
No	30.7	69.3	100	$\chi^2 = 1.17$ df = 1 $\alpha = 0.27$	C = 0.03 $\alpha = 0.27$
Yes	25.3	74.7	100		
Total	30.3	69.7	100		
Working Place					
No Working	30.7	69.3	100	$\chi^2 = 7.98$ df = 6 $\alpha = 0.23$	C = 0.08 $\alpha = 0.23$
At Home	0	100	100		
Workshop	23.1	76.9	100		
Hotel	36.4	63.6	100		
Farming	100	0	100		
Mill/Factory	21.4	78.6	100		
Others	13.8	86.2	100		
Total	30.3	69.7	100		

The height of children has significant association with school attendance. The school attendance of children in different height groups is consistently increasing. The highest school attendance of children in height group 150-170 cm is 82.40% lowest attendance is 21.40% in 90-110 cm height group. The value of unadjusted

χ^2 statistic with 3 df is observed to be 236.03 and contingency coefficient is 0.43 for school attendance which are asymptotically significant at zero percent level of significance.

The weight of children has significant association with school attendance. The school attendance of children in different height groups is heterogeneous. The highest school attendance of children in weight group 30-40 kg is 83.80% lowest attendance is 21.40% in 10-20 cm height group. The value of unadjusted χ^2 statistic with 4 df is observed to be 133.57 and contingency coefficient is 0.33 for school attendance which are asymptotically significant at zero percent level of significance.

The involvement with any works and working places is not significantly associated with still going to school.

5.3 Household Characteristics

The place of resident of children has significant association with school attendance. The school attendance of children in rural area is 73.10% and in urban area is 56.20%. The value of unadjusted χ^2 statistic with 1 df is observed to be 22.13 and contingency coefficient is 0.14 for school attendance which are asymptotically significant at zero percent level of significant.

Table 5.2: Contingency Analysis on Still Going to School with Household

Characteristics

Characteristics	Still Going to School			Values of χ^2 , df and α	Value of Contingency Coefficient C and α
	No (%)	Yes (%)	Total (%)		
Place of Resident					
Rural	26.9	73.1	100	$\chi^2 = 22.13$ df = 1 $\alpha = 0.00$	C = 0.14 $\alpha = 0.00$
Urban	43.8	56.2	100		
Total	30.3	69.7	100		
Type of House					
Pucca	15.4	84.6	100	$\chi^2 = 16.29$ df = 1 $\alpha = 0.00$	C = 0.12 $\alpha = 0.00$
Kacha	32.5	67.5	100		
Total	30.3	69.7	100		
Types of Family					
Unit	20	80	100	$\chi^2 = 0.75$ df = 1 $\alpha = 0.38$	C = 0.02 $\alpha = 0.38$
Joint	30.4	69.6	100		
Total	30.3	69.7	100		
Family Head					
Father	30.8	69.2	100	$\chi^2 = 4.26$ df = 2 $\alpha = 0.11$	C = 0.06 $\alpha = 0.11$
Mother	15.8	84.2	100		
Brother	50.0	50.0	100		
Total	30.3	69.7	100		
Number of Family Member					
1-4	37.6	62.4	100	$\chi^2 = 14.32$ df = 5 $\alpha = 0.01$	C = 0.11 $\alpha = 0.01$
4-7	29.1	70.9	100		
7-10	22.9	77.1	100		
10-13	11.8	88.2	100		
13-16	0	100	100		
16-20	100	0	100		
Total	30.3	69.7	100		
Father Alive					
No	19.4	80.6	100	$\chi^2 = 2.06$ df = 1 $\alpha = 0.15$	C = 0.04 $\alpha = 0.15$
Yes	30.6	69.4	100		
Total	30.3	69.7	100		
Mother Alive					
No	30.8	69.2	100	$\chi^2 = 0.002$ df = 1 $\alpha = 0.96$	C = .001 $\alpha = 0.96$
Yes	30.2	69.8	100		
Total	30.3	69.7	100		
Educated Father					
No	33.8	66.2	100	$\chi^2 = 6.50$ df = 1 $\alpha = 0.01$	C = 0.07 $\alpha = 0.01$
Yes	26.5	73.5	100		
Total	30.3	69.7	100		
Educated Mother					
No	30.9	69.1	100	$\chi^2 = 0.34$ df = 1 $\alpha = 0.55$	C = 0.01 $\alpha = 0.55$
Yes	29.1	70.9	100		
Total	30.3	69.7	100		
Father's Occupation					
Farmer	23.7	76.3	100	$\chi^2 = 12.11$ df = 5 $\alpha = 0.03$	C = 0.10 $\alpha = 0.03$
Small Business	29.5	70.5	100		
Day Labor	34.4	65.6	100		
Rickshaw Puller	26.7	73.3	100		
Teacher	46.2	53.8	100		
Others	37.0	63.0	100		
Total	30.3	69.7	100		

(Table 5.2 Continued...)

