

Dynamics of Poverty in Rural Bangladesh

Introduction and Background

The economy of Bangladesh has achieved a respectable, though not spectacular, rate of growth in the last two decades. Poverty has also come down at a faster rate during the last two decades compared to earlier period. However, poverty remains very high, especially in rural areas. It is even more disappointing to observe that the proportion of chronically poor rural population has remained stubbornly unchanged at around 30 per cent over the last two decades. It is, therefore, more relevant to ask: why is poverty falling so slowly? Why is it that some of the poor manage to escape poverty while many more remain stuck? What are the socioeconomic forces that propel different segments of the poor along different life trajectories? Which of these forces are amenable to policy intervention? What kind of interventions will be most useful? The Institute of Microfinance (InM) undertook a research project to answer these questions for better understanding of the dynamics of poverty in rural Bangladesh.

Data

The first Benchmark Survey of the study, which is being funded by the Department for International Development (DFID) through its Promoting Financial Services for Poverty Reduction (PROSPER) Programme, was completed in 2010. The survey was based on a sample of 6,300 rural households from 180 villages in 63 districts, following a sampling design similar to the one used by the Bangladesh Bureau of Statistics (BBS) for its periodic Household Income and Expenditure Surveys (HIES).

Definitions:

Following BBS methodology, "Poor" are defined as those whose food expenditure is not enough to meet the cost of the required food basket.

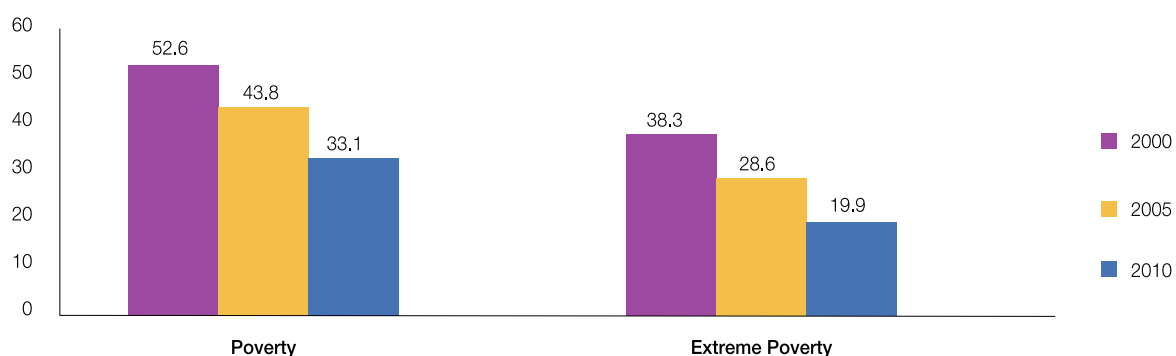
The study has divided the rural population into four groups as follows:

- **Extreme poor:** Those whose 'total expenditure' is not enough to even meet the cost of a minimally required food basket.
- **Moderate poor:** Those among the poor who are not classified as 'extreme poor' are called 'moderate poor'.
- **Marginally non-Poor:** Those who are above the poverty line at any given point in time but only just so. This group of people is potentially vulnerable to falling into poverty with even a small shock to their lives and livelihoods.
- **Well-offs**

Trends and Patterns of Poverty in Rural Bangladesh

Rural poverty has been declining during 2000- 2010. Over that period, the poverty has fallen slightly faster in the second half than in the first half.

Trends in Rural Poverty (%) : 2000-2010



Source: The figures for 2000 and 2005 are from BBS (2007) and those for 2010 are own estimates based on the InM Poverty Dynamics Survey 2010.

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The key features of the nature and extent of poverty decline are:

