

**POVERTY IN TWO SELECTED DISTRICTS IN BANGLADESH:  
CAUSES AND CONSEQUENCES**

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**POVERTY IN TWO SELECTED DISTRICTS IN BANGLADESH:  
CAUSES AND CONSEQUENCES**

**BY**

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A Thesis

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## **CERTIFICATE**

This is to certify that the research work entitled, “**POVERTY IN TWO SELECTED DISTRICTS IN BANGLADESH: CAUSES AND CONSEQUENCES**” conducted by **MANWARA NASRIN MUNNI** bearing Registration No. **11-04668 (July-December/2018)** under my supervision and guidance in the partial fulfillment of the requirements for the degree of **MASTER OF SCIENCE (M. S.) IN DEVELOPMENT AND POVERTY STUDIES** in the Faculty of Agribusiness Management, Sher-e-Bangla Agricultural University, Dhaka 1207, Bangladesh. No part of this thesis has been submitted for any other degree or diploma.

I further certify that any help or source of information received during this study has been dully acknowledgement by her.

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*“Read in the name of your Lord who created”*



**Dedicated To**

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*My Beloved Parents*

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*-The Author*

# **POVERTY IN TWO SELECTED DISTRICTS IN BANGLADESH: CAUSES AND CONSEQUENCES**

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## **ABSTRACT**

As in many developing countries, poverty in Bangladesh has been an alarming social issue for a significant amount of time. Bangladesh has experienced a dramatic progress in reducing poverty. The country is on track to reach the first Sustainable Development Goal of eradicating extreme poverty. For this study some area of Narayanganj and Kurigram district was selected. Data were collected from Household Income and Expenditure Survey (HIES) 2010. Binary Logistic Regression Model has been applied to analyze the data. In this study the household whose were benefited, want to get help or attitude for getting help from Social Safety Nets Program (SSNP) those household marked as poor and the household did not take help from Social Safety Nets Program (SSNP) those were marked as non-poor. 0.24 percent household in Narayanganj district and 10.31 percent household in Kurigram district was benefited from SSNP. There was an effect of income for poor and non-poor household. Most of the household in Kurigram district earned from agricultural sector but most of the household in Narayanganj district earned from non-agriculture sector. Average annual income from other sectors had a significant effect on household of Narayanganj district. Percentage of poor household was 82.5 percent in Kurigram district and 52 percent in Narayanganj district where at least one member in this family was included to Social Safety Nets Program. From this study it can be concluded that most of the household in Kurigram district is poor where most of the household of Narayanganj district is non-poor.

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## ABBREVIATIONS

UNDP:	United Nations Development Programme
SDGs:	Sustainable Development Goals
MDGs:	Millennium Development Goals (MDGs)
HIES:	Household Income and Expenditure Survey
ADB:	Asian Development Bank
<i>et al.:</i>	Et alia (L.) and others
GDP:	Gross Domestic Product
M.S.:	Master of Science
NGOs:	Non-Government Organizations
%:	Percentage
BBS:	Bangladesh Bureau of Statistic
SPSS:	Statistical Package for Social Science
BLRM:	Multiple Binary Logistic Regressions Model
MS:	Microsoft Word
SSNP:	Social Safety Net Programme

**CHAPTER - I**  
**INTRODUCTION**

# CHAPTER I

## INTRODUCTION

### 1.1 Background of the Study

Bangladesh, with a land area of 1,47,000 sq. km and an estimated population of 158.9 million, is the world's eighth populous country (UNDP 2018). Bangladesh's poverty rate, as per the lower poverty line or people live in extreme poverty, came down to 11.3% in 2018, according to the latest data of the Bangladesh Bureau of Statistics (BBS) 8 million people have moved out of poverty since 2010 (BBS 2018). The country is also on track to reach the first Sustainable Development Goal of eradicating extreme poverty by 2030 (UNDP 2018).

Poverty is the oldest and the most resistant virus that brings about a devastating disease in the third world called under development. It is a constant companion of most of the people of Bangladesh due to some specific reasons for which the rich are becoming richer and the poor are becoming poorer. Bangladesh is considered as one of the poorest countries in the world, faces three major crises namely economically, politically and environmentally.. Therefore the role of NGO's is inevitable for the planned development of any country. Accordingly, a lot of NGO's are working simultaneously in the country. NGO is an association of persons formed through the personal initiatives of a few committed persons dedicated to the design, study and implementation of development projects at the grass-root level. They work outside government structure but operate within the legal framework of the country and their target populations are the rural poor. In Bangladesh different kinds of NGO's are working positively for poverty reduction and socio-economic development. Poverty reduction and implementation of livelihood of the poorest of the poor has always been one of the major goals of all development. Poverty remains a global concern for the last few decades. Its nature and dimension are much complex in rural areas. Poverty eradication issues were given the highest emphasis in the Millennium Development Goals (MDGs) and subsequently, these have been kept as the priorities in the Sustainable Development Goals (SDGs). Poverty "Being poor is related to a wide range of factors including income, health, education, access to goods, geographical location, gender, ethnic origin, and family circumstances" (World Bank 1997:2) Poverty is defined as a complex phenomenon that generally refers to inadequacy of resources and deprivation of choices that

would enable people to enjoy decent living conditions. While Yunus (1994) defines it as the denial of human rights relating to the fulfillment of basic human needs. Poverty restrains economic growth and sustainable development. The social, economic, demographic, cultural and other significant contributing factors for poverty reduction have implications on the economic development and policy interventions (World Bank, 2014). Poverty in Bangladesh has declined remarkably since the early-2000s, as result decades of accelerated economic growth. The remarkable progress in poverty alleviation has been recognized by international institutions. According to the World Bank, Bangladesh's poverty rate fell from 82% in 1972, to 18.5% in 2010, to 13.8% in 2016, and below 9% in 2018, as measured by the percentage of people living below the international extreme poverty line (World Bank, 2018). The causes of poverty in Bangladesh are tough to tackle, but the country has nonetheless shown impressive improvements and resilience over the years. For instance, the country has made remarkable progress in poverty reduction in the last couple of decades: according to the World Bank, Bangladesh managed to reduce its poverty rate—defined as the percent of the population living below \$1.90 a day—from 44.2 percent in 1991 to 18.5 percent in 2010. Women taking part in the economy is crucial: according to research published in The Atlantic, “gender inequality and poverty are closely intertwined; tackling the former means mitigating the latter.” Some factors that hinder women from working include the lack of reliable and affordable transportation, the absence of child care and cultural biases against women from working in the same spaces as men. Although dealing with the causes of poverty in Bangladesh is complex, the country has made extraordinary developments since the time of its independence in 1971. Once dismissively called a “basket case” due to rampant poverty, it is described now as “the land of impossible attainment:” it moves up regardless of hurdles.

## **1.2 Poor and Non poor**

The concept of poverty is often interpreted as a state of being “poor” or “not poor.” However, identifying one population as “poor” and everyone else as “non poor” oversimplifies the economic circumstances individuals and families face over the year. A poor is an individual who does not have the minimum essential necessities of life. The poor people maintain few assets and live in kutchra huts with walls built of baked mud and roofs built of grass, bamboo, thatch and

wood. Starvation and hunger are the principal characteristics of the poverty struck families. Non poor means people who are not poor and having sufficient money or material possessions.

### **1.3 Statement of the Problem**

Poverty stands for those people who are in want of any of their fundamental needs. If an individual is in short of any of the needs, he or she will fall under the curtain of poverty. We can say that poverty means the people living under poverty line. In another sense, poverty means the state of being poor. The causes of poverty are due to the limited employment opportunities, degraded environment, bad housing and sanitation. The urban poor hold jobs that are labour demanding, thus affecting their health conditions. In Bangladesh, the population living below the national poverty line dropped to 21.8% in 2018 from 24.3% in 2016. In Bangladesh, the proportion of employed population below \$1.90 purchasing power parity a day dropped 14.8% in 2016 (ADB 2018). The poor people are in lack of education, shelter, food, cloth, security and income earnings. Above all, they are under poverty line. In Bangladesh poverty rate is high in Kurigram and low in Narayanganj district. That's why in this study has found out causes and consequence of poverty and compare between two districts. Thus the researcher undertook this piece of study entitle "POVERTY IN TWO SELECTED DISTRICTS IN BANGLADESH: CAUSES AND CONSEQUENCES"

### **1.4 Justification of the Study**

Poverty is a significant problem in Bangladesh. Poverty rate in rural area is high. Government of Bangladesh takes various projects in root level of the country to reduce poverty. During previous year many researcher had found out measurement of poverty, study on overall country or world, study on absolute and relative poverty, role of micro-finance to reduce poverty. This study will generate baseline information on socio-demographic characteristics of selected district. The present study is conducted in 3 upazila in Narayanganj district and 5 upazila in Kurigram district. This study is expected to add some valuable information to the existing body of knowledge regarding household information with respect to the area under study. This study provides appropriate suggestion and policy recommendations which might help the development agencies and policy makers of the country for reducing poverty level.



## **1.5 Key Research Questions**

The purpose of the study was to find out the answers of following questions:

- i. What are the causes of poverty?
- ii. Why poverty rate is high in Kurigram and lower in Narayanganj?
- iii. What is the consequence of poverty?
- iv. What is the consequence of Social Safety Net Programme?

## **1.6 Objectives of the study**

1. To identify the consequence of SSNP of different dimensions.
2. To identify significant mobilization of income from a variety of sources.
3. To develop the inequality of income distribution in the surveyed population.
4. To measure the causes of different poverty level in the study area.

## **1.7 Limitation of the study**

- i. All data were secondary data. No primary data is used.
- ii. Data were collected from HIES report 2010 which is old data.
- iii. There are 64 districts in Bangladesh but only two districts Kurigram and Narayanganj are selected.

## **1.8 Organization of the Thesis**

The study has been organized into six chapters. Chapter 1 describes the introduction of the study along with the objectives, statement and justification. In chapter 2 a review of literature is presented and methodology is described in chapter 3. Description of the study area is included in chapter 4. Chapter 5 represents the status and determinants of income and other activities of household. Finally chapter 6 represents conclusion and recommendations of the study.

**CHAPTER - II**  
**REVIEW OF LITERATURE**

## **CHAPTER II**

### **REVIEW OF LITERATURE**

The main purpose of this chapter is to review some related studies in connection with the present study. Although a lot of studies have been done on poverty only a few studies have so far conducted related to causes and consequences. This study highlights only a few of the studies, which are considered recent and very relevant for this research. Again, some of these studies may not entirely relevant to the present study, but their findings, methodology of analysis and suggestions have a great influence on the present study, so it has great influence on the present study. Therefore, some of the literatures related to the present study are briefly discussed below:

This chapter is divided into some subsection

Subsection 2.1: Concept of poverty

Subsection 2.2: Causes of poverty

Subsection 2.3: Consequences of poverty

Subsection 2.4: Framework of the study

#### **2.1 Concept of poverty**

**Sen (1983)** voiced big stress onto the absolute nature of poverty which stayed irrespective of the relative dimensions of understanding the deprivation in a realistic social context. Sen argued that the absolute poverty line was not bereft of the flexibility that it ought to assume due to the natural passage of time and the ensuing changes in social and economic conditions. Also variations in absolute poverty were in tune with the variations found across societies due to differences in preferences, occupations, climate and geography. Sen proposed a capabilities approach to conceptualizing poverty according to which poverty understood to be a lack of success to achieve an “absolute level of capability.”

**Citro and Michael (1995)** showed for instance, that poverty ‘relates to individuals’ absence of monetary assets (e.g., cash or close cash income) for utilization of financial products and administrations (e.g., nourishment, lodging, attire, transportation).”

**Ravallion (1996)** contended, for instance, endeavors to precisely catch poverty should incorporate both economic (money-metric) and non-economic indicators.

**Dutt (1998)** presented a time series on poverty measures for all India as well as a state wise and rural-urban division for the period 1951 to 1994 using the results of the 50th NSS round. The author threw light on the trends and the broad underlying factors responsible for the trend.

**Foster (1998)** made an assessment of the absolute and relative poverty measures in view of the then on agenda of most discussions - proposed shift from absolute to relative measure of poverty in US. Performing a thorough contrast of the two approaches to measuring poverty, the author uphold the possibility of combining the two.

**Warr (2001)** estimated the growth elasticity of poverty reduction for Indonesia over 1976 to 1999 which was found to be -1.38. Also, the study covering a small sample of six south Asian economies - upholds the proposition that open trade brought about a higher rate of economic growth and a pattern which was poor-friendly. The calculation of the study explained that only about 40% of the annual variation in the rate of poverty decline is explained by variation in the rate of growth, thereby making it an important variable determining poverty alleviation.

