

A photograph of a man in a field harvesting okra (ladyfinger) vegetables. The man is shirtless and wearing a patterned sarong, kneeling in a field of green okra plants. He is holding a long, green, ribbed okra vegetable in his hands. The background is filled with lush green foliage and more okra plants.

## **RESOLVE Interventions and Its Impact on Livelihood Development of the People**

**Livelihood Status of the Hardcore Poor  
(controlled and uncontrolled) in Hard to Reach Areas of  
Bangladesh**

*(April 2011– March 2012)*



## RESOLVE Interventions and its impact on Livelihood Development of the People

### Livelihood Status of the Hardcore Poor Right Holders in Hard to Reach Areas of Bangladesh

*Quarterly Comparative Report based on the Monthly Livelihood Surveys (April 2011- March 2012)*

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This report provides an assessment of livelihood of the poor in between two groups of people (right holders and non-right holders), living in hard to reach areas in Bangladesh. The data have been collected from three villages of three districts, namely Gaibandha, Sirajgonj and Shariatpur. The report acknowledges with gratitude of efforts provided in collecting data by the staff of Gana Unnayan Kendra (GUK) in Gaibandha, Gono Kalyan Sangstha (GKS) in Sirajgonj and Shariatpur Development Society (SDS) in Shariatpur. This report is an output of Social Policy unit of Unnayan Onneshan.

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## EXECUTIVE SUMMARY

The present survey report for the period of April-June, July-September, October-December 2011; and January-February 2012 reveals a comparative livelihood assessment of the hardcore poor between the right holders (controlled) and the non-right holders (uncontrolled) in the hard to reach areas in some selected sample districts of the northern, central and southern regions of Bangladesh. The survey compiles the collected information of the monthly surveys conducted in specified rural Bangladesh, designated as *Chars* in three districts of Gaibandha, Sirajganj and Shariatpur.

The monthly survey has a sample size of 300 households, living under the orthodox World Bank poverty line (income less than USD 1.25 a day). The survey collates information amongst others on five fundamental rights of human beings (e.g. food, cloths, housing, education and health). Despite certain shortcomings of such measures, for keeping conformity and compatibility, the indicators for the survey have also been developed in line with the indicators used in the Household Income and Expenditure Survey (HIES 2010 and 2005), conducted by the Bangladesh Bureau of Statistics (BBS).

The relevant findings are as follows:

**Income and Poverty:** On average for four quarters, majority of the respondents are wage labourers (53 and 68.97 percent respectively for controlled and uncontrolled group). Most of the respondents in Sirajgonj are wage labourers. On average for four quarters, only 0.89 percent of the respondents are farmers and 83.42 percent of the respondents are labourers.

There is a gradual decrease in the respondents with the level of income that is less than BDT 2000 per month through quarters both in controlled and uncontrolled groups through quarters (47.67, 41, 35.11 and 23.33 percent respectively for first, second, third and fourth quarters for controlled group; 74.33, 64, 58.89 and 48.45 percent respectively for first, second, third and fourth quarters for uncontrolled group). The percentage of the respondents of both groups with the level of income between BDT 2000-3000 per month has increased from first to fourth quarter (29, 28.33, 34.67 and 38.78 percent respectively for first, second, third and fourth quarters for controlled group; 14, 25.67, 37.11 and 36.67 percent respectively for first, second, third and fourth quarters for uncontrolled group).

The percentage of the respondents of controlled group with the level of income between BDT 3000-4000 per month was the highest in second quarter (30.67 percent) but increased from first (23 percent) to fourth (27.89 percent) quarter. Again, the percentage of the respondents of uncontrolled group with the level of income between BDT 3000-4000 has reduced from first (11.67 percent) to fourth (10.45 percent) quarter and the lowest in third quarter (3.56 percent). In first and second quarters, there are no respondents with BDT 4000+ level of income. In third quarter, about 9.11 percent of the respondents of controlled group have more than BDT 4000 income per month but no respondents from uncontrolled group have been found in this level of income in the third quarter. In the fourth quarter, both controlled and uncontrolled group have been seen in this level of income (10.11 percent and 4.44 percent respectively).

It has been found that the level of income of the respondents is increasing through quarters but controlled group respondents' level of income is increasing more than that of uncontrolled group

respondents. The reason is that controlled group is being supported by the RESOLVE project which enriched their sources of income as well as level of income.

**Food Intake and Poverty:** In the current survey, the poverty level of both the groups has also been measured by calorie intake per person per day. The respondents of Gaibandha and Sirajgonj at both controlled and uncontrolled group are found below the food poverty line (in Gaibandha, average calorie intake was 1909 and 1802.75 kcal per person per day in controlled and uncontrolled group respectively), (in Sirajgonj, average calorie intake was 1849.67 and 1819.67 kcal per person per day in controlled and uncontrolled group respectively) in comparison with the national boundary of food poverty (2122 kcal per person per day) during the time. However, it is observed that the calorie intake is comparatively better among the right holders than their counterparts (Table 7). So, according to the present survey, most of the people in hard to reach areas are poor in terms of calorie deficiency, even though the calorie intake in Shariatpur (average calorie intake was 2846.67 and 2457.25 kcal per person per day in controlled and un-controlled group respectively) is higher than the national food poverty line because most of the calorie are coming from carbohydrate only. The reason behind their higher calorie intake during the period in Shariatpur is higher investment in homestead vegetable gardening. The survey observes that most of the respondents are not fully aware of the benefits of balanced diet, which creates further problems of food insecurity. However, the awareness level of calorie intake has improved relatively better among the right holders, compared to the non-right holders. To note that food intake of the control group respondents have also been complemented by their own production of food from their homestead gardens.

**Expenditure Situation:** The current survey considers six expenditure components, namely food, clothing, education, health, housing, and miscellaneous expenditure of both the controlled and the un-controlled group. Considering all of these consumptions, the average total expenditure is found higher in uncontrolled group (on average 68.21 of their income for all four quarters) compared to the controlled group (on average 50.61 of their income for all four quarters), where it indicates that the respondents of the controlled group have been able to improved their living conditions compared to the uncontrolled groups.

The survey finds that the average food expenditure of the respondents is 28.05 and 38.51 percent of their total income in controlled and uncontrolled group respectively. The food expenditure share of all respondents is observed slightly decreased in the last quarter (22.14 and 34.48 percent respectively for controlled and uncontrolled group) than the first quarter (31.2 and 43.25 percent respectively for controlled and uncontrolled group), primarily because of their subsistence emanating from homestead gardening. The average expenditure for all the four quarters of the controlled group is 4.33 percent, 4.09 percent, 3.83 percent, 1.31 percent and 1.29 percent respectively for clothing, education, health, housing and miscellaneous (while the percentage at the uncontrolled group is 14.55, 4.31, 4.57, 1.69 and 0.78 respectively). According to the survey, the miscellaneous expenditure includes transportation, recreation and buying some household products like gold, television, furniture, radio, mobile etc. of the respondents.

However, the significant reason behind lower expenditure on food in the surveyed areas is that most of the respondents are getting food from their own homestead gardening and livestock farming. On average for four quarters, 7.69 and 8.93 percent of income respectively for controlled and uncontrolled group have been investing for business or other income generating activities.

**Gender:** The current survey also investigates womens' participation in some activities e.g. education, family decision-making process and initiatives for birth control methods. However, female participation in education is not found at any satisfactory level among both groups of respondents where only 32 and 29 percent female of controlled and uncontrolled group respectively have access to formal education during April-September (first quarter) and this rate of participation in controlled group has increased in fourth quarter at 36.22 percent but uncontrolled group has experienced reduction to 28.22 percent. Only 2 percent of female members both in controlled and uncontrolled groups in the first quarter have reached higher secondary level and in the fourth quarter this percentage is same in the controlled group but reduced in uncontrolled group at 0.67 percent. The percentage of decision taking power of female respondents in controlled group has increased from first to fourth quarter (26 and 40.22 percent respectively for first and fourth quarter) but in uncontrolled group, it has reduced from first to fourth quarter (23 and 15.11 percent respectively for first and fourth quarter). In birth control process of the families, the percentage of female contribution is 65.75 and 80.67 percent in the controlled group for the first and fourth quarter respectively, while 84 and 79.33 percent respectively was found for first and fourth quarter in the uncontrolled group of respondents.

