# The State of Livelihood Livelihood Status of Hardcore Poor in Hard to Reach Areas in Bangladesh

Quarterly Report based on Monthly Livelihood Survey (July – September 2011)





## The State of Livelihood Livelihood Status of Hardcore Poor in Hard to Reach Areas in Bangladesh Quarterly Report based on Monthly Livelihood Survey (July-September 2011) January 2012

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This is a 'Working Draft' and is meant to raise discussion and seek comments. Please do not quote.

## Acknowledgement

This quarterly report provides an assessment of livelihood of the poor, living in hard to reach areas in Bangladesh, based upon regular monthly survey. The data have been collected from three villages of three districts, namely Gaibandha, Sirajganj and Shariatpur. The report acknowledges the efforts provided in collecting data by the staff of Gana Unnayan Kendra (GUK) in Gaibandha, Gono Kollyan Songstha (GKS) in Sirajganj and Shariatpur Development Society (SDS) in Shariatpur. This report is an output of Climate Change, Biodiversity and DRR unit of Unnayan Onneshan.

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## **EXECUTIVE SUMMARY**

The present quarterly report for the period of July to September 2011 reveals the state of livelihood of the hardcore poor in the hard to reach areas in some of the selected sample districts of northern, central and southern region of Bangladesh. The survey compiles the collected information of the monthly survey conducted in specified rural areas of Bangladesh, designated as *Chars* in the 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 \$1.25 a day). The survey collates information, amongst others, on the five fundamental rights of human being (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). In addition, the significant findings of the existing survey have been compared with the last quarter and the national data (HIES).

The relevant findings are as follows:

**Income and Poverty:** In comparison with the national statistics, the current poverty rates (79.55 and 53.33 per cent for upper and lower poverty respectively) in the surveyed areas are much higher than those of national rural average (35.2 and 21.1 percent for upper and lower poverty respectively). In between two quarters of the study, the significant relevancy finds that the current poverty rate of the respondents has slightly been decreased from the last quarter (82.67 and 60.89 per cent for upper and lower poverty respectively) which is primarily due to their selling of the harvested crops in the last quarter. On the other hand, the SME investment of the respondents was observed significantly in the last quarter and its impacts on the overall income is investigated as a supportive mechanism to increase the gross income level in surveyed areas. As a result of this increased income level, the survey has found that the income poverty rate of the respondents has been decreased in the current study compared to the last baseline survey.

Based upon the poverty line (suggested by World Bank), the current Survey finds that about more than five of every ten people (53.33 per cent) in the surveyed areas are still living under the extreme poverty line as their average income is less than BDT 2000 per person per month. The survey reveals that about 79.55 percent people are living below the upper poverty line as their income level fall in between BDT 2000 and BDT 3000 per person per month.

**Food Intake and Poverty:** It is also found that the average calorie intake in the surveyed areas is 2075 K. Cal per person per day, where the value was 2137 K. Cal in the last quarter. Following the current calorie intake scenarios, all respondents have been categorized as below absolute poverty (2122 K. Cal) in terms of calorie intake poverty measurement. On the other hand, the national average calorie intake for the poor is 2084.64 K. Cal (HIES 2010), which is also a little higher than the current findings. Even though the income level of the respondents has been observed as increased trend, but the food intake is not found at satisfactory level. The survey observes that most of the respondents are unaware of taking balanced diet, which is primarily responsible for the food poverty in spite of their capacity of having high calorie



contained food in the current picture. The survey finds an exception in September in comparison to previous months. The calorie intake of the respondents is relatively higher for this particular period of time, which is because of the harvesting period of Boro rice and the interventions of some organizations into local knowledge regarding high calorie related food intake. The respondents have also been complemented by their own production of food in their homestead gardens.

**Expenditure Situation:** The current survey considers six expenditure components, namely food, clothing, education, health, housing, and miscellaneous expenditure. The survey finds out that the average food expenditure (33.54 percent of total income) of all respondents is lower than the last quarter (35.75 percent) and national average (58.74 percent), primarily because of their subsistence emanating from homestead gardening. The average expenditure is 10.20 percent, 3.49 percent, 4.69 percent and 0.58 percent for clothing, education, health and housing respectively, where the expenditure in the last quarter was 8.32 percent, 6.16 percent, 4.71 percent and 3.07 percent for clothing, education, health and housing respectively. The survey reveals that the miscellaneous expenditure (transportation, recreation and buying some household products like gold, television, furniture, radio, mobile etc.) of the respondents is almost negligible (0.23 and 0.89 percent of total income in first and second quarter respectively), compared to the national average of 12.61 percent.