Characteristics	Still Going to School			Values of χ^2 , df and α	Value of Contingency Coefficient C and α
	No (%)	Yes (%)	Total (%)		
Mother's Occupation					
Housewife	29.8	70.2	100	$\chi^2 = 10.02$ df = 4 $\alpha = 0.04$	C = 0.09 $\alpha = 0.04$
Day Labor	31.9	68.1	100		
Maid/servant	55.6	44.4	100		
Teacher	100	0	100		
Others	25.9	74.1	100		
Total	30.3	69.7	100		
Monthly Income of Household Head					
1500-3500 (in Taka.)	30.1	69.9	100	$\chi^2 = 1.43$ df = 4 $\alpha = 0.83$	C = 0.03 $\alpha = 0.83$
3500-5500	30.9	69.1	100		
5500-7500	26.8	73.2	100		
7500-9500	33.3	66.7	100		
9500+	44.4	55.6	100		
Total	30.3	69.7	100		
Monthly Expenditure of Household Head					
1500-3500 (in Taka.)	32.3	67.7	100	$\chi^2 = 10.20$ df = 4 $\alpha = 0.03$	C = 0.09 $\alpha = 0.03$
3500-5500	25.3	74.7	100		
5500-7500	25.6	74.4	100		
7500-9500	0	100	100		
9500+	53.8	46.2	100		
Total	30.3	69.7	100		
Land of Father Family Head					
No	29.3	70.7	100	$\chi^2 = 0.23$ df = 1 $\alpha = 0.62$	C = .01 $\alpha = 0.62$
Yes	30.7	69.3	100		
Total	30.3	69.7	100		
Family Loan					
No	28.2	71.8	100	$\chi^2 = 0.80$ df = 1 $\alpha = 0.36$	C = .02 $\alpha = 0.36$
Yes	31.0	69.0	100		
Total	30.3	69.7	100		
Loan Provider					
BRIF	0	100	100	$\chi^2 = 13.50$ df = 5 $\alpha = 0.01$	C = 0.11 $\alpha = 0.01$
BRAC	38.4	61.6	100		
RDRS	15.8	84.2	100		
ASA	32.2	67.8	100		
Others	24.1	75.9	100		
No Loan	28.2	71.8	100		
Total	30.3	69.7	100		
Amount of Loan					
2000-4000 (in Taka.)	29.2	70.8	100	$\chi^2 = 35.42$ df = 5 $\alpha = 0.00$	C = 0.183 $\alpha = 0.00$
4000-6000	38.8	61.2	100		
6000-8000	18.8	81.2	100		
8000-10000	22.9	77.1	100		
10000+	13.6	86.4	100		
0	35.1	64.9	100		
Total	30.3	69.7	100		

The type of houses of children has significant association with school attendance.

The school attendance of children of pucca house and kacha houses are 84.60% and 67.5 respectively. In this study area we may consider family with pucca houses as comparatively rich class indicates that the children in high class have high

tendency to go to school. The value of unadjusted χ^2 statistic with 1 df is observed to be 16.29 and contingency coefficient is 0.12 for school attendance which are asymptotically significant at zero percent level of significance

Also family type and family head are not significantly associated with still going to school at 10% level of significance.

The number of family member has significant association with school attendance. The school attendance of children in different height groups is increasing consistently. The value of unadjusted χ^2 statistic with 4 df is observed to be 14.32 and contingency coefficient is 0.11 for school attendance which are asymptotically significant at 1% level of significant. Where father alive and mother alive are not significantly associated at 10% level of significance.

Though the father's educational qualification is associated with still going to school at one percent level of significance, mother's educational qualification is not associated with still going to school at 10% level of significance. Where as the father's and mother's occupation is significantly associated with school attendance of children at 3% and 4% levels of significance.

Land of father, monthly income of household heads and debt of family are not associated with school attendance of children at 10% levels of significant. Also the monthly expenditure of household head's is significantly associated with school attendance at 3% level of significance.

Table 5.2 reflects that debt provider (NGOs) has high association with school attendance. The percent of still going to school of children who are helped by debt of RDRS is highest 84.2% and in the same case of BRAC it is 61.60% where as for ASA is 67.80%. The value of unadjusted χ^2 statistic with 3 degrees of freedom (df) is observed to be 13.50 and contingency coefficient is 0.11 for school attendance which are asymptotically significant at 1% percent level of significant. Also the amount of debt is highly associated with still going to school at zero percent level of significance.

5.4 Educational Characteristics of Children

Learning in NGOs school has significant association with school attendance. The school attendance of children who read in NGOs school is highest (100%). Also the percentage of not still going to school of children who reads in other school is highest (78.90%). The value of unadjusted χ^2 statistic with 1 df is observed to be 717.50 and contingency coefficient is 0.64 for school attendance which are asymptotically significant at zero percent level of significance.

In Table 5.3, it is found that 69.60% children are still going to school for NGOs' encouraging and 70.5 are going to school at present without NGOs' encouraging. The value of unadjusted χ^2 statistic with 1 df is observed to be 8.03 and contingency coefficient is 0.006 for school attendance which are asymptotically insignificant at ten percent level of significance. Also NGOs help and help of various NGOs are insignificant at ten percent level of significance.

Table 5.3: Contingency Analysis on Still Going to School with NGOs

Characteristics on Child Education

Characteristics	Still Going to School			Values of χ^2 , df and α	Value of Contingency Coefficient C and α
	No (%)	Yes (%)	Total (%)		
Learn in NGOs School					
No	78.9	21.1	100	$\chi^2 = 717.50$ df = 1 $\alpha = 0.00$	C = 0.64 $\alpha = 0.00$
Yes	0	100	100		
Total	30.3	69.7	100		
NGO Encourage to Go to School					
No	29.5	70.5	100	$\chi^2 = 8.03$ df = 1 $\alpha = 0.84$	C = 0.006 $\alpha = 0.84$
Yes	30.4	69.6	100		
Total	30.3	69.7	100		
NGOs Help					
No	30.9	69.1	100	$\chi^2 = 0.02$ df = 1 $\alpha = 0.87$	C = 0.005 $\alpha = 0.87$
Yes	30.2	69.8	100		
Total	30.3	69.7	100		
Help of Various NGOs					
BRAC	27.9	72.1	100	$\chi^2 = 4.80$ df = 3 $\alpha = 0.18$	C = 0.06 $\alpha = 0.18$
RDRS	29.8	70.2	100		
Plan	36.7	63.3	100		
No Help	30.9	69.1	100		
Total	30.3	69.7	100		
NGO Helps by Educational Instruments					
No	66.8	33.2	100	$\chi^2 = 342.51$ df = 1 $\alpha = 0.00$	C = 0.50 $\alpha = 0.00$
Yes	11.0	89.0	100		
Total	30.3	69.7	100		
Financial Helps by NGOs					
No	69.0	31.0	100	$\chi^2 = 408.29$ df = 1 $\alpha = 0.00$	C = 0.53 $\alpha = 0.00$
Yes	8.6	91.4	100		
Total	30.3	69.7	100		
Knowledge about child labor forbidden					
No	38.0	62.0	100	$\chi^2 = 46.67$ df = 1 $\alpha = 0.00$	C = 0.20 $\alpha = 0.00$
Yes	17.8	82.2	100		
Total	30.3	69.7	100		
Knowledge of child labor forbidden by NGOs					
BRIF	21.7	78.3	100	$\chi^2 = 54.47$ df = 5 $\alpha = 0.00$	C = 0.22 $\alpha = 0.00$
BRAC	15.2	84.8	100		
RDRS	11.0	89.0	100		
Plan	27.1	72.9	100		
others	37.5	62.5	100		
No Knowledge	38.0	62.0	100		
Total	30.3	69.7	100		

The children who are helped by educational instruments from various NGOs have highest percentage (89%) of school attendance than other who are not benefited by various NGOs help. The value of unadjusted χ^2 statistic with 1 df is

observed to be 342.51 and contingency coefficient is 0.50 for school attendance which are asymptotically insignificant at zero percent level of significance.