## SUMMARY OF FINDINGS

Indicators	Indicators	Findings
<b>Income</b>	#Percentage of respondents in different profession #Percentage of respondents in different level of income # Per capita Income # Per capita Expenditure # Percentage of Investment of household's income in different sectors	Most of the respondents' income was found at around USD 1. But the level of income has been rising both in controlled and uncontrolled group.
<b>Food</b>	# Intake of different food items in gm per capita per day # Per capita calorie intake # Percentage food expenditure of total income # Percentage of respondents in different level of expenditure on food items	In comparison to national rural average that is 2122 kcal (HIES 2010) , on average all respondents in Gaibandha and Sirajganj are found below food poverty line but on average, all respondents in Shariatpur are found above food poverty line. The average food expenditure against income is found lower in surveyed areas (33.28 percent) than the national rural average (58.74 percent)
<b>Cloth</b>	# Percentage of cloth expenditure of total income #Percentage of the respondents in different level of expenditure on cloths	The average cloth expenditure against income is found higher (9.44 percent) than the national average (5.12 percent) in the surveyed areas, but a large portion of the respondents did not spend money for buying cloths.
<b>Education</b>	# Percentage of households in access with education # Percentage of education expenditure of total income #Percentage of respondents in different level of expenditure on education related activities # Percentage of dropout rates #Percentage of households involved in capacity building training	The education related average expenditure is almost same in the surveyed areas (4.2 percent) in comparison to HIES 2010 (4.18 percent). Moreover, a large portion of the respondents are found unable to spend money for education. The dropout rate in primary school is low as well as the percentage of higher education.
<b>Health</b>	# Percentage of respondent sickness with segregating gender and also child # Percentage health expenditure of total income # Percentage of respondents in different level of expenditure on treatment	The rate of child sickness is found very high among marginalised people. The average medical expenditure (4.2 percent) against income is found almost the same as the national average (4.05 percent), but a large portion of the respondents have been identified who are unable to spend money for their medical services.
<b>Housing</b>	# Percentage of housing (renting, repairing, buying or construction) expenditure of total income # Percentage of respondents in different level of expenditure on housing related activities	The average housing expenditure against income is found lower in the surveyed areas than national average as stated in HIES 2010 (7.27 percent), and a large portion of the respondents is found without spending money for their housing related activities.
<b>Household Other Products</b>	#Percentage household (any type of household products like kitchen materials, gold, TV, etc) expenditure of total income #Percentage of respondents in different level of expenditure on household items	In the survey area, the households are found spending very little or no money for other household products whereas the national rural average is 12.61 percent of the monthly income.
<b>Gender</b>	#Percentage of female respondents in access with education #Percentage of female respondents in achieving higher education 'SSC or above' #Percentage of female respondents in taking decision own #Percentage of female respondents in taking birth control methods	Female education enrolment is not satisfactory in the survey areas. Due to overwhelming illiteracy and economically vulnerable situation their participation in decision making is also below national average.



## 1. INTRODUCTION

Many places of Bangladesh are highly vulnerable to natural hazards and also they lag behind very markedly in a good communication system. The people living in such places are leading a miserable life due to unpredictable natural disasters. Given this situation, some innovative projects from the NGOs may influence the status of livelihood of poor people living in such areas. The NGOs which are working for social development can help these rural poor people to improve their status of livelihood by different innovative development programs. With the support of Oxfam Novib three NGOs from three districts namely *Gono Kalyan Shangstha (GKS)* in Sirajgonj, *Gono Unnayan Kendra (GUK)* in Gaibandha and *Shariatpur Development Society (SDS)* in Shariatpur are working for this purpose. *Unnayan Onneshan (UO)* is the technical partner which is working with these three NGOs and Oxfam Novib.

Gaibandha, Sirajgonj and Shariatpur are located respectively in northern, central and southern of Bangladesh. Main reasons to target these three regions are the occurrence of flood in every rainy season; drought in summer for dwindling ground water; riverbank erosion; and salinity problems in southern part as a result of backwater effect. GKS, GUK and SDS project areas are mainly selected as geographically vulnerable areas blocked by river water known as ‘Char’ where boat is the only vehicle for communication. Another major problem is the property rights instability because of continuous riverbank erosion and accretion of land which causes livelihood instability and conflicts between the powerful and the poor for ownership, capture and tenure management.

The three NGOs mentioned earlier are implementing a project namely RESOLVE (Regenerative Agriculture and Sustainable Livelihood for Vulnerable Ecosystem) in hard to reach areas of these three districts through innovative ‘Livelihood Diversification’ and ‘Small Scale Entrepreneurship’ programs.

Under ‘Livelihood Diversification’ program five models are implementing namely:

- ‘Sandbar Cropping’ and ‘Sheep & Chick Rearing’ in Sirajgonj;
- ‘Vertical Agriculture’ and ‘Sheep Rearing’ in Gaibandha; and
- ‘Every’ (Year Round Hanging Vegetable, Floating Vegetable)’ in Shariatpur.

Under ‘Small Scale Entrepreneurship’ program three models are implementing namely:

- ‘Blanket Making’ in Sirajgonj;
- ‘Improved Oven’ in Gaibandha; and
- ‘Bamboo Handicrafts and Hogla Mat’ in Shariatpur.

After one year of implementation of these models, it is necessary to find out the changes that have occurred on the state of livelihood of the beneficiaries. The state of Livelihood is about the living conditions which have been assessed in this survey in between two groups of respondents (beneficiaries and non-beneficiaries by the NGO supports) on some certain households in these three working areas. The survey have assessed the significant changes of livelihood status on both of the respondents those who have been influenced in their livelihood by these models (designated as controlled group), and others (uncontrolled group) who are continuing without any help by these specific projects. Information and data were collected through monthly surveys on five fundamental rights of human beings (e.g. food, cloth, housing, education and health) all over the year. Gender issues have also been assessed in this report considering women empowerment as an important issue

of the RESOLVE project. This report is an attempt to find out the differences between state of livelihood of the controlled group (beneficiaries of RESOLVE) and the uncontrolled group (non-beneficiaries of RESOLVE).

### 1.1 Objective and Rationale of the Survey

An attempt has been made at this report to find out the periodic average changes in living standard between two groups (controlled and uncontrolled) of the respondents leading a very miserable life at char areas in Gaibandha, Sirajgonj and Shariatpur. Since several models are implementing in these three districts, main objective of this report is to test the feasibility of the models and to find out the impact of these models on the state of livelihood of the respondents. As RESOLVE is a non-profitable project to upgrade the standard of living of poor people, finding out the periodic changes of the respondents all over the year is important here. The state of livelihood of the respondents who are not the beneficiaries of the project (uncontrolled group) has also been observed for a better understanding. The periodic change has been shown on quarterly basis based upon the data collected by the monthly survey. That's why, quarterly comparison for four quarters (April-June, 2011; July-September, 2011; October-December, 2011 and January-March, 2012 are referred respectively as 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> quarter) has also been included.

### 1.2 Sample Selection

A total sample of 300 households, divided equally from each of the three different char areas of *Shariatpur*, *Gaibandha* and *Sirajgonj* districts has been selected to monitor the state of livelihood by using a pre-designed questionnaire. After that, total 100 households of each district have been divided again into two categories as controlled and uncontrolled. The households have been selected using stratified sampling technique considering their position in compatible with the orthodox poverty line (World Bank poverty line criteria of daily income is less than USD 1.25) to maintain comparability with the national statistics in case of necessity. The availability of regular quarterly data on the changes of the lives and livelihood of the poor serves usefully in exploring continuous changes and dynamics of the state of livelihood.

### 1.3 Comparability with Conventional Mechanisms

Despite the shortcomings of the conventional mechanisms, particularly in relations to measurement of poverty and livelihood, the survey collects and reports data for making comparison with the findings in between two groups of respondents of two quarters, e.g. controlled and uncontrolled. Accordingly, the collected data has been analyzed using cost of basic needs (CBN) method, articulated by World Bank, which is commonly used by the national statistical agency, the Bangladesh Bureau of Statistics (BBS). The CBN method captures cost of a basic food basket where minimum nutritional requirement estimated as 2122 kcal per person per day, and the level is defined as poverty line. Considering BBS categories, the survey has categorised the poor into three groups based on their nutritional intake such as *Absolute Poor* ( $\leq 2122$  kcal), *Hardcore Poor* ( $\leq 1805$  kcal) and *Ultra Poor* ( $\leq 1600$  kcal). The survey has further measured the poverty level of the samples based on the daily income as proposed by World Bank, where they set daily income of USD 1.25 as poverty line. Using the income method, the survey has categorised the poverty into upper poverty (USD 1 per person per day) and lower poverty (USD 1.25 per person per day).

### 1.4 Limitations

This report is an attempt to show the periodic changes of the state of livelihood of poor people of three selected districts. Living standard of beneficiaries has been compared to the living standard of

non-beneficiaries. Then, the findings of this report have also been compared to the national findings, but the average findings of these three districts may not perfectly represent the overall livelihood status of the poor of this country.

## 2. HOUSEHOLD INCOME

### 2.1 Sources of Income

Considering the four quarters (April-June, 2011; July-September, 2011; October-December, 2011 and January-March, 2012 are referred respectively as 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> quarter), the survey has not found significant change in the percentage of the respondents with the different sources of income. The survey reveals that the most marginalised people (wage labourers and farmers are nearly about 80 percent in conjugation) in the survey areas are dependent on agriculture as their main source of income.