In comparison to the expenditure of all other consumptions, the cloth expenditure has been increased in the current study, where other expenditures have been decreased gradually compared to the last baseline survey. 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. The comparable lower SME investment is also noticeable, since most of the investors have turned out to be regenerative investor and profit holder in their business over the months. Alternatively, due to religious festival in this quarter, cloth expenditure has been increased rapidly, since most of the respondents usually buy new cloths in lieu of investing in other consumption sectors while celebrating any cultural festival.

In the period of 'July-September,' the survey also identifies that a huge portion of the respondents have not spent money for basic services. In this regard, the survey has recorded that 63.78 percent, 60.89 percent, 64.78 percent, 97.22 percent and 99.11 percent of the respondents could not spend money for buying cloths, education, treatment, housing or miscellaneous purposes respectively. It is relevant that 53.33 percent of the surveyed population is living in extreme poor condition and they have no capability of spending money in those activities.

**Gender:** The current survey also considers the female participation in some activities e.g. education, family decision-making process and initiatives for birth control methods. Female participation in education is not found at the satisfactory level in surveyed areas where only 25.77 percent female have access to formal education followed by 27.11 percent female in the last quarter. Also, female are suffering from illness more than their male counterparts. In the decision-making and birth control process of the families, the percentage of female contribution is 17.78 and 79.89 percent respectively, where 22.56 and 70.00 percent was found in the last quarter in that order.



## SUMMARY OF FINDINGS

Indicators	Indicators	Findings
Income	# % of respondents in different profession	Most of the respondents' income was
	# % of respondents in different level of income	found at around \$1. However, per capita
	# Per capita Income	expenditure was higher than per capita
	# Per capita Expenditure	income. To accommodate additional
	#% of Investment of household's income in	expenditure the respondents have to rely
	different sectors	on NGOs or neighbors for credit.
Food	# Intake of different food items in gm per capita	In comparison to national rural average
	per day # Per capita calorie intake	(HIES 2010), all respondents are found below food poverty line. The average
	# % food expenditure of total income	food expenditure against income is also
	# % of respondents in different level of	found below the national rural average
	expenditure on food items	in accordance with HIES 2010.
Cloth	# % cloth expenditure of total income	The average cloth expenditure against
	# % of respondents in different level of	income is found higher than the national
	expenditure on cloths	average in Gaibandha but a large
		portion of the respondents did not spend
		money for buying cloths.
Education	# % of households in access with education	The education related average
	# % education expenditure of total income	expenditure is found higher in
	# % of respondents in different level of	Gaibandha but lower in Sirajgonj and
	expenditure on education related activities	Shariatpur in comparison to HIES 2010.
	#% of dropout rates	Moreover, a large portion of the
	# % of households involved in capacity building	respondents are found unable to spend
	training	money on education. The dropout rate
		in primary school is low, but the percentage of higher education is also
		low.
Health	# % of respondent sickness with segregating	The rate of child sickness is found very
	gender and also child	high among marginalized people. The
	# % health expenditure of total income	average medical expenditure against
	# % of respondents in different level of	income is found higher than the national
	expenditure on treatment	average, but a large portion of the
		respondents are identified who are
		unable to spend money for their medical
TT	# 0 (-s f 1) = (s - s (s - s - s - s - s - s - s - s -	services.
Housing	# % of housing (renting, repairing, buying or	The average housing expenditure against income is found almost same as
	<pre>construction) expenditure of total income # % of respondents in different level of</pre>	national average as stated in HIES
	expenditure on housing related activities	2010, but a large portion of the
	experience on nousing related activities	respondents is found who do not
		(cannot) spend money for their
		housing related activities.
Household	# % household (any type of household products	In the surveyed areas, the households
Other	like kitchen materials, gold, TV, etc)	are found spending very little or no
Products	expenditure of total income	money for other household products
	$\# \hat{\%}$ of respondents in different level of	whereas the national rural average is
	expenditure on household items	12.61% of the monthly income.



Gender	# % of female respondents in access with	Female education enrolment is not
	education	satisfactory in the surveyed areas. Due
	# % of female respondents in achieving higher	to overwhelming illiteracy and
	education (SSC or above)	economically vulnerable situation, their
	# % of female respondents in taking decision of	participation in decision making is also
	their own	below national average.
	# % of female respondents in taking birth	
	control methods	



## I. INTRODUCTION

The state of Livelihood is commonly about the living conditions which have been assessed in this survey on some certain households in Bangladesh. Living condition measurement has been an area of survey using instruments that are mostly expressed in monetary terms where many non-monetized human well-being indicators have not been used. The monthly survey is an attempt to collate information through this second quarterly report, amongst others, on five fundamental rights of human being (e.g. food, cloths, housing, education and health).

