Final Version

Ending Extreme Poverty in Bangladesh During the Seventh Five Year Plan: Trends, Drivers and Policies

Background Paper for the Preparationof the Seventh Five Year Plan

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I. INTRODUCTION: GROWTH AND EXTREME POVERTY

1.1 Can Growth Alone Overcome the Poverty Trap?

We live in a non-linear world where economic realities are punctuated by broken lines, twists and turns, sudden slippages, breaks, and traps. Persistence of poverty, especially in an extreme form of deprivations, is a testimony to that. In a linear world marked by economics of constant return to scale, as the argument goes, disappearance of extreme poverty is only a matter of time. There is nothing special about extreme poverty as opposed to moderate poverty or other income/wealth categories, in terms of mobility prospects, except for the fact they belong to the lower end of the income distribution. Rising tide of economic affluence will eventually pull them up, sooner or later, from the black-hole of poverty and help them climb up along the income/wealth ladder.All they have to do is to wait with whatever assets they might possess for their turn in order to be lifted out of poverty by the forces of economic growth. This optimistic view on extreme poverty reduction was proved to be incorrect in many contexts, however, for at least three reasons.

First, extreme poverty is difficult to tackle because the extreme poor are not standing in the same queue as the moderate poor or the non-poor. They are not part of the single micro economy, or even part of the single society, as envisaged by the linear conception of development: there are multiple equilibria (with different market clearing prices), exclusion and segmentation, guided by different rules and institutions. The extreme poor cannot easily connect with the mainstream economy because they lack assets (physical, financial and human) or because they lack voice and/or social capital.

Second, the trap-centric view of extreme poverty implies that certain threshold levels of assets are needed to overcome the chronic extreme poverty (CEP) trap. Without having such critical minimum assets, the poorest cannot participate effectively in labor and product markets like the rest of the society. Any transfer cannot make the difference: tokenism in income transfer cannot lift the poorest from extreme poverty. This is the central notion underlying the idea of "mini-Big Push" highlighted in the present paper.[3] The issue here is not only the insufficiency of assets, but also the relatively low return of assets. Even when the extreme poor hold, for example, similar level of education and/or financial capital, their return is lower compared to other social categories (Sen and Hulme 2006; Osmani and Sen 2011b).

Third, the real economic world of the extreme poor resembles more a game of "snakes and ladders" whereby they periodically make efforts to climb up the income ladder and are periodically pushed back by various shocks originating in poor health, natural disasters, and personal insecurities (Rahman and Hossain 1995; Sen 2003; Krishna 2010; Kabeer 2009). The matter is complicated by the fact that not only are the extreme poor susceptible to shocks, but the other income groups are also vulnerable, though not to the same extent. The slippages of the non-poor and moderate poor into extreme poverty makes the project of ending extreme poverty solely through a climbing-up

[3] This is inspired by the theme of "increasing returns and economic progress" articulated first by Allyn Young (1928) and later found more concrete application in the idea of "Big-Push" voiced first by Paul Rosenstein-Rodan (1943) in the context of industrialization in Eastern and Southeastern Europe. The idea eventually gained currency in the aid literature of the 1950s and 1960s as applied to the poor developing countries. In the more recent period, there has been resurgence of interest in the idea of "Big-Push" (see, Murphy et al. 1989; for a succinct review of "increasing returns" literature, see Ray 1998).

strategy a very difficult task. Even when the growth projections signal encouraging prospects for extreme poverty reduction, they cannot predict the number of people falling into extreme poverty. The number of poor moving out of extreme poverty may be outweighed by the number of people falling into extreme poverty. One should add to this the segment of the current extreme poor sliding further down the poverty spiral due to shocks. As a result, a simultaneous intervention designed to prevent slippages due to shocks that afflict all groups is required for complete eradication of extreme poverty.

1.2 Zeroing in on "Zero Extreme Poverty"

Bangladesh seems to presenta narrative where the extreme poor have escaped the aforementioned poverty trap in large numbers, no matter how the term "extreme poverty" is measured (see, Box1). Yet extreme poverty is far from being eradicated. Should Bangladesh aim for total eradication or near-total eradication of extreme poverty? The difference between total and near-total eradication can be momentous for more populous contexts such as Bangladesh. In global poverty projections, the World Bank recently set a goal of extreme poverty eradication by 2030, as measured by the $1.25 line per person per day, deeming it to be attainable with little extra efforts on growth and distributive policy fronts. The World Bank, however, puts a caveat that this goal actually does not require full eradication. Even if some countries are within the range of 3% shortfall from the actual target,it is good enough to declare those countries as being "poverty-free". As the Bank document states, "the World Bank Group would commit its full energies to bringing an effective end to extreme poverty by 2030. This means reducing to no more than 3 percent the fraction of the world's population living on less than $1.25 per day" (World Bank 2014). This is anavoidablepolicy stance for at least three reasons. First, it is susceptible to the interpretation that there is a certain residual amount of poverty that cannot be eradicated after all. Worse still, it mayeven be interpreted as indicative of an "admissible rate of poverty", similar to the notion of unavoidable or admissible rate of inequality. Butpoverty and inequality are not the same, and while there may be genuine grounds for admissible inequality based on natural differences in skills, there is hardly any justification for the persistence of poverty. In short, it morally compromises the policy positioneven before it sets itself to the goal of poverty eradication.

Second, even 3% admissible residual poverty as per the World Bank guideline would still imply a sizable number of poor population. Our poverty projections for 2021under a plausible decent growth scenario—uniform 7% GDP growth rateover 2011-2021 accompanied by *non-increasing* consumption inequality—actually entail a degree of extreme poverty to the tune of about 4.5% (see, Table 5.3 later). This translates roughly into 7.5 million! Can any democratic government worthy of its name ignore the demand of a population of this size? The actual number residually persisting in extreme poverty under the best of the growth scenarios would be higher than the above because the average growth rate of the economy in the 2011-2015 period was not 8%, but only about 6.2%. Third, and more importantly, those who would remain in poverty even under the best of the growth scenarios marked by the assumption of non-increasing inequality are likely to be those who are truly difficult to reach through the growth route. Thus, it seems that the poor belonging to the residual category are actually to be reckoned with as the most deserving category from the public transfer point of view. Where growth cannot reach, public social protection should get the upper hand. All these arguments, put together, show why the difference between the 'total' and 'near-total' eradication of extreme poverty is likely to be significant for judging the success of anti-poverty policies in Bangladesh.

It is therefore pertinent that we focus on attaining the goal of "zero extreme poverty" in the context of the Seventh Plan. It is both a desirable and achievable objective for three reasons. First, the goal of extreme poverty eradication by 2021 itself is noble and augurs well with the other overarching macroeconomic target of achieving Middle Income Status by 2021. Ending extreme poverty is possible with "little extra efforts" without compromising the attempts to attain middle-income status. It will bring quality to the transition process and can be one of the main objectives of the Seventh Plan.

Second, financing "Zero Extreme Poverty" is feasible without jeopardizing high growth. This is because the mobilization of aggregate resources—estimated to be in the order of 3% of GDP based on HIES 2010 as per the "lower poverty line"—neededto eradicate extreme poverty is affordable, feasible and doable. Indirect estimates also suggest a figure of allocating an extra amount not exceeding 0.5% of GDP annually over a period of six years (2015-21) to attain this goal with perfect targeting (Shiree 2013). Even with the allowance of deliberate leakage to mobilize the much needed buy-in of the non-poor (on the latter point, see, Gelbach and Pritchett 1995), one needs additional resources exceeding no more than 1% of GDP each year during 2015-16 to finance extreme poverty eradication.

Third, it is the most opportune time to attack remaining extreme poverty. We already know a great deal about what works best for eradicating extreme poverty; GoB is already committed to MDGs and significant gains have already been achieved; development partners are interested, and market conditions are also changing favorably for the extreme poor, as evidenced in the rising real wage incomes for the manual wage workers (Zhang et al 2014).

1.3 Structure of the Paper

The present paper examines this positive poverty reduction experience and points to the need for undertaking further action to ending extreme poverty forever. Accordingly, the paper is structured in nine sections, as described below.

After the introductory section, the second section briefly discusses the past trends in extreme poverty in both income and non-income dimensions. The third section analyzes spatial dimensions of extreme poverty with focus on the interfaces among consumption-poverty, non-income deprivations and adverse ecology. The fourth section analyzes the drivers of extreme poverty reduction with a special focus on transformative aspects of growth through pro-poorest structural transformation. The fifth section illustrates the importance of growth, make plausible growth-induced poverty projections, pointing at the end the limitation of relying on the growth instrument alone for the strategy of ending extreme poverty. The sixth section focuses on the successful examples of livelihood interventions that helped in practice to move very poor households out of extreme poverty. The seventh section discusses social protection programs. The eighth section presents main policy implications. Concluding remarks are presented in the ninth section.

Box 1

Extreme Poverty: Clarifying a Definitional Issue

Extreme poor are often known as very poor, severe poor, or ultra-poor. Lipton (1986) defined ultrapoverty in the food-energy space, focusing on the "group of people who eat below 80 per cent of their energy requirements despite spending at least 80 per cent of income on food". The Bangladesh Bureau of Statistics (BBS) previously used the term in the 1980s and 1990s to denote those who consume less than 1805 Kcal per person per day, defining poverty in the food-energy space.

In contrast, we have used the term "extreme poverty" throughout this paper in the local context i.e. operating within the notion of *national extreme poverty line*, corresponding to the so-called monetary "lower poverty line" as estimated for Bangladesh (Ravallion 1998). In that it deviates from the traditional use of extreme poverty line corresponding to the cut-off point of 1805 kcal per person per day used by the Bangladesh Bureau of Statistics (BBS) in the 1980s and 1990s. We adopt a monetary line as opposed to the calorie line because the latter is not an appropriate measure for capturing trends in extreme poverty (Ravallion and Sen 1996).

Our use of the term extreme poverty also significantly differs from the term extreme poverty, as used in the global discourse corresponding to "dollar-a-day line", or to be precise, 1.25 dollar per person per day adjusted to purchasing power parity (Chen and Ravallion 2008). As a result, national extreme poverty line corresponding to the definition of "lower poverty line" that is used in this paper is *considerably lower* than the $1.25 line. This is just to point out that we are really here talking about most severe poverty in the global battle against poverty—the bottom one fifth of the income distribution.

In adopting a monetary line and restricting ourselves to the poorest segment of the global poor, we are upholding the need for *serving the poorest first before serving other* poorer and poor groups. It is the "maximin principle" as applied to the poverty measurement problems (Rawls 1971).

We recognize the importance of non-income dimensions of extreme poverty as major determinants of the income-dimensions of extreme poverty. We discuss the trends in non-income dimensions of poverty, where applicable, from the perspective of long-term mobility of the extreme income-poor. In particular, we emphasize the role of adverse demographics, under-nutrition, ill-health and limited educational human capital in explaining the persistence of extreme income-poverty.

II. CHANGING FACE OF EXTREME POVERTY: CAUSE FOR OPTIMISM

The case for ending extreme poverty by the end of Seventh Plan period is motivated by the past positive poverty reduction experience, as described below.

2.1 Trends in Extreme Poverty

The most remarkable aspect of poverty reduction during the past two and half decade is the secular drop in the incidence of extreme income-poverty.[4] This is noteworthy because in the early 1990s there was considerable pessimism with regard to extreme poverty reduction. The term "hardcore" poverty was coined to signify the difficulties involved in reaching out to the extreme, severe, ultra or "hard-to-reach" poor. The political economy argument was that it is the more astute and savvy moderate poor who are able to capture the fruits of growth/development leaving very little for the more dispossessed sections. The dichotomy between the poor and the poorest became an apt description of cut-throat competition for scarce resources. Subsequent events proved that pessimism to be an overstretched proposition. The poorest may have been at a comparative disadvantage all through in accessing development benefits vis-à-vis the moderate poor, but they have been no less eager in displaying initiative and action in seizing the economic and social opportunities that went by. Such opportunities were many (we shall return to this point in Section IV) and offered by diverse actors—governments, markets, NGOS and communities. Macro growth acceleration process in the 1990s and 2000s were underpinned by micro drivers that benefitted not only the moderate poor but also the extreme poor. As a result, every single measure of poverty showed improvements both in moderate and extreme poverty. Three main aspects are noteworthy.

First, ***extreme poverty decreased quite dramatically in both rural and urban areas since 1990.***The proportion of rural population living in extreme poverty has halved, having dropped from 44% in 1991/92 to 21% in 2010. The extreme poverty decreased at a faster rate in urban areas during this period, having dropped by two-third, from 24% to 7% (Table 2.1).

Second, the rate of extreme poverty reduction has been faster in the decade of 2000s compared to the 1990s in both rural and urban areas. In the 1990s the annual reduction rate of extreme poverty was 1.8%, compared to 4.8% in the 2000s.

Third, not only is there a declining trend in extreme poverty but also the "structure of poverty" has undergone evolution from the perspective of chronic poverty. The proportionate share of extreme poor in total poor at the national level has diminished with the passage of time, especially in the second half of the 2000s (Table 2.2).

A second cause for optimism is that the poorest are now better equipped in human development. Human development of Bangladesh's poorest people has improved considerably over the past two decades. We consider three human development indicators: (a) proportion of households with lack of access to formal education; (b infant and child mortality; and (c) access to antenatal care. The position of the extreme and chronic poor is captured by disaggregating the trends in these indicators by wealth

[4] Strictly speaking, the term income-poverty used in this paper refers to consumption-poverty, as the income status is typically measured by the BBS through the lens of consumption expenditure.

quintiles. Our main focus is on what has happened to the poorest quintile over the successive years. Unfortunately, disaggregated data by wealth quintiles is only available for the surveys done in the 2000s. Although measured over short spells between 2004 and 2011, the trends of human development improvements for the extreme wealth group are noteworthy (Tables 2.3-2.5).

First, the share of illiterates in the extreme poverty groups has gone down from 64% to 46% over just 7 years. The poorest now have better educational human capital than before which bodes well for their future livelihood pursuits, and attendant incomes and productivities.

Second, the under-five mortality rate for the lowest asset quintile has dropped impressively from 121 in 2004 to 64 in 2011 i.e. halved over such a short period. Earlier, the TFR at the national level started declining at a relative early stage of low level of income, especially since the 1990s, across wealth quintiles. This was facilitated by a public social policy of ensuring easy availability of modern family planning methods at the doorsteps of the users by the family planning workers and at a subsidized price. This was further aided by social interactions in densely populated communities with organized NGO and/or self-help groups (Dev et al 2002). The declining trend in fertility continued in the 2000s.[5] The combined effects of the decline in mortality and fertility would imply that the quality of child care has possibly increased in the poorest wealth group. Generally, the success of social development is attributed to the role of innovative low-cost technology (Mahmud 2008).

Third, women from the poorest group are now better served by the reproductive health system. The proportion of women with access to antenatal care has increased from 33% to 48% over 2004-2011. The matched improvements in these indicators must have been even more dramatic compare to the counterfactual that was prevailing in the beginning of the 1990s.

The upshot of the above is to argue that today's extreme and chronic poor are better equipped—in the human development led capability sense—with assets to fight against severity, chronicity or both.

[5]TFR at the national level dropped from 7 in 1975 to 2.2 in 2011 as per demographic and health survey (DHS) for 2011. This implies that Bangladesh is fast approaching the replacement level of fertility, the turning point at which population stabilizes.