**Table 1: Average occupational situation observations between two groups of respondents for four quarters**

Sources of Income	Controlled				Uncontrolled			
	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
<b>Farmer</b>	26.22	23.33	25.33	25.78	18.22	17.56	17.56	18.67
<b>Labor</b>	53.11	53.78	51.78	53.33	73	67.11	66.89	68.89
<b>Small Business</b>	2	2.44	0.89	1.11	2	2.67	1.33	1.33
<b>Fisherman</b>	5.56	5.33	5.11	5.33	1.33	1.56	1.33	1.33
<b>Service Holder</b>	1.33	0.89	0	0	0.67	0.22	0	0
<b>Rickshaw/ Van Puller</b>	3.11	2.67	2.67	3.33	3.33	4.67	5.33	5.11
<b>Driver</b>	0.44	0.22	0.22	0	0	0	0	0
<b>Others</b>	6.89	11.33	14	11.11	3.89	6.22	7.55	4.67

**Farmer:** On average, the percentage of the respondents of controlled group who are farmer is higher than that of uncontrolled group through the quarters (Table 1). Only one-fourth of the respondents of controlled group are farmer on average, but in second quarter it was the lowest. On the other hand, less than one-fifth of the respondents of uncontrolled group are farmers. Since most of the respondents don't have their own land, the percentage of farmer is found lower in these areas. Most of the respondents who are farmer either they have a small piece of land or they are found to work on leased land.

**Labour:** From first to fourth quarter, on average, the highest percentage of the respondents are engaged in wage labour both controlled and uncontrolled group (Table 1). In spite of no significant changes in control group, this rate was the highest in the second quarter (53.78 percent) and in uncontrolled group this rate was the highest in the first quarter (73 percent). The reason behind the highest level of wage labour is that most of the respondents don't have their own land and they have been working in others land for per day wage.

**Small Business:** Small grocery shop, chick and sheep rearing to sell in market, blanket making for selling, bamboo handicraft and Hogla mat for selling etc. are included in small business. Controlled group are engaged in chick and sheep rearing, blanket making, bamboo handicraft and hogla mat business. Uncontrolled group are engaged only in small grocery shop business. Very small portion of the respondents have been found doing small business. In the first quarter, only 2 percent of both controlled and uncontrolled group were engaged in small business (Table 1). In the second quarter, in both group this percentage has increased (2.44 for controlled and 2.67 for uncontrolled group) However, in the third and fourth quarter, this percentage have reduced in both group (Table 1).

**Fisherman:** More than 5 percent of the respondents of controlled group are fishermen (Table 1). On the other hand, nearly about 1.33 percent of the respondents of uncontrolled group are fishermen (Table 1). In this survey, no significant changes have been found on the percentage of the respondents in case of the fishermen.

**Service Holder:** Service holders are included in those who mainly work in town's shop near the village and in garments factory as labourers. On average, a very small portion of the respondents are service holders. In the first quarter, only 1.33 and 0.67 percent of the respondents respectively for controlled and uncontrolled group were found as service holders. This rate has reduced in the second quarter and in the third and fourth quarter; there were no service holders in both of the controlled and uncontrolled group (Table 1).

**Rickshaw/Van Puller:** There is no significant change in the percentage of the respondents of controlled group in case of rickshaw/van puller through the quarters but the lowest percentage is found in the second and third quarters (2.67 percent). There is a gradual increase in the percentage of the respondents who are rickshaw/van puller from the first to third quarter but in the fourth quarter, there is a slight reduction in this rate from the third quarter (Table 1). As the selected areas are char areas, a very few rickshaws and vans are there for a small portion of rickshaw/van pullers.

**Driver:** Drivers here, refer to those who mainly drive the bus or truck. Less than one percent of the respondents of controlled group are drivers and none of the respondents of uncontrolled group are found as driver (Table 1).

**Others:** In this study mason, carpenter, boat driver etc. are included as well in other category. The percentages of the respondents who are engaged in other occupations are higher in controlled group than the uncontrolled group (Table 1) in all the quarters. This rate was the highest for both controlled and uncontrolled group in the third quarter (Table 1), because this is the time for flood and most of the lands remain under water so people usually involve in other occupations to survive at this time.

The variations of occupational status are observed among different locations. The quarter-wise comparison between the first quarter (base quarter) and the fourth quarter (current quarter) for each location are as follows:



**Table 2: Location wise occupational situation observations between two groups of respondents**

Sources of Income	Gaibandha				Sirajgonj				Shariatpur			
	First Quarter		Fourth Quarter		First Quarter		Fourth Quarter		First Quarter		Fourth Quarter	
	Con.	Uncon	Con.	Uncon	Con.	Uncon	Con.	Uncon	Con.	Uncon	Con.	Uncon
<b>Farmer</b>	24.67	10	23.33	14	0	2.67	0	0	54	42	54	42
<b>Labor</b>	45.33	76	55.33	62.67	82	89	72.67	90	32	54	32	54
<b>Small Business</b>	6	6	3.33	4	0	0	0	0	0	0	0	0
<b>Fisherman</b>	2.67	0	2	0	0	0	0	0	14	4	14	4
<b>Service Holder</b>	4	2	0	0	0	0	0	0	0	0	0	0
<b>Rickshaw / Van Puller</b>	9.33	10	10	15.33	0	0	0	0	0	0	0	0
<b>Driver</b>	1.33	0	0	0	0	0	0	0	0	0	0	0
<b>Others</b>	3.33	0.67	6	4	17.33	11	27.33	10	0	0	0	0

Con. = Controlled

Uncon. = Uncontrolled

**Gaibandha:** The survey found an increase in the percentage of the respondents of controlled group who are wage labourers, rickshaw/van puller and engaged in other occupations. A reduction is found in other occupations. However, in uncontrolled group, there is increase in the percentage of the respondents who are farmers and rickshaw/van puller. The detail sources of income between controlled and uncontrolled group are given here (Table 2)

**Sirajgonj:** In comparison between the first and fourth quarter, the wage labourers are found higher in uncontrolled group (89 and 90 percent respectively) compared to the controlled group (82 and 72.67 percent respectively), where the number of labourer has been observed as increased in both the group. The percent of farmers has been found in uncontrolled group (2.67 percent) in the first quarter, but no farmer has been found in the fourth quarter in the same group. Among other sources of income, the respondents have been found in the scattered way of income in both groups. The detail sources of income between controlled and uncontrolled group are given here (Table 2).

**Shariatpur:** In comparison between the first and fourth quarter, the farmers are found higher in controlled group (54 percent in both quarters) compared to the uncontrolled group (42 percent in both quarters), where no changes of farmers has been observed in both the quarters in the same group of respondents. In the case of other professions, the survey has not found any changes of income sources between the two quarters. The detail sources of income between controlled and uncontrolled group are indicated here (Table 2).

Since there is less land for cultivation because of char areas in Sirajgonj, the percentage of the wage labourers is higher and farmer is lower compared to other areas.

## 2.2 Level of Income

It has been found from the current survey that the respondents of controlled group have the higher level of income than that of uncontrolled group. The details level of income between controlled and uncontrolled group are shown here (Table 3).

**Table 3: Average level of income of the respondents of two groups for four quarters**

Income Level	Quarters	Controlled	Uncontrolled
BDT > 2000	First Quarter	47.67	74.33
	Second Quarter	41	64
	Third Quarter	35.11	58.89
	Fourth Quarter	23.33	48.45
BDT 2000-3000	First Quarter	29	14
	Second Quarter	28.33	25.67
	Third Quarter	34.67	37.11
	Fourth Quarter	38.78	36.67
BDT 3000-4000	First Quarter	23	11.67
	Second Quarter	30.67	10.33
	Third Quarter	21.11	3.56
	Fourth Quarter	27.89	10.45
BDT 4000+	First Quarter	0	0
	Second Quarter	0	0
	Third Quarter	9.11	0
	Fourth Quarter	10.11	4.44

**<2000:** There is a gradual decrease in the respondents with the level of income less than BDT 2000 per month through the quarters both in controlled and uncontrolled groups (Table 3). The percentage is higher for the respondents of uncontrolled group because the respondents of controlled group have been engaged in other innovative income generating activities supported by RESOLVE.

**2000-3000:** The percentage of the respondents of both groups with the level of income between BDT 2000-3000 per month has increased from the first to fourth quarter (Table 3). In this level of income, the respondents of controlled group is higher than that of uncontrolled group because controlled respondents' level of income is higher than uncontrolled respondents' level of income.

**3000-4000:** The percentage of the respondents of controlled group with the level of income between BDT 3000-4000 per month was the highest in second quarter (30.67 percent) but increased from the first (23 percent) to fourth (27.89 percent) quarter. However, the percentage of the respondents of uncontrolled group with the level of income between BDT 3000-4000 has reduced from the first (11.67 percent) to fourth (10.45 percent) quarter and the lowest in third quarter (3.56 percent). So, it is observed that the respondents of controlled group have higher level of income and fluctuation is there in uncontrolled respondents' level of income.