The survey purposively targeted the poor of geographically vulnerable areas of Northern, South and Central Bangladesh, more specifically the people living in hard to reach areas of chars. Historically, the regions are inundated every year and periodic flooding influences local ecosystems. Despite people's sufferings, flood makes the agriculture land fertile through siltation and thereby shapes the life and economy of the areas. In addition, other environmental factors such as riverbank erosion, drought in dry season, salinity intrusion as a result of backwater effect, dwindling ground water level have been contributing to augment the vulnerability of the regions. These have been further complicated by the property rights instability associated with continuous erosion and accretion of land by the riverine systems and consequential conflicts over ownership, capture and tenure management between the powerful and the poor.

The monthly survey has a sample size of 300 households, conducted in three districts of Gaibandha, Sirajganj and Shariatpur.

## 1.1 Objective and Rationale of the Survey

The report does not necessarily attempt to define 'livelihood', rather has tried to understand the periodic average changes in living standard of the poor living in the hard to reach areas. As a part of longitudinal survey, the current report explores the trend on status of livelihood on a quarterly basis, based upon the data collected from the monthly survey. The report thus intends to provide an indication of the periodic changes in living condition of the poor in the hard to reach areas in Bangladesh through monthly monitoring of the predefined set of livelihood indicators. The periodic changes observed in their livelihood also allow making a comparison with the national bench-marks, contained in national statistics such as Household Income and Expenditure Survey or with the defined levels relating to poverty. In addition, the livelihood status in current quarter has been compared with the baseline findings (previous quarter 'April-May 2011) to observe the continuous assessment of livelihood. The availability of regular quarterly data on the changes of the lives and livelihood of the poor serve usefully in exploring continuous changes and dynamics of their lives in absence of national data collected in such intervals as HIES are conducted with the intervals of four to five years.

## **1.2 Sample Selection**

A total sample of 300 households (100 households for each of the three char areas of Shariatpur, Gaibangha and Sirajgonj) were selected to monitor the state of livelihood by using a predesigned questionnaire. The households were 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 1.25 US Dollar) to maintain comparability with the national statistics.



## **1.3** Comparability with Conventional Mechanisms

Despite the shortcomings of the conventional mechanisms, particularly in relation to measurement of poverty and livelihood, the survey collects and reports data for making comparison with the findings of HIES 2005, HIES 2010 and the previous quarterly report. 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 is estimated as 2122 k. cal per person per day, and the level is defined as poverty line. Considering BBS categories, the survey has categorized the poor into three groups based on their nutritional intake such as *Absolute Poor* ( $\leq 2122$  K.cal), *Hardcore Poor* ( $\leq 1805$  K.cal) and Ultra Poor ( $\leq 1600$  K.cal). The survey further measures the poverty level of the samples based on daily income as also proposed by World Bank, where they set daily income of USD 1.25 as poverty line. Using income method, the survey has categorized the poverty into upper poverty (\$1.25 per person per day) and lower poverty (\$1 per person per day).

## **1.4 Limitations**

It has been already stated that the survey focuses on the current livelihood status of the marginalized people in three areas and a generalized case of national comparison of rural areas of Bangladesh is not advisable. The current findings are indicative of changes observed in the lives and livelihood of the poor in vulnerable areas.

## II. HOUSEHOLDS INCOME

## 2.1 Sources of Income

There are no significant changes in the percentage of population by different sources of income between the present quarter (July-September) and the previous quarter (Baseline Survey: April-June). In the current quarter, most of the respondents (60.44 percent) are found wage laborers and the second largest portion (20.44 percent) is engaged in subsistence farming as peasants (Figure - 1). In the same order 61.78 and 21.89 percent have been followed in the last quarter. The survey observes that all the wage laborers are involved in agriculture in land owned by others and/or in leased land due to the unavailability of off-farm activities in their localities. These major two occupations have been distinguished as separate sources of income. The survey reveals that the most of the marginalized people (wage laborers and farmers are more than 80 percent in conjugation) in the survey areas are dependent on agriculture as their main source of income. The average percentage of both labor and farmer has been decreased slightly in this quarter in contrast to the previous quarter (April-June) and as a result it is found that the main sources of income of some people have been scattered beyond the list of occupational survey in *char* areas.



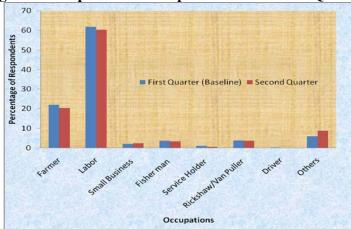
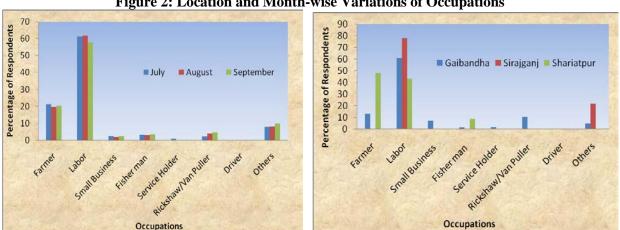
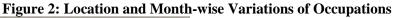