**Hofman *et al.* (2004)** explained the relation between income and poverty - Indonesian per capita income increased to \$3346(PPP) in 1995 from \$817(PPP) in 1965 and a major proportion of the population gained from this growth and poverty rates reached a low of 11% (poverty headcount rate) in 1996.

**Khan (2004)** suggested a number of solutions to poverty reduction which included an important role for the State in the form of providing direct income transfers to supplement the low incomes of the poor or subsidizing the cost of the marketed requirements. The author had critically analyzed some of the measures put into practice in the Latin American and East Asian countries.

**Lister (2004)** made a compelling coverage of the definition, measurement and multi-faceted nature of poverty, without being country/region specific.

**Srinivasan (2007)** analyzed the definition of poverty line in India - changing with time and approved and questioned the way it broadened in the recent past by the revision experts assigned the task by the Government of India. The author also suggested the changes that need to be made to make poverty line a better monitoring tool as well as the benchmark for policy decisions involving poverty alleviation.

**Bandyopadhyay (2010)** made a chronological examination of the definition of poverty line in India. The author also addressed the debates that done rounds amongst the experts of the area with regard to various components and surrounding issues involved in poverty measurement, such as - the appropriate recall period used in consumer surveys and the use of calorie intake as a proxy for nutritional adequacy.

**Mehta and Bhide (2010)** studied the trend of poverty definitions and the trend of incidence on All India and State level sourced from estimation done by the Planning Commission. They critically analyzed the gaps in the definition of poverty and the policy measures taken in the form of various poverty alleviation schemes being run to tackle poverty directly and indirectly. Most significantly, the authors assessed the capability of some of these programmes in impacting the dynamics of poverty - which of these influenced entry into poverty, exit from poverty or improve the quality of life.

**Motwani (2012)** highlighted the relevance of relative poverty over absolute poverty. She asserted the significance given to poverty line or absolute poverty by economists and policy makers as compared to relative poverty which is social or custom driven perception of the people. Therefore the author suggested incorporation of relative dimension of poverty into the absolute measure of poverty used by policy makers in India.

## **2.2 Causes of poverty**

**Ghosh (1990)** was discussed the significant causes of poverty which were broadly of two types - ones that are visible and have a strong presence in all the parts of the nation at a particular time and the ones which were local factors peculiar to a region and largely responsible for regional poverty. Amongst the former category was urban bias in investments. This bias had been the

focus of the study by Michael Lipton (Lipton, 1977) and had been endorsed by the author among others in context of India. The author studied existing literature and undertook a study for 10 districts of West Bengal and the findings confirm the presence of this urban bias or rural neglect in context of capital/ investment allocations in India.

**Chambers (1995)** brought forth lesser discussed dimensions of poverty and deprivation such as vulnerability, isolation and powerlessness and proposes widening the definition to include these disadvantages as well.

**World Bank (1995)** details on the poverty profile of Brazil sketching the description of the causes, effects and policy actions related to poverty over the period 1960-1995. The spurt in poverty with the turn of the last decade of the twentieth century has been of special concern. Discussing the policy implications, the authors highlight the need for targeting interventions with specific geographical coverage and expansion of welfare services for the poor. The authors acknowledge the strong influence of growth on poverty reduction in the 1970s but stress the requirement of safety nets to enable extremely poor and vulnerable sections tide out of their poor condition.

**Wilson (1996)** focused in this study observes poverty as a kind of tendency where poor are responsible for their own circumstances.

**Rocha (1997)** explained that the economic crisis of the 1980s caused the incidence of poverty to rise in Brazil and the simultaneous hyperinflation increased the burden on the masses which adversely affected the poor tremendously.

**Pradhan and Saluja (1998)** wrote about poverty in context of Indian economy. They reviewed the studies undertaken to define and measure poverty in India as well as for the segregation into rural and urban poverty, explained the significance of agricultural performance on income levels and therefore deprivation or otherwise and perform an impact evaluation of the different social programmes.

**World Bank (2001)** presented the World Development Report for 2000/2001 which cited a string of reasons that cause poverty in different settings – whether developed countries or

developing countries. The report also showed a plan for action to reduce poverty by observing specific country cases socio-economic issue of poverty in the post-independence period.

**Mujeri and Khondker (2002)** presented a general equilibrium analysis to identify the contribution of various factors in poverty reduction in Bangladesh and their study revealed that liberalization of the economy and its integration into the world economy resulted in improving the situation of the poor and the gains from economic liberalization benefitted the well off more than the economically weaker sections. This had been largely due to structural constraints.

**Jones (2003)** covered the trends in economic growth and poverty reduction in six Asian economies including India, Bangladesh and Indonesia and drawn future scenarios (till 2015) of the extent of poverty reduction against possible growth rates and income inequality. Using the trends of 1990s and data from various sources including World Bank and ADB, the study arrived at poverty results corresponding to conservative and liberal growth possibilities for India, Bangladesh and Indonesia. Significantly, the study points out the insufficiency of the past growth rates in reducing poverty and the need to tune the economic growth in favour of the poor.

**Osmani *et al.* (2003)** undertook a study covering the growth and poverty trends in Bangladesh in the 1980s and 1990s which explained the economic growth as an important reason underlying poverty reduction in 90s which was largely due to growth in the small scale manufacturing and services. The authors gave more credit to the latter and attribute liberalization of economy as significant in creating opportunities that helped in poverty reduction.

**Chaturvedi and Upadhyay (2004)** showed the growth performance of India in the pre and post reform period and found out the corresponding trends in per person consumption expenditure and poverty rates. The findings showed a rise in the per capita consumption spending and its growth and fall in poverty ratios in the post reform period. However the income disparities across regions showed further worsening.

**Deaton (2004)** discussed issues involved in measurement of poverty. The author questions the idea of keeping absolute poverty lines, anchored in minimum calorie requirements, constant in real terms over time and space. Eliciting the problems with them, the solution suggested was the

adoption of separate nutrition norms. Also, the author appreciated expansion of the meaning of deprivation beyond income and food to make it more holistic.

**Du Toit (2004)** in this manner upheld the methodology and contended that “social exclusion reverberates with different methodologies that amplified the investigation of poverty beyond money-metric measures”.

**Shek (2004)** research on the perceived causes of poverty hint that poverty can be perceived along three perspectives: individualistic, structural and fatalistic.

**Rao (2005)** presented a compilation of research papers with more than half a dozen discussing the numerous dimensions of rural poverty. The author, a noted economist made critical analysis of the strategies adopted for rural poverty alleviation. Rao made a strong case for the importance of agricultural growth and improvement to benefit masses and thus aid poverty reduction which could not be achieved by lop sided growth and targeted poverty reduction schemes alone. The proposed strategies for the then upcoming seventh five year plan involved fund allocation for skill development and employment generation in rural areas to allow sustained improvement in the income levels of the marginalized. Thus social sector reforms in addition to revitalizing agriculture hold the key to poverty alleviation.

**Rocha (2005)** discussed on the continuing absolute poverty in Brazil which is blamed onto inequality in the distribution of income and the poverty levels were more sensitive to changes occurring in the levels of inequality than the changes in economic growth.

**Rokkam and Ray (2005)** discussed the extent, trends and causes of poverty in India. The extent of poverty reflected in the poverty trend reveals a prominent downward movement in the last decade of the 20th century as also within the pool of determinant of poverty in India, the significance based ordering kept changing with the passage of time. The editors compiled an excellent collection of research discussions (by subject learners and experts) which cover the causes of poverty in India as well as the various solutions being used to check its prevalence. The research papers in the handbook also ranged the wide gamut of programmes and policies that used at Central as well as State level in India to tackle poverty via legislative initiatives, involvement of poor in governance, etc. and an analysis of the same.



**Virmani (2005)** conducted an extensive macro level study to examine the linkages between economic systems/policy regimes and growth and poverty since 1950. With the help of secondary and empirical data, the author has studied these linkages. While India's incidence of poverty understandably matched the low income status of the country, the author deplors the performance of social indicators such as literacy, access to clean drinking water, health and sanitation facilities, etc. and blames poor policy design and implementation for the same. The author argued that in absence of the oppressive policy towards the business class, the latter would have succeeded far more in improving economic growth and lowering the extent of poverty in India.

**Applebaum et al. (2006)** focused the sixth factor for the causes of poverty. Under this factor the non-poor make an explanation that the poor are responsible for their own cause of poverty, where they were unwilling to earn more and lack the skill to earn anything.

**Das (2006)** examined the causes of poverty in Brazil and focused on the political history of the country as an important determinant for the existence of poverty.

**Elizabeth (2006)** studied underlines the importance of understanding the processes that link poverty at the local level with the regional and national political economy. The causes of rural poverty in South Africa stem from historically-generated power inequalities.

**Ferreira et al. (2007)** discussed the poverty situation in Brazil over 1985-2004. They explained low reduction in poverty due to low economic growth and low impact of growth on poverty. In the latter half of the period of study, price control and State interventions in the form of welfare programmes were important determinants that contributed to the decline in poverty.

**Davids (2010)** showed perspective of the causes of poverty predicts that poverty stems from the factors such as people are poor because they are lazy or dependent on welfare.

**Osmani and Latif (2013)** found by an econometric analysis of the determinants of poverty helped identify a number of factors that can make significant contribution to poverty reduction, namely access to assets (both land and non-land assets), greater availability of working members within the household, education, access to non-farm employment opportunities, access to

microcredit and foreign remittance, and greater connectivity, all of which had straightforward policy implications.

**Korankye (2014)** investigated that poor governance, lack of education and prevalence of diseases were the major causes behind poverty in Ghana.

**IFAD (2015)** reported of halving of poverty in Brazil over 1990-2010 on account of good economic growth and concerted efforts of the government attacking poverty. Highlighting a major reason for poverty in Brazil as inequality in land tenure, the report outlines the strategy of IFAD to work in tandem with the governmental efforts atrural development.

**Khatun (2015)** identified that poverty was caused from lack of income, access to education, credits and public infrastructure.

### **2.3 Consequence of poverty**

**Kakwani and Subbarao (1990)** studied a significant span of more than two decades in post-independence India, the authors in this working paper arrived at very noteworthy conclusions regarding the complementary role of growth and poverty reduction programmes.

**Lustig (1995)** analyzed the poverty in Brazil for the decade of 1980s which was a period marred by economic slowdown and the adverse impact fell most on the poor people.

**Lustig and McLeod (1996)** analyzed the effect of minimum wages of labour on the level of poverty and through their empirical study of twenty two developing nations of Latin America and Asia find that the two are inversely related to each other.

**Fan *et al* (1999)** covered the governmental spending on multiple items in rural India and finds out the impact of these on poverty reduction (in addition to growth of productivity). The highlighting finding of the research was the high impact of investment in rural infrastructure such as roads while poverty reduction programmes like employment generation make a moderate impact on both poverty alleviation as well as growth in rural India.

**Cornia and Kiiski (2001)** showed that in Indonesia rural development and subsequent reduction in income inequality came about due to greater investments in rural infrastructure and public health and education made out of oil revenues thus the period stretching from mid-1970s to the late 1980s was characterized by rapid economic growth and reduction in poverty. But, the study revealed that beyond this period till the onset of the financial crisis of mid 1990s, the emphasis of economic development was largely urban, and the slow growth in agriculture increased the rural urban divide and thus the overall inequality worsened. Importantly, the overall economic growth was accompanied by decline in the national poverty rates in this period.

**Deolalikar et al (2002)** studied poverty in the Asian region to find the importance of social, political and economic institutions in effecting poverty situation in both ways that was, reducing or perpetuating it. The role of socio-cultural and legal factors to a large extent determines the involvement of the marginalized in the decision making or governance which in turn influenced their economic well-being.

**Krishna (2005)** studied poverty at grass root level in 107 villages in India to suggest that different strategies would be required to prevent non-poor from getting into poverty and poor climbing out of poverty. The author revealed that health related expenditure tops the list of reasons due to which people's misery or poverty increased.

**Papnek (2005)** traced the impact of economic factors and changes therein on the poor in Indonesia. In addition to analyzing the impact of macro policy on economic growth and the subsequent impact on the labour demand/employment opportunities, wages/incomes of the poor and inflation, the study also identified the features of the State run anti-poverty schemes which were responsible for improving the condition of the poor or failing to do so.