**4000+:** In the first and second quarters, no respondents are there with this level of income. In the third quarter about 9.11 percent of the respondents of controlled group have more than BDT 4000 income per month on the other hand, no respondents from uncontrolled have this level of income in the third quarter. In the fourth quarter both controlled and uncontrolled group have this level of income (10.11 percent and 4.44 percent respectively).

It has been found that the level of income of the respondents is increasing through quarters but the controlled group respondents' level of income is increasing more than that of uncontrolled group respondents. The reason is that the controlled group is being supported by the RESOLVE project which has enhanced their sources of income as well as levels of income. On the other hand, the SME investment of the respondents is observed significantly among all right holders (controlled group) in the last quarter and its impacts on overall income can be considered as a supportive mechanism to increase the gross income level in surveyed areas.

The variations of income level status are observed among different locations (Table 4). The table of quarter-wise comparison between the first quarter (base quarter) and the fourth quarter (current quarter) for each location is as follows:

**Table 4: Location-wise income level between two groups of respondents between 1<sup>st</sup> & 4<sup>th</sup> quarter**

Level of Income	Gaibandha				Sirajgonj				Shariatpur			
	First Quarter		Fourth Quarter		First Quarter		Fourth Quarter		First Quarter		Fourth Quarter	
	Con.	Uncon.	Con.	Uncon.	Con.	Uncon.	Con.	Uncon.	Con.	Uncon.	Con.	Uncon.
<b>BDT &lt;2000</b>	36	30	23.33	26.67	94	97	38.67	40	13	96	8.07	78.67
<b>BDT 2000-3000</b>	39	37	58	47.33	5	2	28.67	41.33	43	3	29.57	21.33
<b>BDT 3000-4000</b>	25	33	18	12.67	1	1	28	22	43	1	37.53	0
<b>BDT 4000+</b>	0	0	0.67	13.33	0	0	4.67	0	0	0	24.83	0

*Con. = Control*

*Uncon. = Uncontrolled*

**Gaibandha:** On average, 36 and 23.33 percent respectively of the respondents of controlled group for the first and fourth quarter belonged to the income level less than BDT 2000 per month. In addition, on average 30 and 26.67 percent of the respondents of uncontrolled group respectively for the first and fourth quarter belonged to this level of income. So, it is found that more respondents of controlled group have been upgraded their income level. The percentage of the respondents of both groups with the income level between BDT 2000-3000 per month has increased in the fourth quarter from the first quarter but this rate is higher for controlled group (Table 4). On the other hand, the percentage of the respondents of both groups with the income level between BDT 3000-4000 per month has reduced but the rate is higher for uncontrolled group (Table 4). Furthermore, it has been found from this survey that the percentage of the respondents of controlled group with the level of income of more than BDT 4000 per month is lower than that of uncontrolled group (Table 4). Although more of the respondents of controlled group are found as severe poor in the first quarter, the improvement of their income level to the highest level (BDT 4000+) is lower than that of uncontrolled group. However, they are improving their level of income continuously.

**Sirajgonj:** There is a huge improvement in the level of income of the respondents both for controlled and uncontrolled group, but most of the respondents of controlled group are upgraded to

higher level of income from the first to fourth quarter (4.67 and 0 percent respectively for controlled and uncontrolled group with income level of BDT 4000+ per month in fourth quarter) (Table 4).

**Shariatpur:** A big improvement has been found in the level of income of the respondents of controlled group from the first to fourth quarter. No respondents of controlled group belonged to the income level of BDT 4000+ per month in the first quarter but in the fourth quarter, 24.83 percent of the respondents belonged to this level of income. On the other hand, only 1 percent of the respondents belonged to the income level between BDT 3000-4000 per month in the first quarter but no respondents belonged to this level of income in fourth quarter. Moreover, none of the respondents of uncontrolled group belonged to the income level of BDT 4000+ in both the first and fourth quarter.

Overall, it has been observed from the current survey that there is a gradual increase in the level of income of the respondents of controlled group through the quarters. Although in some locations the level of income of the respondents of controlled group is lower than that of uncontrolled group but there are fluctuations in uncontrolled groups' income level (Table 4).

#### Key Findings

- On average, for four quarters majority of the respondents are wage labourers (53 and 68.97 percent respectively for controlled and uncontrolled group).
- In Sirajgonj, on average for four quarters only 0.89 percent of the respondents are farmers and 83.42 percent of the respondents are labourers.
- On average, the overall income level of the controlled group is higher than that of the uncontrolled group and it is rising through the quarters (Table 3).

### 2.3 Policy Relevance

The survey illustrates that most of the respondents of the controlled group in the survey areas are engaging in more income generating sources by investing their income in crops, vegetable, fisheries and other innovative programs. The respondents of the controlled group are in better return on their livelihood over the months as there is a gradual increase in their level of income (Table 3). Although the income level of the respondents of the uncontrolled group is rising but there exists fluctuations (Table 3). This tendency implies that the respondents of the uncontrolled group are unable to fulfill their daily demands with their existing income and are suffering from adverse shocks in their income and livelihood

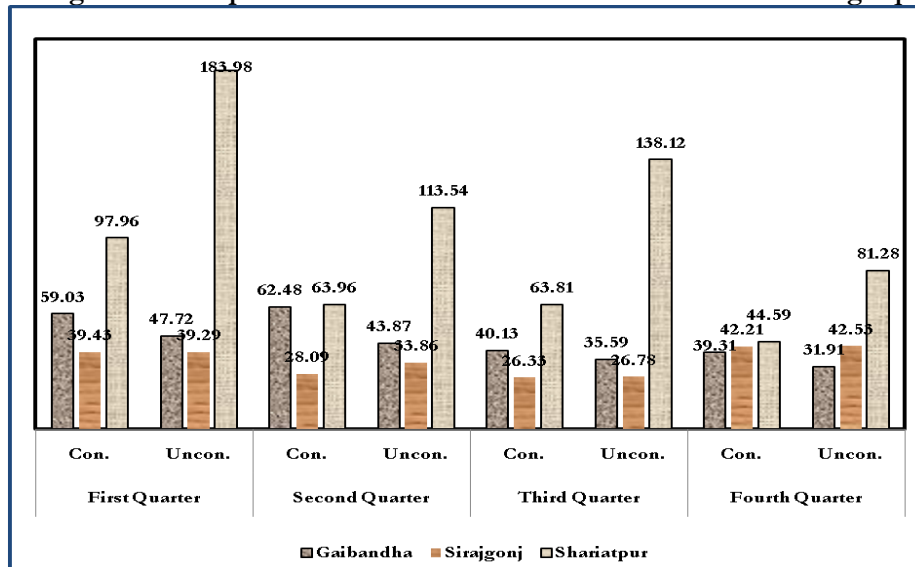
## 3. BASIC NEEDS CONSUMPTION

### 3.1 Expenditure

The current survey considers six components of expenditure which is required for subsistence living, based on the Household Income and Expenditure Survey (HIES). The overall expenditure in survey areas has fluctuated over the months. As a result, quarterly fluctuations have also been found in both controlled and uncontrolled groups in three locations (Figure 1).



**Figure 1: Percentage of total expenditure of total income for three locations through quarters**



Con. = Controlled  
Uncon. = Uncontrolled

**Gaibandha:** In all the quarters, the percentage of total expenditure of controlled group’s total income has been found higher than that of uncontrolled group in Gaibandha (Figure 1). The higher expenditure of the right holder indicates that as they increase their sources of income by RESOLVE supported programs, their level of income has increased. As a result, they have increased their expenditure for several purposes like education for children, medical expenses etc.

**Sirajgonj:** In all the quarters, the percentage of total expenditure of controlled group’s total income has been found almost same as the uncontrolled group in Sirajgonj (Figure 1). The right holders of Sirajgonj have developed a cooperative fund with the support of GKS where they save a fraction of their income and for this reason; their expenditures have not increased much. In addition, they have also developed subsistence of living (e.g. homestead crops, SME business, poultry etc) compared to the uncontrolled groups.