Figure 1: Comparison of Occupations between Two Quarters

Even, the variations are observed among different locations but the trend of occupational status has not changed significantly during the month-wise gross evaluations. Since there is a relative lack of off-farm income generating activities in Sirajgonj, the percentage of the farm laborers is higher compared to other areas. Since, April-May is the harvesting period of Boro rice and as a result, the percentage of day laborers is found higher in the last quarter than the present quarter. Based on the months, the survey also figures out the average percentage of people involved in different occupations where farmer and labor dominate around 20 and 60 percentages respectively (Figure 2). In case of location-wise observations, the survey finds that there is no existence of farmer in Sirajganj, which means that most of the respondents in this area do not have their own land. The occupations in Sirajganj are observed mostly in a scattered way following highest 77.67 percentages found as wage laborer. The relevant pictures in other locations are shown in the following figure.



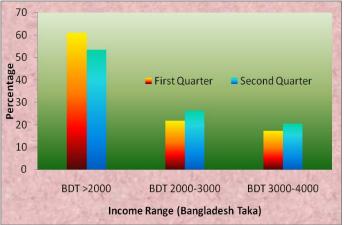


#### 2.2 Level of Income

The highest percentage (53.33 percent) of the respondents' income in the surveyed areas is less than BDT 2000, which means that most of the people in the surveyed areas have their income below USD 1.25 per person (income poverty line suggested by World Bank). This figure is 7.56 percent lower than the previous quarter. However, the income of 26.22 percent of the

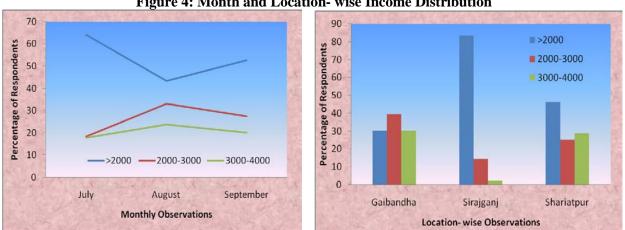


respondents is BDT 2000-3000 and 20.45 percent has the income level of BDT 3000-4000, which are higher, compared to the last quarter (21.78 and 17.33 percent respectively). The income level of the respondents has increased in this quarter mainly due to their selling of the crops which have been harvested in the last quarter. On the other hand, the SME investment of the respondents is observed significantly in the last quarter and its impacts on overall income is investigated as a supportive mechanism to increase the gross income level in surveyed areas. The comparison of income level between two quarters is shown in the following figure.



#### Figure 3: Observation of Income Level between Two Quarters

The respondents with monthly income of BDT 2000-3000 and BDT 3000-4000 have been increasing than that of the least income categories over the time (Figure 4). This change can be attributed to the seasonal income from Boro rice cultivation that has mentioned already. In case of specific regional income status, the least income level (less than BDT 2000) is found higher in Sirajgonj (83.33 percentages) because the respondents of this area have been suffering from natural disaster (flood and river bank erosion).



#### Figure 4: Month and Location- wise Income Distribution

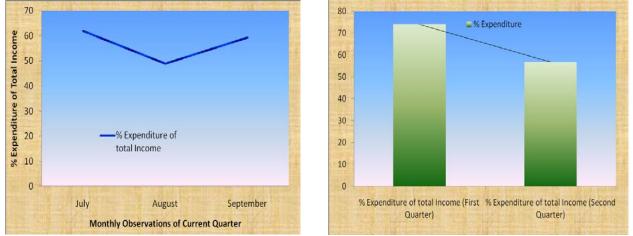


## **III. BASIC NEEDS CONSUMPTION**

## **3.1 Expenditure Situation**

The current survey also considers six components of expenditure required for subsistence, based on the Household Income and Expenditure Survey (HIES). The overall expenditure in the surveyed areas has fluctuated over the months but decreased steadily in time of comparison with the previous quarter (Figure 5). It has also been observed in the current survey that the total expenditure for the poor is largely influenced by three categories of expenditure, mainly, food, cloth and SME investment. Among these categories, the cloth expenditure is increased over the months where other expenditures have decreased gradually. 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. The comparable lower SME investment is now noticeable, since most of the investors are turned out to be regenerative investors and profit holders in their business over the months. This supplementary consumption in every household does not add to any indirect cost in their own calculation of monthly income or expenditure. Alternatively, due to religious festival in this quarter, cloth expenditure is increased rapidly, since most of the respondents usually buy new cloths in lieu of investing in other consumption sectors while celebrating any cultural festival.