**Mehta and Shepherd (2006)** compiled an anthology on research articles which undertook understanding of consequences of poverty via primary and secondary data sources. In addition, there were suggestions regarding policies on poverty reduction.

**Bardhan (2007)** analyzed the link between globalization and poverty reduction for India and China on the basis of the experience of these two countries 1980 onward. The study gave little credit to global linkages for improving the condition of the people or lack of it for a slow decline

in poverty - as believed by many scholars and thinkers. The author maintained that factors other than globalization had been stronger at influencing the wages of the rural poor and therefore the observed pattern of consumption expenditure. Also, globalization had done little to improve health dimensions of well-being in case of India.

**Malluff and Burllandy (2007)** examined and analyzed the conditional cash transfer scheme – Bolsa Familia as a policy response to the problem of income inequality and poverty in Brazil and recommend better coordination cross welfare programmes with same social objectives, enhancing participation of the people in formulation and implementation of the programmes.

**Saxena (2007)** covered some centrally sponsored poverty alleviation programmes and through their assessment, the author identified the reasons underlying the deviation between the actual and desired outcomes of these schemes. Suggested changes in the policy stance regarding proper targeting and implementation also discussed.

**Sen *et al.* (2007)** hail the progress in poverty reduction made by Bangladesh. Poverty fell faster in the decade of 1990s relative to the decade of 1980s precisely on account of higher economic growth in the former as compared to the latter.

**Kapila (2008)** commented that the economy was caught in a ‘vicious circle of poverty’ and had the infamous distinction of being one of the nations with the lowest per capita income and consumption level. High illiteracy (84%), high mortality rates (27 per thousand), high rural population (85%), combined with unemployment, ignorance, diseases and inequitable distribution of resources among people and geographical regions made India stand out as a poor nation faced with innumerable challenges.

**Asselin (2009)** developed a methodology to develop a multidimensional poverty line or a composite poverty index by stringing together various dimensions of deprivation and using the measure to compute poverty in a realistic context by making use of the available tools for calculation and assessment. The author had strengthened the suggestion by putting the methodology to test in case of Vietnam.

**Ferreira and Leite (2009)** studied that in spite of high levels of income inequality in Brazil, the country experienced pro-poor growth since the second half of 1990s and the phenomenon became pronounced 2001 onward.

**Alkire and Santos (2010)** discussed the technicalities of the multi-dimensional poverty index developed by OPHI and apply it to evaluate the poverty situation across the world. The important findings included differences in poverty situation once the new index is used as compared to the income measure of poverty. The authors proved that South Asia was home to more than half of the world poor.

**Klytchnikova and Diop (2010)** surveyed the impact of trade liberalization on poverty in Bangladesh from 1996 to 2000 and explain that trade liberalization led to increased import of farm equipment which was important in improving the rice productivity and lowered the rice prices. This benefitted the 'extremely poor' net buyers of rice who were able to scale up to the 'poor category.'

**Banks (2011b)** discussed the ability of the urban poor to benefit from wider processes of urban governance was dependent on a system where their votes count, a pro-poor municipal government had some capacity to deliver, and a dynamic civil society that could press the case for the urban poor and work towards an open and accountable relationship between state and civil society.

**Karnani (2011)** found skeptical of the ability of the markets to solve the problem of poverty by providing to meet the needs of the poor and generating employment opportunities for them. He instead proposes the role of the State's poverty reduction interventions in achieving the desired results.

**Sutiyo and Maharjan (2011)** found that the less than expected impact of poverty alleviation schemes on poverty in Indonesia largely due to gaps in their implementation. Specifically the study points out poor targeting mechanism, inadequate bureaucratic capability in programme implementation and dominant presence of local elite to divert programme benefits in their direction.

**World Bank (2011)** with the help of survey data collected from multiple sources analyzes India's experience with poverty. Specifically, the impact of urbanization and shift from farm to non-farm economic activities on poverty reduction in India in the two decades (spanning 1990 - 2010) has been explored. The major finding included a significant impact of urban growth on poverty reduction while the findings were inconclusive on the role of non-farm dynamism on improving the plight of the rural poor.

**Hick (2012)** explained the problematic issues that confound the traditionally accepted material concept of poverty and deprivation and shares his confidence in Amartya Sen's proposed Capabilities Approach to poverty measurement and policy making.

**Suryahadi et al. (2012)** discussed the trend of poverty in Indonesia which exhibited a decline in long run barring 1999 and 2006 due to Asian financial crisis and rise in fuel prices. The authors estimated the growth elasticity of poverty for both rural and urban Indonesia as well as the sector based component impact on poverty reduction over 1984-2002. The authors contend that growth in service sector impacts poverty reduction the most in both rural and urban Indonesia.

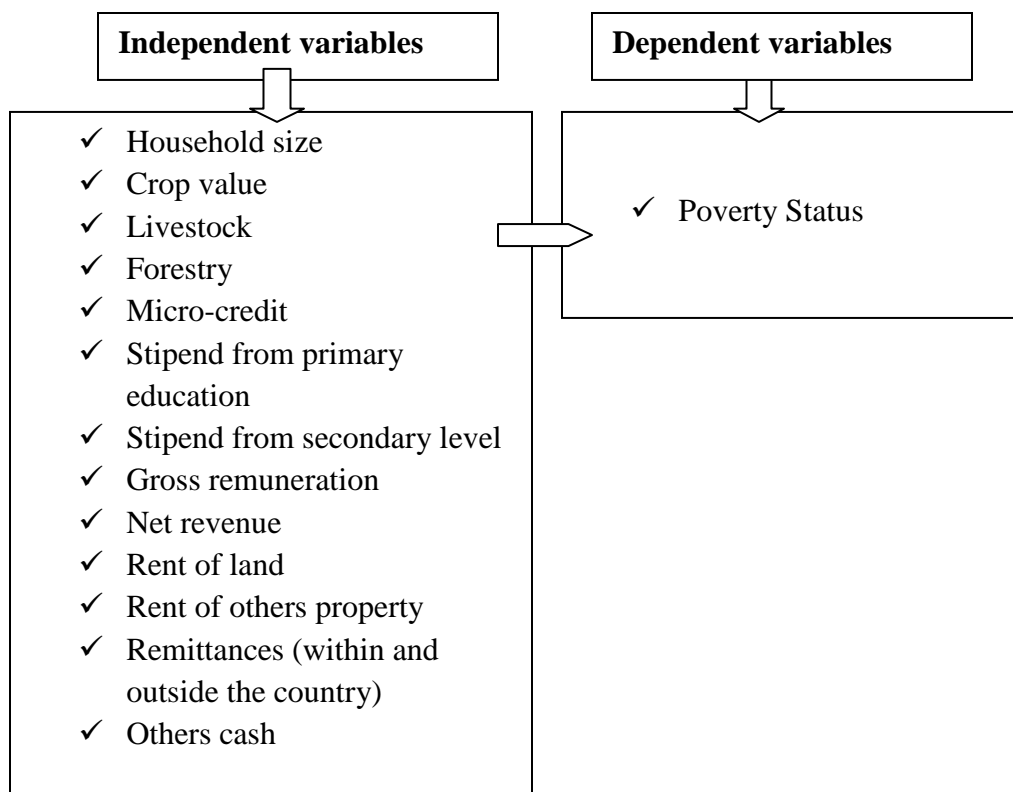
**Inchauste et al. (2013)** studied the success at poverty reduction experienced by Bangladesh, Thailand and Peru and attribute the increase in farm income to higher returns on land and experience in the 1990s in Bangladesh. Other factors that favoured poverty decline included an increase in the number of adults per family, increase in the number of earning members per family, increase in foreign remittances.

**Kapoor (2013)** questioned the belief that economic growth alone is capable of reducing poverty and with the help of estimates for a number of individual states shown that in some cases high economic growth had not resulted in the expected decline in poverty while some below average performers of economic growth had pushed poverty numbers forcefully. However, disputing the approximate consensus about the positive impact of economic growth on poverty reduction misplaced in itself as available literature on the issue approves importance to economic growth but did not assign it the complete onus of alleviating poverty. But, the study put the distortionary impact of inequality in consumption on 'growth elasticity of poverty' in limelight.

**Qayum and Samadder (2013)** share the poor impact of the State interventions as weak institutions and absence of implementation guidelines disrupted implementation of poverty reduction policies designed by the government in Bangladesh and there was no monitoring mechanism at the local level to ensure correct targeting and fund utilization.

## 2.4 Framework of the study

A conceptual framework illustrates what expect to find through your research. It defines the relevant variables for your study and maps out how they might relate to each other. It should construct a conceptual framework before you begin collecting data. It is often represented in a visual format. A conceptual framework of this study is represented in figure 2.1



**Figure 2.1: Framework of the study**

**CHAPTER - III**  
**MATERIALS AND METHODS**



## **CHAPTER III**

### **MATERIALS AND METHODS**

#### **3.1 Introduction**

Methodology is a system of broad principles or rules from which specific methods or procedures may be derived to interpret or solve different problems within the scope of a particular discipline. Methodology is not a formula but a set of practices.

The study was conducted to poverty of two selected districts in Bangladesh: causes and consequence some selected areas in Kurigram and Narayanganj district and analyzed in terms of the objectives set for the study. This study was based on secondary data from HIES report 2010.

#### **3.2 Source of Data**

This study is based on the data from Household Income and Expenditure Survey (HIES) 2010 conducted by Bangladesh Bureau of Statistics (BBS), Government of the People's Republic of Bangladesh. The HIES collected information from 64 districts of Bangladesh. The data were collected during the period from February 2010 to January, 2011.

A two-stage sample design was adopted for the survey. HIES-2010, 612 Primary Sampling Units (PSUs) was selected systematically from 16 strata as a subset of IMPS design. The population size was 12,240 households where 7,840 were from rural area and 4,400 from urban area.

A two-stage stratified random sampling technique was used to ensure greater precision. In the first stage, the specific geographic areas (mouza/ward) were considered as primary sampling units (PSUs) within each stratum. In the second stage, 220 households were randomly selected from each PSU covering rural areas. A PSU is usually a natural cluster of households. The HIES data are hierarchical due to its formation where households are nested into PSUs, and PSUs into divisions. In the HIES (2010), a total of 12240 households were randomly selected from 7

divisions, 64 districts, and 384 sub-districts. In our study, we have used 220 households from two districts (Narayanganj and Kurigram) in Bangladesh to identify the important factors associated with poverty in rural Bangladesh.

### **3.3 Variables of the Study**

Before executing any statistical analysis, it is important to check the data very carefully and selecting dependent and independent variables carefully is also important. In this study, two dependent variable and 5 independent variables for binary logistic regression model (BLRM). The construction of variables and their categories are discussed below:

#### **3.3.1 Dependent variable**

Since the study measures determinants poor and non-poor is used as dependent variable in Binary Logistic Regression Model (BLRM). In Binary Logistic Regression Model (BLRM), dependent variable is poverty status.

Categories of dependent variable are given below:

Poor = 0; Code-0 is used for the value less than the average

Non-poor=1; Code-1 is used for the value greater than or equal to the average

#### **3.3.2 Independent variables**

The study includes a total of 14 independent variables for multiple binary logistic regression models (Table 3.1). The selected independent variables and their categories are given:

**Table 3.1: Independent Variables for Multiple Binary Logistic Regression Model**

<b>S.N</b>	<b>Independent variables for BLRM</b>
01	Household size
02	Crop value
03	Livestock
04	Forestry
05	Micro-credit
06	Stipend from primary education
07	Stipend from secondary level
08	Gross remuneration
09	Net revenue
10	Rent of land
11	Rent of others property
12	Remittances (within the country)
13	Remittances (outsides the country)
14	Others cash

### **3.4 Analytical Tools and Techniques**

The study has used several statistical tools and techniques, both descriptive and inferential to have analyzed the data. Specially, Binary Logistic Regression Model has been applied to analyze the data for the study. Besides, some descriptive tools and techniques such as measurement of central tendency and dispersion, tabulation, cross-tabulation, graphing etc. have also been used in the study.

### 3.4.1 Multiple Binary Logistic Regression Model

When the dependent variable is dichotomous, logistic regression model is widely used not only to identify risk factors but also to predict the probability of success. The simple linear logistic regression model<sup>1</sup> can be expressed as  $\log_e \left[ \frac{\pi(X_i)}{1 - \pi(X_i)} \right] = \beta_0 + \beta_1 X_i$

Where, the quantity  $\pi(X_i) = E(y_i = 1 | X_i)$  represent the conditional probability that  $Y=1$  given  $X$  and expressed as  $\pi(X_i) = \frac{e^{\beta_0 + \beta_1 X_i}}{1 + e^{\beta_0 + \beta_1 X_i}}$ .