FIGURE 2.1:**Trends in National Extreme Poverty**

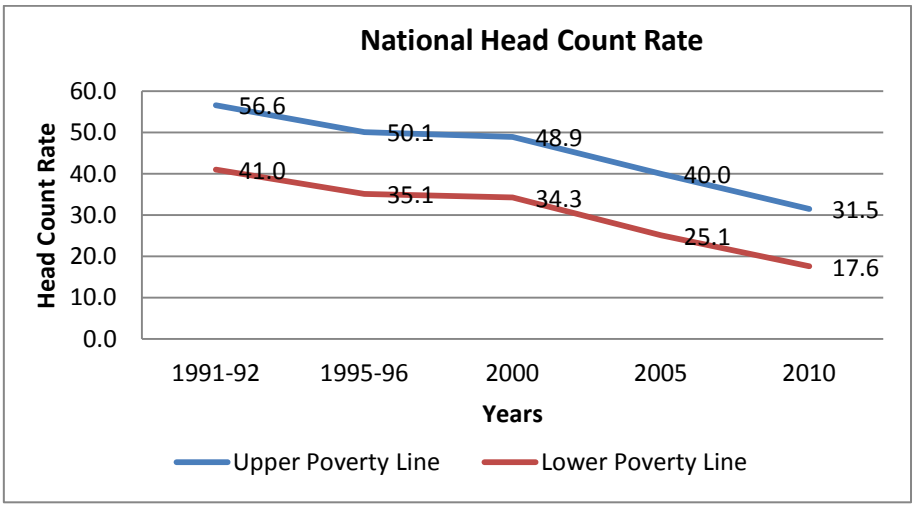


FIGURE 2.2:**Ratio of Lower vs. Upper Poverty at the National Level**

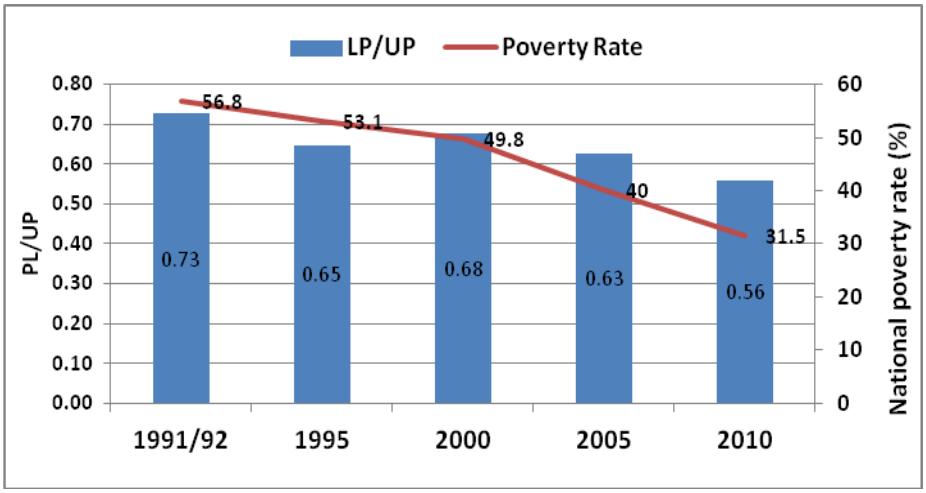
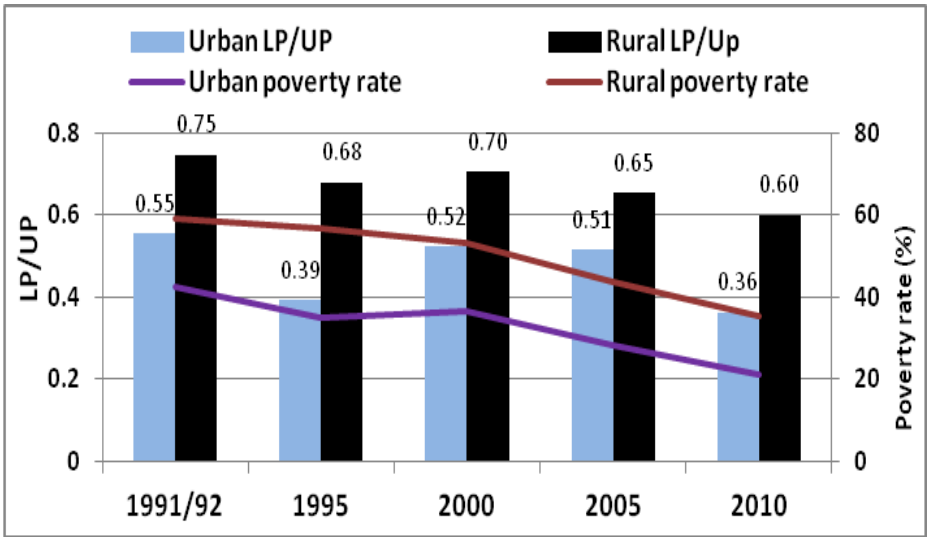


FIGURE 2.3:**Ratio of Lower vs. Upper Poverty in Urban and Rural Areas**



2.2 Profile of the Contemporary Extreme Poor

Extreme poor are like any average poor but only poorer by a large margin. It is still the assetless poor on the economic space who dominates the overall profile of extreme poverty.

The extreme poor experience poverty through multiple deprivations manifested in having little or no income or employment, little or no education, poor housing, ill health, malnutrition, social marginalization, and lack of voice and power (Sen and Hulme 2006). These poor groups subsist at the bottom of the social pyramid and are defined and characterized using terminologies such as 'extreme poor', 'hardcore poor', 'ultra-poor', 'chronically poor', 'poorest of the poor', and 'marginalized poor'. Although there are some common elements among these terminologies, their characterization may differ depending on specific contexts.

Which households constitute the category of the extreme poor? To address this question, we need to compute incidence of extreme poverty on a range of profile sensitive indicators. notwithstanding significant economic and social changes over the past two and a half decades, it is still the lack of access of assets (multidimensionally defined) that defines extreme poverty (Tables 2.6 and 2.7). The latter has much lower level of educational human capital (generally having no literacy and no formal education), very limited land assets (with no land or less than 5 decimals of land) and mainly dependent on manual labor and wage employment (engaged in agricultural sector, transport, and services).

Analysis of profile of the extreme poor reveals additional aspects that are important from the view-point of policies that may contribute to ending extreme poverty in the shortest possible time.

Five features are noteworthy. The first aspect to be highlighted that the incidence of extreme poverty dropped during 2000-2010 for all educational, land-ownership and occupational categories.In case of Bangladesh, there is some truth to the observation that "rising tide often lifts all boats", though in no equal measure. Significantly, the nature of the growth process in the 2000s was such that no major category was left behind: literate as well as illiterate, landless and marginal landholdings, farm laborers and service workers all categories considerable improvements, again not in the same magnitude.

This is not to say some marginal occupations have not been bypassed by this process, but the holders of those occupations have possibly switched over to more remunerative occupations. The argument is that both higher return to occupations and switch from low-paid low-esteem occupations might have played a role in the growth-induced transformative process. We have no way of directly testing the force of this argument (though we shall have some more to say on the "structural aspects" of the growth process with focus on changing rural institutions). However, some cross-sectional evidence suggests that it is plausible. This brings us to the second aspect of the mechanism of extreme poverty reduction.

Second,the evidence presented in Table 2.6 also suggests as to what may well have been the "structural underpinnings" of this favourable extreme poverty dynamics. In 2000, the incidence of *rural* extreme poverty was highest in case of household heads engaged in agriculture, service and transport sectors (roughly assessed at 41%, showing remarkable similarity). This implies that in those days there was little welfare gains for agricultural workers in moving out of agriculture to rural service and transport/

production sectors. But, if these workers could move into rural trade—a move with access to financial capitala pre-requisite—the extreme poverty would have dropped to 28%. Of course, movement of these workers to "professional and technical category" would also be extreme poverty-reducing. However, this was a remote possibility that participation in the latter sector require some exposure to educational human capital, which they typically lacked. By 2010, the prospect for further extreme poverty reduction through transition to rural non-farm sectors became even narrower. The incidence of rural extreme poverty was lower in case of household heads engaged in agricultural sectors compared to service and transport/ production sectors (23% as opposed to 29-31%). The only rural non-farm sector that held out brighter prospect of extreme poverty reduction was rural trade where the incidence of extreme poverty was 15%.

Third, the importance of non-rural sectors in rural extreme poverty reduction—especially the role of rural-urban migration--is indirectly borne out by the profile data. The rural extreme poor would have clear welfare gains in moving out of agriculture and entering into urban services and production sectors. In 2010, in making such moves their poverty would have dropped from 23% in agriculture to 17% in urban services and 11% in production sectors, respectively. Making such inter-sectoral move from agriculture to rural services and transport/ production sectors would not have been welfare enhancing to the extreme poor.

Fourth, access to educational human capital seems to be an important driver of extreme poverty reduction. Simple profile analysis bears the validity of this proposition. By human capital we are not implying an educational level corresponding to post-secondary level. Even exposure to literacy and/or completed years of primary education can make a dramatic change in the level of extreme poverty (Table 2.6). Thus, in 2010, the incidence of extreme poverty was 17% nationally, but only 9% for those who have some knowledge of literacy. In contrast, those who had "no formal education" had an extreme poverty rate of 25%, which came down sharply to 16% with completion of primary level.

Fifth, land is still the most important asset in highly dense environment of Bangladesh, especially in the agrarian context. Past studies cast doubt on land reform as a viable tool for Bangladesh, the static welfare effects of distributive land reforms being assessed as being modest (Ravallion and Sen 1994). This does not mean that land access reform of any kind is theoretically inadmissible. The point to highlight here is that access to some land on the part of the land-poorest group has been typically found to be a strong reducer of their povertysituation. The success of land access reform is higher in contexts where political economy costs do not overweigh the benefits of land reform. This has been forcefully argued in the context of other dense population environments such as West Bengal (Deininger et al. 2009). In 2010, 21% of rural population lived in extreme poverty. The matched figure sharply rises to 36% for households owning less than 5 decimals of land, but falls equally sharply to 22% in the next category of 5-49 decimals. This means that policy of *khas* land distribution to the landless and near-landless belonging to the extreme poor category may have still analytical relevance.

While profiling of the extreme poor along the dimensions of occupation, education and land brings out the broad tendencies, more micro level evidence allows to focus on additional dimensions of vulnerability of the extreme poor (Table 2.7). After all, there are poorer and poorest social segment within the category of extreme poor defined by

the "lower poverty line". Thus, only 11% of the rural households are female-headed, but 28% of female-headed households belong to extreme poor category. The matched figure for urban areas is also similar (25%). Non-savers are typically belong to the extreme poverty category. In contrast, multiple sources of irregular incomes are more of a marker of extreme poor category, as the share of the latter among households with mono-income source is only 31% in rural areas and 19% in urban areas. Only 6% of the households reported "open defecation" in rural Bangladesh; 47% of them are likely to be extreme poor in rural areas. Among those without schooling, a remarkably stable 72% belong to the extreme poor category. Food insecurity is common among the extreme poor households: 90% eat less than normative amount, most skipping 3 meals a day, having implications for nutritional poverty. All this evidence points out that income and non-income deprivations are closely linked when it comes to extreme poverty.

The above analysis is based on repeat cross-sections data and no causalities are implied, lacking proper panel data on long-run labor mobility and movement out of extreme poverty since the 2000. However, the above story line seems plausible even in the context of rural panel settings (Hossain and Bayes 2009; Hossain et al. 2013).

2.3 Social Face of Marginality

Social face of marginality is often missed out in the economic policy discourse due to low voices and influences that marginal groups have over the policy process. The adverse nexus of power/ knowledge is nowhere starkly revealed as in the case of socially marginal groups. These groups tend to be typically small and hence remain obscured from the gaze of the policymakers and the elites in general. Part of the reason may be that in designing development policy we oftentend to see what we want to see or measure. Concerns over social marginalization are somewhat overshadowed or to some extent even displaced by the dominance of the conventional discourse on poverty. The latter typically tends to focus on income/ consumption short-falls or degradations on conventional human development dimensions to the negligence of qualitatively potent dimensions such as powerlessness and social exclusion. Marginality can be best described as the acute form of powerlessness as a result of social and economic exclusions. Marginal men can be non-poor from strictly static income-poverty point of view, but remains *endemically vulnerable to poverty due to constant pressure of powerlessness* arising out of social and economic exclusions (Sen and Hulme 2006).

In Bangladesh, marginalized communities are mainly the minority communities/groups in terms of religion, ethnicity, physical conditions, remoteness, ecological vulnerabilities, and occupations. The examples are fisher folk community; sex workers; physical states like people with disability; HIV positive; transgender; people in conflict with laws; displaced people; people living in extreme vulnerable areas, i.e., coastal zones, *chars*, river basins, slums, embankments, etc.Some of the specific groups also include marginalized segments of ethnic and religious minority communities; the so-called "outcasts of modernity" such as rural artisans and those engaged in traditional vocational occupations which are gradually disappearing in the face of changing urbanization and industrialization; people with HIV/AIDS; poor people with chronic ill health; economically deprived rural proletariat, especially abandoned and destitute rural poor women; poorest segment of the urban slum dwellers; smaller ethnicities living in the Chittagong Hill Tracts (CHTs) region; children of the poor, the homeless and the unemployed; and "environmental refugees" because of degradation of forest, river erosion, etc. (Ali and Mujeri, 2011). The quantitative significance of each of these

socially marginalized groups is, however, hard to establish due to lack of analytically informed nation-wide sociological census.

The above groups may not strictly correspond to the category of the extreme income-poor (may be slightly above or below the matched income cut-off) but each of them represents an excluded, sub-altern, and marginalized existence as distinct under-class and sub-class. They are often subsumed under the category of "specific chronic poverty groups" and often described as "chronic marginality". The common thread across these diverse identities lies in their definitional origin as "extreme poor plus". While they tend to correspond to the extreme poor income-wise, they are much more than just income poor when considered marginality-wise. Severe income short-fall and powerlessness mutually reinforce and socially reproduce their marginal existence.

2.4 Disability and Extreme Poverty

The aggregate economic costs of disability is sizable, estimated to be 1.74% of GDP in Bangladesh (Ali 2014). Disability has also direct bearing on extreme poverty. Disability and extreme poverty form a vicious cycle where each reinforces the other. To eradicate extreme poverty, it is critical to focus on disability. This focus on disability is essential to meeting the zero extreme poverty by the terminal year of the 7th Five Year Plan. Persons with disabilities are more likely to be among the poorest of the poor. The Household Income and Expenditure Survey of 2010 shows that about 9.1% of the population suffers from some form of disability. Poor people are more likely to have one or more disabilities and women are 37% more likely than men to have a disability.

Many of the conditions of poverty can cause or worsen disability. Injury and impairment can be created through poor access to water and sanitation, malnourishment, and other unsafe working or living conditions. Limited education, health care and weak public health contribute to poor management of injuries and stigma towards those with impairments. People with disabilities have a range of specific needs related to both their impairments as well as the social and environmental barriers they face. One of the principal disadvantages people with a disability face in Bangladesh is the attitudes and stigma surrounding disability. This results in low self-confidence, exclusion from family, community and other social and economic participation.[6]

The path out of extreme poverty needs to take into account these disability-specific needs for both individuals and their families. To ensure that gains of poverty reduction are maintained, disability-specific vulnerabilities have to be responded to. Furthermore, addressing disability-specific needs will reduce any cost of care that the family provides. Organizations have struggled with accurate identification of persons with disabilities, rehabilitation requirements, limited technical capacity of staff and the perceived higher cost-per-beneficiary. Sometimes reaching a higher number of people has taken priority over reaching those with more complex needs.