Figure 5: Trend of Total Expenditure of the Respondents over the Three Months and between Two Quarters



In case of the expenditure at both month and district level, the total expenditure has not exceeded their total income in this quarter due to their progressive return on investment in small business (Table 1 and 2) and all respondents have additional money as their savings after all kinds of consumptions in every month. The survey also observes that some respondents have been grouped (20 people in each group, designated as *Samity*) to associate themselves in different organization, facilitated by NGOs for carrying out activities such as deposit of money, loan services, etc. The detail expenditure in correspondence with month and location, and the national (rural areas) statistics has been compared with the surveyed areas (Table 1 and 2).



	140	10 11 Qu	areering need		ipenaitai e	or oups (mor		)	
Month	Food	Cloth	Education	Health	Housing	Misc.	Investment in business	Total	Compared in against of 100% income
July	36.08	6.23	5.33	7.71	1.12	0.28	5.3	62.05	37.95% (+)
August	30.53	8.69	2.80	2.98	0.04	2.58	1.33	48.95	51.05% (+)
September	34.01	15.69	2.35	3.39	0.58	1.29	2.09	59.40	40.60% (+)

#### Table 1: Quarterly Review of Different Expenditure Groups (month-wise)

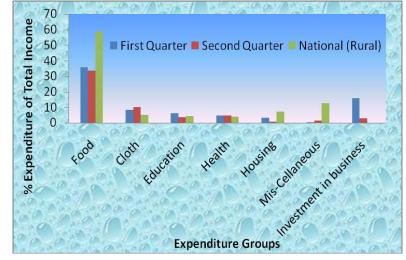
#### Table 2: Quarterly Review of Different Expenditure Groups (location-wise)

Tuble 2. Quarterly Review of Different Experiature Groups (location wise)											
Location	Food	Cloth	Education	Health Housin		Misc.	Investment in business	Total	Compared in against of 100%		
									income		
Gaibandha	23.76	11.28	4.80	5.27	1.16	4.14	2.77	53.18	46.82 (+)		
Sirajgonj	25.12	2.60	1.48	1.77	0	0	0	30.97	69.03 (+)		
Shariatpur	51.73	16.74	4.20	7.05	0.57	0	5.95	86.24	13.76 (+)		
National	58.74	5.12	4.18	4.05	7.27	12.61	-	91.97	8.03 (+)		

Note: National data were adopted from HIES 2010

Expenditure on food remains low with the time even when the cost is supposed to increase over the time due to food inflation. However, the respondents adjust food inflation with their effort of growing own food through exploitation of labor or through reduction in consumption. The gross consumption of three surveyed areas has also been compared with the previous quarter (First Quarter) and national (rural areas) values graphically (Figure 6).

#### Figure 6: Comparison of Expenditure among Two Quarters and National Value



The relevant findings in six areas of consumption are as follows:

## 3.1.1 Food Expenditure

During the period of July and September, a considerable portion of the respondents (36 percent) have spent less than BDT 500 for food consumption which illustrate their incapability in arranging food twice a day. In that case, 36.33 percent of the respondents spent less than BDT 500 in the last quarter. In the both quarters the maximum food expenditure is found around BDT 1500 against the average total food expenditure in rural areas at the national level of BDT 3023 per month. Only 5 percent people are able to spend the amount equivalent to national average



food expenditure, where 3.11 percent was in the last quarter. This is perhaps, because the surveyed areas are poverty prone and many of respondents produce their own food in their homestead garden.

## 3.1.2 Clothing Expenditure

The average expenditure on cloth in the surveyed areas is 10.20 percent of respondent's total income (8.32 percent in the last quarter) which is 5.12 percent at the national level (HIES 2010). The survey also reveals that 63.78 (62.11 percent in the last quarter) percent households did not spend money for buying cloths during July to September.

## 3.1.3 Education Expenditure

The average expenditure on education is found 3.49 percent in the surveyed areas where 6.16 percent was found in the last quarter. Moreover, it is found that the average household expenditure on education at national level is BDT 568 in rural areas (HIES, 2010), but the survey shows that only 1 percent households have spent money of BDT 600. Majority of the respondents (60.89 percent) did not spend money on education during the time period followed by 57.56 percentages in the last quarter. The significance of this finding is that they have little access (39.11 percent) to education and the access of education has also been decreased from the last quarter (42.55 percentages). Moreover, 9.56 percent of the respondents in the surveyed areas are involved in informal education like capacity building training by NGOs and the value was satisfactory in the previous quarter (30 percentages). But because the data of this report shows the reduction of the capacity building training of the respondents, the low intervention of the NGOs has been found.

## 3.1.4 Health Expenditure

Average expenditure on health (4.69) in the surveyed areas is higher than that of the national rural average of 4.71 percent. This expenditure of the respondents has not changed significantly from the last quarter (4.71 percentages). The reason is the higher distance for seeking medical assistance. The survey also finds that an average of 64.78 percent (62.11 percentages in the last quarter) respondents did not spend single amount for the healthcare during the period.