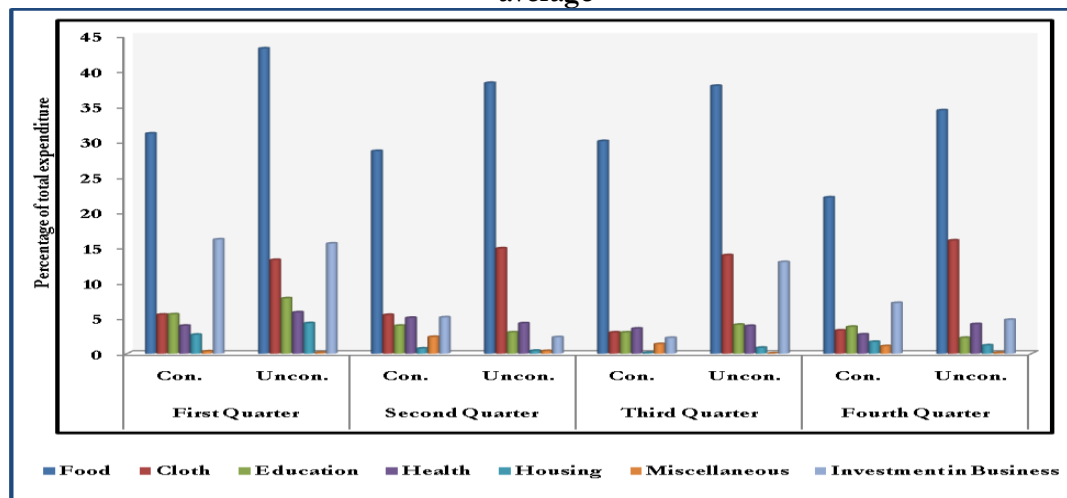
**Shariatpur:** In all the quarters, the percentage of total expenditure of total income of uncontrolled group has been found much higher than that of the controlled group (Figure 1). Except the fourth quarter (81.28 percent), in all quarters the percentage of total expenditure of uncontrolled group has been found more than 100 percent (183.98, 113.54, 138.12 percent respectively for the first, second and third quarter). This means that their expenses are found higher than their income. They are affording this high expenditure by taking loan from other sources. On the other hand, controlled group’s percentage of total expenditure has been found lower than the percentage of total income in all the four quarters and there is gradual decrease in this rate (Figure 1). The lower expenditure among the right holders indicates that the respondents of the controlled group have developed their subsistence of living (e.g. homestead crops, SME business, poultry etc) compared to the uncontrolled groups.

### 3.2 Components of Expenditure

From the current survey, it has also been observed that the total expenditure for the poor is largely influenced by three categories of expenditure mainly, e.g. food, cloth and SME investment. Among

these three categories, food is the main component of expenditure. On average, the respondents spend almost one-third (28.05 and 38.51 percent respectively for controlled and uncontrolled group) of the total expenditure only for food (Figure 2).

**Figure 2: Percentage of total expenditure of the respondents of two groups for four quarters on average**



Con. = Controlled  
Uncon. = Uncontrolled

Almost for all components, on average uncontrolled group is spending more than that of controlled group (Figure 2). However, in terms of location-wise scenario, actually the respondents of controlled group in Sirajgonj and Gaibandha spend more than uncontrolled group for almost all components. On the other hand, the respondents of controlled group in Shariatpur spend less than uncontrolled group for almost all components. The location-wise expenditure variations of controlled and uncontrolled groups between the first and fourth quarter are given here (Table 5).

**Table 5: Location-wise percentage of expenditure level between two groups of respondents in two quarters**

Com. of Exp.	Gaibandha		Sirajgonj				Shariatpur					
	First Quarter		Fourth Quarter		First Quarter		Fourth Quarter		First Quarter		Fourth Quarter	
	Con	Uncon.	Con.	Uncon.	Con.	Uncon.	Con.	Uncon.	Con.	Uncon.	Con.	Uncon.
<b>Food</b>	27.59	25.89	21.79	18.89	29.34	28.12	18.36	19.56	36.67	75.75	26.27	64.99
<b>Cloth</b>	8.90	4.76	3.43	3.73	3.04	3.71	3.44	4.54	4.65	31.37	3.01	39.89
<b>Edu.</b>	7.88	3.99	6.59	3.62	1.18	1.03	0.91	1.50	7.67	18.52	3.95	1.62
<b>Health</b>	2.59	4.74	0.71	3.12	3.39	2.29	1.66	1.34	5.89	10.56	5.83	8.1
<b>Housing</b>	2.84	2.68	1.29	1.64	2.48	4.14	3.75	1.91	2.75	6.14	0	0
<b>Mis.</b>	0.98	0.48	0	0	0	0	3.2	0.36	0	0	0	0
<b>Inv.</b>	8.25	5.18	8.41	11.7	0	0	7.64	2.7	40.33	41.64	5.53	0

Com. of Exp. = Components of Expenditure  
Edu. = Education  
Mis. = Miscellaneous  
Inv. = Investment in Business

**Gaibandha:** Average percentage of expenditure of both groups for all components except ‘investment in business’ has reduced from the first to fourth quarter (Table 5). The percentage of expenditure for investment in business of controlled group has increased less than that of the uncontrolled group (Table 5).

**Sirajgonj:** For the controlled group, the percentage of expenditure for food, education and housing has reduced from the first to fourth quarter (Table 5). In addition, the percentage of expenditure for cloth, housing, miscellaneous and investment in business has increased from the first to fourth quarter (Table 5). On the other hand, for the uncontrolled group, the percentage of expenditure for food, health and housing has reduced from the first to fourth quarter (Table 5) and other expenditures have increased.

**Shariatpur:** For the controlled group, average percentage of expenditure for all components has reduced from the first to fourth quarter (Table 5). For the uncontrolled group, average percentage of expenditure for all components except cloth has reduced from the first to fourth quarter (Table 5).

The current survey also stated that the percentage of expenditure of both groups for food has reduced from the first to fourth quarter in all three selected locations (Table 5). The reason behind this is the collection of vegetables from homestead gardening for what they don’t need to buy vegetables from outside. In addition, for the higher rate of inflation, the cost of all components has increased. As a result, the respondents are facing difficulties to meet all the basic needs. An increase in the percentage of expenditure for investment is found in business of both groups in all locations (Table 5). This means that they are transferring their income for other asset making activities like poultry, livestock, homestead gardening, small scale business etc.

#### Key Findings

- In the first three quarters, the respondents of uncontrolled group in Shariatpur have spent more than their income (183.98, 113.54 and 138.12 respectively for first, second and third quarter) but in fourth quarter, it is less than their income (81.28 percent)
- On average, the respondents spend almost one-third (28.05 and 38.51 percent respectively for controlled and uncontrolled group) of total expenditure only for food.
- The percentage of expenditure for investment in business of both controlled and uncontrolled group has increased from the first to fourth quarter (Table 5).

## 4. CONSUMPTION OF FOOD

Rice and vegetable constitutes the main food-course for the poor people in the char areas. The consumption pattern of other essential food items like pulse, fish, meat, milk, edible oil, fruits are very low in the all surveyed areas. The survey has grouped different food items into four classes like carbohydrates, protein, fat and vitamins. Total calorie intake is derived from total consumption of food items by the respondents and presented in terms of per capita per day. According to the HIES,  $\leq 2122$  kcal,  $\leq 1805$  kcal and  $\leq 1600$  kcal per capita per day are considered for absolute, hardcore and ultra poverty respectively. Average calorie intake scenario of the respondents is presented in the here (Table 6)

**Table 6: Average calorie intake scenario of controlled and uncontrolled group for four quarters**

	First Quarter		Second Quarter		Third Quarter		Fourth Quarter	
	Con.	Uncon.	Con.	Uncon.	Con.	Uncon.	Con.	Uncon.
<b>Gross Calorie Intake</b>	2239.5	2080.65	2117.87	2027.37	2257	1994.67	2221.11	2003.55

From the current survey, it is found that in the first, third and fourth quarter, the average calorie intake of the respondents of controlled group was higher than 2122 kcal but in second quarter this amount has become slightly lower by only 4.13 kcal. So, it can be said that the respondents of the controlled group are not poor in terms of food consumption. However, in all the quarters, the respondents of the uncontrolled group have been found hardcore poor in terms of food consumption as the average calorie intake was lower than 2122 kcal but higher than 1805 kcal. Although the expenditure for food of controlled group has reduced through quarters (Table 5), average calorie intake has not reduced as their food consumption has not reduced due to collection of vegetables from homestead gardening.

**Table 7: Location-wise average calorie intake scenario of controlled and uncontrolled group for four quarters**

Locations	First Quarter		Second Quarter		Third Quarter		Fourth Quarter	
	Con.	Uncon.	Con.	Uncon.	Con.	Uncon.	Con.	Uncon.
<b>Gaibandha</b>	2117	1890	1856	1809	1820.33	1808	1842.67	<b>1704</b>
<b>Sirajganj</b>	1985	1848	1769	1848	1727	1725.33	1917.67	<b>1857.33</b>
<b>Shariatpur</b>	<b>2532</b>	<b>2504</b>	<b>2728</b>	<b>2425</b>	<b>3223.67</b>	<b>2450.67</b>	<b>2903</b>	<b>2449.33</b>

The variations of the calorie intake status are observed among different locations (Table 7). It is identified from the survey that the respondents of controlled group are getting higher calorie than that of uncontrolled group in all locations in all the quarters (Table 7).