- Very sharp decline of the proportion of extreme poor - from 38 per cent in 2000 to just 20 per cent in 2010.
- Equally sharp rise in the proportion of the well-offs - from 36 per cent to 54 per cent.
- The proportion of moderate poor has fallen only slightly, while that of the marginal non-poor has increased equally slightly.
- Inter-divisional disparity in poverty rates has come down considerably- for both overall and extreme poverty. The sharpest reduction in poverty has occurred in two western divisions- Rajshahi and Khulna - followed by Dhaka.
- The group owning more land not only had less poverty but also enjoyed faster rate of poverty reduction than those owning less.
- Even the landless and functionally landless groups were not left out. While 64 per cent of the landless were poor in 2000, only 42 per cent were so in 2010. Similarly, the proportion of poor among the functionally landless group has come down from close to 60 per cent to less than 30 per cent.
- Shifts in occupational pattern played only a minimal role in the process of rural poverty reduction. Less than 10 per cent of the decline of poverty during the last decade can be attributed to shifts between occupations.
- The level of poverty falls systematically with higher educational status of the head of household. Higher levels of education are also found to be associated with faster rates of poverty reduction.
- Female-headed households (both married female heads and single female heads) as a whole experienced similar level of poverty as compared with male-headed households in 2000 and then enjoyed a faster rate of poverty reduction over time, thus ending up with a lower level of poverty in 2010.
- Despite enjoying a slightly faster rate of poverty reduction over the last decade as compared with male-headed households, single female-headed households still had the highest level of poverty in 2010 among the three groups.
- Faster reduction of poverty in recent years is consistent with macroeconomic developments.

Relationship of Poverty Decline with Macroeconomic Development and Inequality

Table 1: Performance of the Bangladesh Economy: 1990 to 2010

	1990-2000	2000-2005	2005-2010
Annual Growth of GDP per capita (%)	3.1	4.0	4.8
Annual Growth of Agricultural GDP (%)	3.2	2.5	4.2
Flow of Remittance as % of GDP	3.2	5.5	9.7
Microcredit disbursement as % of GDP	n.a.	1.8	3.1

Note: Microfinance disbursement figures are available in calendar years; these were converted into fiscal years by taking average of adjacent years. The average for 2005-2010 is actually an average for the three years 2005-06, 2006-07 and 2007-08, since data beyond 2008 are not yet available on a consistent basis.

Source: Microcredit disbursement figures are from *Microfinance Statistics*; the rest of the data are from Government of Bangladesh, *Bangladesh Economic Review*, various years.

- The stability of consumption inequality has played a critical role in making possible the observed acceleration in poverty reduction in the last decade despite sharp increase in income inequality, because in standard practice poverty is measured with reference to consumption rather than income.

Table 2: Evolution of Inequality in Rural Bangladesh: 1991/92 - 2010 (Gini Coefficient)

Distribution	1991/92	1995/96	2000	2005	2010
Per capita income	0.276	0.310	0.356	0.404	0.465
Per capita consumption	0.249	0.277	0.281	0.280	0.284

Notes and Sources: The figures for 2010 are our own estimates based on InM Poverty Dynamics Survey 2010; the earlier figures are from Khan (2005).

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Findings of the Baseline Survey

a. Asset Transition and Poverty

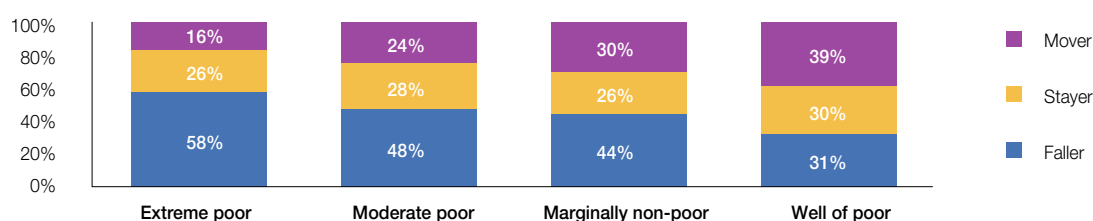
The nature of asset transition in rural Bangladesh

There is not much hope for escape from the trap through accumulation of land because land distribution does not change much. But accumulation of non-land assets provides a possible avenue for escape from the 'asset trap'. Those who can take advantage of this opportunity are likely to move up the economic ladder, and those who can not are likely to stay behind.

There is a close connection between asset transition and current poverty status.

- Today's better off groups have more 'movers' - i.e., households who moved up the asset ladder.
- Today's poorer groups have more 'fallers' - i.e., households who moved down the asset ladder.
- Today's better off groups have a history of faster asset accumulation in the past.

Transition in Non-land Physical Asset by Poverty Category (percentage)



Source: InM Poverty Dynamics Survey 2010.

Table 3: Change in Non-land Physical Assets by Poverty Category

Poverty category	Initial non-land asset (Taka)	Current non-land asset (Taka)	Percentage change (%)	Annual rate of growth (%)
Extreme poor	26658	37107	39.2	9.6
Moderate poor	31893	56563	77.4	12.7
Marginally non-poor	37741	76276	102.1	12.8
Well-off	112383	197812	76.0	14.1
Total	77710	136380	75.5	13.0

Notes and Sources: (1) Initial non-land assets are valued at 2010 prices; official deflator for private capital formation was used to convert initial values into current prices.