If one consider a collection of  $p$  independent variables denoted by the vector  $X'=(X_1, X_2, \dots, X_p)$  then the multiple logistic regression model is given by the equation as

$$\log_e \left[ \frac{\pi(X_i)}{1 - \pi(X_i)} \right] = \beta_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \dots + \beta_p X_{pi}$$

Two set of the mean values of the dependent variable for each subclass of the independent variables are obtained. The observed or “unadjusted” mean values are the actual means of the dependent variable in each subclass of the independent variable. The second is the “adjusted” mean, which gives the net effect of the predictor. The adjusted effects measure those of the predictor alone after taking into account the effect of all other predictors. The program output gives the deviations of the dependent variables from its grand means for each subclass of the independent variable in both “unadjusted” and “adjusted” form. To facilitate interpretation, the deviations of the mean value of the dependent variable from the grand mean in each of the subgroup of the independent variable have been added to the grand mean. This addition directly gives the mean value of dependent variable in the respective subgroups. These mean values indicate how households in a given subgroup differ from households in other subgroup with respect to the dependent variable with or without controlling the effect of all other predictors.

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<sup>1</sup> Agresti, A. (1996), “An Introduction to Categorical Analysis”, Wiley Series in Probability and Statistics, John Wiley and Sons Inc.

Hosmer D.W. & S. Lemeshow (2000), “Applied Logistic Regression”, John Wiley & Sons, Inc.

### **3.5 Statistical Software**

In this study, the entire analysis was done in personal computer. A well-known statistical package named SPSS (Statistical Package for Social Science) Windows version 21 was used for analysis. This program produces lists, frequencies; cross tabulations and Multiple Binary Logistic Regressions Model (BLRM). Variables were recorded and selected using defined variables, if statements, mathematical and logical operations, complex report formatting and programming language are related to the analysis. Besides SPSS package program other well-known packages viz., MS Word, MS Excel were also used for various purposes like report writing and for graphical representation.

**CHAPTER: IV**

**BACKGROUND CHARACTERISTICS  
OF THE SURVEYED HOUSEHOLDS**

## **CHAPTER: IV**

### **BACKGROUND CHARACTERISTICS OF THE SURVEYED HOUSEHOLDS**

#### **4.1 Introduction**

This subsection summarizes background characteristics of the surveyed households. Before performing any statistical analysis, it is important to know the background characteristics of the study population or nature of the data. Personnel characteristics of respondents have very significant role to play in expressing and giving the responses about the problem. In order to study these characteristics of different variables, it is necessary to focus on the percentage distribution of the considered variables. The percentage distribution demonstrates the pattern of variables and observations in different groups. The chapter has compiled a great deal of information on the socio-demographic and economic characteristics of its panel members. Demographic characteristics include age, gender, marital status, occupational status, educational status and household size (number of persons per household). Their profile can provide the delimitation of the study so that whatever findings brought out of the study can be described within the scope only of this profile. So, to have insights into the causes and consequences of poverty in the surveyed households areas, exploration of these characteristics is essential.

The profiles of the surveyed households in terms of socio-demographic characteristics and economic characteristics in connection with age, gender, marital status, occupational status, educational status and household size (number of persons per household) of the 220 respondents have been described, analysed, explored and presented in this chapter.

#### **4.2 Socio-Demographic Features**

The socio-demographic profiles of the households have been analyzed in terms of age, gender, marital status, occupational status, educational status and household size (number of persons per household) of the household members.

## **4.2.1 Characteristics of the Household Members**

This subsection provides the characteristics of household members, which are helpful in identifying the socio-economic behaviour of the households. The characteristics of household members have been analyzed in terms of their age, gender, marital status, occupational status, educational status and household size (number of persons per household) of the household members are discussed below:

### **4.2.1.1 Age and Gender**

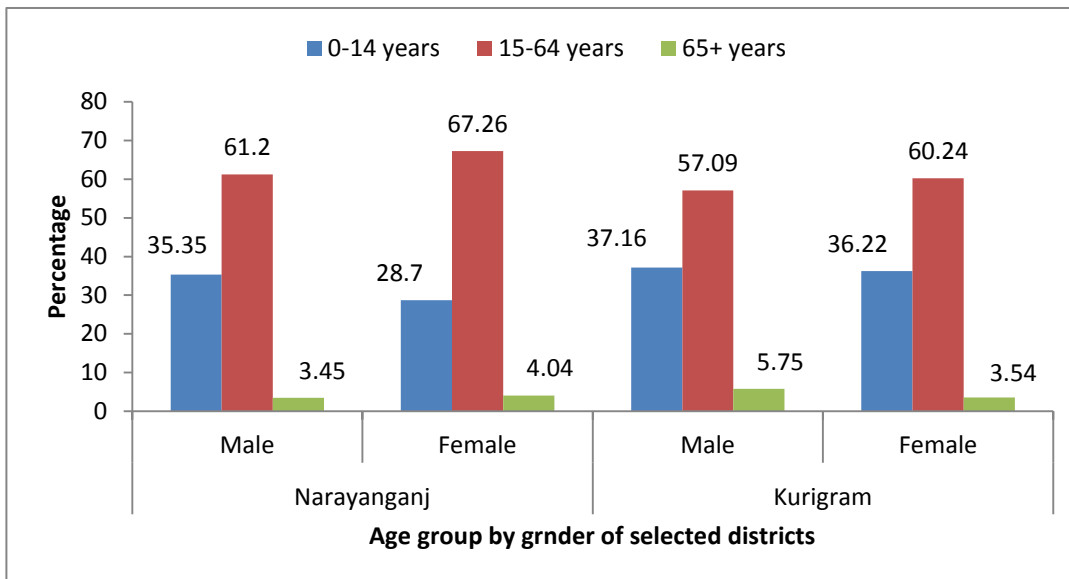
Age of the respondents is one of the most important characteristics in understanding their views about the particular problems; by highest and lowest age range indicates dependent people in that sense age becomes important to examine the response. There are 220 surveyed households from two selected districts in Bangladesh had a total population of 970.

It is evident from Figure 4.1 that range of the age was found (0 to 65+) years. The distribution of household population according to gender in case of below 15 years indicates that 35.35% male, 61.20% male between (15-64) years and 3.45% male were 65 or more in Narayanganj district. Again 28.7% female were under 15 years, 67.26% between (15-64) years and 4.04% female were 65 or more in Narayanganj district (Figure 4.1).

On the other hand in case of below 15 years indicates that 37.16% male, 57.09% male between (15-64) years and 5.75% male were 65 or more in Kurigram district. Again 36.22% female were under 15 years, 60.24% female between (15-64) years and 3.54% female were 65 or more in Kurigram district (Figure 4.1).

In this category male and female percentage below 15 years in Kurigram district was higher than Narayanganj district and percentage of 65 or above years, in case of male in Kurigram districts was higher than Narayanganj district, in case of female of Narayanganj district is higher than of Kurigram districts.





**Figure 4.1. Age category of Narayanganj and Kurigram district**

Source: HIES report 2010

From Table 4.1 the average age of the members of the surveyed households was estimated at 26 years with a standard deviation 19 of male respondents and 27 years of female respondents with a standard deviation of 18 in Narayanganj district and the average age 27 years with a standard deviation 21 of male respondents and 26 years of female with a standard deviation 19 in Kurigram district. Average age of male in Narayanganj district is lower than Kurigram district and average age of female in Narayanganj district is higher than Kurigram district.

The gender ratio was found out 104 male per 100 women in the Narayanganj district and 103 male per 100 women in Kurigram district which is higher than the national figure (102 for rural) as reported by HIES survey 2005 (BBS, 2007). In comparison, gender ratio is higher in the Narayanganj district. The dependency ratio of the study population was estimated at 56% in Narayanganj district and 71% in Kurigram district which is significantly lower than that of (74.2% for rural Bangladesh) the whole of the rural population reported by the HIES survey-2005 (BBS, 2007). The child dependency ratio is estimated at 50% in Narayanganj district and 63% in Kurigram district and the old dependency ratio at 6% in Narayanganj district and 8% in Kurigram district which including the distribution pattern of age discussed earlier indicates that

in Narayanganj district there was lower dependency ratio than Kurigram district. Surveyed people indicate that there are less vulnerable population in Narayanganj district (Table 4.1)

**Table 4.1: Age and Gender of Household Member**

Age group	Narayanganj		Kurigram	
	Male	Female	Male	Female
Average $\pm$ SD	26 $\pm$ 19	27 $\pm$ 18	27 $\pm$ 21	26 $\pm$ 19
Sex Ratio	104 male per 100 women		103 male per 100 women	
Child dependency ratio	50		63	
Dependency Ratio	56		71	
Old dependency ratio	6		8	

Source: HIES report 2010

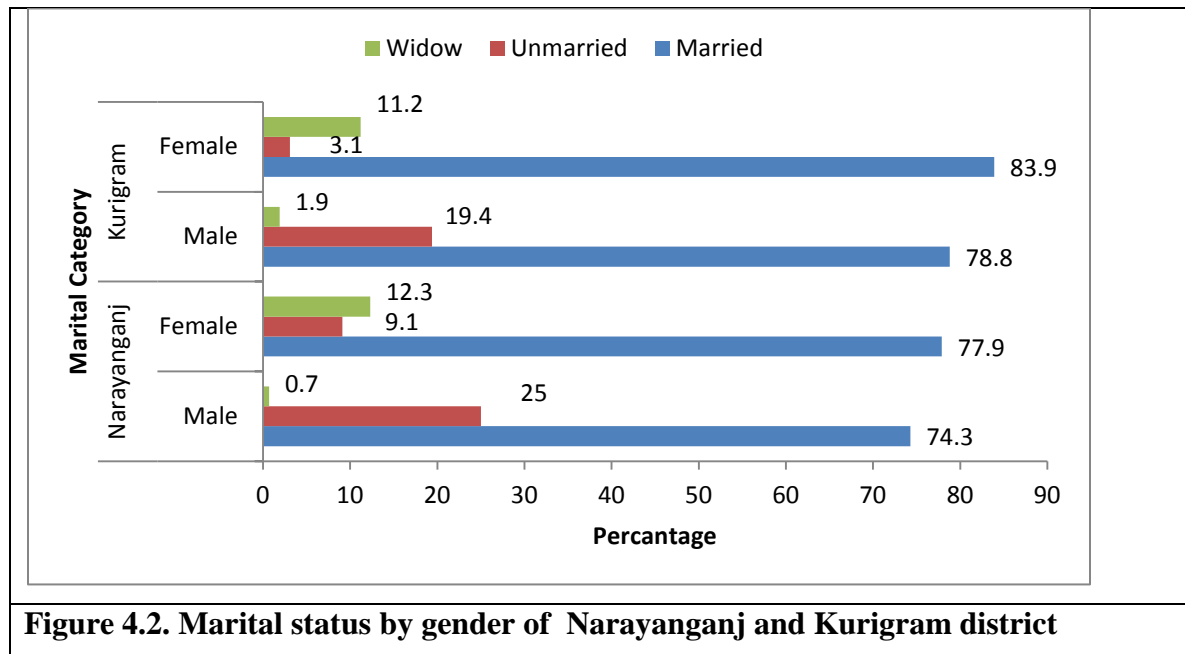
#### 4.2.1.2 Marital status

Marriage is one of the most important social institutions. The perceptions and attitudes of the person can also differ by the marital status of the persons because the marriage might make the persons little more responsible and matured in understanding and giving the responses to the questions asked.

The marital status of the household population aged 16 years or more (at the time of the survey). Figure 4.2 indicates that about 74.3% male was married, 25% male was unmarried and 0.7% male was widow and 77.9% female was married, 9.1% female was unmarried and 12.3% was widow in Narayanganj district.

On the other hand about 78.8% male was married, 19.4% male was unmarried and 1.9% male was widow and 83.9% female was married, 3.1% female was unmarried and 11.2% was widow in Kurigram district.

The proportion of unmarried people was found significantly low for female population in comparison with that of the male population, which indirectly indicates that female population is being getting married earlier than their male counterpart.