To sum up the discussion so far on the profile of the extreme poor, we underscore two main messages. First, there seems to be a "threshold effect" involved in the distribution of extreme poverty. It is seen in all three key profile indicators. Having exposure to literacy and primary completion can drastically bring down the current level of extreme poverty. Similarly, facilitating labor movement out of rural sectors to urban services, transport and production (manufacturing) sectors would be more rewarding than similar movement within the rural context. Expansion of trading seems to be extreme poverty

[6] On this, see Ali (2014)

reducing provided the latter can access financial capital. Even though physical availability of surplus land is extremely scarce in Bangladesh, some threshold of land-access (above 5 but below 50 decimals of land) in the rural context can still be seen as meaningful intervention. After all, access to land has been found to be a potent tool for faster extreme poverty reduction in West Bengal and elsewhere (Deininger et al. 2009). Second, a considerable part of extreme poverty is in the nature of chronic marginality—result of social marginalization, stigma and exclusion. Marginality cannot be fully addressed through income/ employment route alone and would demand social cohesion building measures.

TABLE 2.1

POVERTY HEAD-COUNT RATES (%)

	Upper Poverty Lines					**Lower Poverty Lines**				
	1991/92	**1995**	**2000**	**2005**	**2010**	**1991/92**	**1995**	**2000**	**2005**	**2010**
National	56.8	53.1	49.8	40	31.5	41.3	34.4	33.7	25.1	17.6
Urban	42.6	35	36.6	28.4	21.3	23.6	13.7	19.1	14.6	7.7
Rural	58.7	56.7	53.1	43.8	35.2	43.7	38.5	37.4	28.6	21.1

Source: HIES various issues, Bangladesh Bureau of Statistics (BBS)

TABLE 2.2

RATIO OF POVERTIES AS PER LOWER AND UPPER POVERTY LINES

	Lower PL/Upper Pl				
	1991/92	**1995**	**2000**	**2005**	**2010**
National	0.727	0.648	0.677	0.628	0.559
Urban	0.554	0.391	0.522	0.514	0.362
Rural	0.746	0.679	0.704	0.653	0.599

Source: Calculated from HIES Reports (Various Years)

TABLE 2.3

TRENDS IN EXPOSURE TO FORMAL EDUCATION

Wealth Quintile	**Share of Households with "No Formal Education" (%)**		
	2004	**2007**	**2011**
Lowest	63.50	55.70	45.90
Second	46.80	42.00	32.90
Middle	35.30	34.40	25.80
Fourth	25.40	23.10	20.10
Highest	14.50	12.70	12.60
Total	**36.70**	**33.20**	**27.10**

Source: DHS Data

TABLE 2.4

TRENDS IN INFANT AND UNDER-FIVE MORTALITY

Wealth Quintile	**Infant Mortality**			**Under-5 Mortality**		
	2004	**2007**	**2011**	**2004**	**2007**	**2011**
Lowest	90	66	50	121	86	64
Second	66	67	51	98	85	64
Middle	75	63	41	97	83	49
Fourth	59	46	38	81	62	48
Highest	65	36	29	72	43	37
Total	**65**	**52**	**43**	**88**	**65**	**53**

Source: DHS Data

TABLE 2.5

TRENDS IN ACCESS TO ANTENATAL CARE

Wealth Quintile	**Any ANC (%)**		
	2004	**2007**	**2011**
Lowest	33.7	41.6	48.0
Second	46.0	47.4	55.4
Middle	58.3	58.9	68.1
Fourth	66.5	71.9	79.5
Highest	84.1	86.4	93.0
Total	**55.9**	**60.3**	**67.7**

Source: DHS Data

TABLE 2.6

INCIDENCE OF EXTREME POVERTY BY LAND, EDUCATION AND OCCUPATION

Incidence of Poverty by Profile Indicators	2010			2000		
	National	Rural	Urban	National	Rural	Urban
Overall Extreme Poverty Rate	***17.6***	***21.1***	***7.7***	***34.3***	***37.9***	***20.0***
Education-Literacy Status:						

Illiterate	25.1	27.2	15.6	46.3	47.4	39.4
Literate	9.2	12.4	3.3	18.4	22.6	7.6
Educational Level:						
No Education	25.1	27.1	15.6	46.1	47.2	39.1
Completed Class I-IV	15.8	18.4	7.9	27.6	30.3	16.1
Completed Class V-IX	11.4	13.8	5.4	22.8	26.2	11.8
Completed Class SSC+	3.4	6.1	0.8	7.2	10.9	1.6
Landownership Status (acres):						
No Land	19.8	33.8	9.9	30.4	53.1	20.5
<0.05	27.8	35.9	12.3	43.3	48.8	22.3
0.05-0.49	17.7	22.1	5.4	40.0	41.7	12.6
0.50-1.49	13.3	15.2	2.4	29.6	30.6	15.4
1.50-2.49	7.6	8.6	1.8	21.9	22.9	1.4
2.50-7.49	4.1	4.3	2.7	11.5	12.4	0
7.50+	3.7	4.2	0	4.0	4.1	0
Main Occupation of the Household Head:						
Professional/ Technical and Related	10.6	15.0	4.3	22.2	22.2	15.1
Adm./ Management	0.5	1.2	0.0	1.5	0.0	2.0
Clerical, Related Works and Govt.	8.5	15.5	4.6	34.2	42.6	22.0
Sales Workers	10.3	14.6	4.7	23.0	28.4	14.2
Service Workers	26.1	30.9	16.6	37.3	41.3	30.2
Agri., Forestry, and Fisheries	22.2	22.5	16.7	40.8	41.2	29.8
Production, Transport and Related	21.5	28.9	10.7	34.1	40.7	21.6
Not Working	12.6	15.7	4.0	25.6	29.7	13.0

Note: Figures represent incidence of extreme poverty (expressed in percentage terms) in each category of "profile indicators". Source: HIES 2010 and 2005 Reports (Various years).

TABLE 2.7

INCIDENCE OF BASELINE EXTREME POVERTY: ADDITIONAL EVIDENCE FROM PRO-POOREST PROGRAMS

Selected Indicators	Extreme Poor Rural HHs (%)	Extreme Poor Urban HHs (%)	Average Rural HHs (%)
Female headed households	28	24.5	*11*
HH head without any schooling	72.5	71.8	*27*
Secondary school enrollment	35	22.5	*79.6*
Housing: straw/plastic as roof materials	24	0.0	5.24
Open defecation	47	14.0	*5.8*
Households without any savings	99	98.4	-
Have only one or no source of income	31	19.2	-
Food insecurity (ref. period: last week)			
Eating lesser amount	90	90.7	-
Eating <3 meals a day	45	70.6	-
No electricity	86	12.1	50.7

Source: EEP/Shiree Baseline Report-2, August 2014; HIES 2010 and BDHS 2011 (for figures in italic).

III. SPATIAL DIMENSION OF EXTREME POVERTY: INTERFACE BETWEEN ADVERSE ECOLOGY, SOCIAL DEPRIVATIONS AND INCOME-POVERTY

Extreme and chronic poverty is also expressed spatially: some geographic areas—remote, ecologically vulnerable, inhabited by socially marginalized groups or otherwise—remain perennially neglected, bypassed and discriminated against often by mirroring the ill-fate of the poorest. Whether it is chronically poor areas or chronically poor people that drive "spatial poverty trap" is a debate that is still not resolved. The main point is to recognize that they exist in most developing countries, large and small, and they bring an added disadvantage to the economic lives of the already disadvantaged and marginalized people.

At the outset it may be noted that spatial poverty traps and high incidence of poverty in particular geographic settings may not mean the same thing. Spatial poverty traps always imply *dynamic* poverty traps—the incidence of initial poverty may be higher or lower, but the important point is that poverty in those spatial settings tends to stagnate, indicating its stubborn or chronic nature. It is quite possible that some areas have exhibited high initial poverty but it experienced significant decline in the subsequent period. Hence, by definition, these areas cannot be treated as spatial poverty traps, though static measure can yield misclassification.

Such geographic traps in well-being can be of different origin: it may be due to initial remoteness (*Char* areas of Bangladesh, for example, which persist as mini-islands on rivers separated from the mainland and cut-off from the modern civic amenities); initial social exclusion (as in the case of *adibashis* in the tribal belt of Eastern India); initial ecological vulnerability to natural disasters (as in the case of river erosion areas in the North-West of Bangladesh and generally applied to the wetland *haors* and coastal lands susceptible to floods and cyclones in South Asia); consequences of long-term policy neglect (as in the case of the hill-people residing in the Chittagong Hills Tracts in Bangladesh) or a mix of all four factors.

3.1 Going Beyond Income-Poverty Maps

In the Bangladesh case, we find a distinct spatial dimension associated with extreme poverty. Three aspects of this spatial dimension are noteworthy (see, Maps 1-4). The evidence is collected from the freshly constructed mapping exercise focusing on thana-level information on income-poverty, social deprivation index (a synthetic index summarizing 9 non-income indicators), and vulnerability to natural disaster (measured by "susceptibility to floods, tidal surges, and major disaster events").[7]

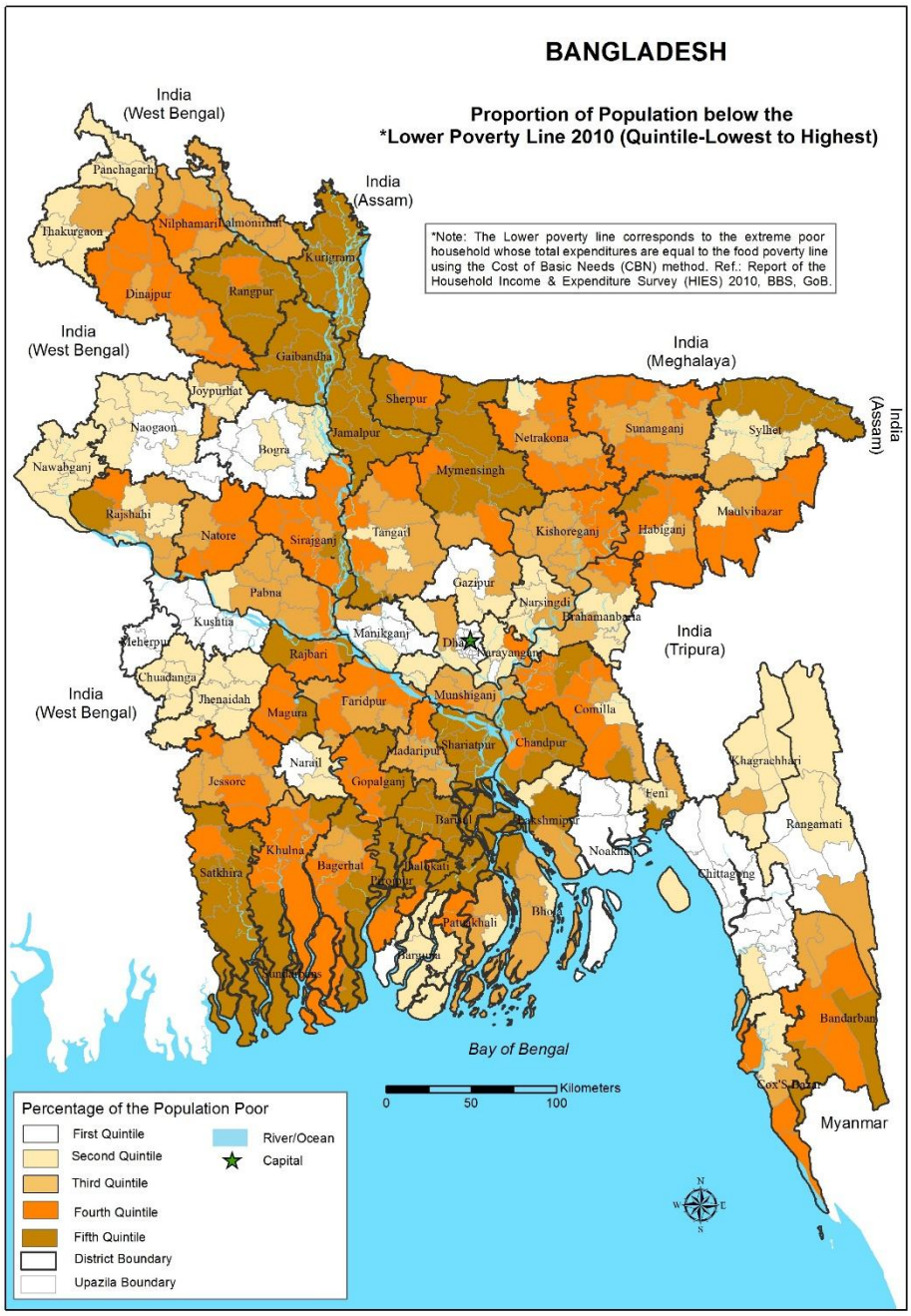
First, we discern indirect quantitative evidence of interface between adverse ecology and extreme income-poverty. This relationship is *more pronounced* in the case of extreme poverty (i.e. for the lower poverty line) than in the case of overall poverty (i.e. one that corresponds to the upper poverty line). Relatively high extreme poverty appears to be spread in 4distinct zones prone to adverse ecology, encompassing North-West and North-East, South-West and South-Central areas of Bangladesh (Map-1). This includes (a) the river-erosion belts of Kurigram, Gaibandha and Jamalpur (with very high incidence of income and non-income poverties); (b) the haor areas of greater Mymensingh and Sylhet (with relatively low overall incidence of income-poverty but very high incidence of non-income poverty); (c) coastal areas of greater Khulna and Barisal divisions in the South prone to tidal surges and storms (with relatively high incidence of income-poverty but low incidence of non-income poverty), and (d) pockets of ecological vulnerability in the South-Central region encompassing Shariatpur, Chandpur, upper Barisal and Lakshmipur i.e. areas in the eco-zone of Meghna Basin (with considerable heterogeneity in both income and non-income poverties).