**Gaibandha:** The controlled respondents are getting calorie less than 2122 kcal in all the quarters, and that is reduced amount from the first to fourth quarter. Since Gaibandha is river erosion prone area, the cultivable land is not available all the time here and their food basket are always being affected by this. A gradual reduction have also found in the calorie intake of respondents of the uncontrolled group (Table 7).

**Sirajgonj:** The controlled respondents are getting calorie less than 2122 kcal in all the quarters. In the second and third quarter this value was the lowest but it has increased in the fourth quarter than these two quarters. Every year, the selected area of Sirajgonj is being inundated by flood and consequently, as the second and third quarter is the time for flood and other natural disasters, the respondents' food basket is also being affected for this. Fluctuations have also been found in the uncontrolled groups' calorie Intake (Table 7).

**Shariatpur:** It is also identified that the respondents of Shariatpur are getting relatively higher calorie in both the groups in all quarters than that of other two selected locations (Table 7) and so, they are not poor in terms of food consumption. Year round vegetable cultivation is being practiced in this location which has made the food basket comparatively richer than that of other locations.



#### 4.1 Policy Relevance

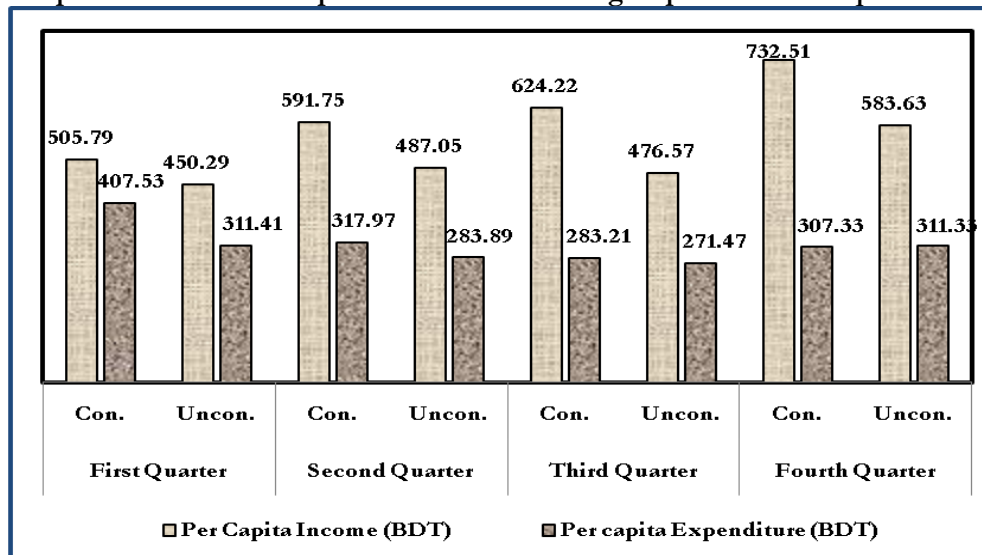
The lower calorie intake is mainly affecting other basic services such as education and health infrastructure. Incentives and other facilities to the right holders are influencing the respondents on good return of food growing and calorie intake. On the other hand, the respondents of the uncontrolled group are taking lower calorie in their food (Table 7); even they have high expenditure in their food consumption compared to the controlled group (Figure 2). Agriculture in *Char* areas may affect indirectly on good clothing, housing and many other household activities (e.g. buying products, celebrating different festivals etc) and the challenge is associated with accessing those services that is remoteness. The food inflation has impacted them, either by requiring them to excessive exploitation of labour or reduction in consumption due to lack of public food distribution system.

### 5. SITUATION OF POVERTY

#### 5.1 Income Poverty

The survey observes the per capita income and expenditure of the both group of respondents. In this survey, it is found that the income of controlled group respondents has increased slightly in terms of expenditure (Figure 3) through the quarters. In all four quarters, per capita income has found higher in the controlled group than that of the uncontrolled group (Figure 3). Although a gradual increase have been found in per capita income of the right holders, their per capita expenditure has reduced (Figure 3). The reason behind this is that right holders are saving their income for other income generative investments so that their expenditure does not increase much. Per capita income of uncontrolled group has found to be increased from the first quarter to fourth quarter (450.29 and 583.63 percent respectively for the first and fourth quarter) and per capita expenditure has been found almost same in the first and fourth quarter (311.41 and 311.33 percent respectively). Overall scenario of per capita income and expenditure is given here (Figure 3).

**Figure 3: Comparison of income-expenditure between two groups for the four quarters**



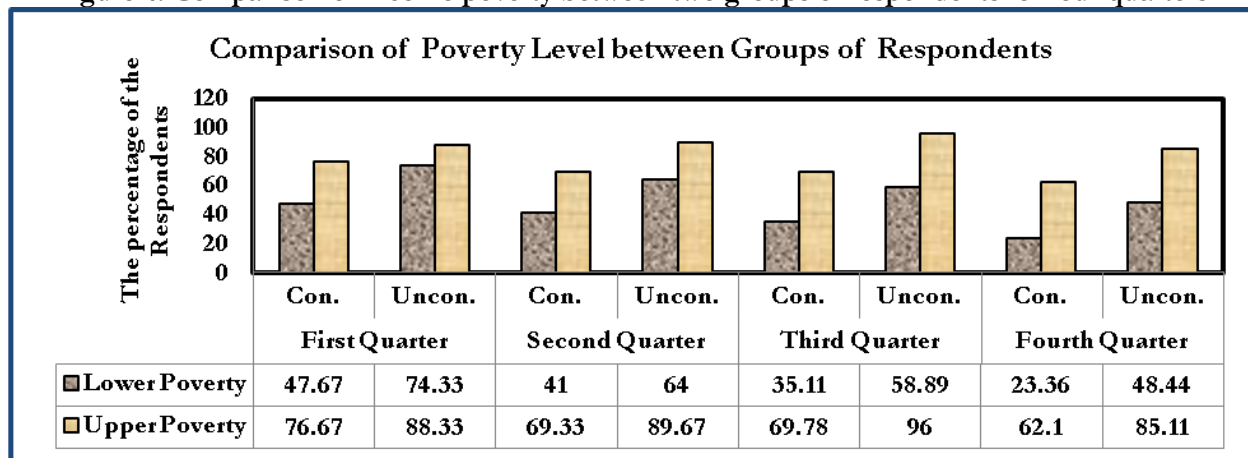
Con. = Controlled  
Uncon. = Uncontrolled

Based on income situation suggested by World Bank, the survey reveals that the respondent whose income is USD 1 per person per day belongs to the lower poverty and the respondent whose income is USD 1.25 per person per day belongs to the upper poverty. On the basis of income situation, the survey reveals that the lower poverty rate of controlled groups has reduced from the first to fourth quarter (47.67, 41, 35.11 and 23.36 percent respectively for the first, second, third and fourth quarter). Upper poverty rate of controlled group (76.67, 69.33, 69.78 and 62.1 percent respectively for the first, second, third and fourth quarter) has also reduced because of the rise of income level by new sources of income supported by RESOLVE project.

On the other hand, upper poverty rate of uncontrolled group (88.33, 89.67, 96 and 85.11 percent respectively for the first, second, third and fourth quarter) has increased in the second and third quarters but slightly reduced in the fourth quarter from the first quarter. In addition, lower poverty rate of the uncontrolled group (74.33, 64, 58.89 and 48.44 percent respectively for first, second, third and fourth quarter) has also reduced from the first to fourth quarter. On average both upper and lower poverty rate of the uncontrolled group is higher than that of controlled group (Figure 4).

The survey states that on average, the respondents of uncontrolled group are poorer than the respondents of controlled group. The survey also illustrates the poverty rate of both controlled and uncontrolled group for the four quarters separately (Figure 4).

Figure 4: Comparison of income poverty between two groups of respondents for four quarters



Con. = Controlled  
Uncon. = Uncontrolled

The variations of poverty rate of controlled and uncontrolled group are observed among different locations (Table 8). Among all the locations, Gaibandha and Sirajgonj are found with higher poverty rate than Shariatpur (Table 8). The survey has also found that Sirajgonj is the most poverty prone area followed by Shariatpur and Gaibandha (Table 8). One possible reason might be that Sirajgonj is the most climate vulnerable area than the other surveyed areas. As a result, more climate refugee is appearing in Sirajgonj due to flood and other resulting factors of climate change in every year. The reason behind the decrease of the poverty rate slightly from the previous quarter is homestead gardening and the success of SME investment.

**Gaibandha:** For controlled group, although lower poverty rate (39 and 23.33 percent respectively for the first and fourth quarter) has reduced from first to fourth quarter, upper poverty rate (75 and

81.33 percent respectively for the first and fourth quarter) has increased from the first to fourth quarter. This means that the income level of some respondents is rising so people are moving from lower to upper poverty. Similarly, for uncontrolled group lower poverty rate (30 and 26.67 percent respectively for the first and fourth quarter) has reduced from first to fourth quarter and upper poverty rate (67 and 74 percent respectively for the first and fourth quarter) has increased from the first to fourth quarter.