The children who are helped by economic support from various NGOs have highest percentage (91.40%) of school attendance where as 31.0% children are still going to school with any financial support of any NGO. The value of unadjusted χ^2 statistic with 1 df is observed to be 408.29 and contingency coefficient is 0.53 for school attendance which are asymptotically insignificant at zero percent level of significance.

The children who have knowledge about forbidden of child labors have highest percentage (82.20%) of school attendance where as 31.00% children are still going to school who have no knowledge about the forbidden child labor. The value of unadjusted χ^2 statistic with 1 df is observed to be 46.67 and contingency coefficient is 0.20 for school attendance which are asymptotically insignificant at zero percent level of significance.

78.30%, 84.80%, 89.00% and 72.90% children who are still going to school are warned about the forbidden of child labor by BRIF, BRAC, RDRS and Plan respectively. The value of unadjusted χ^2 statistic with 5 df is observed to be 54.47 and contingency coefficient is 0.22 for school attendance which are asymptotically insignificant at zero percent level of significance.

5.5 Impact on School Attendance

Logistic regression analysis can go some way towards identifying those variables which are truly related to schooling differentials of children. In this study we used still going to school or school attendance as dependent variable. While measuring the impact of some selected factors on school attendance, the dependent variable takes the value 1 if the respondent is currently attending school and the value 0 otherwise.

For logistic regression analysis, the effect of each independent variable on the dependent variable is indicated by the odds ratios for each variable category relative to the reference category for which the odds ratio is 1. The odds ratio has a clear interpretation and is straightforward.

Table 5.4 represents results of the multivariate analysis related to school attendance and each table is followed by the interpretation of our findings based on estimated odds ratios. To test the impact of some key factors of working children on current school attendance, a number of variables such as child characteristics, household and educational characteristics are used as independent variables.

Sex has positive significant effect on their school attendance. Girls are 1.456 times more likely to attend school than boys.

Table 5.4: Logistic Regression Analysis of Still Going to School on Some Selected Characteristics

Characteristics	Regressor Coefficient (β)	Standard Error of β	P - Value	Odds Ratio
Sex				
Male (r)	---	---	---	1.000
Female	1.697	0.683	0.01***	1.456
Family Loan				
No (r)	---	---	---	1.000
Yes	-2.171	0.828	0.00***	0.114
NGOs Help by Educational Instruments				
No (r)	---	---	---	1.000
Yes	2.838	0.931	0.00***	3.074
NGOs Help by Treatments				
No (r)	---	---	---	1.000
Yes	6.475	1.157	0.00***	3.995
Financial Help by NGOs				
No (r)	---	---	---	1.000
Yes	4.163	0.936	0.00***	2.244
Encourage by NGOs				
No (r)	---	---	---	1.000
Yes	1.447	0.828	0.08*	4.248

r represents the reference category.

Family loan has negatively significant effect on school attendance at zero percent level of significance. This result (in table 5.4) indicates that the children of family with loan is 89% less likely to attend school than the children of family without debt.

NGOs' help by educational instruments has positive impact on still going to school of children. The respondents with NGOs' help by educational instruments are 3.074 times more likely to attend school than the respondents without NGOs' help by educational instruments.

NGOs' help by treatment has positive impact on still going to school of children. The respondents with NGOs' help by treatment are 3.995 times more likely to attend school than the respondents without NGOs' help by treatment.

NGOs' help by financial support has positive impact on still going to school of children at zero percent level of significance. The respondents with NGOs' help by financial support are 2.244 times more likely to attend school than the respondents without NGOs' help by financial support.

Encourage by NGOs' has positive impact on still going to school of children at ten percent level of significance. The respondents with encourage by NGOs' are 4.248 times more likely to attend school than the respondents without encourage by NGOs'.

CHAPTER-SIX

**CHILD DEVELOPMENT
THROUGH HEALTH**

Chapter Six

Child Development through Health

6.1 Introduction

Body mass index is the most powerful indicators to overall health condition of child. In this chapter we study the association between body mass index and other phenomena like child characteristics, household characteristics and health characteristics with NGOs. Also, we have investigated the impact of various differentials on body mass index of children.

6.2 Child Characteristics

Table 6.1 shows that in each age group the percentages of under weight are highest than normal and over weight and also in 5-8 as well as 8-11 years age groups the percentages are 98.6% and 90% respectively. The value of unadjusted χ^2 statistic with 3 degrees of freedom (df) is observed to be 203.29 and contingency coefficient is 0.40 for body mass index of children which are asymptotically significant at zero percent level of significance.

For both male and female it have been found that the percentages of under weight are highest than normal and over weight. The value of unadjusted χ^2 statistic with 1 degrees of freedom (df) is observed to be 5.62 and contingency coefficient

is 0.07 for body mass index of children which are asymptotically significant at ten percent level of significance.