## 3.1.5 Housing Expenditure

The average expenditure on housing is only 0.58 percent in the surveyed areas in this quarter which are 6.69 percent lower than that of the national rural level. This expenditure is 2.49 percent lower than the previous quarter. The survey observes that there is no destructive natural disaster in this period which might be the cause of lower expenditure in housing purposes during July-September. The survey identifies that 97.22 percent (88.89 percent in the last quarter) of the households did not spend money for any type of housing related activities during that period.

## 3.1.6 Miscellaneous Situation

The miscellaneous expenditure considers transportation, recreation and buying miscellaneous products like gold, television, furniture, radio, mobile etc. The survey observes that almost all of the people (99.11 percent) in the surveyed areas have no ability to spend money for these purposes whereas the national average of expenditure for miscellaneous activities is 12.61 percent (HIES, 2010). Almost same picture is found in the previous quarter (98.67 percent).



#### **Key Findings**

- Majority of the respondents (60.44 percent) in the surveyed areas are found to be wage laborers, which is slightly lower than the last quarter (61.78 percent);
- The average expenditure on food (33.54 percent of total income) in the three regions are lower than that of the last quarter (35.75 percent) and national (58.74 percent) level;
- The survey also observes that 63.78, 60.89, 64.78, 97.22 and 99.11 percent of the respondents could not spend money on cloths, education, treatment, housing or miscellaneous purpose respectively. Expenditure on food, education, housing and Miscellaneous were found (except cloth and health, 10.20 and 4.69 percent respectively) lower than the national level because of remoteness and distance;
- SME investment is found in the current survey (2.91 percent), and it is becoming lower than before (15.84 percent) due to the regenerative investment and profit in business of the respondents.

## **3.2 Policy Relevance**

The survey illustrates that the most of the respondents in the surveyed areas are investing a part of their income in crops, vegetable, fisheries and other income generating activities and they are in better return on their investment over the months. This tendency implies that the char dwellers are unable to fulfill their daily demands with existing income. Even though most of the respondents are living below the poverty line, they collect additional money from micro credit providing organizations or from neighbors as debt.

## IV. CONSUMPTION OF FOOD

Rice and vegetable constitutes the main food-course for the poor people in char areas. The consumption pattern of other essential food items like pulse, fish, meat, milk, edible oil, fruits are very low in all surveyed areas. The survey has grouped different food items into four classes like carbohydrates, protein, fat and vitamins. The intake of food items has been measured in gram and calorie per person per day (Figure 7).

In case of monthly observations, the survey has not found significant changes of gross food intake among different months. But in case of location, the survey observes that the high food intake is found in Shariatpur compared to any other regions. The reason behind this is that Shariatpur is less disaster prone area and their agricultural practices are relatively higher than other surveyed regions. Because of the high food intake in Shariatpur compared to Gaibandha and Sirajganj, the high calorie intake is also visible in Shariatpur which affects on gross calorie intake at an increasing trend in the recent months (Figure 7).

Over the food intake scenarios from all figures, it is identified that the respondents in *Shariatpur* get relatively high calorie (about 2579 K. cal) compared to other areas and the national level poverty line (2122 K. cal). Respondents in *Shariatpur* assert that they are more resilient with growing food in the vulnerable situation compared to the other surveyed areas. Partially, the high investment goes to farming that has been observed in Shariatpur in the last two quarters.



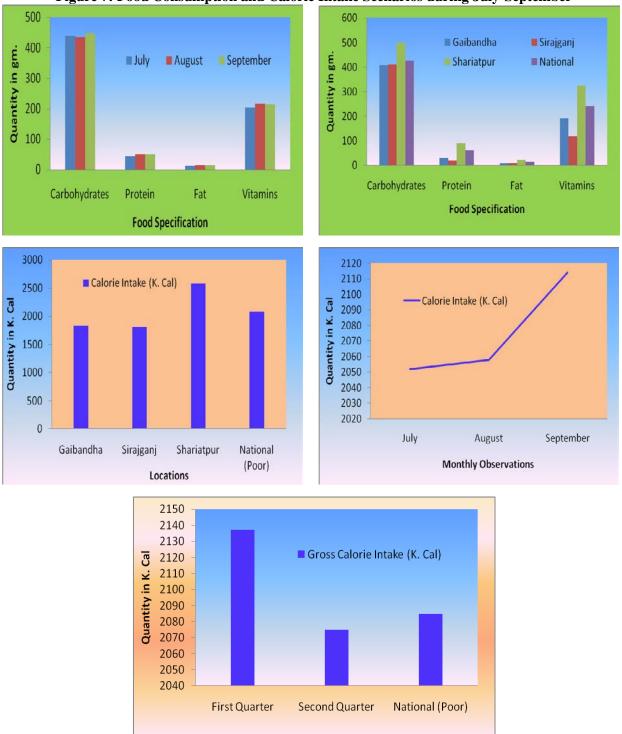


Figure 7: Food Consumption and Calorie Intake Scenarios during July-September

In case of comparison between two quarters, the gross calorie intake of the second quarter is found low compared to first quarter and even to the national value per person per day. The survey observes that rather than their capability of taking high calorie contained food, the unawareness of the most of the respondents in taking balanced diet is primarily responsible for