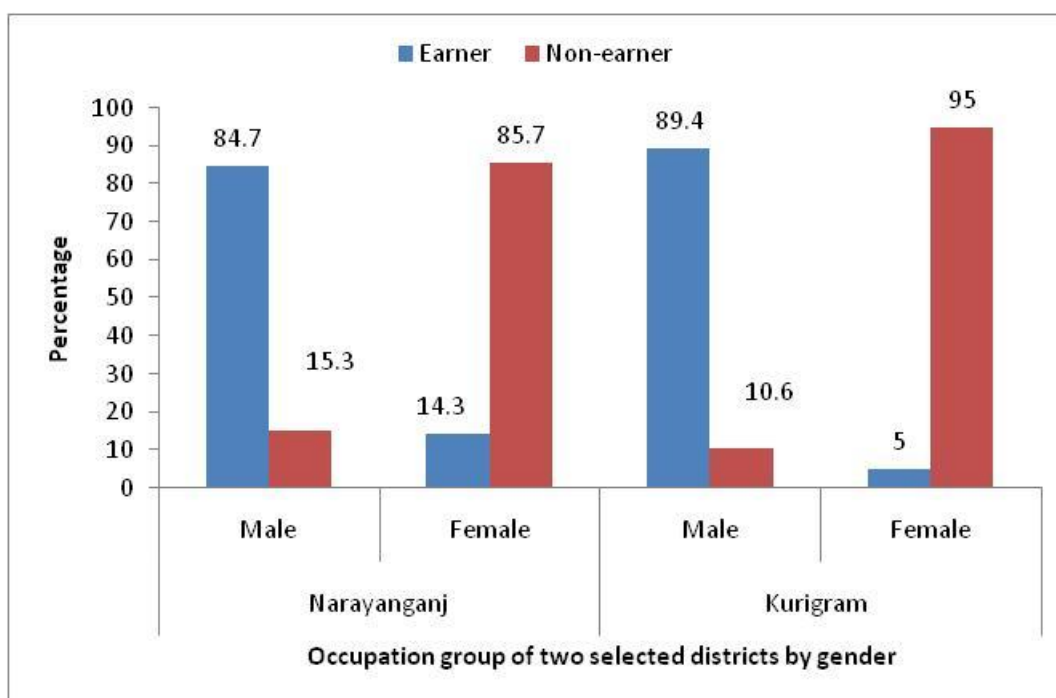
**Figure 4.2. Marital status by gender of Narayanganj and Kurigram district**

Source: HIES report 2010

#### 4.2.1.3 Occupational Status

Person’s occupations do have a bearing on his or her personality and so also the ways of looking at the problem before him. The quality of life is also determined by an individual’s occupation and the incomes he derives from it. Occupation of an individual also socialized him or her in a particular fashion which in turn reflects his or her pattern of behaviors and his/her level of understanding of particular phenomenon. In other words the person’s response to a problem is possible determined by the type of occupation he is engaged in and hence variable occupation was investigated and data pertaining to occupation is presented in Figure 4.3, Figure 4.4, Figure 4.5 and Figure 4.6.

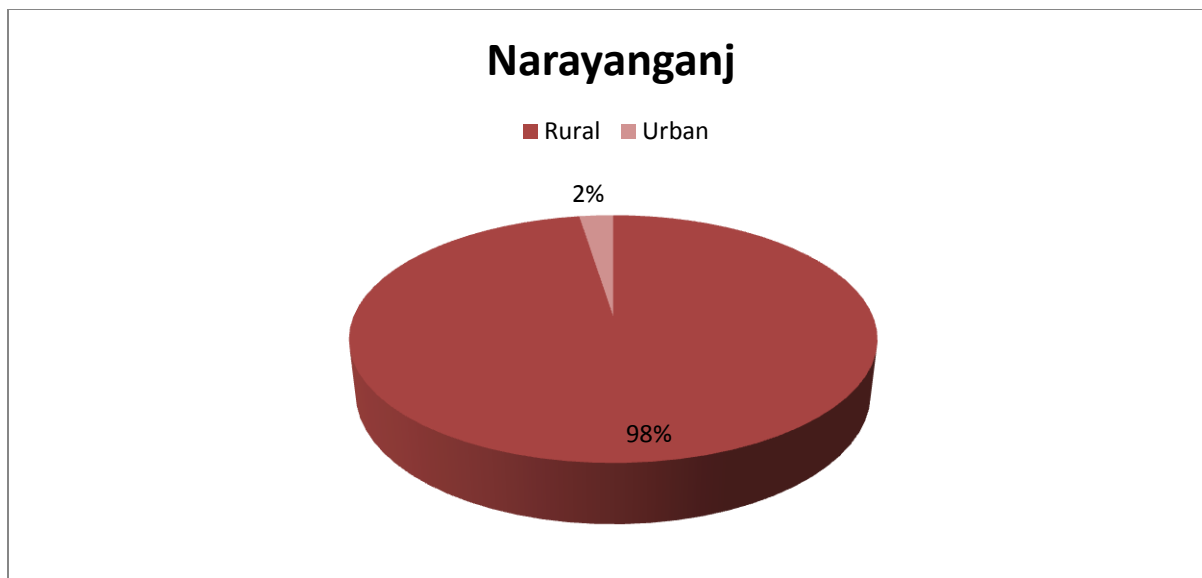
It is evident from Figure 4.3 that in 84.7% male was earner and 15.3% male was non-earner in Narayanganj district and 14.3% female were earner and 85.7% female was non-earner. On the other hand 89.4% male was earner and 10.6% male was non earner in Kurigram district. Again 5% female was earner and 95% female was non-earner in Kurigram district. In Narayanganj district percentage of female earner respondents was higher than Kurigram district but percentage of male earner respondents was lower than Kurigram district.



**Figure 4.3. Occupational status by gender of Narayanganj and Kurigram district**

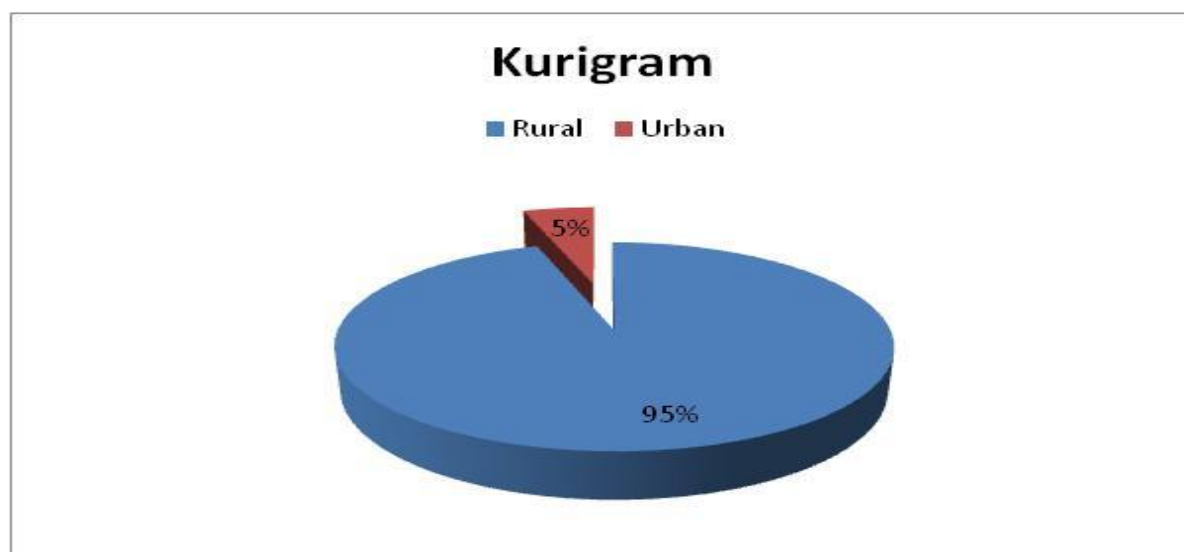
Source: HIES report 2010

From figure 4.4 it indicates that about 98% people were worked in urban area in Narayanganj district and only 2% people worked in rural at the surveyed time. On the other hand from figure 4.5 indicates that about 95% people worked in urban area and only 5% people worked rural area in Kurigram district. Maximum people were worked in rural area selected area of both districts.



**Figure 4.4. Working place of Narayanganj district**

Source: HIES report 2010

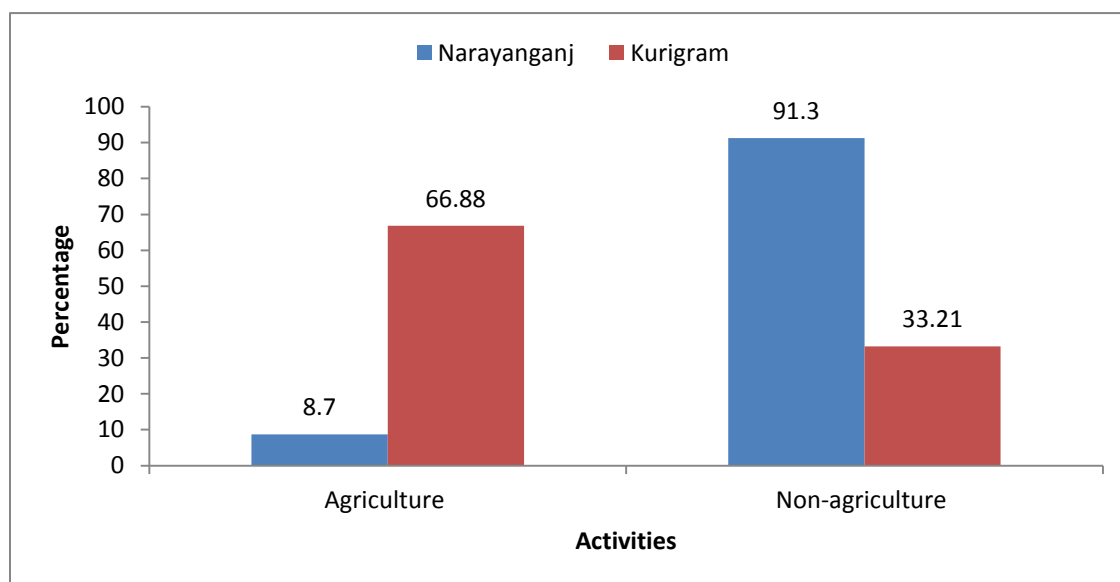


**Figure 4.5. Working place of Kurigram district**

Source: HIES report 2010

Figure 4.6 indicates that 8.7% household engaged in agriculture in Narayanganj district and 66.88% household engaged in agriculture in Kurigram district. Moreover most of the people about 91.3% in Narayanganj district engaged in non-agricultural work and 33.21% people Kurigram district engaged in non-agricultural work. In Kurigram district most of the

respondents engaged in agriculture but in Narayanganj district most of the respondents engaged in non-agriculture.



**Figure 4.6. Activities of Household of two districts**

Source: HIES report 2010

In agriculture sector, 14.23% respondents were day labor 85.71% respondents were self employed. In non-agriculture sector, 31.97% respondents were day labor, 27.21% were self employed, 40.82% respondents were employee. In agriculture sector, 63.81% respondents were day labor and 36.19% respondents were self employed. In non-agriculture sector, 19.23% respondents were day labor, 73.08% were self employed and 7.69% respondents were employee. In agriculture sector day labor respondents were higher in Kurigram district but in Narayanganj district self employed respondents were high. In non-agriculture sector self employed respondents were more in Kurigram district and in this sector employee respondents were more in Narayanganj district than Kurigram district (Table 4.2).

**Table 4.2: Occupational Status (age > 15 years)**

	Narayanganj		Kurigram		Total
	No of people	%	No of people	%	
Agriculture:					
Day labor	2	14.23	67	63.81	69
Self employed	12	85.71	38	36.19	50
Total	14	100	105	100	119
Non-agriculture:					
Day labor	47	31.97	10	19.23	57
Self employed	40	27.21	38	73.08	78
Employee	60	40.82	4	7.69	64
Total	147	100	52	100	199

Source: HIES report 2010

#### 4.2.1.4 Educational Status:

Education is one of the most important characteristics that might affect the person's attitudes and the way of looking and understanding any particular social phenomena. In a way, the response of an individual is likely to be determined by his educational status and therefore it becomes imperative to know the educational background of the respondents. Hence the variable 'Educational status' was investigated by the researcher and the data pertaining to education is presented in Table 4.3. The Table 4.3 shows the comparative educational attainment of the household population of more than 7 years and older according to gender.