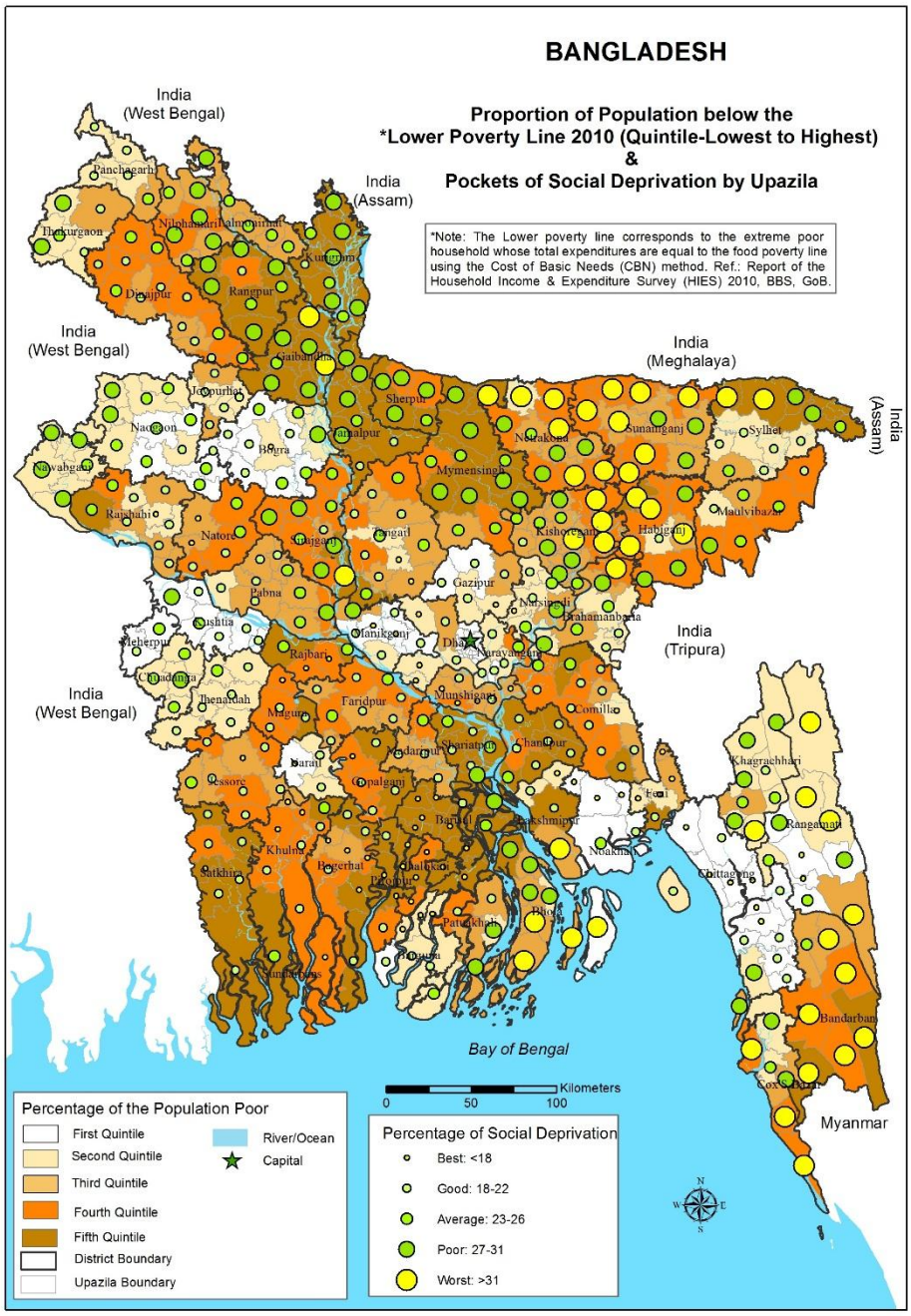
Second, from the above it is clear that extreme income-poverty is *not always a good predictor* of areas of most social deprivations. In some geographic terrains we find a distinct overlap between the two, but in others a separate diverging dynamic seems to be at work (Map 2). From this standpoint we can identify four zones. First, North-Western parts (Zone 1) are marked by high extreme poverty and ecological vulnerability (i.e. river-erosion areas) where we see a considerable lagging behind of social indicators. Districts such as Kurigram, Gaibandha, and Jamalpur fall into this area. They are the prime candidates for spatial targeting being classic cases of overlapping and multiple vulnerability. Second,from the policy point of view, however, it is important to consider *mismatches* between the income and non-income dimensions of poverty. Thus, North-Eastern parts(Zone 2) are marked by relatively low extreme

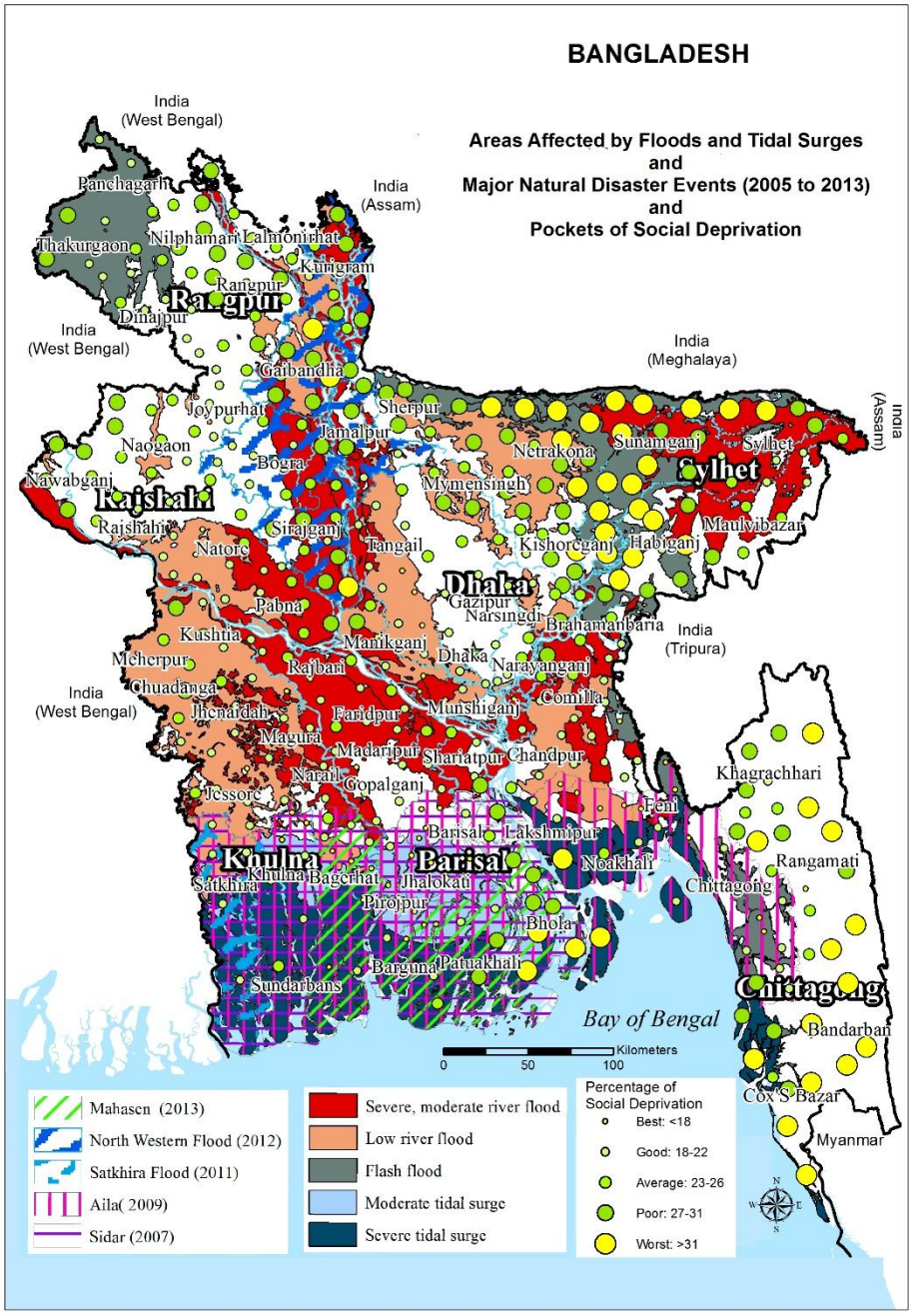
[7] Poverty data for 2010 comes from the unpublished Upazila level database underlying the Poverty Maps constructed by the BBS with technical support from the World Bank and WFP. Social deprivation indicators come from the unpublished Upazila level data base underlying the Equity Atlas constructed by the BBS with technical support from UNICEF and BIDS. Data on vulnerability to natural disasters come from WFP.

poverty but exhibit relatively high non-income poverty. Districts such as Netrokona, Kishorganj, Sunamganj and Habiganj fall into this category. Poverty criteria other than income (such as education and health indicators) will prioritize these areas from spatial targeting point of view. Third, three districts in the Chittagong Hill Tracts(CHT) in the South-East (Zone 3) also tell the same story as the haor areas: they exhibit lower levels of extreme income-poverty but higher level of non-income poverty. But, we classify them under a separate category because of special terrain (i.e. hilly characteristics) and ethnic markers (large concentration of "hill people"). Both second and third zones are characterized by geographic remoteness during part or most time of the year. Fourth, in contrast, areas in the South-East and South-Centralparts (Zone 4)—with the exception of the coastal areas of Patuakhali, Bhola and Lakshmipur—have relatively lower incidence of non-income poverty, as measured by the synthetic social deprivation index, but they have higher incidence of extreme income-poverty (higher than Zone 2 and Zone 3 areas).

Third, consideration of the interface between ecological vulnerability and social deprivations reveals that it is not so much the extent of ecological vulnerability *per se* that cause slow progress in fighting non-income poverty. Geographical remoteness (as typically present in Haor areas and CHT) is the single most important factor underlying relatively high level of non-income poverty. Southern and Western districts generally do not suffer from geographical remoteness and hence even the extreme poor people residing in these areas are better poised compared to their counterparts located in the ecological vulnerable areas of the North to access education and health services (Map 3).While Bangladesh often can do only so much in avoiding its inherent vulnerability to different types of natural disasters, it can help the extreme poor to better prepare for such disasters and move out of extreme poverty through the human development route exploiting better all-weather connectivity. GoB needs to prioritize infrastructural investments in roads, bridges, culverts, mode of transport (including water transport). The other important policy message is to underscore complex interplay between income and non-income dimensions of extreme poverty and to recognize that spatially poor areas need not be limited to the restricted notion of income-poverty. Non-income poverty maps —as attempted in Map 2 (and as partly attempted in Child Under-Nutrition mapping carried out by BBS with support from WFP)—merits due attention alongside the conventional poverty mapping based on income-poverty criterion. If poverty is to be treated as multidimensional, poverty-maps should be done on a multidimensional basis as well, especially when it comes to identifying the contentious issue of "poor area targeting" for social protection and other forms of service delivery. What precise dimensions need to enter the space of "measurable multidimensionality" is a question to be decided by taking into data availability into consideration in line with international best practices.


BANGLADESH
Proportion of Population below the
*Lower Poverty Line 2010 (Quintile-Lowest to Highest)
*Note: The Lower poverty line corresponds to the extreme poor household whose total expenditures are equal to the food poverty line using the Cost of Basic Needs (CBN) method. Ref.: Report of the Household Income & Expenditure Survey (HIES) 2010, BBS, GoB.
India (West Bengal)
India (Assam)
India (Meghalaya)
India (Tripura)
Myanmar
Bay of Bengal
Panchagarh
Thakurgaon
Nilphamari
Lalmonirhat
Kurigram
Dinajpur
Rangpur
Gaibandha
Joypurhat
Naogaon
Sherpur
Jamalpur
Bogra
Nawabganj
Netrakona
Sunamganj
Sylhet
Mymensingh
Rajshahi
Natore
Sirajganj
Tangail
Kishoreganj
Habiganj
Moulvibazar
Pabna
Gazipur
Narsingdi
Brahamanbaria
Kushtia
Meherpur
Manikganj
Dhaka
Narayanganj
Rajbari
Chuadanga
Jhenaidah
Magura
Faridpur
Munshiganj
Comilla
Madaripur
Shariatpur
Chandpur
Narail
Jessore
Gopalganj
Feni
Barisal
Lakshmipur
Khagrachhari
Rangamati
Noakhali
Khulna
Satkhira
Bagerhat
Patuakhali
Bhola
Chittagong
Bandarban
Cox's Bazar
Kilometers
0
50
100
Percentage of the Population Poor
First Quintile
Second Quintile
Third Quintile
Fourth Quintile
Fifth Quintile
District Boundary
Upazila Boundary
River/Ocean
Capital


BANGLADESH
Proportion of Population below the
*Lower Poverty Line 2010 (Quintile-Lowest to Highest)
&
Pockets of Social Deprivation by Upazila
*Note: The Lower poverty line corresponds to the extreme poor household whose total expenditures are equal to the food poverty line using the Cost of Basic Needs (CBN) method. Ref.: Report of the Household Income & Expenditure Survey (HIES) 2010, BBS, GoB.
India (West Bengal)
India (Assam)
India (Meghalaya)
India (Tripura)
Myanmar
Bay of Bengal
Kilometers
0 50 100
Percentage of the Population Poor
First Quintile
Second Quintile
Third Quintile
Fourth Quintile
Fifth Quintile
District Boundary
Upazila Boundary
River/Ocean
Capital
Percentage of Social Deprivation
Best: <18
Good: 18-22
Average: 23-26
Poor: 27-31
Worst: >31



3.2 Encouraging Signs in Spatial Extreme Poverty

From economic stand-point, spatial disadvantage increases transaction costs, reduces incentives for private investment, and generates negative spatial externalities, all of which make the stubbornness of chronic poverty even harder. It is important, therefore, to assess what happens to these areas over time and across space from the perspective of trends monitoring. In case of Bangladesh, we see positive signs that spatially poor areas (both in the sense of income and non-income poverty) are also improving over time.

Three aspects are noteworthy. First, ***spatially poorest areas have also exhibited significant progress***. Rapid economic growth and social progress since the early 1990s did not bypass the spatially remote areas altogether. The bottom 50Upazilas (sub-district) initially identified in 1991 (GoB 1991) have exhibited progress in most human

development education and health indicators.[8] Real wages have increased in these Upazilas. This is true even in case of areas of chronic seasonal distress (locally known as *Monga*). Althoughhigh regional (Upazila level) dispersions in wage and well-being are still persistent, they are much less pronounced than even two decades ago.

Second, these areas have seen significant activities of targeted programs carried out by NGOs.[9] Past studies exploring the "program placement issue" of key MFI programs revealed that in the early stages of interventions major MFIs and NGOs prioritize to the needs of the poor areas. This deliberate program placement on the part of major NGOs explain relatively high concentration of microcredit in the "lagging" Western parts of the country, especially in the 1980s and 1990s(Khandker 2000; Khandker 2005; World Bank 2007; Osmani and Sen 2011b; Sen et al 2014).

Third, spatial pockets often lack political voice and representation in the parliament. This has not happened in Bangladesh. Since the transition to sustained electoral democracy beginning with 1991, a number of important political representatives have been elected from constituencies corresponding to these spatial poverty pockets—the list includes former speakers of the parliament, cabinet ministers and presidents—who have successfully lobbied for allocating public resources for the poor areas. Successive national elections since 1991 saw switching political regimes: none of the two main parties that has ruled the country in the past two decades got elected for successive two terms.[10] This has led to acute political competition between the two main political alliances for popular votes. This indirectly came to the aid to the poor areas. Acute need for political mobilization for electoral support also meant that the remote geographic areas could figure prominently in the electoral calculations of both the political alliances. Such democratic practices possibly have led to competitive lobbying for state resources and concentration of associated NGO resources in these areas as positive spillover effects. The upshot of the above is to point out that political competition even under imperfect but sustained democracy—under conditions of "democratic mimicry"—possibly matters for attacking chronic poverty.

IV. DRIVERS OF IMPROVEMENTS IN EXTREME POVERTY

What have been the drivers of this improvement? Several factors have contributed to this.

4.1 Role of Rising Rural Wages in Reducing Extreme Poverty

A significant share of the extreme poor households is dependent on the agricultural wage work for their livelihoods. Consequently, they benefit when real agricultural wage rate increases. In Bangladesh, agricultural labor market has tightened significantly in the recent decade of 2000s. This has led to an increase in real agricultural wage rate. The rice wage per day remained stagnant for the most part in the 1980s and increased only modestly in the 1990s (from 3.5 kg in 1990/91 to 4.5 kg in 1999/90). The real breakthrough came only in the second half of the 2000s: rice wage

[8] This has been detailed out in the recently published *Equity Atlas* of BBS in 2013.

[9] This includes, among others, Char Livelihoods supported by DFID and health care program run by GK i.e. Gonoshasthya Kendra).

[10] It may be noted that the share of votes claimed by the two mainstream parties of the country (roughly 40% each) has remained relatively stable over time, but the winning probability varied depending on the combined strength of the other parties and the unpredictable turns in either direction by the swing voters (the last two account for the remaining 20%).

per day remained at 8-10 kg in 2008-13 period. This pattern has been borne out well by the real wage trends using general consumer price index in both rural and urban areas.