Table 6.1: Contingency Analysis on Body Mass Index with Child

Characteristics

Characteristics	Body Mass Index				Values of χ^2 , df and α	Value of Contingency Coefficient C and α
	Under Weight (%)	Normal Weight (%)	Over Weight (%)	Total (%)		
Age						
5-8 (in years)	98.6	1.4	0	100	$\chi^2 = 203.29$ df = 3 $\alpha = 0.00$	C = 0.40 $\alpha = 0.00$
8-11	90.0	10.0	0	100		
11-14	61.5	37.8	0.7	100		
14-17	63.6	36.4	0	100		
Total	85.8	14.0	0.2	100		
Sex						
Boy	87.9	12.1	0	100	$\chi^2 = 5.62$ df = 2 $\alpha = 0.06$	C = 0.07 $\alpha = 0.06$
Girl	83.5	16.1	0.4	100		
Total	85.8	14.0	0.2	100		
Religion						
Muslim	87.7	12.3	0	100	$\chi^2 = 23.79$ df = 2 $\alpha = 0.00$	C = 0.15 $\alpha = 0.00$
Non Muslim	75.9	22.9	1.2	100		
Total	85.8	14.0	0.2	100		
Education						
Illiterate	95.7	4.3	0	100	$\chi^2 = 217.92$ df = 8 $\alpha = 0.00$	C = 0.41 $\alpha = 0.00$
Class i-Class ii	97.6	2.4	0	100		
Class iii--Class iv	89.3	10.7	0	100		
Class v-Class vi	78.7	21.3	0	100		
Class vii-Class ix	47.2	51.2	1.6	100		
Total	85.8	14.0	0.2	100		

In the case of religion it has been found that for non Muslim and Muslim the percentages of under weight are highest than normal as well as over weight. The value of unadjusted χ^2 statistic with 1 degrees of freedom (df) is observed to be 23.79 and contingency coefficient is 0.15 for body mass index of children which are asymptotically significant at ten percent level of significance.

In each levels of education the percentages of under weight are highest than normal as well as over weight where as in illiterate group and class i- class ii groups the percentages are 95.70% and 97.60% respectively . The value of unadjusted χ^2 statistic with 4 degrees of freedom (df) is observed to be 217.92 and contingency coefficient is 0.41 for body mass index of children which are asymptotically significant at ten percent level of significance.

6.3 Household Characteristics

In each level of fathers' occupation the percentages of under weight are highest than normal as well as over weight and highly associated with body mass index. The value of unadjusted χ^2 statistic with 10 degrees of freedom (df) is observed to be 32.74 and contingency coefficient is 0.17 for body mass index of children which are asymptotically significant at zero percent level of significance.

Monthly expenditure of household head has significant association with body mass index. The percent of normal weight of children is highest (75%) whose household heads' monthly expenditure is 7500Tk.-9500Tk.. The value of unadjusted χ^2 statistic with 8 degrees of freedom (df) is observed to be 35.01 and contingency coefficient is 0.18 for body mass index of children which are asymptotically significant at zero percent level of significance.

Table 6.2: Contingency Analysis on Body Mass Index with Household Characteristics

Characteristics	Body Mass Index				Values of χ^2 , df and α	Value of Contingency Coefficient C and α
	Under Weight (%)	Normal Weight (%)	Over Weight (%)	Total (%)		
Father's Occupation						
Farmer	76.7	22.9	0.4	100	$\chi^2 = 32.74$ df = 10 $\alpha = 0.00$	C = 0.17 $\alpha = 0.00$
Small Business	88.4	11.6	0	100		
Day Labor	92.5	7.5	0	100		
Rickshaw Puller	85.8	14.2	0	100		
Teacher	100	0	0	100		
Others	82.6	16.7	0.7	100		
Total				100		
Monthly Expenditure of Household Head						
1500-3500 (in Taka.)	89.3	10.6	0.1	100	$\chi^2 = 35.01$ df = 8 $\alpha = 0.00$	C = 0.18 $\alpha = 0.00$
3500-5500	77.9	21.7	0.4	100		
5500-7500	89.7	10.3	0	100		
7500-9500	25.0	75.0	0	100		
9500+	76.9	23.1	0	100		
Total	85.8	14.0	0.2	100		
Land of Household Head						
No	89.0	11.0	0	100	$\chi^2 = 4.94$ df = 2 $\alpha = 0.08$	C = 0.06 $\alpha = 0.08$
Yes	84.2	15.5	0.3	100		
Total	85.8	14.0	0.2	100		
Loan of Family						
No	82.0	17.6	0.4	100	$\chi^2 = 4.77$ df = 2 $\alpha = 0.09$	C = 0.06 $\alpha = 0.09$
Yes	87.2	12.6	0.1	100		
Total	85.8	14.0	0.2	100		
Loan Provider						
BRIF	0	100	0	100	$\chi^2 = 18.51$ df = 10 $\alpha = 0.04$	C = 0.13 $\alpha = 0.04$
BRAC	92.4	7.6	0	100		
RDRS	84.2	15.8	0	100		
ASA	86.6	13.1	0.3	100		
Others	84.0	16.0	0	100		
No Loan	82.0	17.6	0.4	100		
Total	85.8	14.0	0.2	100		
Amount of Loan						
2000-4000 (in Taka.)	75.4	23.1	1.5	100	$\chi^2 = 35.42$ df = 10 $\alpha = 0.00$	C = 0.18 $\alpha = 0.00$
4000-6000	85.8	14.2	0	100		
6000-8000	86.7	13.3	0	100		
8000-10000	85.7	14.3	0	100		
10000+	66.1	33.9	0	100		
0	89.0	10.8	0.2	100		
Total	85.8	14.0	0.2	100		

Land of household head and loan of family are also associated with body mass index at ten percent level of significance. Where provider and amount of loan are also associated with body mass index at five percent and zero percent level of significance.

6.4 NGOs Characteristics on Child Health

NGOs help by treatment is associated with body mass index at ten percent level of significance. Among the children who have not taken any treatment from NGOs the percent of normal weight is 10.9%.