In Narayanganj district 44.3% male and 52.8% female respondents were found out to have no education at all and primary, secondary and higher secondary level of male respondents were respectively 14.1%, 30.3% and 11.4% and female percentage of these categories were respectively 18.3%, 24.4% and 4.4%. On the other hand in Kurigram district 53.6% male and 70.4% female respondents were found out to have no education at all and primary, secondary and higher secondary level of male respondents were respectively 23.2%, 21.3% and 1.9% and female respondents of these categories were respectively 17.7%, 11.3% and 0.5%. From Table 4.3 it is found that respondents in Narayanganj district are more educated than Kurigram district.

**Table 4.3: Educational Status (age > 7 years)**

Educational Status	Narayanganj				Kurigram				Total
	Male	%	Female	%	Male	%	Female	%	
No class	82	44.3	104	52.8	111	53.6	143	70.4	440
Class (1-5)	26	14.1	36	18.3	48	23.2	36	17.7	146
Class (6-10)	56	30.3	48	24.4	44	21.3	23	11.3	171
Class(11-higher)	21	11.4	9	4.6	4	1.9	1	0.5	35
Total	185	100	197	100	207	100	203	100	792

Source: HIES report 2010

#### 4.2.1.5 Household Size

From the Table 4.4 there is 1% family that consisted of one member in Narayanganj district and in Kurigram district 3.33% family consisted of one member. Moreover 57% of the households consisted of 2-4 members, 32% of the households consisted of 5-7 members and it is also to be noted that 8% of the households were found to have 8-9 members and about 2% were composed of 10 or more members.

On the other hand 57.5% of the households consisted of 2-4 members, 34.17% of the households consisted of 5-7 members and it is also to be noted that 2.50% of the households were found to have 8-9 members and about 2.50% were composed of 10 or more members in Kurigram district.

The average family size was estimated at 4.55 with a standard deviation of 1.92 in Narayanganj district. On the other hand, the average family size was estimated at 4.29 with a standard deviation of 1.81 in Kurigram district. The average family size was considerably higher in Narayanganj district than in Kurigram district.



#### 4.4. Household Size (number of persons per household)

Number of family members	Narayanganj		Kurigram		Total
	No. of Households	%	No. of Household	%	
1	1	1	4	3.33	5
2	9	9	12	10	21
3	20	20	18	15	38
4	28	28	39	32.5	67
5	20	20	29	24.17	49
6	9	9	10	8.33	19
7	3	3	2	1.67	5
8	4	4	2	1.67	6
9	4	4	1	.83	5
10 & above	2	2	3	2.5	5
Total	100	100	120	100	220
Average $\pm$ SD	4.55 $\pm$ 1.92		4.29 $\pm$ 1.81		4.41 $\pm$ 1.86

Source: HIES report 2010

**CHAPTER: V**  
**STATUS AND DETERMINANTS OF**  
**INCOME AND OTHER ACTIVITIES**  
**OF HOUSEHOLD**

## **CHAPTER: V**

### **STATUS AND DETERMINANTS OF INCOME AND OTHER ACTIVITIES OF HOUSEHOLD**

#### **5.1 Introduction**

The poor people in selected area included in various social safety nets programme. This chapter focuses benefited and non-benefited household in selected area, included SSN programme, average annual income from agricultural sector, annual income from other sector, household member included in social safety net program, reason for not included in SSNP, poor and non-poor household member in selected area, poor and non-poor household which are not included in SSNP, estimated regression coefficients and associated statistics from multiple binary logistic regression model for identifying poverty status in Narayanganj district, estimated regression coefficients and associated statistics from multiple binary logistic regression model for identifying poverty status in Kurigram district, estimated regression coefficients and associated statistics from multiple binary logistic regression model for identifying income status in overall.

#### **5.2 Social Safety Nets Programme**

Social Safety Nets Programmes (SSNPs) are non-contributing programmes that aim the poor and vulnerable segment of people and are intended to lessen poverty and inequality, facilitate better social investments, better community risk administration, and deal social security to those living under the poverty line. Through the intensifications of earnings, poverty shrinks and on the contrary, poverty rises. In poor and developing countries, poverty alleviation has become synonymous with the overall economic development. With around 40 percent of her people living under the poverty line and a growing number of people being added under the poverty line, Safety Net Programmes in Bangladesh is more than an essential component to fighting against poverty (Iqbal, 2008).

The household whose were benefited want to get help or attitude for getting help from SSNP those household marked as poor and the household did not take help from SSNP those were marked as non-poor in this study.

### 5.3 Various SSNPs in Selected Area

It is evident from Table 5.1 that total 48 household benefited from SSNP. Among them only one household involved with SSN programme named as “Allowance for the Financially Insolvent Disabled” in Narayanganj district.

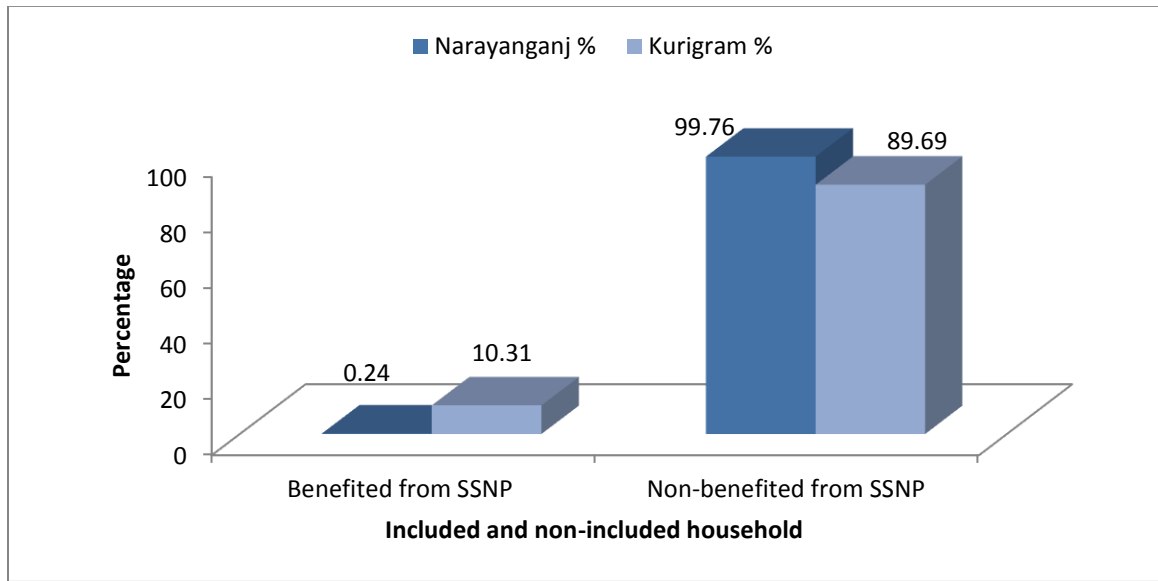
On the other hand 6.38% household benefited from “Old age Allowance”, 4.25% household benefited from “Allowance for the Widowed, Deserted and Destitute”, 2.13% household benefited from Allowance for the Financially Insolvent Disabled, 4.25% household benefited from Cash for Work, 40.43% household benefited from Gratuitous Relief, 19.15% household benefited from Stipend for Primary Students, 14.89% household benefited from Stipend for Secondary and Higher Secondary/Female Student, 6.38% household benefited from Char livelihood, 2.13% household benefited from Rural Employment, Social forestration and Rural Maintenance Program in Kurigram district. Most of the household benefited from Gratuitous Relief in Kurigram district.

**Table 5.1: Included SSN Program in Selected area**

Name of Program	Narayanganj		Kurigram	
	No	%	No	%
Old age Allowance	0	0.0	3	6.38
Allowance for the Widowed, Deserted and Destitute	0	0.0	2	4.25
Allowance for the Financially Insolvent Disabled	0	0.0	1	2.13
General Relief Activities	1	100	0	0.0
Cash for Work	0	0.0	2	4.25
Gratuitous Relief	0	0.0	19	40.43
Stipened for Primary Students	0	0.0	9	19.15
Stipened for Secondary and Higher Secondary/Female Student	0	0.0	7	14.89
29-Char livelihood	0	0.0	3	6.38
Rural Employment, Social forestration and Rural Maintenance Program	0	0.0	1	2.13
Total	1	100 %	47	100

#### 5.4 Included Household in SSNP

Figure 5.1 represents household member that benefited and non-benefited from SSNP. Benefited household in Narayanganj district was 0.24% where 10.31% household was benefited from SSNP in Kurigram district. Benefited household in Kurigram district was higher than Narayanganj district.



**Figure 5.1. Household Member Included in Social Safety Net Program**

#### 5.5 Reason for not included in SSNP

There were many reasons household members who were not included to Social Safety Nets Program. In Narayanganj district 17.31% people were unknown about the program, 51.20% people were not fit for that program, 12.74% people were fit for the program but not apply and 18.75% people thought that selection system was not proper.

Again in Kurigram district 0% people were unknown about the program, 73.35% people were not fit for that program, 0% people were fit for the program but not apply and 26.65% people thought that selection system was not proper.

**Table 5.2: Reason for not included in SSNP**

Reason	Narayanganj		Kurigram		Total
	Household Member	%	Household Member	%	
Unknown about the Program	72	17.31	0	0	72
Not fit for that program	213	51.20	300	73.35	513
Fit for the program but not apply	53	12.74	0	0	53
Selection was not proper	78	18.75	109	26.65	187
Total	416	100	409	100	825

**5.6 Benefited and Non-benefited Household**

Hence benefited and non benefited household from SSNP was investigated and data pertaining to SSNP is presented in Table 5.3.

In Narayanganj district 2.1% household were benefited from social safety nets programmes and 50.4% were not benefited from social safety nets programmes.

On the other hand in Kurigram district 97.9% household benefited from social safety nets programmes and 49.6% household were not benefited from social safety nets programmes. The average number of the surveyed households was estimated at 2 with a standard deviation 0 in Narayanganj district and the average number of the surveyed households was estimated at 5.42 with a standard deviation 4.13 in Kurigram district.

It is evident from Table 5.3 that benefited household from SSNP is more in Kurigram district than in Narayanganj district

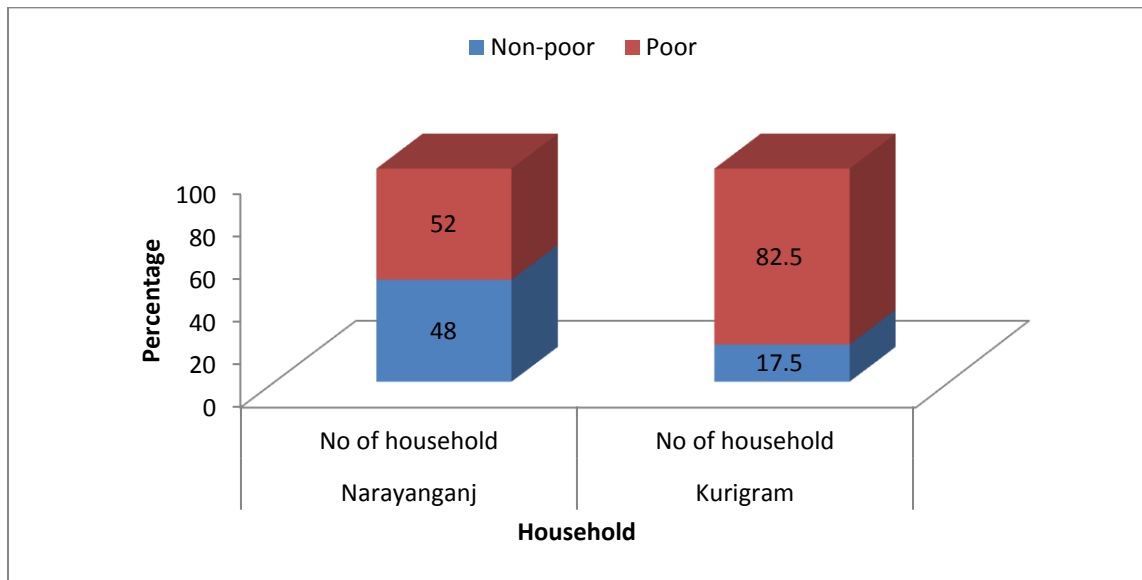
**Table 5.3: Benefited and Non-benefited percentage from SSNP**

Safety Nets Programs last 12 months	Narayanganj				Kurigram			
	Benefited		Non-benefited		Benefited		Non-benefited	
	No	%	No	%	No	%	No	%
	1	2.1	416	50.4	47	97.9	409	49.6
SSN average $\pm$ SD	2 $\pm$ 0				5.42 $\pm$ 4.13			

### 5.7 Poor and Non-poor Household

Figure 5.2 estimated poor and non-poor household in Narayanganj and Kurigram district.