Rising land/labor productivity growth in rice agriculture in the 2000s had beneficial effects on the agricultural wage rate and hence on rural poverty. The difference in agricultural wage income was 95% higher in 1988 in case of new technology compared to traditional variety based rice cultivation. The matched difference has come down over time—it was 60% in 2000—but the relative gains for wage labor are still considerable (Hossain and Bayes 2009). Second, *wage growth* also tends to be faster in villages experiencing high growth in land productivity.[11]

The spread of new technology in rice agriculture has created the scope for releasing workers for higher productivity non-farm and non-agricultural work. As a result, there is a more pronounced shift towards non-farm and non-agricultural occupations in villages with highest land productivity compared with villages with lowest land productivity. In villages with high land productivity, the proportion of household heads with farming as main occupation was 39% in 2008 compared with 47% observed in villages with low land productivity. In contrast, those who are engaged in trade were more prominent in high land productivity villages (17% as opposed to 10%).[12]

4.2 Role of Urban Jobs in Reducing Extreme Poverty

The tightening of the agricultural wage labor market witnessed in the 2000s has been contributed principally by three channels: (a) relocation of farm labor to rural non-farm sectors; (b) relocation of rural labor to urban activities through the "pull effects" of urbanization, creating employment opportunities for the extreme poor in labor-intensive construction and transport activities; and (c) by creating jobs for the poor and the extreme poor in the manufacturing sector. Indirect evidence suggests this. The share of farm income in total rural income has dropped from 40% to 36% over 2000-2010 with concomitant rise in the share of non-farm income from 34% to 40%, and that of remittance (domestic and foreign) income from 8% to 11%.[13]

We have seen earlier in Section 2.2 that potential welfare effects for the farm workers in switching to urban jobs are far greater than in case of switch to rural non-farm jobs. While diversification within rural areas, of course, continues to be important for rural extreme poverty reduction, the other factor of *the "pull effects" of the urban sector both as a growth accelerator and a source of jobs for the extreme poor is going to be increasingly and compellingly more important compared to the rural non-farm sector*. This aspect of extreme poverty reduction needs to be taken into due account in course of the Seventh Five Year Plan.This is also in line with more recent rigorous research exploring role of spatial linkages in raising the productivity of the rural non-farm sector (Deichman et al. 2009).

First, the extreme poverty reduction proceeded on a faster pace in urban areas than in rural areas. The urban advantage was present even in 2000, the extreme headcount rate in urban areas being exactly half that of the rural areas (Table 2.6). However, the comparative force of urban factor has magnified during the period since 2000. By 2010, the extreme poverty headcount rate is only about one-third that of the rural areas (7% as opposed to 21%). As urbanization progresses in the next decade due to overall growth

[11] See, Hossain, Sen, and Sawada (2013)

[12] See, Hossain, Sen, and Sawada (2013)

[13] The remaining part is accounted for by the "residual" miscellaneous category. On this, see Osmani and Sen (2011b).

acceleration, it is likely to play even stronger role in rural extreme poverty reduction. The above trend is in line with something that is already happening in the recent years. Between the two censuses of 2001 and 2011, the share of population residing in urban areas has increased from 20% to 28%. The 2013 Economic Census indicates much greater diversity and depth of economic activities in urban areas, with indication of significant growth of business and industrial establishments in peri-urban areas and secondary towns beyond just the Metropolitan areas. Rising Fixed (land) costs in megacities, improved inter-city connectivity and availability of cheap labor (including female wage labor) are contributing to this process. Economic growth unleashed demand for real estate sector/construction and transport activities, which, in turn, generated demand for domestic (migrant) labor, benefiting the extreme and chronic poor. In short, urbanization has already played an important role in overall fast decline in rural incidence of poverty, including rural extreme poverty.

Second, the challenge that the policymakers need to face is to provide policy support to rural extreme-poverty reduction through sustainable urbanization. The latter demands putting emphasis on the mitigation of climate change effects in rural areas, enhance temporary migration opportunities by improving inter-city connectivity and within-city multi-modal transport, and by encouraging relocation of urban jobs increasingly outside of the growing Metropolis to the secondary cities. The latter would be important to reduce congestion costs while at the same time exploiting agglomeration economies associated with rapid urbanization. Rather than pursuing a futile rhetoric of discouraging rural-urban migration (which is against the very logic of economic growth based on transfer of surplus labor from rural to urban sectors)[14], policy emphasis should be on *building urban futures for the rural poorest* through "extension of the urban sector itself". This requires, among others, prioritizing urban infrastructural development for improved connectivity, and investing in human capital of the rural poorest and their families.

Third, the rural-urban relocation of labor also benefitted from the growth of export-oriented manufacturing such as the ready-made garments which currently employ about 4 million workers (75% of which are first-generation women workers mostly from poor families). The question is whether extreme poor households benefitted by this growth. After all, the proportion of female workers with "no formal education" turns out to be only about 7% (Sen 2014). However, education status of the female workers may be a misleading indicator given the rapid spread of primary education among girls in rural areas of Bangladesh since the 1990. To address the extreme poverty question one needs to ascertain the economic status of the parental families from which these workers originate.

A recent study on 1600 female RMG workers drawn from 13 areas of greater Dhaka city shed some light on the issue (Sen 2014).Before joining RMG, the economic situation of workers' households was precarious. About 80% of them were persisting below the subjective food-poverty line: 17% of the workers' households lived in extreme food-poverty and another 63% lived in moderate food-poverty. These workers, on average, have been engaged in RMG sector for about 4 years. The poverty status of the sending (parental) household has changed significantly in this period. Currently, the proportion of parental households persisting below the food-poverty line has come down to 43% from 80%. Consequently, the share of households residing in

[14] On the logic of economic development based on accelerated inter-sectoral rural-urban mobility of surplus agricultural labor, see Lewis (1955).

"breakeven" status (neither deficit nor surplus) has increased from 19 to 36%. It would appear RMG work has reduced poverty in the parental households almost by half in just 4 years!

This remarkable and accelerated progress in the well-being of the "sender households"– the rate of annual decline is faster than the nationally observed rate– may be attributable to RMG sector. Thus, export-led industrialization has a very important role to play in rural poverty reduction, including extreme poverty reduction, an aspect that has remained inadequately studied in the literature.

4.3 Migration and Extreme Poverty Reduction

Creation of additional non-farm employment opportunities, via non-farm diversification in rural areas and rapid urban growth sustained by robust flows of overseas remittance and manufacturing export growth, led to increased out-migration (seasonal and permanent) of labor. Migration contributed to the rise in agricultural/rural wages for workers who remained behind in agriculture/rural areas. The effects of migration on the extreme and chronic poor may have been different for domestic as opposed to international migration.

Thus, most of the domestic migrants belong to the landless and functionally landless households: the latter's share in the pool of domestic migrants has increased from 51 to 57% during 2000-2008.[15] However, domestic migrants are not solely represented by the extreme and chronic poor, as education was found positively correlated with higher physical mobility.[16] Be that as it may, evidence suggests that domestic migration for seasonal or temporary work helps in the main the poorest and poorer groups.

If the domestic migrants are mainly comprised of the *landless and functionally landless* households, the same cannot be said of the international migration that occurred from rural areas. This is expected since the latter involves considerably higher benefits, but also considerably higher costs of migration. Even here some positive recent trends are discernible. The share of the two lowest land-owning groups in rural areas (owning up to 0.40 ha) in the pool of rural households reporting international migrants has increased considerably during 2000-2008. Thus, in 2000, the combined share of these two landowning groups constituted 38%; this has increased to 54% in 2008.[17] An additional check on the educational status of the overseas migrants confirms this pro-poor trend. The share of those with 'no formal schooling' in the pool of households with overseas migrants has increased from 29% to 40% during the same period.[18]

The evidence is also indicative of considerable indirect positive well-being effects of international migration for those who remain behind in rural areas. International migration is recognized as a key driver of economic growth. Remittances from abroad together with manufactured exports have been instrumental in supporting the above

[15] This, however, does not take adequate account of seasonal migration of labor for the construction sector in urban areas.

[16] Hossain, Sen, and Sawada (2013)

[17] Hossain, Sen, and Sawada (2013)

[18] These patterns with respect to international migration must be seen as being indicative only. While lack of land assets is one important determinant of severity and chronicity of poverty, it is by no means the only determinant (Ravallion and Sen 1994). The category of landless and functionally landless households does not solely comprise of extreme and chronic poor. Given the acute land scarcity in rural Bangladesh, many poor households (and, perhaps, vulnerable non-poor) would also arguably fall into this category. The criterion of 'no formal education' is even more economically heterogeneous.

structural shifts in national output. Thus, remittances' share has increased to around 10% of GDP in 2010/11, up from 5% in the late 1990s. Remittances not only have positive effects on wellbeing of the workers' families, but also indirectly have favourable indirect effects on the labor market by encouraging local economic activities. To what extent remittance has a positive effect on extreme poor remains an intriguing question. After all, the share of overseas remittance in total income is only 11% for the landless, but rises up to 16-19% for marginal and small farmers; the matched share is only 3% for the casual agricultural laborer as opposed to 14% for self-employed in agriculture; 12-13% for the less than primary education compared to 16-17% for primary plus and secondary plus education categories (Osmani and Sen 2011b).

However, while casual agricultural laborers have limited resources for financing international migration, indirect effects of international migration through the labor market are of greater significance for this group. Therefore, high agricultural wage growth has been cited more frequently in the household responses in villages experiencing high remittance growth compared with villages experiencing low remittance growth (40% vs. 26%) and vice versa (Hossain, Sen, and Sawada 2013). For the casual agricultural laborers who have limited resources for financing international migration, it is the indirect effects of international migration through the channel of labor market that are of greater significance. The wage growth tends to be faster in villages experiencing high growth in overseas remittances.

The upshot of the above is to point out that new job and income opportunities came to the aid of the extreme and chronic poor. Real gains in daily wage rate combined with expansion of employment opportunities meant that the real wage income of this group rose in the recent decade, which is consistent with the overall picture of falling extreme poverty.

4.4 Institutionally Transformative Growth and Extreme Poverty Reduction

One of the key factors behind successes in extreme poverty reduction has been the overlooked fact that Bangladesh experienced not just any growth, but *institutionallytransformative* growth. By the latter coinage we would like to distinguish a growth process that not only accelerates per capita GDP/ GNP growth rate but also brings about *institutional changes that magnify the poverty reducing effects* of economic growth. Agrarian theorists such as Lenin (1976) and Kautsky (1988) underscored the need to study the process of "reorganization of the countryside" under the influence of industrial/ urban capitalism. This reorganization under duress can unleash agrarian protests, eventually culminating in social dislocation on a grand scale—the process is often called "agrarian revolution" as a direct consequence of "primitive accumulation". This has taken place in many developing countries with still unresolved peasant question: peasants could no longer lead the old ways of self-sustaining "peasant mode of production" nor they could become readily proletarianized to join the flexible ranks of the industrial reserve army (fluctuating in tandem with the business cycle). The result of this unfinished transition is mass poverty in early stages of capitalist development.[19] But, this need not be inevitable. Reorganization of the countryside can proceed in a relatively peaceful manner to support the gradual ascent of the unskilled labor notwithstanding growing inequality, as arguably has taken place in Bangladesh. While this is a subject of specialized and comprehensive investigation beyond the scope of the current paper, we are tempted to highlight two key aspects of

[19] On the recent review of land question as applied to Third World peasantry, see, Rosset et al. (2006).

institutionally transformative growth that have had strong footprints on rural extreme poverty reduction.

The first most significant growth-induced transformation that has taken place in the countryside relates to the "progressive" emergence of pro-poor and pro-poorest land-tenancy institution.[20] Not only has the green revolution in the crop sector has proceeded with accelerated pace, it has also led to pro-poor shifts in rural factor markets such as the land tenancy market. Land under tenancy has increased, a pronounced shift from share-tenancy to fixed rent and leasehold tenancy has taken place, and (rather surprisingly) one may note a rise in the share of "pure tenancy". The evidence suggests that the landless/ marginal farmers may have been the major beneficiaries of these changes in rural institutions, thus generating pro-poor effects. For instance, the share of leased-in land in total operated land held by rural households increased impressively: from 23% in 1988 to 33% in 2000, rising further to 40% in 2004 (Hossain and Bayes 2009). This has also benefited the landless groups (those owning up to 0.20 ha). The corresponding figure for the latter increased from 31% to 50% during 1988-2004. The social base of tenants became more broad-based and larger over time: the proportion of households leasing in-land increased from 44% in 1988 to 54% in 2000, rising to 58% in 2004. The class of "pure tenants" did not vanish in the process of penetration of capital in agriculture: the share of landless tenants in fact went up from 34% in 1988 to 54% in 2004 (Hossain and Bayes 2009).

Moreover, the form of tenancy has also changed: inefficient and oppressive forms of share-cropping have declined gradually over time. Thus, the share of leased-in land in total cultivated land was 40% in 2004 (16% was cultivated under cash-rent and 24% under share-rent). This would imply that share-cropping was representing no more than 60% of total leased-in land in 2004. This is a marked change, as share-rent was the historically pre-dominant form, with cash-rent virtually missing as a form of leasing in the early 1980s (Hossain and Bayes 2009).

These changes in the tenancy market have had favorable employment and welfare implications for the extreme land-poor groups. Cash-rent allows more return to farm labor than share-rent (cash-rent is equivalent to one-fourth of the produce to be paid to landowners than the typical share-rent claim which is about one-half of the produce). Favorable changes in land-tenure as a source of additional remunerative employment for the landless and consequently, as an exit route out of poverty--may come as surprise, as many observers of the period believed that the only way out under land-scarce conditions is movement towards rural non-farm labor.

The second most significant growth-induced transformation that has taken place in the countryside relates to the "progressive" emergence of credit market institution for the rural poor and the poorest. The evidence suggests that the landless/ near landless groups account for the bulk of the institutional (government plus microfinance institution (MFI)) credit in Bangladesh—the combined share was 53% in 2008. The share of the landless group in total rural institutional credit increased from 21% in 1988 to 43% in 2008 (Hossain and Bayes 2009). Although MFI loans are given for rural non-farm sectors, the fund is often rechanneled to farm operations (and vice versa). Again, since clients of MFIs are mainly rural women, the above-mentioned transformation of the tenancy market also coincided with the "feminization" of agriculture: 66 percent of economically active women participated in agricultural activities in 2008, an increase from 58 percent in 2000 (Jaim and Hossain 2011).

[20] For initial attempts at these interpretations discussed in Section 2.4, see, Hossain et al. (2013).

The third most significant growth-induced transformation that has taken place in the countryside relates to the "progressive" emergence of labor market institution for the rural poor and the poorest. The share of casual wage dependent agricultural labor has gone down in times peak agricultural activities. The latter has increasingly given away to the contractual labor in farm activities. Beginning with 2000, we find also increasing evidence that construction works in the countryside, brick fields, and the real estate sector are taking recourse to the "contract" form of labor use where payment is made not on a daily basis but against a defined work-load shared usually by a group of laborers. Contractual work in the form of small brigade results in higher wage income compared to daily wage and perhaps even contribute to higher productivity. Contractual work is likely to be more voice-enhancing for the workers. All these changes augur well with the maintained hypothesis of faster extreme poverty reductionunder institutionally transformative growth. The above-mentioned three significant growth-induced transformations are other possibilities of "great transformations" that modernity can bring about under certain contexts and as such need to be studied in greater depth.[21]

V. GROWTH ELASTICITY OF EXTREME POVERTY AND POVERTY PROJECTIONS FOR THE SEVENTH FIVE YEAR PLAN

If the power of transformative growth has been potent enough, it should have resulted in a major decline in extreme poverty. The response of extreme poverty reduction to growth is statistically termed as "growth elasticity of extreme poverty reduction". This is undertaken to assess the feasibility of the planned objective "ending extreme poverty" by 2021. Although poverty projections were done in the past (Gimenez et al. 2014)it was not done for extreme poverty. This is where the present section contributes to the literature. Such elasticity can be a helpful guide in anticipating future extreme poverty trends subject to certain caveats in the backdrop of which such poverty projections are typically made.