Table 6.3: Contingency Analysis on Body Mass Index with NGOs

Characteristics on Child Health

Characteristics	Body Mass Index				Values of χ^2 , df and α	Value of Contingency Coefficient C and α
	Under Weight (%)	Normal Weight (%)	Over Weight (%)	Total (%)		
NGO Helps by Treatment						
No	88.8	10.9	0.2	100	$\chi^2 = 5.21$ df = 2 $\alpha = 0.07$	C = 0.07 $\alpha = 0.07$
Yes	83.9	16.0	0.2	100		
Total				100		
Health Awareness by Various NGOs						
BRIF	81.3	18.8	0	100	$\chi^2 = 64.30$ df = 10 $\alpha = 0.00$	C = 0.24 $\alpha = 0.00$
BRAC	80.7	18.8	0.5	100		
RDRS	97.3	2.7	0	100		
Plan	79.4	20.6	0	100		
Others	20.0	80.0	0	100		
No Awareness	89.9	10.1	0	100		
Total	85.8	14.0	0.2	100		
Treatment Place						
NGO Hospital	21.7	78.3	0	100	$\chi^2 = 82.29$ df = 6 $\alpha = 0.00$	C = 0.27 $\alpha = 0.00$
Hospital	88.2	11.5	0.3	100		
Village Doctor	87.0	12.9	0.1	100		
Homeopath	75.0	25.0	0	100		
Total	85.8	14.0	0.2	100		
Treatment by Various Type NGOs						
BRAC	66.7	33.3	0	100	$\chi^2 = 86.41$ df = 4 $\alpha = 0.00$	C = 0.27 $\alpha = 0.00$
Plan	15.0	85.0	0	100		
No Treatment by NGOs	87.3	12.5	0.2	100		
Total	85.8	14.0	0.2	100		
Sanitary Latrine						
No	89.6	9.7	0.7	100	$\chi^2 = 4.62$ df = 2 $\alpha = 0.09$	C = 0.06 $\alpha = 0.09$
Yes	85.2	14.7	0.1	100		
Total	85.8	14.0	0.2	100		

Health awareness by various NGOs has significant association with body mass index. The value of unadjusted χ^2 statistic with 10 degrees of freedom (df) is observed to be 64.30 and contingency coefficient is 0.24 for body mass index of children which are asymptotically significant at zero percent level of significance. Also treatment place and treatment by various type NGOs are highly associated with body mass index.

Sanitary latrine has significant association with body mass index. The value of unadjusted χ^2 statistic with 4 degrees of freedom (df) is observed to be 4.62 and contingency coefficient is 0.06 for body mass index of children which are asymptotically significant at ten percent level of significance.

6.5 Impact of Some Key Factors on Body Mass Index

We have assessed the impact of some selected factors on body mass index by applying the backward regression technique. It is found that age has positive significant impact on body mass index at zero percent level of significant where height and weight have positive significant effect on body mass index.

In Table 6.4 education of mother and monthly income have positively significant effect on body mass index which indicates that each unit increases in education of mother and monthly income, the health status of the children increases. Where as loan of family has negatively significant impact. Suffering from long time by chronic disease has negative impact at three percent level of significance.

Table 6.4: Backward Regression Analysis of Body Mass Index on Some Selected Characteristics

Characteristics	Regressor Coefficient (β)	Standard Error of β	t - Statistic	P - Value
Age	0.054	0.014	3.845	0.000
Height	0.215	0.003	67.581	0.000
Weight	0.501	0.005	99.416	0.000
Education of Mother	0.074	0.036	2.039	0.042
Monthly Income	0.00166	0.000	1.913	0.056
Family Loan	-0.070	0.041	1.698	0.090
Suffering with chronic disease from Long Time	-0.150	0.072	2.081	0.038
Health Awareness by NGO	0.110	0.047	2.349	0.019
Learn in NGOs School	0.113	0.062	1.801	0.072
Still Going to School	0.159	0.075	2.112	0.035
Financial Help by NGOs	0.189	0.059	3.221	0.001
Hand Washing before Meal	0.127	0.055	2.321	0.021
$R^2 = 0.945$		$\text{Adjusted } R^2 = 0.528$		

Health awareness by NGOs, learning in NGOs school, still going to school and NGOs help has been positive significant effect on child health. This indicates that the fruitful initiatives of different NGOs improve the child health including other development.

CHAPTER-SEVEN
CONCLUSION

Chapter Seven

Conclusion

7.1 Introduction

The present study attempts to investigate the factors influencing education and health of children followed by differential studies with respect to some selected characteristics. It is evident from the bivariate and multivariate analysis that some key factors, such as age, sex, height, weight, education of mother, monthly income, monthly expenditure, loan of family, suffering with chronic disease from long time, learning in NGOs school, NGOs help, NGOs help by educational instruments, NGOs help by treatments, financial help by NGOs, health awareness by NGOs, hand washing by soap before meal, encourage by NGOs etc. have considerable effect on the schooling of the children. The purpose of this chapter is to summarize some general and specific findings found in earlier chapters to draw some conclusions and also to provide some recommendations for the policy makers.

7.2 Summary and Discussion

This thesis first examines some background characteristics emphasizing mainly on schooling and health condition of children. It then looks at the effect of some key factors on school attendance and health condition. The central message from this

study is that children adversely affect the child's schooling which is reflected in lower school attendance and lower health status.

It is evident from our study that age, height and weight have positive significant effect on child health. The empirical findings provide that, mother education has a large effect on health status. Monthly income has positive significant on health that means increases health condition with the increasing of monthly income.

Family loan and suffering with chronic disease from long time have negative significant effect on health status of children that means health condition decreases with increasing of family loan and suffering with chronic disease from long time.

It is also obvious that health awareness by NGO and hand washing before taking meal has positive significant effect on health status that means increases the health status with increasing of health awareness by NGO and hand washing before taking meal.

Also learning in NGOs school and still going to school and financial help by NGOs have positive significant effect on health status that means increase the health status with the increasing of learning in NGOs school and still going to school.

In our study it is found that females are 1.45 times more likely for going to school than male. Also it is found that family loan has negative significant effect on school attendance that means occurrence of school attendance is $(1/10)$ as likely

to occur among the respondents with family loan than the respondents without family loan.

NGOs help by educational instruments has positive significant effect on school attendance and the occurrence of still going to school is 3.07 times more likely to occur among the respondents with NGOs help by educational instruments than without NGOs help by educational instruments.