**Sirajgonj:** As Sirajgonj is the most poverty prone area, 99 percent respondents of both controlled and uncontrolled group belonged to upper poverty rate in first quarter, but in fourth quarter this rate has reduced (67.34 and 81.33 percent respectively for controlled and uncontrolled group). Lower poverty rate for both controlled (94 and 38.67 percent respectively for first and fourth quarter) and uncontrolled (97 and 40 percent respectively for first and fourth quarter) group has reduced from first to fourth quarter. Although the rate of poverty is higher in Sirajgonj but the rate of poverty reduction is higher.

**Shariatpur:** Upper poverty rate of controlled group (56 and 37.67 percent respectively for the first and fourth quarter) has been found the lowest in Shariatpur compared to other two areas and also lower than that of uncontrolled group (99 and 100 percent respectively for the first and fourth quarter). Lower poverty rate (13 and 8 percent respectively for first and fourth quarter) of controlled group has reduced from the first to fourth quarter and this rate also reduced in uncontrolled group (96 and 78.67 percent respectively for first and fourth quarter). Most of the respondents of uncontrolled group are living below the poverty line.

The detail rate of each location for the first and fourth quarters can be found here (Table 8).

**Table 8: Location-wise poverty rate evaluation between two groups of respondents in two quarters**

Group of Respondents	Gaibandha				Sirajgonj				Shariatpur			
	Upper Poverty		Lower Poverty		Upper Poverty		Lower Poverty		Upper Poverty		Lower Poverty	
	1st	4th	1st	4th	1st	4th	1st	4th	1st	4th	1st	4th
<b>Controlled</b>	75	81.33	36	23.33	99	67.34	94	38.67	56	37.67	13	8
<b>Un-controlled</b>	67	74	30	26.67	99	81.33	97	40	99	100	96	78.67

## 5.2 Food Poverty (Direct Calorie Intake)

In the current survey, the poverty level of both the groups has also been measured by calorie intake per person per day. The respondents of Gaibandha and Sirajgonj at both controlled and uncontrolled group are below the food poverty line (in Gaibandha, average calorie intake is 1909 and 1802.75 kcal per person per day in controlled and uncontrolled group respectively), (in Sirajgonj, average calorie intake is 1849.67 and 1819.67 kcal per person per day in controlled and uncontrolled group respectively) in comparison with the national boundary of food poverty (2122 kcal per person per day) during the time. However, it is observed that the calorie intake is comparatively better among the right holders than their counterparts (Table 7). So, according to the present survey, most of the people in hard to reach areas are poor in terms of calorie deficiency, even though the calorie

intake in Shariatpur (average calorie intake is 2846.67 and 2457.25 kcal per person per day in controlled and uncontrolled group respectively) is higher than the national food poverty line as most of the calorie are coming from carbohydrate only. The reason behind their higher calorie intake during the period in Shariatpur is higher investment in homestead vegetable gardening.

#### Key Findings

- Among the right holders (controlled group) average 69.47 percent (where average 89.78 percent was in uncontrolled group) of the respondents are living in upper poverty level with income level of less than BDT 2000;
- 32.67 and 28.36 percent of the respondents at controlled and uncontrolled group respectively are living in lower poverty level in terms of their income.
- Considering food poverty line, respondents of Gaibandha and Sirajgonj are more vulnerable than respondents of Shariatpur (Table 7)

### 5.3 Policy Relevance

The high incidence of upper poverty indicates structural obstacles faced by the inhabitants, coupled with shocks, emanating from disasters and climate-change induced vulnerabilities. This warrants a different public provisioning of public goods, besides addressing structural causes and climate-induced vulnerabilities.

## 6. DESEGREGATE GENDER SITUATION

Women Empowerment is one of the main objectives of RESOLVE project. In the issue of gender the survey mainly focuses on four major aspects. These are;

- Percentage of female respondents in access with education,
- Percentage of female respondents in achieving higher education ‘SSC or above’,
- Percentage of female respondents in taking decision by their own (Specially for earning women),
- Percentage of female respondents in taking birth control method.

Information about the percentage of female member respondents of both controlled and uncontrolled groups is given here (Table 9). The comparison between both groups and between the first and fourth quarter is depicted here (Table 9) to show the changes occurred in the last year.

In the survey areas, the study observes that the female access in formal education is comparatively higher in the controlled group than their counterparts (Table 9). The study also finds that only 32 and 29 percent female of controlled and uncontrolled group respectively have access to formal education during April-September (First quarter). This rate has slightly increased in the fourth quarter (36.22 and 28.22 percent respectively for controlled and uncontrolled group). As the level of income of the controlled group is rising, they are sending their girls to school more than before.



**Table 9: Comparison between the percentages of female respondents of both groups in four major aspects of gender issue**

Indicators	First Quarter		Fourth Quarter	
	Con.	Uncon.	Con.	Uncon.
Access of Girls Education in Households	32	29	36.22	28.22
Obtaining Highest Degree as SSC, or above	2	2	2	0.67
Decision Taking Power	26	23	40.22	15.11
Using Birth Control Method	65.75	84	80.67	79.33

Only 2 percent female has completed Secondary School Certificate (SSC) or higher education at both of the group of respondents in the first quarter and this rate has decreased in fourth quarter for uncontrolled group at 0.67 percent. It has been observed that although girls' enrollment in school is increasing but for early marriage they cannot continue their education.

The survey has also found that only 26 percent female of the right holder are able to take their decision concerning family activities in the first quarter. This rate has increased in the fourth quarter at 40.22 percent. In contrast 23 and 15.11 percent respondents of uncontrolled group respectively for the first and fourth quarter have the decision taking power of their own. So, their decision taking power has been found to be reduced. The reason behind this is the increasing earning power of the female right holders than non-right holders.

The percentage of taking birth control method (65.75 percent) is not found satisfactory among the right holders compared to the uncontrolled groups (84 percent) in the first quarter. However, in the fourth quarter an opposite scenario has been found (80.67 and 79.33 percent respectively for the controlled and uncontrolled group) as female right holders are becoming more concern about their health.

## CONCLUSION

This report is an attempt to find out the impact of RESOLVE project on the state of livelihood of the right holders (controlled group) as well as compared to the state of livelihood of controlled group with the state of livelihood of uncontrolled group. On average, the state of livelihood of the respondents of controlled group has been found improving on a continuous way. On the other hand, the state of livelihood of the respondents of uncontrolled group is improving as well but not as much as controlled group. Moreover, there are fluctuations in the improvement of state of livelihood of uncontrolled group.

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## Annex 1:

### Methodology of the State of Livelihood

A pre-designed questionnaire has been used in the survey to collect information from 300 selected households of the three char areas of Shariatpur, Gaibandha and Sirajgonj districts. The households have been selected randomly considering poverty level measurement criteria and per capita household income of less than USD 3. The household selection criteria imply that the surveyed households are marginalised in terms of income. After selecting 100 households from each location, they have been further grouped into controlled and uncontrolled group as 50 households for each case. The controlled 50 households have been facilitating with various livelihood promotional opportunities (e.g. capacity building training, seeds, loan, adaptive agriculture techniques etc) under RESOLVE project. The collected information has been averaged quantitatively to observe the significant change between controlled and uncontrolled households. The analytical questionnaire has been made based on clarifying all the livelihood factors that have been influencing basic human needs of selected respondents.

**Income Poverty Line:** Since 1990, World Development Report (WDR) on Poverty, the World Bank has anchored its international poverty line to the national poverty line used in the poorest countries. The original “USD 1 a day” line was a typical line amongst the low-income countries in the data available at the time of the 1990 WDR. This is acknowledged to be a frugal line; naturally richer countries have higher national poverty lines. One could hardly argue that the people in the world who are poor by the standards of the poorest countries are not in fact, poor.

**The Survey follows the World Bank’s latest poverty line that is USD 1 and USD 1.25 per person per day income for the upper and lower poverty line**

**Food Poverty Line:** The cost of basic needs (CBN) method is the standard method for estimating the incidence of poverty. This is recommended by the World Bank and the estimates based on it are used by the planners, policy makers and the international agencies. To measure the food poverty line, a basic food basket (eleven food items) and cost has been selected. The quantities in the basket are scaled according to the nutritional requirement of 2122 kcal per person per day. The estimated cost is taken for 2122 kcal as Food Poverty Line (FPL).