5.1 Extreme Poverty Projections: Three Caveats

We wish to highlight three such caveats that needs to be kept in view in interpreting the policy stance on extreme poverty projections based on observed (past) growth elasticities. First,the net growth elasticities are based on past trends on inequality of consumption expenditure. And the past trends in consumption were favourable—declining in urban areas, slight increase in rural areas, but mostly displayed a stable pattern. The extreme poverty projections are implicitly premised on the possibility that such favorable inequality trends will continue till 2021. This is, of course, a big assumption about favorable change in Gini in the next decade.If the consumption inequality starts to rise in the next decade—due to structural factors involved in the Kuznets process (on this, see Ray 1998)—then net growth elasticities would be reduced, resulting in a higher share of the proportion of extreme poor by 2021 (i.e. the matched share would be higher than 3-4% estimated under the most favorable growth scenario).

Second, net growth elasticities also implicitly assume that pressures of downward sliding down the extreme poverty ladder would not aggravate during the next decade.

[21] For a classic statement of radical aspects of "great transformations" associated with the advent of capitalism, see Polanyi (1944).

We know the observed cross-sectional headcount rate at any given point time (as typically done based on HIES) is actually the result of two opposing dynamic tendencies—one pulling the extreme poverty up (the so-called "movers" group), and another pushing the extreme and non-extreme poor households down the extreme poverty ladder (the so-called "fallers" group). Increased susceptibility to shocks in the next decade can easily nullify the extreme poverty projections based on past trends. Signs of such adverse futures on account of risks and uncertainties cannot be ruled out altogether in Bangladesh due to heightened climate change induced shocks, misgovernance triggered shocks, and aggravating health shocks(see, Box 2). Mitigating, or where possible preventing, these shocks need to be at the heart of any policy package on extreme poverty reduction. The shock-prevention programmes for the fallers need to be costed out equally diligently as the programs for encouraging faster take-off for the movers. The upshot of the argument is that even in the presence of favorable growth elasticities cost of ending extreme poverty by 2021 would be higher than the linearly projected amount simply because of unanticipated risks of falling again into extreme poverty.

Third, for the extreme poverty projections, growth elasticities statistically treat all extreme poor groups equally. This disregards the varying contexts for social reproductions of diverse category of extreme poor groups. As we have already noted in Section 2.3, some extreme poor groups are more deprived in terms of powerlessness and social exclusion than others. Some are also more hard-to-reach groups spatially or socially than others, requiring not just using economic routes, but also measures to promote empowerment and inclusion in the mainstream network of social cohesion. As a result, climbing up process for the latter may be more time-consuming (due to added search costs) and arduous (due to initial social disadvantages), consequently the actual growth elasticities for the more powerless and more excluded groups within extreme poverty would be lower than average elasticities for the overall extreme poor category.[22]

5.2 Methodology and Data

Bangladesh has been quite successful in poverty reduction in the last decade and the headcount poverty rate has been declined on average 1.7 percent per year from 48.9 % in 2000 to 31.5% in 2010 (Bangladesh Bureau of Statistics, 2011). Poverty in both rural and urban areas consistently declines in the last decade. However, poverty still continues to be a substantial and stubborn problem for Bangladesh as 47 million people still lived in poverty and 26 million people lived in extreme poverty in 2010. To maintain the current pace of poverty reduction in the years ahead, we need to understand the trend of poverty reduction in the last decade; and the role of economic growth and redistribution to the poverty reduction. Part of the answersas to why poverty declined so sharply in the 2000s lies not only in high economic growth but also in declining inequality in the decade of 2000.

The main goal of this section is that given the poverty reduction performances in the last decade, can Bangladesh expect to become free of extreme poverty by 2021? This

[22] It may be noted that growth elasticity of extreme poverty reduction cannot be computationally generated for male and female population separately. This is because HIES data f or consumption are typically collected at the household level i.e. not disaggregated by gender status of the individual members of the household. As a result, poverty measures are also typically calculated at the household level.

paper analyzes the role of economic growth and inequality on the poverty reduction in the 2000s and projects the future poverty rates till 2021 based on lower poverty lines[23]. To project the poverty rates for years ahead, the poverty reduction in the last decade has been decomposed into two components: the growth component and the redistribution component; and the net elasticity of poverty estimated with respect to the per-capita consumption growth. The growth component accounts for the poverty reduction due to per-capita consumption growth holding distribution of income constant; while the redistribution component captures the role of inequality on the poverty reduction holding per-capita consumption constant. We estimate net elasticity of poverty reduction with respect to growth to project the headcount index of extreme poverty for the years ahead till 2021. We use two rounds of household income and expenditure survey (HIES) (2000 and 2010) conducted by the BBS in collaboration with the World Bank.

Consumption Growth in the 2000s

Real per-capita consumption growth was about 20 percent between 2000 and 2010; and the consumption growth was much higher in the rural areas than in the urban areas for this period. While rural consumption growth was about 21 percent, the matched figure for the urban areas is about 9 percent only. Moderate poor has declined on average 1.74 percentage point per year, but extreme poverty has declined by 1.67 percentage points per year. Equal pace in the poverty reduction of both moderate poor and extreme poor implies a general shift in the consumption level and a positive inequality outcome. Generally, for the countries in transition from an economically backward to a progressive sector, economic growth comes with rising inequality level (Ray, 1998). However, economic growth in Bangladesh in the 2000s has been accompanied by a declining inequality and thus growth and redistribution components were moved into same direction for poverty reduction. Using lower poverty lines, poverty reduction in the urban areas outperforms the poverty reduction in the rural areas the headcount index of extreme poverty has declined by 6.2 percent while the matched figure for rural area is 4.4 percent. Though, the base of the extreme poverty in the rural areas was much higher than to the urban areas (37.9 percent vs. 20 percent (HIES 2000)).

Method of Growth Elasticity to Poverty Estimation

Here we estimate the elasticity of poverty with respect to growth following the poverty decomposition approach explained in Datt and Ravallion (1992). The basic idea behind the decomposition is to separate the change in poverty headcount into its expenditure growth component and redistribution component. The overall change in poverty from period 0 to period 1 can be decomposed as follows:

$$\Delta^{p} = [P(\mu_1, L_0) - P(\mu_0, L_0)] - [P(\mu_0, L_1) - P(\mu_0, L_0)] + \varepsilon \quad (1)$$

Where p stands for poverty measures, μ stands for average consumption, and L represent the relative inequality measure.

Here the first component represents the change in poverty due to growth in the per-capita consumption expenditure holding distribution of the per-capita consumption expenditure constant, while the second component represents the change in poverty due to a change of distribution in the per-capita consumption expenditure holding income constant. Following the decomposition of poverty reduction into the growth component

[23] A similar estimation and projection for poverty rates based on *upper poverty lines* have been carried out by Gimenez et al. (2014).

and the redistribution component, we will estimate net elasticity of poverty with respect to growth in the per-capita consumption expenditure to project poverty rates till 2021 based on lower poverty lines.

From Giménez et. al. (2014), the net elasticity of poverty with respect to growth, λ, can be presented as

$$\lambda = \gamma + \beta \times \delta$$

Here γ is the gross elasticity of poverty to growth implying the percentage change in poverty due to percentage change in consumption expenditure holding the level of distribution of per-capita real expenditure constant. The second component, $\beta \times \delta$, captures the percentage change in poverty rate due to percentage change in the inequality keeping the level of per-capita real expenditure constant. While the first component is expected to be negative, the second component could be either positive or negative depending on the role of consumption growth to the inequality.

Datt and Ravallion (1992) decompose the change in poverty into its growth and redistribution components by generating counterfactuals of the per-capita expenditure. We have generated two counterfactuals of real per-capita consumption expenditure for 2000 and 2010 by changing consumption uniformly across the sample households using the average growth rate of real per-capita consumption expenditure between 2000 and 2010. The gross elasticity of poverty, λ, to growth has been estimated by calculating the difference in poverty rates between the counterfactual and the base-year expenditure distribution. The redistribution component has been estimated by computing the difference in poverty under the counterfactual and that for the end of the period distribution, and by dividing it by the percentage change in the mean real per-capita consumption. Datt and Ravallion (1992) method of poverty decomposition could be done in two ways: forward and backward. By taking the average of these two methods, we eliminate the residual components in Datt and Ravallion (1992).

5.3 Discussion of Main Results

We have carried out this exercise for both the moderate poverty lines and the extreme poverty lines to check the consistency and robustness of our estimates with the estimates of Giménez et.al. (2014) as they have carried out the same exercise for moderate poor with the same data. We have found the same gross and net elasticity of poverty with respect to consumption growth based on moderate poverty lines as reported in Giménez et.al (2014). The elasticity estimates for extreme poverty are then used for extreme poverty projection till 2021. Table 5.1 presents elasticity of both moderate poverty and extreme poverty with respect to the per-capita consumption growth and to the growth of the Gini coefficient of inequality for national, rural, and urban areas. In the 2000s, both consumption growth and change in inequality lowered poverty rates especially in the urban areas. Using lower poverty lines, and factoring out of changing inequality, poverty would have been much higher in the urban area.

Nationally, without any change in inequality, a one-percentage point increase in per-capita consumption would have been resulted in a 1.77 percentage point decline in the headcount ratio of extreme poverty. With a headcount of about 34.3 percent, this represents a 0.61 (34.3*-1.77/100=-0.61) percentage points decline in the share of population below the lower poverty line. Declining inequality results in a declining extreme poverty- a one percentage point decrease in the Gini coefficient of inequality decreases the headcount index for the extreme poor by 0.28 percentage points. The net

elasticity of poverty with respect to growth is thus -2.05 as compared to the gross elasticity of -1.77. About 14 percent ($\beta^*\delta$ as a percent of λ) of the extreme poverty decline was came from the decrease of inequality during the period. The upper poverty lines show a similar trend but with lower gain from inequality moderation. While a one percentage point decline in the inequality reduces extreme poverty by 0.28 percentage points, the matched reduction in moderate poor is only 0.09 percentage points.

The positive poverty outcome due to decline in inequality was mainly from urban areas. The results presented in the Table 5.1 suggest an important difference between the rural and urban area-per capita consumption growth has been associated with declining inequality in urban areas but not in rural areas. The gain in poverty reduction due to lowering inequality was much strong in urban areas. While a one percentage point decrease in the Gini coefficient of the inequality reduces poverty by (20*(-1.25/100)=0.25) 0.25 percentage point in the urban areas, the inequality in the rural areas has been increased and a one-percentage point increase in inequality increased the headcount index of extreme poverty by (37.9*(0.27/100)=0.25) 0.1 percentage point. One-tenth of the potential extreme poverty decline due to growth was lost due to rising inequality in the rural areas.

However, the rural growth in per capita consumption has a bigger net impact on reducing extreme poverty than the per-capita consumption growth in the urban areas. Despite the per-capita consumption growth in the urban areas had a much low impact on the poverty reduction, the urban growth of per-capita consumption came with the reduction of inequality which in turn had a bigger role on the sharp reduction of extreme poverty in the urban areas. The net elasticity of poverty reduction with respect to growth in urban areas is thus -1.84 which is more than triple of the gross elasticity of poverty reduction. -0.59. The net elasticity of extreme poverty with respect to consumption growth in the rural areas is stronger than the net elasticity of extreme poverty with respect to growth in the urban areas implying that more rapid rural development would reduce extreme poverty faster than more rapid urban development.

Poverty estimates based on extreme poverty lines are projected to 2021 by applying the net elasticity of poverty to growth estimated above using the baseline 2010 extreme poverty rates at national, rural and urban level (17.6 percent, 21.1 percent, and 7.7 percent respectively). Projections are made using four real GDP growth scenarios (e.g. 5.5, 6, 7, and 8 percent). It is assumed that net growth elasticity of poverty would remain same over the projection period. In the second table of projected extreme poverty rates, we have used the economic growth rates net of population growth rates[24].

Estimates for each of the four resulting scenarios are presented in Table 5.2. The projected figures suggest Bangladesh would successfully reduce its extreme poverty to below 5 percent even with the current growth scenarios of 5.5 percent. To reach near the elimination of extreme poverty, Bangladesh should eventually realize higher level of real GDP growth rate such as 7 percent or 8 percent. Once population growth rate is accounted, poverty rate based on lower poverty line would end up around 6 percent in 2021 with the current level of GDP growth rate (Table 5.3). With current growth scenario, extreme poverty rate in the urban areas would be around 2 percent in the year of 2021. Given Bangladesh would perform poverty reduction as fast as in the last decade, overall projections suggest that Bangladesh would reduce extreme poverty rate

[24] Elasticity of poverty to growth has been estimated based on per-capita consumption expenditure and thus it is practical to use per-capita real GDP growth instead of overall real GDP growth.

considerably by 2021. The projection also suggests that we would see extreme poverty rate lower than 10 percent by 2015, the end of the current sixth five year plan period.

BOX2

Crisis, Impact and Coping: Addressing the Problem of Fallers

People in this country, especially those who live in rural areas encounter various shocks. Not all kinds of shocks, however, affect in equal measure the likelihood of slippage along the extreme poverty ladder (Baulch 2012; Osmani and Sen 2011a). The most prominent of these are natural hazard and health related shocks. This also includes crop failure or damage, loss of livestock, loss or damage of household fixed assets, and wedding and dowry expenses. Many of these inflict a large economic burden on the affected households. The study (Ahsan et al., 2013) also points out that among the insurable risks the larger burdens appear to be associated with health shocks followed by property shocks. The study also reveals that these latter shocks disproportionately affect households whose primary members are typically engaged in agriculture (crop and livestock), casual labor (livestock), transport work (health) and small businesses (property). Regular household income and accumulated savings are not sufficient to cope with these shocks. Consequently, they mainly deal with these by additional borrowing, selling physical assets and livestock, all of which are unsustainable in any forward-looking context as the study observes.

As previously mentioned, Bangladesh is one of the few countries most vulnerable to natural hazards with high population density. Moreover, high level of poverty and vulnerability and depleted ecological system make it more vulnerable to climate change, which threatens the development achievements that the country as so far achieved. The increasing risks from climate change and sea level rise, natural and man-made hazards, such as cyclone, storm surge, flooding, land erosion, water logging, salinity intrusion in soil and water have adversely affected livelihoods of people living in environmentally fragile areas.

A study conducted by Ali et al. (2009) observed that although different areas (hotspots) are prone to different types of hazards, intensity and frequency of climatic events are increasingly bringing about greater impacts on the lives and livelihoods of the people. Some devastating historical disasters have affected almost all places though the degree of effect may be different. Once it happens, the most affected sector is usually agriculture because crop cultivation is highly depended on nature. The fisheries and livestock sectors are also highly affected. Due to various climatic hazards, landlessness is gradually increasing in almost all ecologically vulnerable areas which are severely affecting the incomes of the people, especially of the poor and the extreme poor, as rural people are mostly depended on agro-based livelihoods. Food insecurity is a direct consequence of landlessness, because when people cannot grow crops, they cannot provide food for their families. In some areas, climatic hazards have led to new social conflicts or increased the previous ones. Social insecurity such as theft, harassment also increases.