NGOs help by treatments has positive significant effect on school attendance and the occurrence of still going to school is 3.99 times more likely to occur among the respondents with NGOs help by treatments than without NGOs help by treatments.

Our study reveals that financial help by NGOs has positive significant effect on school attendance and the occurrence of still going to school is 2.24 times more likely to occur among the respondents with financial help by NGOs than without financial help by NGOs.

It is found that encourage by NGOs has positive significant effect on school attendance and the occurrence of still going to school is 4.24 times more likely to occur among the respondents with encourage by NGOs than without encourage by NGOs.

7.3 Findings of the Study

The study has identified some socio-economic factors' effect on child development. The major findings of this study are:

- i) Mother education plays an important role on child development.
- ii) Loan of family is a dominating constraint for child development.
- iii) NGOs' contribution about health awareness is mentionable.
- iv) NGOs' initiatives in education are significant and also helpful to buildup a nation.
- v) The educated children are conscious about their health

7.4 Recommendations

Based on the above mentioned findings the following recommendations deserve consideration.

- i) The government should take initiatives to improve the education of mother and girl who are the mother of next generation.
- ii) Food for education program should be extended and stable for the children of poor family.
- iii) Also the government should take steps to control the commercial view of NGOs and encourage them for social welfare.

BIBLIOGRAPHY

Bibliography

- Ahmed, M. *et al.* (2007).** Access to Education in Bangladesh Institute of Educational Development BRAC University.
- Asaduzzaman, A. S. M. (2007).** BU-IED Progress Report 2005-06, Institute of Educational Development BRAC University Dhaka , Bangladesh.
- BBS. (2001).** Census Report 2001. Bangladesh Bureau of Statistics (BBS), Dhaka, Bangladesh
- BBS. (2003a).** Statistical Year Book 2003. Bangladesh Bureau of Statistics (BBS), Dhaka, Bangladesh.
- BBS. (2003b).** Progotir Pathey 2003. Bangladesh Bureau of Statistics (BBS), Dhaka, Bangladesh
- BBS. (2005).** Statistical Year Book 2004. Bangladesh Bureau of Statistics (BBS), Dhaka, Bangladesh
- BBS. (2007).** Statistical Year Book 2005. Bangladesh Bureau of Statistics (BBS), Dhaka, Bangladesh
- Bruntrup, M. *et al.* (1997).** Impact Assessment of the Association for Social Development. Dhaka: ASA.

Bhalotra, S. and C. Heady (1998). Child Labour in Rural Pakistan and Ghana: Myths and Data. Department of Economics, University of Bristol, UK

Bhuiyan, M. R. (1997). Fundamentals of experimental Design. Jewel Rahman Shakil Prokashoni 38/4, Bangla Bazar, Dhaka-1100.

Daily star. (14 June, 2008). World Day Against Child Labor. Dhaka.

Gupta, S. C. and Kapoor, V. K. (1994). Fundamentals of Mathematical statistics. Sultan Chand and Sons Publishers, Eight Edition, India.

Husain, *et al.* (1998). Poverty Alleviation and Empowerment: The Second Impact Assessment Study of BRAC. Dhaka.

Haspels, N. and Suriyasarn, B. (2003). International Save the children Alliance Handbook: Child Rights Programming 2002. Bangkok.

HRW. (2005). Child Labor in Agriculture, Human Rights Watch. ([www. Hrw.org](http://www.Hrw.org))

Khanam, R. (2006). Impact of Child Labour on School Attendance and School Attainment: Evidence from Bangladesh. Discipline of Economics, University of Sydney, N. S. W., Australia.

Khandker, S. R. et al. (1998). The Impact of Grouped-Based Credit Programs on Poor Households in Bangladesh: Does the Gender of Participants Matter? *The Journal of Political Economy* 106 (55).

Levison, Deborah (1998). Household composition and children's employment and schooling in urban Brazil. October, Hubert H. Humphrey Institute of Public Affairs, University of Minnesota, manuscript.

Mercer, A. et al. (2004). Effectiveness of an NGO Primary Health care Programme in Rural Bangladesh: Evidence from the management information system. *Health Policy and Planning*, 2004 Jul; 19(4):187-198.

Islam, N. (2006). Role of Grameen Bank in Poverty Reduction in Bangladesh. University of Rajshahi, Rajshahi, Bangladesh.

Rosati and Rossi (2001). Children's Working Hours, School Enrolment and Human Capital Accumulation: Evidence from Pakistan and Nicaragua, UCW (Understanding Children's Work), a joint ILO, UNICEF and World Bank Project, October 2001.

Roge, G. A. (1973). In Chronic Disease, Public Health in Europe No. 2

Regional office of WHO, Copenhagen.

Raj, H. (1986). Fundamentals of Demography. Surjeet Publications. Post box

2157, 7-K, Kolhapur Road, Kamla Nagar, Delhi-110007.

Regina, C. et al. (1918). Survival Models and Data Analysis. Jone Wiley and

sons, New York.

Save the Children U K. (2008). The Child Development Index Holding

Governments to Account for Children's Wellbeing. London, England.

Tzannatos, Z. (1998). Child Labor and School Enrollment in Thailand in the

1990. Social Protection Discussion paper No. 9818, The World Bank.

UNICEF. (2006). The State of the World's Children 2006. United Nations

Children's Fund (UNICEF), New York, U.S.A.

UNICEF. (2007). Besho Shishu Paristhetha 2007. United Nations Children's

Fund (UNICEF), New York, U.S.A.

Varum Gauri. (2002). Expect from Development NGO's Location Decisions

and Impact in Rural Bangladesh. The World Bank Anna Fruttero, New

York University.

WHO. (1948). Definition of Child Labor. World Health Organization
(WHO), Geneva, Switzerland.

World Bank. (1996). Bangladesh: pursuing common goals, strengthening
relations between Government and development NGOs. Dhaka,
University Press Ltd.

www.brac.org.

www.childwikipedia.

[www. Bangladeshwikipedia2006](http://www.Bangladeshwikipedia2006).