It is showed that 52% household in Narayanganj district was poor where 48% household was non-poor. On the other hand 82.5% household was poor and 17.5% household was non-poor in Kurigram district. It is presented that most of the household in Kurigram district was poor than Narayanganj district.



**Figure 5.2. Poor and Non-poor Household**

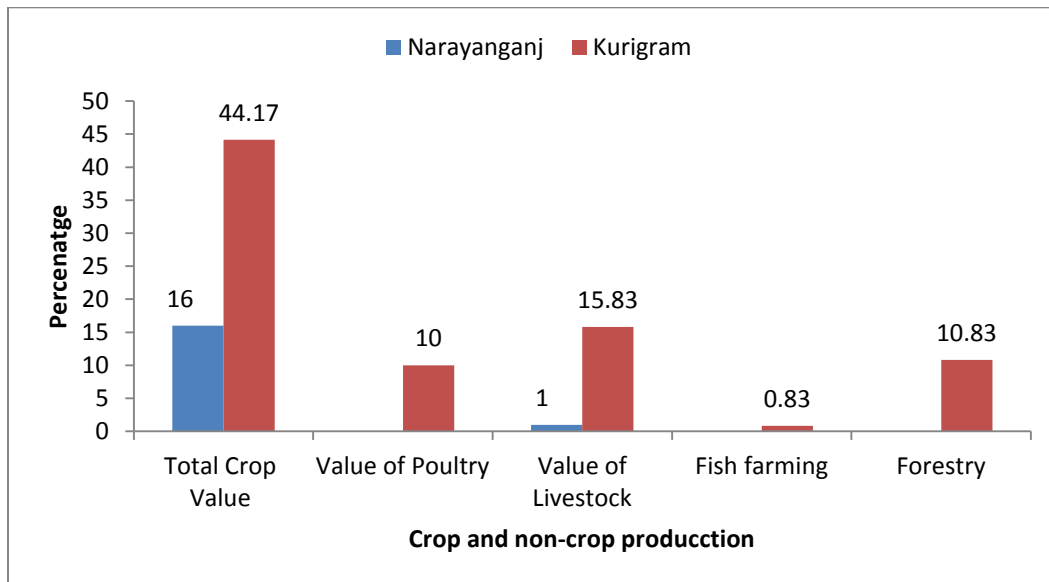
### 5.8 Average Annual Income from Agricultural Sector

From figure 5.3 it is observed average annual income from agriculture sector in Narayanganj and Kurigram district.

From figure 5.3 it is found that 16% household earned annual income from crop production in Narayanganj district and 44.17% household earned annual income from crop production in Kurigram district. 10% household earned their income from poultry, 15.83% from livestock, 0.83% from fish farming and 10.83% from forestry in Kurigram district.

Only 1% household earned their income from livestock in Narayanganj district but there was no household which was engaged in poultry, fish farming and forestry in Narayanganj district.

It is found from figure 5.3 that most of the household in Kurigram district was engaged in agricultural sector so average annual income from agricultural sector was higher in Kurigram district than Narayanganj district.



**Figure 5.3. Household Annual Income of two selected districts (Agricultural Sector)**

### 5.9 Average Annual Income from Other Sector

Figure 5.4 estimated average annual income from other sectors in Narayanganj and Kurigram district.

From figure 5.4, it is estimated that 4% household in Narayanganj district earned their annual income from stipend from primary school and 7.5% household in Kurigram district earned their annual income from stipend from primary school.

Again 1% household earned annual income from stipend from secondary level in Narayanganj district where 5.83% household earned annual income from stipend from secondary level in Kurigram district.



Household which got stipend from primary education was higher in Kurigram district but stipend from secondary level was higher in Narayanganj district.

Moreover 2% household earned from value of other property and assets in Narayanganj district but Kurigram district any household did not earn from this sector.

Wage employments in daily basis receive payment in Kurigram district 3.33% household but in Narayanganj district no household received payment in daily basis.

41% household in Narayanganj district got income from gross remuneration and Kurigram district 3.33% household got income from gross remuneration. Household in Narayanganj district earned more from gross remuneration than Kurigram district.

26% household in Narayanganj district earned income from total value of in kind or other benefits and 3.33% household in Kurigram district earned income from total value of in kind or other benefits

22% household in Narayanganj district earned income from rent of land and 2.50% household in Kurigram district earned from rent of land. Income of household in Narayanganj district from rent of land was higher than Kurigram district.

3% household in Narayanganj district income from charity, gift, royalty, help, zakat, fitra or other such assistance etc in cash and Kurigram district income from charity, gift, royalty, help, zakat, fitra or other such assistance etc in cash was 11.67% household.

Again income from charity, gift, royalty, help, zakat, fitra or other such assistance etc in kind number of household was 1% in Narayanganj district. On the other hand income from charity, gift, royalty, help, zakat, fitra or other such assistance etc in kind where number of household was 2.5% in Kurigram district.

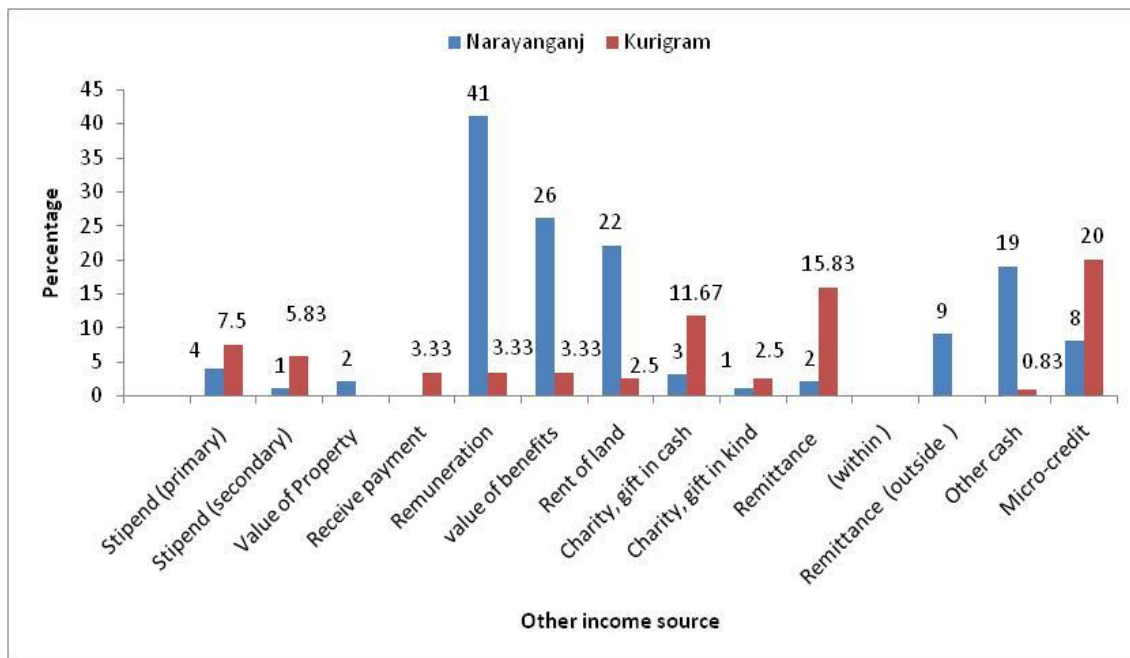
Income from charity, gift, royalty, help, zakat, fitra or other such assistance etc both in cash and kind was more in household in Narayanganj district than Kurigram district.

Annual income from remittances received from relatives (within country) in Narayanganj district number of household was 2% and Kurigram district number of household was 15.83%.

Again average annual income from remittances received from relatives (outside the country) in selected area of Narayanganj district was 9% household and the people of selected area in Kurigram district there was no household which earned income from remittances received from relatives (outside the country).

Average income of 19% household earned from other cash in Narayanganj district and Kurigram district 0.83% household earned from other cash. Household in Narayanganj district earned more income from other cash than in Kurigram district.

Again 8% household earned from micro credit in Narayanganj district and 20% household in Kurigram district earned from micro credit. Household in Kurigram district was more than Narayanganj district.



**Figure 5.4. Household Annual Income of two selected districts (Other Sector)**

### 5.10 Inequality of Income in the Surveyed Population: Lorenz Curve

A formulation as a solution to the problem of performing the ‘Income’ can be made even if the functional form of the distribution  $f(x)$  is not known. This can be achieved through ‘ the curve of concentration’ defined as follows:

$N$  = Total frequency of population

$I$  = Total household income

$N(x)$  = Number of households with income  $x$  or more

$I(x)$  = Total amount of income possessed by  $N(x)$

$P(x) = \{N - N(x)\} / N$  = Proportion of households with income less than or equal to  $x$

$q(x) = \{I - I(x)\} / I$  = Proportion of income of the households with income less than or equal to  $x$

The straight line  $q(x) = p(x)$  is known as 'Line of equal distribution'. The graphical form of this function is known as Lorenz Curve (Figures 5.5). The design of concentration of income is compared with the line of equal distribution. As a measure of the difference between distributions, Gini proposed a concentration ratio defined as follows:

Let  $p(x)$  is plotted on x-axis and  $q(x)$  on y-axis. Put  $BC=1$  on the x-axis and  $BA=1$  on the y-axis.  $BD$  is the  $q(x) = p(x)$  line and the point  $O$  is on the curve,  $q = f(p)$ .

Therefore concentration ratio,  $g = (\text{area } BOD) / (\text{area } BCD)$ .

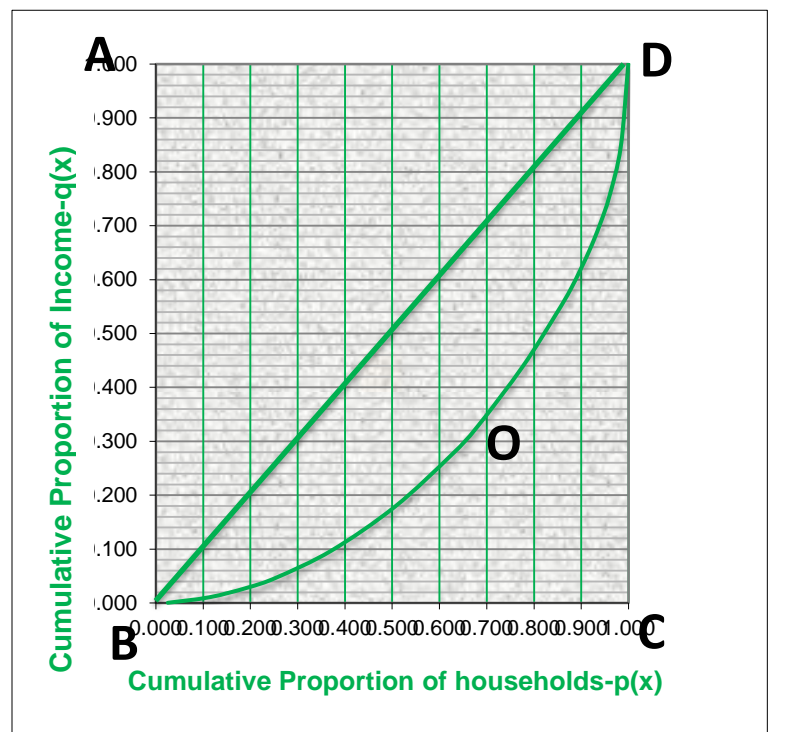
An alternative computation of the Gini coefficient was suggested by Barrow (1998) using the equation:

$$G = \frac{\text{Area}(BOD)}{\text{Area}(BCD)} = \frac{\text{Area}(BOD)}{\text{Area}(BOD) + \text{Area}(BODC)}, \text{ where}$$

$$\text{Area}(BODC) = \frac{1}{2} \{ (x_1 - x_0)(y_1 + y_0) + (x_2 - x_1)(y_2 + y_1) + \dots + (x_k - x_{k-1})(y_k + y_{k-1}) \}$$

$$\text{Area}(BOD) = (\frac{1}{2} \times 1 \times 1) - \text{Area}(BODC)$$

The distribution of income at household level along with the necessary elements for drawing Lorenz curve is given in Figures 5.5 shows the corresponding Lorenz curves at household level of the study population.



**Figure 5.5 Lorenz Curve of Overall Household Income**

The Gini concentration ratios are estimated at 0.497 for the overall households, which indicate a higher inequality of income among the survey households. The results suggest that about 50% of the income of the community is concentrated in the hands of few peoples and the rest of the income is all distributed among the major portion of the households of the study area.