Coping mechanisms and adaptation vary according to the type of hazard in different areas. Temporary migration is most frequent for the working member of the hazard affected households. The adaptive capacity of a community or household depends on its range of resources, which enable it to moderate potential damages and cope with consequences of climate change. The study also observed that none of the climatic areas have a high adaptive capacity which is understandable given their very poor asset base which prevents asset transformation in times of need.

TABLE 5.1

GROWTH ELASTICITY ESTIMATES (2000-2010)—DATT AND RAVALLION (1992) METHOD (HIES)

	Upper Poverty Line (Adept Based)			Lower Poverty Line (Adept Based)		
Parameter	**National**	**Rural**	**Urban**	**National**	**Rural**	**Urban**
γ	-1.55	-1.84	-0.78	-1.77	-2.52	-0.59
$\beta^*\delta$	-0.09	0.13	-0.69	-0.28	0.27	-1.25
λ	-1.64	-1.71	-1.47	-2.05	-2.24	-1.84

Note: The base is the national poverty line for 2005.

TABLE 5.2

EXTREME POVERTY HEADCOUNT PROJECTIONS FOR 2011-2021

	National				**Rural**					**Urban**				
Assumed GDP Growth Rates	5.5	6	7	8	5.5	6	6.5	7	8	5.5	6	6.5	7	8
Net Elasticity	-2.05	-2.05	-2.05	-2.05	-2.24	-2.24	-2.24	-2.24	-2.24	-1.84	-1.84	-1.84	-1.84	-1.84
2010	17.6	17.6	17.6	17.6	21.1	21.1	21.1	21.1	21.1	7.7	7.7	7.7	7.7	7.7
2011	15.62	15.44	15.07	14.71	18.50	18.26	18.03	17.79	17.32	6.92	6.85	6.78	6.71	6.57
2012	13.85	13.54	12.91	12.30	16.22	15.81	15.40	15.00	14.22	6.22	6.09	5.97	5.84	5.60
2013	12.29	11.87	11.06	10.28	14.22	13.68	13.16	12.65	11.67	5.59	5.42	5.25	5.09	4.78
2014	10.91	10.41	9.47	8.60	12.47	11.85	11.24	10.67	9.58	5.03	4.82	4.63	4.44	4.07
2015	9.68	9.13	8.11	7.19	10.93	10.25	9.61	8.99	7.86	4.52	4.29	4.07	3.86	3.47
2016	8.59	8.01	6.95	6.01	9.59	8.88	8.21	7.58	6.45	4.06	3.82	3.59	3.37	2.96
2017	7.62	7.02	5.95	5.02	8.41	7.68	7.01	6.39	5.30	3.65	3.40	3.16	2.93	2.53
2018	6.76	6.16	5.10	4.20	7.37	6.65	5.99	5.39	4.35	3.28	3.02	2.78	2.56	2.15
2019	6.00	5.40	4.37	3.51	6.46	5.76	5.12	4.55	3.57	2.95	2.69	2.45	2.23	1.84
2020	5.32	4.74	3.74	2.93	5.67	4.98	4.37	3.83	2.93	2.65	2.39	2.15	1.94	1.57
2021	4.72	4.15	3.20	2.45	4.97	4.31	3.74	3.23	2.40	2.38	2.13	1.90	1.69	1.34

TABLE 5.3

EXTREME POVERTY HEADCOUNT PROJECTIONS FOR 2011-2021 (NET OF POPULATION GROWTH RATE)

		Per-Capita GDP Growth (net of Population growth)													
		National				Rural					Urban				
Assumed GDP Growth Rates		5.5	6	7	8	5.5	6	6.5	7	8	5.5	6	6.5	7	8
Per-capita Growth		4.2	4.7	5.7	6.7	4.2	4.7	5.2	5.7	6.7	4.2	4.7	5.2	5.7	6.7
Net Elasticity		-2.05	-2.05	-2.05	-2.05	-2.24	-2.24	-2.24	-2.24	-2.24	-1.84	-1.84	-1.84	-1.84	-1.84
	2010	17.6	17.6	17.6	17.6	21.1	21.1	21.1	21.1	21.1	7.7	7.7	7.7	7.7	7.7
	2011	16.08	15.90	15.54	15.18	19.11	18.88	18.64	18.41	17.93	7.10	7.03	6.96	6.89	6.75
	2012	14.70	14.37	13.73	13.10	17.32	16.89	16.47	16.06	15.24	6.56	6.43	6.30	6.17	5.92
	2013	13.43	12.99	12.12	11.30	15.69	15.11	14.55	14.01	12.95	6.05	5.87	5.69	5.52	5.19
	2014	12.28	11.74	10.71	9.75	14.21	13.52	12.86	12.22	11.01	5.58	5.36	5.15	4.94	4.55
	2015	11.22	10.61	9.46	8.41	12.87	12.10	11.36	10.66	9.36	5.15	4.90	4.66	4.42	3.99
	2016	10.25	9.58	8.35	7.25	11.66	10.82	10.04	9.30	7.95	4.75	4.48	4.21	3.96	3.50
	2017	9.37	8.66	7.37	6.26	10.57	9.68	8.87	8.11	6.76	4.39	4.09	3.81	3.55	3.07
	2018	8.56	7.83	6.51	5.40	9.57	8.67	7.83	7.07	5.75	4.05	3.73	3.44	3.17	2.69
	2019	7.83	7.07	5.75	4.66	8.67	7.75	6.92	6.17	4.88	3.73	3.41	3.11	2.84	2.36
	2020	7.15	6.39	5.08	4.02	7.86	6.94	6.12	5.38	4.15	3.45	3.12	2.82	2.54	2.07
	2021	6.54	5.77	4.49	3.46	7.12	6.21	5.40	4.70	3.53	3.18	2.85	2.55	2.28	1.81

Note: Population Growth in 2000-10 was 1.37 (Here we assume 1.3)

[Reproduce this table in abs. number]

VI. MINI-BIG PUSH THROUGH SUCCESSFUL ANTI-POVERTY INTERVENTIONS

Bangladesh is not only the pioneer in the field of microcredit but it is also a testing ground for successful pilots in attacking ultra-poverty. These pilots merit wider replication in the Seventh Plan. Some of the successful programmes are discussed below.

6.1 Interventions that went beyond Tokenism

Quite a few extreme poverty programmes have been/are being implemented in different regions of the country with a common objective of helping the extremely poor people to overcome extreme poverty situation. Of them, six major extreme poverty programmes have been reviewed here to have an understanding of the programmes; target beneficiaries; and delivery of assets, transfers and services. They include: Char Livelihoods Program (CLP), Rural Employment Generation for Public Assets (REOPA), Strengthening Household Abilities for Responding to Development Opportunities (SHOUHARDO), BRAC's Targeting the Ultra-Poor (TUP) Program, Urban Partnerships for Poverty Reduction (UPPR), and Economic Empowerment of the Poorest Program (EEP/Shiree).

Char Livelihoods Program (CLP)

The Char Livelihoods Program (CLP) works with the goal of improving the livelihoods of extreme poor households living in chars in north western Bangladesh. Improving the livelihoods, income and food security is the core aim of Char Livelihoods Program. Extremely poor women, children and men living on island chars in the north west of Bangladesh are the main target group of this program. CLP-1 targeted 55,000 of the poorest households while CLP-2 began in April, 2010 with the aim of lifting 67,000 households out of extreme poverty.

Extreme poor households living on chars avail the full support of access to health services, village savings and loans groups, cash for work etc. In order to be a part of the program, the households must fall into some fixed criteria. The household, which has been living on the char at least for 6 months where the household does not have any owned land or regular source of income, can be a part of the CLP. Here the household cannot have productive assets more than tk.5000, cannot have more than 2 sheep/goats, and cannot have more than 10 fowl or one shared cow[25]. Again the eligible household for the char livelihoods program cannot be part of any other such program which provides cash or asset and also the households must be willing to attend weekly group meetings for 18 months.

The main process of delivering the services to the household is that they are provided with some income generating asset of their own choice valued at Taka 16,000 (approximately equivalent to GBP 140). Their access to clean water and a sanitary latrine are also ensured through services and trainings. This program provides stipend payments for 18 months and access to village savings and loans. It also creates access to some social development group for 18 months which gives trainings and vouchers for access to health services.

To determine outcomes, the CLP uses the pipeline control method whereby the status of new entrants (new cohorts) is compared to the status of earlier cohorts and any difference is termed an outcome. Additionally, in 2011 they started collecting data from

[25] Implementation of such programs are fraught with obvious administrative and behavioral constraints.

a sample of households who meet the CLP selection criteria but who will not receive support for another year, although they will receive support at a later date. The status of these households (termed as control households) is being monitored alongside households that did receive support in 2011, and therefore, offers another method of measuring outcomes. By comparing these data it is observed that there is an increase in the value of assets over time, with productive assets continuing to grow among CLP participants. It is also observed that CLP participants have more access to agricultural lands than non-participants, and CLP participants are moving towards multiple source of income. Their expenditure is also more on purchasing income generating asset and less of food stuff.

As this program is explicitly focused on chars, program should focus more on extreme vulnerability to flooding.

Rural Employment Generation for Public Assets (REOPA)

REOPA is a project which supports female headed households by providing two years of employment for destitute women and employment for casual laborers during the lean period. Also, the women take on various training sessions on social and legal issues, gender equity, human rights, primary health care, nutrition and income generation. This project has been implemented in 6 vulnerable districts involving 'Union Parishad'. REOPA employs 60 destitute women per Union as Women Crew Groups (WCG) in two 2-year cycles where each employment cycle maintains 30 km earthen roads per Union. Mainly widowed, divorced and abandoned women are selected for the programme.

Linkages with service providing agencies and capacity strengthening activities for Local Government Institutions are also important components of REOPA. Union Parishads (UPs) and Upazilas have been exposed to participatory planning and monitoring, livelihoods development and targeting which has been successful in reaching the vulnerable through formal and on-the-job training.

Strengthening Household Abilities for Responding to Development Opportunities (SHOUHARDO)

The overall objective of CARE Bangladesh's SHOUHARDO program is to sustainably reduce chronic and transitory food insecurity in the society. SHOUHARDO addressed not only the availability, access and utilization issues that lead to food insecurity, but also the basic issues that contribute to vulnerabilities such as a lack of participation, social injustice, and discrimination that prevent people from realizing their full potential in leading healthy and productive lives. It is maintaining a strong emphasis on improving food and livelihood security, nutrition for poor and extreme poor (PEP) and promoting women's empowerment at the community level. In the second phase, the program has an added component aimed at strengthening local governance and improving adaptation to climate change.

SHOUHARDO-I worked on 400,000 households in 18 districts. SHOUHARDO-II is trying to transform the lives of 370,000 Poor and Extreme Poor (PEP) households in 11 of the poorest and marginalized districts in Bangladesh by reducing their vulnerability to food insecurity *(*Annual Report, 2013). To ensure better services to the program beneficiaries, SHOUHARDO-II is working closely with three key institutions: Village Development Committees (VDC), Union Parishad (UP) and Nation Building Departments (NBDs).

The SHOUHARDO program was successful in establishing pro-poor community-based institutions as a means of increasing the capacity to coordinate development activities. With the help of this program, households are able to considerably increase their mean household income per capita to BDT 1,255 which was previously BDT 890. The program has also established 193 Savings Groups (SGs) with 25 members per group during year 2013. In 2013, as a result of the increased production and income and savings activities, distress selling by the poor and extreme poor (PEP) households has reduced to 17 % compared to 20.2 % in 2012 (Annual Report, 2013).

BRAC's Targeting the Ultra-Poor (TUP) Program

BRAC had been at the forefront of innovative programs for addressing extreme poverty. In 2002, BRAC initiated and executed an innovative anti-poverty program called "Challenging the Frontiers of Poverty Reduction" (CFPR) that was later on entitled Targeting the Ultra-Poor (TUP) program. The main objective of this program is to assist the ultra-poor population graduate from extreme poverty, get access to the mainstream development programs and establish sustainable livelihood improvement.

In the first phase it covered 100,000 ultra-poor households from 15 of the poorest districts of Bangladesh over the period of five years. It was launched in three relatively poor districts in Northwest Bangladesh including Rangpur, Kurigram, and Nilphamari. At present, BRAC TUP has a target of driving 1.2 million extreme poor out of poverty in 268 Upazilas.

A multidimensional program TUP incorporates both livelihood protection and advancement components. It uses significant improvements in targeting and connecting social capital through village support networks and sponsorship of community leaders. It emphasizes on developing human (such as health, education, and training) and physical capital (such as, asset transfers) for poor women with the goal of helping them graduate to the standard micro-credit program of BRAC.

The program affects the extreme poor positively. It has been found that after two years of implementation of the program, beneficiary women have higher labor force participation, and they allocate more time to self-employment and less to wage-labor. More specifically, they have higher income, higher per-capita expenditure, and improved food security. The programme has significant effect on female participating in the market in the treated communities. The wage rate for unskilled female labor has also risen.

Urban Partnerships for Poverty Reduction (UPPR)

The Urban Partnerships for Poverty Reduction programme (UPPR) is working in slums and informal settlements in 23 cities and towns which have a distinct focus on women and children. It is consolidating communities so that people can accomplish and improve their own lives, and demand better services from the Government. The main purpose of the project is to improve the livelihoods and living conditions of 3 million urban poor and extremely poor people, especially women and girls.

The program has a target of achieving access to improved water supply for 615,000 people and access to improved sanitation system for 717,000. Better footpaths and drainage system have been developed for 1.6 million people. Also, 260,000 poor households have been supported through savings and credit. UPPR is a women and children focused program, whereby 140,000 extremely poor women has been helped to set up a small business to increase their income and 70,000 children received education

grants to help them go to school. (Annual Review, 2012). The UPPR programme represents an effective model for the delivery of improved living conditions and livelihoods for the urban poor and extreme poor at considerable scale.

Between 2009 and 2013, the headcount of multidimensional poverty reveals that poor households had fallen from 41.7% to 28.9% in seven towns. Another study of women's empowerment in 2013 showed that the Community Development Committee (CDC) leaders have high levels of empowerment; active Primary Group (PG) members have moderate levels of empowerment; while inactive PG members have lowest levels of empowerment. By December 2013, over 90 per cent of leadership positions in CDCs were being held by poor and extremely poor women. UPPR has promoted for a multi-sectoral approach where communities and local government institutions (LGIs) jointly take the lead (Progress Report, July to December 2013).

Economic Empowerment of the Poorest/Stimulation Household Improvement Resulting in Economic Empowerment (EEP/Shiree)

EEP/Shiree is an extreme poverty focused programme being implemented in different parts of the country with an aim to enable over 1 million people to lift themselves out of extreme poverty and achieve sustainable livelihoods by March 2016. The programme also seeks to reduce the vulnerability of the extreme poor to natural disasters, economic shocks, social exclusion and malnutrition. EEP/Shiree is also committed to addressing the needs of the extremely poor women, children, elderly and ethnic minorities and marginalised groups. In addition to supporting direct interventions, EEP/Shiree supports research and disseminates key findings and lessons learned from the programme's experience with the aim of transforming the way in which extreme poverty is approached by government, donors, NGOs and the public. It seeks to increase the knowledge base on the distinct experiences of extreme poverty in Bangladesh, and to raise awareness of extreme poverty in an international context.

While there are varying definitions of extreme poverty, Shiree beneficiary households fall well within the poorest 5% of the Bangladeshi population. This marginalized segment of the population includes households who are often affected by: chronic malnutrition, insecure employment, lack of shelter, landlessness, limited or no physical assets, little social or political capital, limited ability to withstand shocks, and poor access to health, education and other basic services and social safety-net programmes.