their lower calorie intake. But in the recent months the calorie intake is becoming high due to the growing of seasonal rice and vegetables (winter vegetables).

## 4.1 Comparison with National Statistics

According to the HIES,  $\leq 2122$  K. cal,  $\leq 1805$  K. cal and  $\leq 1600$  K. cal per capita per day are considered for absolute, hardcore and ultra poverty respectively. During July-September, it is estimated that average per capita calorie intake per day per person in the surveyed areas is 2075.00 K. cal, which is lower than the national food poverty line of 2122 K. cal and also far from the other national findings for poor (2084.64 K. Cal), non-poor (2344.60) and the previous quarter (2137 K. cal) (Table 3).

Months	Carbohydrates (Rice and other Cereal) in gm		Protein (Pulse, Fish, Meat, Eggs and Milk) in gm		Fat (Edible Oil)		Vitamins (Fruits and Vegetables).		Calorie Intake (K. Cal Per capita per day)			
	Current Survey	National Rural	Current Survey	National Rural	Current Survey	National Rural	Current Survey	National Rural	Current Survey	Average	National (poor)	National (non- poor)
July	439	106 55	44	(2)((	13	14.20	204	241.20	2052	2075	2084 64	2344.6
August	434	426.55	50	62.66	14	14.20	216	241.39	2058	2075	2084.64	2344.0
September	447		50		14		214		2114			

 Table 3: Food intake status in survey areas (month- wise)

Notes: National data are adopted from HIES 2010

#### Key Findings

- The average per capita calorie intake per day per person in the surveyed areas is 2075.00 K. cal, which is lower than the national food poverty line (2122 K. cal.) and even the national average of poor (2084.64 K. cal);
- Respondents at *Char* areas are found most vulnerable than their other counterparts in aspects of calorie intake that has been categorized as absolute poverty (approx.).

## **4.2 Policy Relevance**

The lower calorie intake affects other basic services such as education and health infrastructure. Incentives to agriculture in *Char* areas may indirectly be effective to good clothing, housing and many other household activities (e.g. buying products, celebrating different festivals etc) but as these areas are hard to reach; these incentives cannot be properly implemented. The food inflation has impacted them by either requiring them to excessive exploitation of labour or reduction in consumption due to the lack of public food distribution system.

## V. SITUATION ON POVERTY

## 5.1 Income Poverty

The survey observes the per capita income and expenditure of the respondents. In this survey, it is found that the income of the respondents has increased slightly in terms of expenditure (Figure 8). It is also observed that the people at *Char* areas have to rely on credit and other facilities providing organizations to meet their basic necessities.



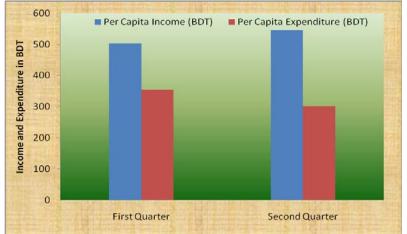


Figure 8: Income and Expenditure Scenarios between Two Quarters

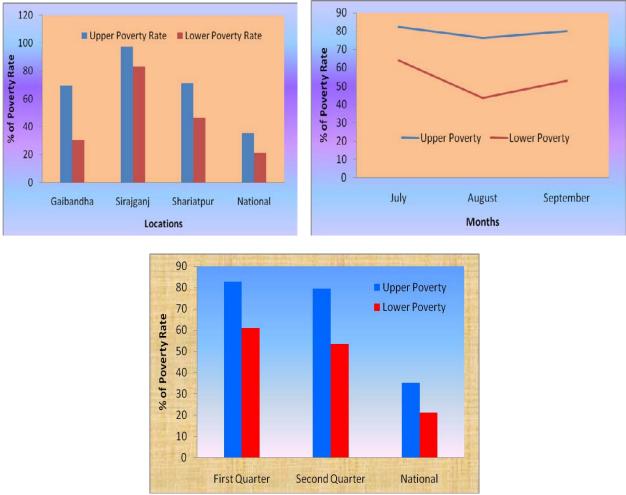
On the basis of income situation, the survey reveals that the percent of the respondents remained higher in both upper (79.55 percent) and lower poverty line (53.33 percent) (Table 4 and Figure 9). In the following figure the survey also illustrates the actual gap of poverty rate of *Char* areas (hard to reach) and common rural areas in Bangladesh.