### **5.11 Estimated Poverty Status by MBLR of Selected Area of Narayanganj District**

Table 5.4 estimated poor and non-poor household by income status which is calculated by MBLR of Narayanganj district.

In Narayanganj district if household size was low then the probability of poor 0.976 times.

If crop value of a household was higher than average crop value then the possibility of non-poor of these household was 5.14 times more than of these household which was poor.

Again if micro-credit of a household was higher than average micro-credit then the possibility of non-poor of these household was 1.208 times more than of these household which was poor.

Moreover if gross remuneration of a household was higher than average gross remuneration then the possibility of non-poor of these household was 2.185 times more than of these household which was poor.

If total value of in kind or other benefits of a household was higher than average value of in kind or other benefits then the possibility of poor of these household was 0.758 times more than of these household which was non-poor.

Again if net revenue of a household was higher than average net revenue then the possibility of non-poor of these household was 1.892 times more than of these household which was poor.

Moreover if rent of land of a household was higher than average rent of land then the possibility of non-poor of these household was 2.357 times more than of these household which was poor.

Remittance of a household was higher than average remittance then the possibility of non-poor of these household was 4.046 times more than of these household which was poor.

Again if other cash of a household was higher than average other cash then the possibility of non-poor of these household was 1.125 times more than of these household which poor.

If rent of others property of a household was higher than average rent of others property then the possibility of poor of these household was 0.10 times more than of these household which non-poor.

Genuinely, the **Hosmer & Lemeshow** test statistics bears the evidence of better fit of the model to the data set under consideration.

**Table 5.4: Estimated regression coefficients and associated statistics from multiple binary logistic regression model for identifying poverty status in Narayanganj district, Dependent variable: poverty status, Poor = 0, Non-poor =1**

Variable	B	S.E.	Wald	df	Sig.	Exp(B)
Household size	-.021	.143	.021	1	.884	.979
Crop value	1.637	1.156	2.006	1	.157	5.140
Micro-credit	.189	.973	.038	1	.846	1.208
Gross remuneration	.781	.602	1.682	1	.195	2.185
Total value of in kind or other benefits	-.276	.786	.124	1	.725	.758
Net revenue	.638	.617	1.066	1	.302	1.892
Rent of land	.857	1.069	.643	1	.422	2.357
Remittances	1.398	1.196	1.366	1	.242	4.046
Others cash	.118	.775	.023	1	.879	1.125
Rent of other property	-2.305	1.232	3.499	1	.061	.100 *
Constant	-2.476	2.933	.713	1	.399	.084

#### Hosmer and Lemeshow Test

Step	Chi-square	df	Sig.
1	7.027	7	.426

\*10% level of significant

#### 5.12 Estimated Poverty Status by MBLR of Selected Area of Kurigram District

Table 5.5 estimated poor and non-poor household by income status which is calculated by MBLR of Kurigram district.

If crop value of a household was higher than average crop value then the possibility of non-poor of these household was 10.885 times more than of these household which was poor.

If livestock of a household was higher than average livestock then the possibility of non-poor of these household was 1.973 times more than of these household which was poor.

If forestry of a household was higher than average forestry then the possibility of non-poor of these household was 3.356 times more than of these household which was poor.

Again if micro-credit of a household was higher than average micro-credit then the possibility of poor of these household was 0.466 times more than of these household which was poor.

Moreover if net revenue of a household was higher than average net revenue then the possibility of non-poor of these household was 2.845 times more than of these household which was poor.

Remittance of a household was higher than average remittance then the possibility of non-poor of these household was 9.627 times more than of these household which was poor.

In Kurigram district if household size was low then the possibility of poor 0.977 times.

Genuinely, the **Hosmer & Lemeshow** test statistics bears the evidence of better fit of the model to the data set under consideration.

**Table 5.5: Estimated regression coefficients and associated statistics from multiple binary logistic regression model for identifying Poverty status in Kurigram district, Dependent variable: poverty Status, poor =0, non-poor=1.**

Variable	B	S.E.	Wald	df	Sig.	Exp(B)
Crop value	2.387	.641	13.865	1	.000	10.885 ***
Livestock	.680	.926	.539	1	.463	1.973
Forestry	1.211	1.479	.670	1	.413	3.356
Micro-credit	-.764	1.142	.448	1	.503	.466
Net revenue	1.045	.876	1.425	1	.233	2.845
Remittances	2.265	.941	5.791	1	.016	9.627 **
Household size	-.023	.140	.027	1	.869	.977
Constant	-3.880	2.668	2.114	1	.146	.021

#### Hosmer and Lemeshow Test

Step	Chi-square	df	Sig.
1	3.534	7	.832

\*\*\* 1% level of significant

\*\* 5% level of significant

### **5.13 Estimated Income Status by MBLR of Overall**

From Table 5.6 it is estimated that, if household size was low then the possibility of poor 0.976 times.

If crop value of a household was higher than average crop value then the possibility of non-poor of these household was 3.55 times more than of these household which was poor. Again if livestock of a household was higher than average livestock then the possibility of poor of these household was 0.438 times more than of these household which was non-poor.

If forestry of a household was higher than average forestry then the possibility of poor of these household was 0.559 times more than of these household which was non-poor.

Moreover if micro-credit of a household was higher than average micro-credit then the possibility of poor of these household was 0.762 times more than of these household which was non-poor.

Again if stipend from primary education of a household was higher than average stipend from primary education then the possibility of poor of these household was 0.451 times more than of these household which was non-poor.

If stipend from secondary level of a household was higher than average stipend from secondary level then the possibility of poor of these household was 0.709 times more than of these household which was non-poor.

Moreover if gross remuneration of a household was higher than average gross remuneration then the possibility of non-poor of these household was 4.357 times more than of these household which was poor.

If net revenue of a household was higher than average net revenue then the possibility of non-poor of these household was 2.357 times more than of these household which was poor.

Again if rent of land of a household was higher than average rent of land possibility of non-poor of these household was 10.573 times more than of these household which was poor.

If rent of others property of a household was higher than average of others property then the possibility of poor of these household was 0.166 times more than of these household which was non-poor.



Remittance (within the country) of a household was higher than average Remittance (within the country) then the possibility of non-poor of these household was 4.412 times more than of these household which was poor.

Again remittance (outside the country) of a household was higher than average remittance (outside the country) then the possibility of non-poor of household was 8.618 times more than of these household which was poor.

Moreover if other cash of a household was higher than average other cash then the possibility of non-poor of these household was 2.574 times more than of these household which was poor.

Genuinely, the **Hosmer & Lemeshow** test statistics bears the evidence of better fit of the model to the data set under consideration.

**Table 5.6: Estimated regression coefficients and associated statistics from multiple binary logistic regression model for identifying poverty status in overall, Dependent variable: Poverty status, poor=0, non-poor=1.**

Variable	B	S.E.	Wald	df	Sig.	Exp(B)
Household size	-.024	.098	.059	1	.808	.976
Crop value	1.267	.429	8.740	1	.003***	3.550
Livestock	-.827	.857	.931	1	.334	.438
Forestry	-.582	1.411	.170	1	.680	.559
Micro-credit	-.272	.694	.154	1	.695	.762
Stipend from primary education	-.795	.856	.863	1	.353	.451
Stipend from secondary level	-.344	1.159	.088	1	.767	.709
Gross remuneration	1.472	.455	10.479	1	.001***	4.357
Net revenue	.857	.483	3.153	1	.076*	2.357
Rent of land	2.358	.968	5.931	1	.015**	10.573
Rent of others property	- 1.796	.989	3.302	1	.069*	.166
Remittances (within the country)	1.484	.790	3.529	1	.060*	4.412
Remittances (outsides the country)	2.154	1.200	3.223	1	.073*	8.618
Other cash	.945	.744	1.615	1	.204	2.574
Constant	- 4.368	3.235	1.824	1	.177	.013

**Hosmer and Lemeshow Test**

Step	Chi-square	df	Sig.
1	3.081	8	.929

\*10% level of significant \*\* 5% level of significant \*\*\* 1% level of significant

## **CHAPTER VI**

# **CONCLUSIONS AND RECOMMENDATIONS**

## CHAPTER VI

### CONCLUSIONS AND RECOMMENDATIONS

This study investigated the causes and consequences of poverty in two selected districts in Bangladesh using a nationally representative HIES 2010 dataset. In this chapter makes an effort to draw conclusions and provide recommendations based on the key findings of the research. The analysis includes measuring poor and non-poor percentage by various social safety nets programmes and income of household in selected area through binary logistic regression model (BLRM). Conclusion is based on result and findings of the present study. Recommendation is made on education level, occupation, income and the Government and for further information for future researchers.

#### 6.1 Conclusions

The result of the study indicates that the causes of poverty in selected area are low income, lack of education, dependency ratio, household size etc. Dependency ratio is higher in Kurigram district. Surveyed people indicate that there are less vulnerable population in Narayanganj district. Education status in Narayanganj district is better than Kurigram district. The household who's benefited from social safety nets programme marked as poor where at least one member in this family was included to Social Safety Nets Programme. From social safety nets programme household of Kurigram district are more benefited and the average number of the surveyed households is also high in Kurigram district than Narayanganj district that means number of poor household is high in Kurigram district than Narayanganj district. Average household size in Narayanganj district is higher than Kurigram district. Average annual income is more in Kurigram district from agricultural sector but average annual income from other sector is high in Narayanganj district.

The study also indicates that rent of other property has significant effect on poverty in Narayanganj district. On the other hand crop value and remittance has significant effect on poverty in Kurigram district. Moreover crop value, gross remuneration, net revenue, rent of land, rent of other property, remittance (within and outside the country) has significant effect on poverty in overall household in selected area.

## 6.2 Recommendations

By achieving sustainable development goal 1 (no poverty) Bangladesh can reduce poverty. On the basis of findings of the study to reduce poverty level the following recommendations are made as a part of present study which helps to reduce poverty in selected area. The following recommendations are put forward:

- ❖ Education level should increase in selected area by various government project such as zero interest loan for poor student, ICT based education, Primary Education Development Program secondary and higher secondary education quality enhancement project etc.
- ❖ Household annual income from agriculture sector in Kurigram district was 44.17% from total crop value but in Narayanganj district annual income from other sector was higher than Kurigram district. If annual income from other sectors is increased in Kurigram district by giving working opportunity in various industrial sectors then poverty rate in Kurigram will reduce.
- ❖ Dependency ratio in Kurigram district is 71% it should be reduced by creating job opportunity in Kurigram district.
- ❖ Government should take step for reducing poverty in selected area by encouraging people to take technical education and should create job sector.

If governments of Bangladesh have to take proper step in selected area by improving education level, improve technical education and create various job sectors so that unemployment status decrease and income level increase then poverty will reduce.

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## APPENDIX

### Appendix I. HIES English Questionnaire 2010

#### 1. Household information

Id code	Gender 1. Male 2. Female	Age	Marital Status 1. Married 2. Unmarried 3. Widow	Earner 1. Yes 2. No

#### 2 Social Safety Nets Programme

Has (name) included of any social safety nets programme in the last 12 months?	If Yes What was the main program in which (name) has Included in the last 12 months?	How much was (name) actually receive in cash/in kinds?  Taka	What was the cause for not included (Code)
1. Yes			
2. No			

#### 3. Education

<p>1. What was the highest class that you completed?</p> <p>00. No class passed            01. Class 1            02. Class 2            03. Class 3            04. Class 4            05. Class 5            06. Class 6            07. Class 7            08. Class 8            09. Class 9            10. SSC            11. HSC</p>
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12. Graduate/equivalent
2. Are you receiving stipend from primary education 1. Yes 2. No
3. If yes how much receive
4. Are you receiving stipend from secondary education 3. Yes 4. No
5. If yes how much total receive last 12 months

5. Economic activities

Where did you do activity? 1. Rural 2. Urban
What was major field engaged in? 1. Agriculture 2. Non-agriculture
What was employment status 1. Day labour 2. Self employed 3. Employer 4. Employee

6. Income

Receive payment
Gross Remuneration
Total value of other benefit
Net Revenue
Total crop value
Receive value from livestock
Receive value from poultry
Receive value from forestry
Receive value from fish farming
Sell of agricultural asset
Earn from rental value
Rent of land
Rent of other property
Insurance
Profit and dividend
Lottery, prize bond
Remittances
Other cash
Micro-credit