QUESTIONNAIRE



পপুলেশন সায়েন্স এন্ড হিউম্যান রিসোর্স ডেভেলপমেন্ট বিভাগ
রাজশাহী বিশ্ববিদ্যালয়, রাজশাহী।

প্রশ্নপত্র

গবেষকের নামঃ মোঃ রফিকুল আলম

এম.ফিল গবেষণার শিরোনামঃ Role of NGOs in Child Development: A Study in Nilphamari District, Bangladesh.

(আপনার প্রদত্ত তথ্য সম্পূর্ণ গোপন রাখা হবে এবং কেবল মাত্র গবেষণার কাজে ব্যবহার করা হবে)।

- ১। ক্রমিক নং
- ২। উত্তর দাতার নাম:.....
- ক) উত্তর দাতার বয়স:.....বছর.....মাস.....দিন।
- খ) উত্তর দাতার লিঙ্গ: ছেলে মেয়ে
- গ) উত্তর দাতার জাতীয়তা: বাংলাদেশী অন্যান্য.....
- ঘ) উত্তরদাতার ধর্মঃ মুসলিম অমুসলিম
- ঙ) উত্তর দাতার শিক্ষা: নিরক্ষর স্বাক্ষর জ্ঞান (১ম-২য়) শ্রেণী (৩য়-৪র্থ) শ্রেণী (৫ম-৬ষ্ঠ) শ্রেণী
অন্যান্য শ্রেণী.....
- চ) উত্তর দাতার উচ্চতা:সে.মি.
- ছ) উত্তর দাতার ওজন:.....কেজি।
- ৩। মালিকঃ আপনি কি লেখাপড়ার জন্য তাদেরকে উৎসাহ দিয়েছেন? হ্যাঁ না ।
- ৪। মালিকঃ আপনি কি তাদের স্বাস্থ্যের ব্যাপারে কোন খোজ খবর নেন? হ্যাঁ না ।
- ৫। মালিকঃ নিয়ে থাকলে কোন ধরণের? চিকিৎসা খাবার অন্যান্য
- ৬। পরিবারের প্রধানঃ পিতা মাতা ভাই অন্যান্য
- ৭। পরিবারের ধরণঃ একক যৌথ
- ৮। তোমার পিতা জীবিত কি? হ্যাঁ না
- ৯। তোমার মাতা জীবিত কি? হ্যাঁ না
- ১০। পিতার শিক্ষাগতযোগ্যতাঃ নিরক্ষর স্বাক্ষরজ্ঞান শ্রেণী.....
- ১১। মাতার শিক্ষাগতযোগ্যতাঃ নিরক্ষর স্বাক্ষরজ্ঞান শ্রেণী.....
- ১২। পিতার পেশাঃ কৃষি ব্যবসা দিনমজুর রিক্সা চালক অন্যান্য
- ১৩। মাতার পেশাঃ গৃহিণী দিনমজুর গৃহ পরিচারিকা অন্যান্য
- ১৪। পরিবারের সদস্য সংখ্যা কত?জন।
- ১৫। পিতা/মাতা/অভিভাবকের কি জমি আছে? হ্যাঁ না
- ১৬। পরিবার প্রধানের মাসিক আয় কত?টাকা।
- ১৭। পরিবারের মাসিক ব্যয় কত?টাকা।
- ১৮। তোমার পরিবারে কি ঋণ আছে? হ্যাঁ না
- ১৯। ঋণ কারা দিয়েছে? BRIF BRAC RDRS Plan ASA অন্যান্য.....
- ২০। কেন ঋণ দিয়েছে? পড়া লেখার খরচের জন্য পরিবারের জন্য অন্যান্য.....

- ২১। ঋণের টাকার পরিমাণ টাকা।
- ২২। তোমার বসবাসের স্থানঃ গ্রাম শহর ।
- ২৩। তোমার বসবাসের ধরনঃ নিজ বাড়ি ভাড়া বাড়ি বস্তিরতে স্টেশন পাকা ঘর কাঁচা ঘর
অন্যান্য
- ২৪। তুমি কি কাজ কর? হ্যাঁ না ।
- ২৫। তুমি কোথায় কাজ কর? বাসা ওয়ার্কসপ হোটেল কৃষি চাতাল মিল/ফ্যাক্টরী অন্যান্য
.....
- ২৬। তুমি কিভাবে এই পেশায় আসলে? নিজের ইচ্ছায় পরিবারের চাপে দারিদ্রের তাড়নায় সংমা/বাবার জন্য
 অন্যান্য
- ২৭। তুমি কার মাধ্যমে এই পেশায় আসলে? পিতা মাতা ভাই আত্মীয় স্বজন প্রতিবেশী দালাল
অন্যান্য
- ২৮। তুমি প্রতিদিন কত ঘন্টা কাজ কর? ৬ ঘন্টা ৮ ঘন্টা ১০ ঘন্টা ১২ ঘন্টা ১৮ ঘন্টা অন্যান্য
.....
- ২৯। তুমি সপ্তাহে কতদিন কাজ কর? ৭ দিন ৬ দিন ৫ দিন ৪ দিন অন্যান্য
- ৩০। তোমাকে কাজের জন্য কোন নির্যাতন করে কি? হ্যাঁ না ।
- ৩১। করলে কোন ধরনের? শারীরিক নির্যাতন মানসিক নির্যাতন অন্যান্য
- ৩২। তুমি কত দিন যাবত কাজ করছো?দিন মাসবছর ।
- ৩৩। তুমি কত বছর বয়সে কাজে প্রবেশ করেছো?বছর।
- ৩৪। তোমার পারিশ্রমিক কিভাবে পাও? বেতন বেতন নাই দৈনিক মাসিক বার্ষিক ।
- ৩৫। তুমি মাসিক কত টাকা আয় কর?টাকা।
- ৩৬। তোমার বেতনের টাকা মালিক ঠিকমত দেয় কি? হ্যাঁ না ।
- ৩৭। তুমি মাসিক কত টাকা সঞ্চয় কর?টাকা।
- ৩৮। তোমার ঘুমানোর স্থানঃ নিজ ঘর হোটেল দোকান স্টেশন কর্মস্থল অন্যান্য.....
- ৩৯। তুমি কয়টার সময় ঘুমাও?
- ৪০। তুমি কয়টার সময় উঠো?
- ৪১। কত ঘন্টা ঘুমাও?ঘন্টা।
- ৪২। এতে কি তোমার কোন সমস্যা হয়? হ্যাঁ না ।
- ৪৩। হলে কি ধরনের? শরীর দুর্বল হয় কাজে অনীহা বাড়ে অন্যান্য
- ৪৪। তোমার খাবার পানির উৎসঃ টিউবওয়েল সাপ্লাই কুয়া পুকুর অন্যান্য
- ৪৫। তুমি প্রতিদিন কতবার খাও? এক বার দুইবার তিনবার চারবার অধিকবার
- ৪৬। কাজ করার সময় শারীরিক সমস্যা হয় কি? হ্যাঁ না ।
- ৪৭। তুমি কতটি টিকা নিয়েছো? সম্পূর্ণ আংশিক একেবারেই না ।
- ৪৮। তুমি কি জাতীয় পায়খানা ব্যবহার কর? কাঁচা পাকা খোলা জায়গায় ।
- ৪৯। তুমি কি জান খোলা মাঠে পায়খানা রোগ জীবাণু ছড়ায়? হ্যাঁ না ।
- ৫০। জানলে কারা বলেছে? এনজিও-এর লোকজন বাবা-মা ।
- ৫১। এনজিও বললে কোন ধরনের? BRIF BRAC RDRS Plan অন্যান্য.....
- ৫২। তুমি কি প্রতিবার পায়খানা শেষে সাবান দিতে হাত ধোও? হ্যাঁ না ।
- ৫৩। তুমি কি খাবার আগে সাবান দিয়ে হাত ধোও? হ্যাঁ না ।