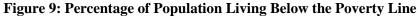
Table 4. Foverty Lever (based on BD1 per capita per montif)									
Poverty Line, suggested by	% of Poverty in	% of Poverty in	% of I	% of Poverty in Rural (Current survey)					
World Bank	Rural (HIES	Rural (HIES							
	2005)	2010)	July	August	September	Average			
% of Total Poverty (Based	43.8	35.2	82.33	76.33	80	79.55			
on Upper Poverty Line)									
Lower poverty	28.6	21.1	64	43.33	52.67	53.33			

Table 4: Poverty Level (Based on BDT per capita per month)

In location-wise observations, the survey identifies that the highest percentage of poverty rate is found in Sirajganj (97.67 and 83.33 percent for upper and lower poverty respectively) compared to other locations (Figure 9). The survey also finds that Sirajganj is the most poverty prone area followed by Shariatpur and Gaibandha. One possible reason might be that Sirajganj is the mostly disaster vulnerable area than the other surveyed areas. As a result, more climate refugees are appearing in Sirajganj due to river bank erosion and other resulting factors from climate change. But, in case of monthly observations, the survey finds the decreased trend of poverty rate (gross) over the months (Figure 9). The reason behind the slightly decreasing poverty rate compared to the previous quarter has already been mentioned before (among them are homestead gardening and the success of SME investment).







## **5.2 Food Poverty (Direct Calorie Intake)**

In the current survey, the poverty level has also been measured by calorie intake per person per day. The respondents at the surveyed areas are below the food poverty line (average calorie intake was 2075 K. cal per person per day) in comparison with the national boundary of food poverty (2122 K. cal per person per day) during July-September. In comparison with the current value, the calorie intake in the last quarter was high (2137 K. Cal.), which means that all the respondents were found at a slightly upper level of food poverty line in the previous quarter. So, according to the present survey, all the people in hard to reach areas are poor in terms of calorie deficiency, although their calorie intake in Shariatpur (most of the calorie come from carbohydrate only) is little higher than the national average. The reason behind their higher calorie intake during the mentioned period is that the period is the harvesting period of Boro rice and higher investment in farming.



#### **Key Findings**

- 53.33 percent of the respondents are living under the lower poverty line with income level less than BDT 2000;
- 79.55 percent of the respondents in the *char* areas are living with upper poverty line in terms of their income;
- > Considering food poverty line, respondents are vulnerable.

## **5.3 Policy Relevance**

The high incidence of lower poverty indicates structural bottleneckness 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.

## VI. DESEGREGATE GENDER SITUATION

In the surveyed areas, only 25.77 percent female have access to formal education, where in the last quarter, the value was 27.11 percent. Only 0.78 percent female have completed Secondary School Certificate (SSC) or higher education which is very lower than that of the national rural average of 4.22 percent (HIES 2005) However, it was 0.67 percent in the last quarter. In the surveyed areas, the sickness of female has been increased than their male counterparts (61.71 and 67.28 percent in first and second quarters respectively). The survey has also found that only 17.78 percent female can take their decision concerning family activities and the rate was high in the previous quarter (22.56 percent). The percentage of taking birth control method is satisfactory in current quarter (79.89 percent) compared to last quarter (70 percent).



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## Annex 1:

## Methodology of the State of Livelihood

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

**Income Poverty Line:** Since the World Development Report (WDR) on Poverty in 1990, the World Bank has been anchoring its international poverty lines to the national poverty lines used in the poorest countries. The original "\$1 a day" line was a typical line amongst low-income countries found 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 which is \$1 and \$1.25 per person per day income for the lower and upper poverty line respectively.

**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 are selected. The quantities in the basket are scaled according to the nutritional requirement of 2122 k. cal per person per day. The estimated cost is taken for 2122 k. cal as Food Poverty Line (FPL).

Three steps were followed for estimating what it costs for a household to meet its basic needs in the base year 2005 by the HIES. First, the cost of a fixed food bundle was 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 k. cal per day per person. 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 was 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 was computed by multiplying the prices with the quantities in the food bundle. The second step entitled computing two non-food allowances for non-food consumption. The first was obtained by taking the median amount spent



for non-food items by a group of households whose per capita total expenditure is close to the food poverty line, which is called the "lower no-food allowance". The second was obtained by taking the median amount spent for non-food items by a group of household whose per capita food expenditure is close to the food poverty line which is called "upper non-food allowance". The third step consisted of simply 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 BBS, <=2122 K. cal, <=1805 K. cal and <=1600 K. cal per capita per day are considered for absolute, hardcore and ultra poverty respectively



Annex 2:

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