(2) Annual growth rate was calculated separately for each household (as they differ in the initial date i.e., date of formation of the household) and then averaged for the poverty group to which they belong.

(3) Data are from InM Poverty Dynamics Survey 2010.

This provides indirect evidence that the dynamics of poverty may have been powerfully shaped by the dynamics of asset transition. So, the factors that determine asset transition have a deep impact on poverty.

Table 4: Determinants of Non-land Physical Assets by Poverty Groups

Dependent variable: Non-land physical assets	All	Non-poor	Poor
Explanatory variables			
Microcredit	(-)	(-)	(+)
Foreign remittance	(+)	(+)	(+)
Age of the household	(+)	(+)	(+)
Age of the household squared	(-)	(-)	(-)
Educational status of household head	(+)	(+)	(+)
Gender of household head	(-)	(-)	(-)
No. of working age members	(+)	(+)	(+)
Initial non-land physical asset	no effect	no effect	(+)
Initial land asset	(+)	(+)	(+)
Average distance from imp. places	no effect	no effect	no effect
Scope for non-farm work near village	(+)	(+)	(+)
Soil fertility in the village	no effect	no effect	no effect

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b. Employment, Productivity and Poverty

- The poorer households are found to have a slightly smaller number of working age people per household compared to the richer ones.
- It is found that non-agriculture now accounts for a slightly larger share of total employment in rural Bangladesh. Of the total number of person days worked, 56 per cent went to non-agricultural activities and 44 per cent to agriculture.

Table 5: Incidence of Poverty by Occupational Pattern: 2000 to 2010

Occupation	Overall Poverty			Extreme Poverty		
	2000	2010	% decline	2000	2010	% decline
Agriculture	56.5	35.8	-36.7	42.6	22.2	-48.0
<i>Self-employment</i>	38.3	20.7	-46.0	24.7	10.4	-57.8
<i>Wage labour</i>	74.3	57.4	-22.7	60.1	39.1	-35.0
Non-agriculture	48.3	32.8	-32.2	33.0	18.5	-43.9
<i>Self-employment</i>	44.7	32.1	-28.2	28.4	19.2	-32.3
<i>Paid employment</i>	51.0	33.6	-34.2	36.5	17.7	-51.5
<i>Wage labour</i>	67.6	44.6	-34.0	50.8	24.8	-51.2
<i>Salaried work</i>	31.6	19.7	-37.9	19.9	8.8	-55.8
Others	45.8	23.4	-48.9	32.3	15.3	-52.8
All	52.6	33.1	-37.0	38.3	19.9	-48.1

Notes and Sources: The figures for 2010 are own estimates based on InM Poverty Dynamics Survey 2010, while the figures for 2000 were calculated by us from the raw data file of HIES 2000.

- Overall non-agriculture is slightly more remunerative than agriculture - on the average a day of work yields Tk. 281 in non-agricultural activities and Tk. 260 in agriculture.
- The poorer the household the smaller is the amount of endowments, both human and material. Not surprisingly, workers from poorer households are mostly engaged in the types of employment (namely, wage labour) that are the least remunerative of all.
- It is noteworthy that even wage labour in non-agriculture is associated with higher level of endowments. Endowments - both human and material - thus play a critical role in determining who gets access to the more remunerative employment opportunities being thrown up by the growth process.

Table 6: Endowments of Workers by Employment Types: Rural Bangladesh 2010

Type of employment	Schooling (years)	Land (decimal)	Non-land Assets (Tk)
Wage labour in agriculture	2.0	25	50590
Wage labour in non-agriculture	3.5	29	91972
Self-employment in agriculture	4.4	185	216958
Self-employment in non-agriculture	4.5	74	242094
Salaried work in non-agriculture	7.9	118	251836

Source: InM Poverty Dynamics Survey 2010.

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c. Education and Poverty

- The poor people are in particularly disadvantageous situation regarding education.
- Not surprisingly, the extreme poor has the least amount of education (2.9 years of schooling) as opposed to the well-offs who have on an average 6.3 years of schooling.

Table 7: Education of Households by Poverty Category: Rural Bangladesh 2010

Poverty category	Schooling (years)
Extreme poor	2.9
Moderate poor	3.9
Marginally non-poor	4.6
Well-off	6.3
All	5.2

Source: InM Poverty Dynamics Survey 2010.

d. Microcredit and Poverty

i. Microcredit and Poverty: Overall Relationship

- Microcredit reduces the probability of being poor and extreme poor.
- While microcredit reduces the probability of being poor for borrowers as a whole and especially for 'productive borrowers', it does not do so for 'consumption borrowers'.
- However, microcredit raises the level of consumption of all borrowers - including 'consumption borrowers'.