- ৫৪। তুমি অসুস্থ হলে সাধারণত কোথায় চিকিৎসা নেও? এনজিও চিকিৎসালয় হাসপাতাল গ্রাম্য ডাক্তার
কবিরাজ হোমিও প্যাথ
 অন্যান্য
- ৫৫। কোন এনজিও চিকিৎসা কেন্দ্রে যাও? BRIF BRAC RDRS Plan
অন্যান্য.....
- ৫৬। কর্মস্থলে অসুস্থ হলে কে চিকিৎসা ব্যয় বহন করে? নিজে পরিবার মালিক ।
- ৫৭। তুমি কি মনে কর যে তোমার স্বাস্থ্যের অবস্থা ভালো? হ্যাঁ না ।
- ৫৮। গত শেষ ছয় মাসের মধ্যে স্বাস্থ্য সম্পর্কে পরামর্শের জন্য ডাক্তারের কাছে গেছো কি? হ্যাঁ না ।
- ৫৯। তুমি নিয়মিত স্বাস্থ্য পরীক্ষা কর কি? হ্যাঁ না ।
- ৬০। তুমি কি কোন দীর্ঘমেয়াদী অসুখে ভুগছো? হ্যাঁ না ।
- ৬১। তুমি কি নেশা কর? হ্যাঁ না ।
- ৬২। নেশা করলে কোন ধরনের? গাজা হিরোইন ফেনসিডিল ধূমপান গাজা গুল অন্যান্য
.....
- ৬৩। তুমি নিয়মিত খেলা ধুলা কর কি? হ্যাঁ না ।
- ৬৪। তুমি কি এনজিও স্কুলে পড়েছে? হ্যাঁ না ।
- ৬৫। পড়লে কোন ক্লাশ পর্যন্ত পড়েছে?
- ৬৬। কোন ধরনের এনজিও স্কুলে পড়েছে? BRIF RDRS Plan অন্যান্য
- ৬৭। তুমি কি কখনও স্কুলে গিয়েছো? হ্যাঁ না ।
- ৬৮। তুমি কি এখন স্কুলে যাও? হ্যাঁ না ।
- ৬৯। স্কুলে না গেলে কেন যাচ্ছ না? আর্থিক অসচ্ছলতা স্বাস্থ্য খারাপ শিক্ষক ভাল ব্যবহার করে না বাবা মায়ের
অনীহা
- ৭০। স্কুলে যাওয়ার জন্য কারা উৎসাহ যুগিয়েছে? গন্যমান্য এন.জি.ও বাবা-মা আত্মীয় স্বজন
অন্যান্য.....
- ৭১। এন.জি.ও কোন সাহায্য করে কি? হ্যাঁ না ।
- ৭২। সাহায্য করে থাকলে কোন ধরনের? বই পুস্তক খাদ্য পোশাক চিকিৎসা অন্যান্য
.....
- ৭৩। কোন ধরনের এনজিও সাহায্য করেছে? BRIF BRAC RDRS Plan
অন্যান্য.....
- ৭৪। এন.জি.ও উৎসাহ না দিলে তুমি কি লেখাপড়া করতে পারতে? হ্যাঁ না ।
- ৭৫। এনজিও কর্তৃক কোন বৃত্তি পেয়েছ কি? হ্যাঁ না
- ৭৬। কোন এনজিও কর্তৃক বৃত্তি পেয়েছে? BRIF BRAC RDRS Plan অন্যান্য.....
- ৭৭। পেয়ে থাকলে কোন ধরনের? মাসিক বার্ষিক এককালীন অন্যান্য.....
- ৭৮। তুমি কি জান যে শিশুশ্রম নিষিদ্ধ? হ্যাঁ না ।
- ৭৯। শিশুশ্রম নিষিদ্ধ কারা এই ধরনের কথা বলেছে? BRIF BRAC RDRS Plan
অন্যান্য.....
- ৮০। তুমি কি মনে কর যে এই কাজ তোমার জন্য ক্ষতিকর? হ্যাঁ না ।
- ৮১। যদি হ্যাঁ হয় তবে কি ধরনের ক্ষতি হতে পারে? স্বাস্থ্যগত মানসিক অন্যান্য