Three steps have been followed for estimating what it costs a household to meet its basic needs in the base year 2005 by the HIES. First, the cost of a fixed food bundle has been estimated. The bundle consists of eleven items; rice, wheat, pulses, milk, oil, meat, fish, potato, other vegetables, sugar and fruits. It provides minimal nutritional requirements corresponding to 2122 kcal per day per persons - the same threshold is used to identify the absolute poor with the direct calorie intake (DCI) method. The price for each item in the bundle has been estimated as the mean of unit values (price per unit) of the item reported by a reference group of households, calculated separately for each of the 16 geographic areas or strata. The food poverty line has been computed by multiplying the prices with the quantities in the food bundle. The second step has been entitled by computing two non-food allowances for non-food consumption. The first step has been obtained by taking the median amount spent for non-food items by a group of households whose per capita total expenditure is closed to the food poverty line called as “lower no-food allowance”. The second step

has been obtained by taking the median amount spent for non-food items by a group of household whose per capita food expenditure is closed to the food poverty line, which is called “upper non-food allowance”. The third step consisted simply of adding to the food poverty lines- the lower and upper non-food allowances to yield the total lower and upper poverty lines for each of the 16 geographical areas.

**According to the Bangladesh Bureau of Statistics (BBS),  $\leq 2122$  kcal,  $\leq 1805$  kcal and  $\leq 1600$  kcal per capita per day are considered for absolute, hardcore and ultra poverty respectively**

Annex 2:

LvbvwfwĖK Rxebhvĭv  
gvwmK ch©v†jvPbv

wPwýZKiY bα^it  
gvm:

DĖi`vZvi cwiwPwZt (1-6)

†Rjvi t

Dc†Rjvt

GjvKvt

bvgt

wj½t

wcZv/ ^vgxi bvgt

7. cwiev†ii †gvU m`m` msL`v t

8. cwievi cÖav†bi †ckvt

9. MZgv†m Avcbvi cwiev†ii Avq/e`q cwigvb:

10. MZgv†m Avcbvi cwiev†i †Kvb m`m` wK †ckv cwieZ©b K†i†Qb wKbv?

11. MZgv†m Lvbvi wewb†qvM n†q†Q wK?

12. Avcwb wK MZgv†m †Kvb km` †ivcY K†i†Qb?

i) Rwtg

ii) Rwtg cwigvbt [

iii) mv†ii e`envit

iv) Avcwb wK ai†bi exR, km`, Drcv`†b e`envi K†i \_v†Kb?

v) Avcwb wK MZgv†m K...wKv†Ri Rb` †Kvb miKvix mvnvh` ev fZ©~Kx †c†q†Qb?

K) †KvbwU †ekx cwigv†Y †c†q†Qbt

L) UvKvi cwigvY

i) MZgv†m km` Drcv`b Ki†Z wM†q Kv†iv Kv†Q †\_†K FY wb†Z n†q†Q wK bv?

ii) km` Drcv`†b †m†Pi cÖavb Drm wK?

iii) Avcwb wK K...wKv†R KxUvbkK e`envi K†ib?

13. MZ mßv†n Avcbvi cwiev†ii Lv`ZvwjKv

Lvevi	cwigvY (†KwR)	evRvi g~j` (cÖwZ †KwR)	†gvU LiP
Pvj			
Ab`vb`km`			
Wvj			
kvK meRx			
gvQ			
gvsm			
wWg			
`ya   `y»RvZ `ae`			
†fvR`†Zj			



dj			
‡gvU LiP			

14. MZgv‡m cwiev‡ii †Kvb m`‡m`‡i †cvkvK µq K‡i‡Qb?  
‡cvkvK µ‡q †gvU KZ UvKv LiP n‡q‡Q?

15. MZgv‡m LvbvwfwËK ^Y© /†iŠc, PwK, Avmevecl, †Uwjwfb, †iwWI, ^e`y`wZK  
d`vb Avqib wdªR, Mevw`ci µq|

- K) wK µq K‡i‡Qbt
- L) Li‡Pi cwigvb (UvKvq)t
- M) UvKvi Drmt

16. MZgv‡m Avcbvi Avevm`‡ji †Kvb DcKiY †givgZ K‡i‡Qb wKbv?  
Li‡Pi cwigvb (UvKvq) t

17. MZgv‡m Lvbvi †Kvb m`m` AwfMgb K‡i‡Qb wKbv?  
AwfMg‡bi Kvibt

18. MZgv‡m LvbvwfwËK †Kvb m`‡m`i cªZ`veZ©b n‡q‡Q wKbv?  
KZw`b ci wd‡i‡Qb t

19. MZgv‡m Avcbvi cwiev‡ii †Kvb m`‡m`i †cQ‡b wk¶vi Rb` e`q K‡i‡Qb wK?  
nMZgv‡m wk¶vi †cQ‡b †gvU e`qt

- K) MZgv‡m †g‡q m`m`‡i wk¶vi †cQ‡b e`q K‡i‡Qb wK?  
†g‡qm`‡i †cQ‡b †gvU wk¶v e`qt
- MZgv‡m Avcbvi cwiev‡ii †Kvb m`m` ^zj ev` w`‡q‡Q wK?  
KviY D‡j-L Ki`b

20. MZgv‡m Avcbvi cwiev‡ii †Kvb m`m` Amy` n‡q‡Q wKbv?

- KZRm Amy` n‡q‡Qb?
- ‡ivMxi eqmt
- wPwKrmvi aibt
- Li‡Pi cwigvbt (UvKvq)

21. MZgv‡m cwiev‡ii †Kvb m`m` mªq K‡i‡Qb wK?

- K) UvKvi cwigvbt
- L) mª‡qi gvag

22. MZgvf̄m Avcwb KvD†K Aww\_©Kfv†e mvnv†h̄ K††Qb wK?  
 mvnv†h̄i cwigvY KZt  
 MZgvf̄m Avcwb KvD†K avi w`†q†Qb  
 av†ii cwigvY KZt

23. Avcwb MZgvf̄m †Kvb wKQy eÜK ††L†Qb wK bv?  
 MZgvf̄m eÜKK...Z m̄ú†i wKw`Í cwi†kva Ki†Z †c††Qb wK?  
 K) UvKvq cwigvYt

L) A†\_©i Dm t

24. MZgvf̄m `^Y©/†iŠc̄, AvmevecÍ, †Uwjwfbk, †iwWI/†Uc, B†jKU<sup>a</sup>wbK d`vb, Avqib, wd«R, Rwg, Mew`ci wewµ K††Qb wK?

KZ UvKvq wewµ K††Qbt

25. MZgvf̄m Avcwb ev Avcbvi cwiev†i Ab`m`m̄iv Ö `¶Zv Dbœqb †U<sup>a</sup>wbsÖ †c†q†Qb wK?

K) KZRb m`m̄ Ö`¶Zv Dbœqb †U<sup>a</sup>wbsÖ †c†q†Qbt

26. MZgvf̄m Avcwb ev Avcbvi cwiev†ii †Kvb m`m̄ `~†hv©†Mi m̄šyLxb n†q†Q wK bv?  
 nu`v n†j,

K) wK `~†hv©†Mi m̄šyLxb n†q†Qt  
 `y†hv©†Mi ci †Kvb mnvqZv †c†q†Qbt  
 nu`v n†j, wK ai†bi mn†hvMxZv †c†q†Qb?  
 M) mnvqZvi cwigvb UvKvqt

N) †Kvb gv†m Avcbvi †ekx `~†hv©†Mi m̄šyLxb nb? (Bs†iRx gvm)t

27. cwiev†i bvix m`m̄ msL`v KZ?

bvix m`m̄†i wK¶vMZ †hvM`Zv

28. MZgvf̄m Avcbvi cwiev†ii DcvwR©Z A\_© wbR wm×všÍ Abyhvqx LiP K††Qb wK?  
 (cÖavb DcvR©bKvix bvix n†j cÖ†hvR`)

29. Avcwb wK Ö¶z`<sup>a</sup>FYÖ Kg©m~Pxi mv†\_ hy<sup>3</sup>

30. MZgvf̄m Avcwb Ö¶z`<sup>a</sup>FYÖ Øviv wK †Kvb myweav †c†q†Qb ?

31. Ö¶z`<sup>a</sup>FYÖ Øviv Avcwb MZgvf̄m wK †Kvb Amyweavi m̄šyLxb n†q†Qb ?

32. MZgvf̄m †Kvb bvix m`m̄ Amy` n†q†Q wK?

cwiev†ii bvix m`m̄†i wK ai†bi wPwKrmv e`e`v MÖnY Kiv n†qQ?

†ivMxi eqmt

wPwKrmvi aibt

33. Avcwb wK Rb¥wbqš;Y c×wZ MÖnY K††Qb ?

wK Kvi†Y MÖnY Ki†Z cvi†Qb bv?

34. ivbœvq e`eýZ Rjvjvbx

wbW`©óKiyb)

35. Rjvjvbx mieivn

µq Kiv nq, n†j gvwmK e`q KZ?:

msMÖn Kiv n†j, †K msMÖn K†i?:

Rjvjvbx msMÖ†n cÖwZw`b KZ mg†qi c<sup>a</sup>†qvRb nq?::