Table 8: Comparison of Current Poverty between Microcredit Borrowers and Non-borrowers (%)

Category of households	Proportion of households		Proportion of persons	
	Poor	Extreme Poor	Poor Extreme	Poor
Microcredit borrowers	33.7	19.1	37.4	22.0
Non-borrowers	26.1	15.4	29.0	17.9
All	29.6	17.1	33.1	19.9

Source: InM Poverty Dynamics Survey 2010

- Microcredit's contribution towards poverty reduction in rural Bangladesh is estimated at **about 5 per cent**. That is, in the absence of microcredit, rural poverty would have been about 5 per cent higher than what it is today. The impact on extreme poverty is much higher - about 10 per cent.
- But microcredit's benefit for the poor cannot be judged by the impact on poverty rate alone, because it captures only those who ceased to be poor.
- One must count also the improved consumption levels of those who remain poor.

ii. The Role of Microcredit in the Dynamics of Asset Transition

- Microcredit reduces the probability of being a 'faller' in asset transition, and raises the probability of being a 'mover', but the effect is much stronger for the poor than for the non-poor.
- Microcredit also raises the amount of asset owned in absolute size.
- Microcredit helps the poor, especially the extreme poor in the acquisition of non-land physical assets while remittance helps the well-offs.
- The positive effects of microcredit are evident not just for 'productive borrowers' but also 'consumption borrowers'.
- Consumption borrowers benefit from better ability to avoid asset depletion at times of crises.
- Productive borrowers benefit from both avoidance of asset depletion and creation of new assets.

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Table 9: Current Ownership of Non-land Assets by Microcredit Borrower Category among the Poor (Taka per household)

Borrower category	Non-land physical asset	Financial asset
Non-borrower	45234	6809
Consumption borrower	39107	5821
Productive borrower	57045	8804
All	45295	6836

Source: InM Poverty Dynamics Survey 2010.

The Relative Unimportance of the Interest Rate

- Interest rate is not perceived by the borrowers to be a serious problem for asset creation with the help of microcredit.
- Among those who ever stopped taking microcredit, only 2% cited 'high interest as the reason' as the main reason; and among those who never wanted microcredit only 3% cited it as the main reason.
- For 'productive borrowers', their own estimated breakeven interest rate is much higher than the actual rate - 24% as against 13% on the average (flat rate).

iii. Role of Microcredit in Employment Pattern

- Borrowers participate in labour force at a slightly higher rate than non-borrowers. The difference is not very large - 50 per cent for borrowers as compared with 44 per cent for non-borrowers, but the propensity of the borrowers to participate more is systematically evident across the poverty groups.
- Further evidence that borrowers use their labour endowments more intensively than non-borrowers.
- Underemployment is found to be quite high overall, but relatively speaking borrowers have a lower rate at 39 per cent compared to 50 per cent for non-borrowers. This pattern is evident across the poverty groups.
- It is evident that the borrowers put in their labour time more in non-agricultural activities - mainly in self-employment but also to a lesser extent in wage employment. Thus, almost 33 per cent of their labour time is devoted to self-employment in non-agriculture compared to 22 per cent for non-borrowers. By contrast, self-employment in agriculture accounts for just 20 per cent of their time as compared with 26 per cent for non-borrowers.
- Non-borrowers in general have higher levels of productivity in self-employment and salaried work, but not in wage employment. Thus, the productivity of non-borrowers in self-employment in agriculture is Tk. 394 per person day as against Tk. 303 for borrowers; in self-employment in non-agriculture the corresponding figures are Tk. 412 and Tk. 252 respectively.
- Non-borrowers are generally endowed with more assets (not just current assets but also initial assets); and they have higher productivity of labour, other things remaining the same.

Policy Implications

The findings indicate that the effectiveness of microcredit can be improved by:

- Focusing mainly on the poor. Currently, about the half the borrowers belong to the well-off; and our analysis consistently reveals that microcredit does very little good to the well-off.
- Offering new products and service delivery models for the poor. Our survey shows that almost half of the poor and marginally poor households are left out, but at least half of them can be counted as potential clients if certain features (such as weekly repayment schedules) are revised.