Extreme poverty is a complex and dynamic phenomenon in which numerous social, cultural and health factors influence a household's ability to lift itself out of poverty or to sustain positive gains. EEP/Shiree is helping the poorest households who have failed to benefit from economic growth, social protection mechanisms and other development programmes. SHIREE works in different geographic location of Bangladesh including some adverse ecology including: the Northwest (especially affected by seasonal hunger), the Southern coastal belt (most vulnerable to severe climatic shocks including cyclones), the Chittagong Hill Tracts, the Northeast haor region, and Dhaka urban slums.

Although EEP/Shiree is an extreme poverty focused programme, its portfolio is quite diverse. As already mentioned, it covers a wide range of extremely poor and marginalized communities living in different parts of the country including most of the country's adverse geography. Types of the interventions that EEP/Shiree supports are also diverse. It ranges from asset transfers of various kinds (such as, livestock, poultry bird, rickshaw/van, other productive equipment) to khas land distribution, distribution

of working capital, providing training, providing nutrition supplement and behaviour change counselling, supporting various agricultural activities, small business, climate change resilient livelihoods activities, and various other innovations including production and distribution of nutritious food items, working closely with the elderly and the persons with disability, etc.

EEP/Shiree has so far been quite successful in reaching out to its target beneficiary and helping them in lifting themselves out of extreme poverty. It has already reached its target of reaching over 1 million extreme poor beneficiaries, of which it has also been successful in lifting over 500,000 people out of extreme poverty as of September 2014. This is about 90% of the total beneficiaries who have completed at least two years of receiving livelihoods and other support from the program. This figure is also well above the graduation target set for 2014 for the program.

Graduation monitoring report 2014 of EEP/Shiree observes a very significant improvement in graduation in year 2014 - 95.5% in urban areas and 91.0% in rural areas. Male headed households had significantly higher graduation rates (by about 10% on an average) than female headed households. Female headed households had significantly greater depth of poverty than male headed households as well. The improvements in graduation, especially between surveys 8 and 9, are post-intervention and suggest that households are continuing to progress out of poverty even without support.

6.2 Costs of Reaching out of the Extreme Poor Beneficiaries in Bangladesh

An estimate of cost per beneficiary household (BHH) has been made based on the extreme poverty programs mentioned above. It is important to note here that this is a crude estimate and it is not to make any comparison between the programs. Also, it is beyond the scope of the present paper to explore the most 'value for money' means to reach and transform the lives of the extreme poor in the country.Main purpose of this estimate is to have an understanding of average cost of reaching out of the extreme poor household that it may require, based on current experience, if we would like to have similar programs during the 7th Five Year Plan Period.

The estimates of total and annual costs per beneficiary household are presented in Table 6.1 below. As it is observed from the table, there are variations in total as well as annual cost per beneficiary households among the programmes ranging from Taka 21,643 (US$ 271) to 125,692 (US$ 1571) for total cost per beneficiary household. However, apart from the efficiency of delivering the services, these variations are also due to several factors including working in different areas (rural, urban and different regions), in adverse geographic locations (island chars, haors, coastal areas, hill-tracts, etc.) and with ethnic and marginalized communities (ethnic minorities, persons with disability, elderly, etc.). This is why it is important to take average of costs per beneficiary households over all the programs to have an understanding of average cost per beneficiary household for the future extreme poverty programs.

If we take the average of total cost per beneficiary household over all the programs, it comes up at Taka 35,425 or US$ 443 for helping each of the average extreme poor households. This indicates that an amount of not more than US$ 500 per extreme poor household is required (if we plan to spend this amount over the period of five years, then it comes down to US$ 100 per beneficiary household each year) to achieve the desired target of "zero extreme poverty" by the terminal year of the 7th Five Year Plan when Bangladesh is also expected to move into the league of medium income counties.

6.3 How Effective are Anti-Poverty Programmes in Reducing Extreme Poverty: Experiences from TUP, CLP and EEP/Shiree

From the preceding discussion it may be seen that all the programs have been successful in reaching out to respective target beneficiaries. They have also claimed that the lives and livelihoods of beneficiary households have been improved, and a good proportion of them have been able to move themselves out of extreme poverty due to the interventions of the programs. We have estimated the total as well as average annual costs of the interventions per beneficiary household, which is found to be reasonable. Still, a question remains about how effective the extreme poverty programs are in actually making significant positive impact in the lives and livelihoods of the extreme poor beneficiaries, and helping them to graduate from extreme poverty on a sustainable manner. An attempt has been made here to answer this question. However, detailed investigation and exploring the situation in all the programs in this respect is beyond the scope of the paper (data availability is also another issue here), and hence some limited investigation has been carried out here using data from TUP, CLP (to some extent) and EEP/Shiree (to some extent) to have an idea of whether and to what extent the extreme poverty programs have been successful in bringing about positive changes to the lives of its beneficiaries.

Under TUP, a micro-simulation approachestimated that while about 89% of the treatment group achieved graduation, it is only about 40% of the control group. Assuming that CFPR's effective targeting process assured that no beneficiary satisfied the necessary graduation criteria prior to their participation in the programme, the graduation of half the participant pool is an attributable impact‖ of the CFPR programme[26]. The report also points out that two years after recruitment into the programme, the real value of non-land productive assets owned by TUP participants had increased by BDT11,829 over its control counterparts. However, with respect to increase in real income, attributable impact of TUP programme can be calculated as an increase in per capita real income of BDT1,426, which represents an increase in real income of 24 per cent over two years.[27]

Under CLP, it has been found that the income of 24.1% of 51,824 households has been raised significantly, meaning at least 12,490 households, or 46,712 people have been lifted above the extreme poverty line selected by CLP-1[28]. Also, the value of productive assets held among sampled households from all cohorts appreciated significantly from a maximum of Taka 5,000 to an overall average of just over Taka 34,000. Those from earlier cohorts (Asset Transfer Programme 1-2) had statistically significant higher average levels than those from later cohorts (Asset Transfer Programme 3-4).

Under EEP/Shiree, the data that has been used here is a panel survey conducted by EEP/Shiree every year with a sample which is representative of all the beneficiary households. The survey started in March-April 2010 and the latest round was completed in March-April 2014. In the latest round, a new cohort (cohort-6) of sample

[26] Joint End of Project Review of CFPR Phase II (Final Report, June 2012).

[27] TUP has been subjected to extensive review. On the favorable impact of TUP on the ultra-poor, see Bandiera et al. (2009) and Emran et al. (2009).

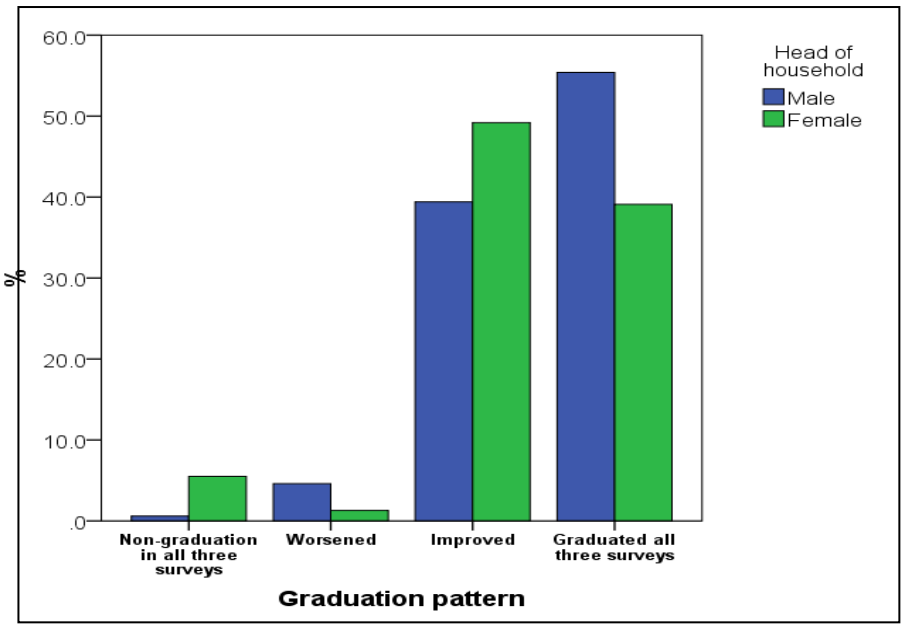
[28] Independent Impact Assessment of Chars Livelihoods Programme Phase-1 (Final Report, August 2011).

households was chosen from the households recruited in the programme just before conducting the 2014 survey. Hence, cohort-6 households were interviewed for the first time in 2014 survey. This provides us an opportunity to use this cohort as a 'control' group (as the program doesn't have any specified control group) against the first cohort (cohort-1) which was chosen from the very first set of recruitments (and completed over three years of program intervention) and were interviewed in all five surveys (kind of quasi-experimental design one may say). However, as the control group (cohort-6) was interviewed for the first time in 2014, we have assumed that their situation was exactly the same as cohort-1 in 2010 when the baseline for cohort-1 was carried out. This is how the analysis has been carried out here using the difference-in-difference method of estimating the program's impact.

The results are presented in Table 6.2. In the table, 'before' represents baseline conducted in 2010, and 'after' represents final survey conducted in 2014. As observed from the table, improvements have been noted with respect to all indicators included in the table. However, large improvements are noted in the areas of access to and accumulation of assets; moving from wage labourer to self-employed activities; earning incomes and saving from it; ensuring food security; and enhancing women empowerment (see Table 6.2 for details). Graduation from extreme poverty is also assessed based on the criteria set out for measuring graduation in the program using the same data set. Graduation analysis also reveals that apart from nutrition, the beneficiary households have been able to make large improvements with respect to the rest of the other criteria (Table 6.3). It is also observed that improvement in overall graduation (households are considered graduated if they satisfy the essential food security/coping criterion plus any six from the rest of the criteria) in 2014 over the baseline situation of 2010 is quite significant (85.1%). Project-control comparison also shows 72.6% as net graduation among the project beneficiary over the control groups during the same period.

Another important question here is whether the households who have graduated have been able to maintain the level or not (i.e., falling back into the extreme poverty again). The following graph tries to answer this question. The graph 6.1 shows that 48.5% of the households graduated quite early (in 2012, immediately after completion of two years of program intervention) and also maintaining (and even improving) that status from then on (as captured by 2003 and 2004 surveys). This group may be considered as sustainable graduate. Another 45.9% have found graduated only recently (as captured by the last survey only) and it is yet to be seen what proportion of it sustain the status. On the other hand, 2.6% has been found totally unsuccessful and another 3% as descending households.

GRAPH 6.1: **Graduation Pattern in EEP/ Shiree Beneficiary Households**



Source: EEP/Shiree Graduation Report, 2014

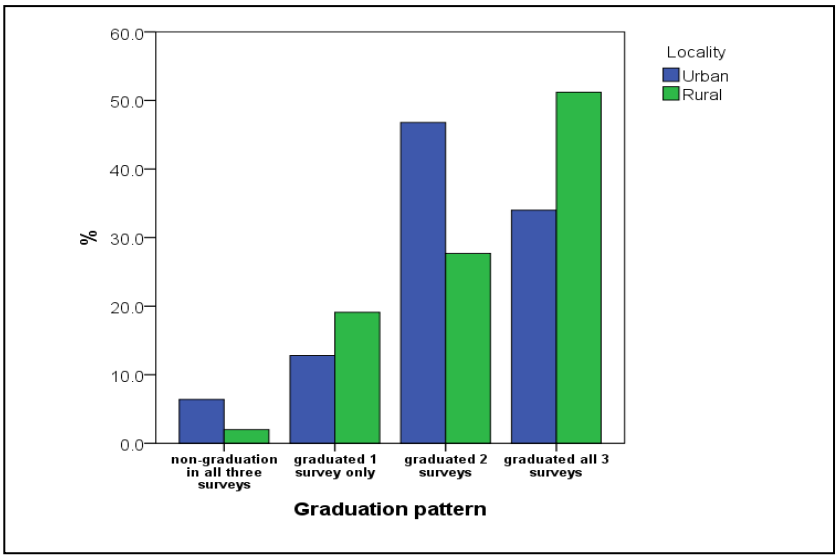
6.4Rural-Urban Differences in Extreme Poverty Reduction: Experience from EEP/Shiree

Poverty or extreme poverty situation in rural and urban are not exactly the same. Similarly, impact of poverty or extreme poverty reducing interventions in rural and urban is also expected to be different between them. Given the growing urbanization and increased rate of rural-urban migration, it is important to look into the differential impact of extreme poverty programmes among the beneficiaries living in urban compared to that of the rural households. An attempt has, therefore, been made here to see the differential impact using the panel survey data of EEP/Shiree[29]. Double difference approach is used here to investigate the difference between the two.

A comparison of impacts of extreme poverty programmes between rural and urban applying the difference-in-difference method is presented in Annex Table 6.1. As it is observed from the table, the outcome is in favour of urban than rural. This means that extreme poverty interventions produce higher beneficial impact in urban than rural. This is reflected in respects of income, expenditure, savings and households good. However, with regards to some other indicators (e.g., self-employment, access to land, ownership of animal, etc.) rural extreme poor are ahead of urban. In the case of graduation, mixed outcomes are, however, observed with regard to the individual constituent of graduation criteria, and no significant difference is observed between the two (Annex Table 6.2). This mixed situation is also reflected in graph 6.2 below.

[29] It may be mentioned here that EEP/Shiree has a programme in one of the largest slums in Dhaka, and the data for urban here represents the situation of the slum only.

GRAPH 6.2:**Graduation pattern by locality in surveys 2012, 2013 and 2014**



Source: EEP/Shiree Graduation Report, 2014

6.5 Feminization of Extreme Poverty: Experience from EEP/Shiree

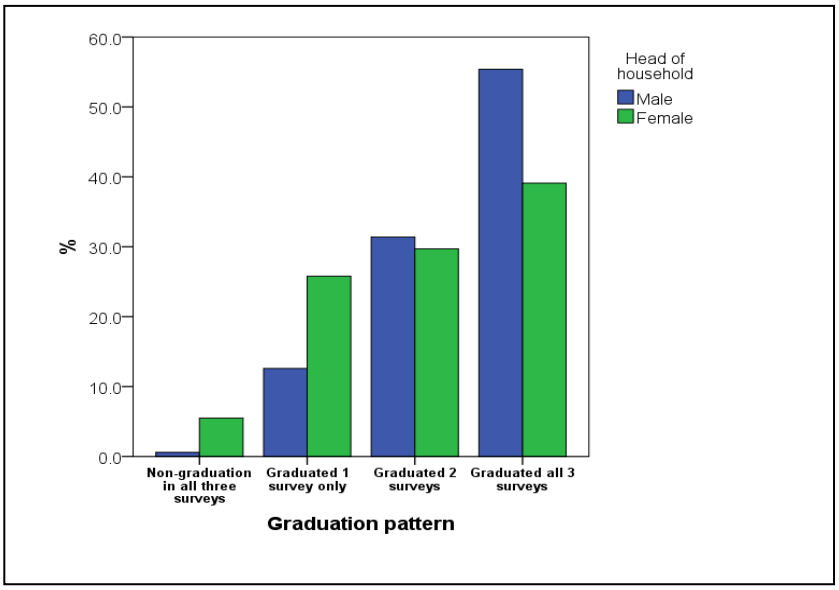
Females are more deprived and vulnerable than males in almost all aspects in Bangladesh. Extreme poverty is no exception to this. Relatively higher proportion of female headed households is extreme poor. Among the extreme poor households, proportion of female headed households is 28%, whereas, the corresponding figure for the country as a whole is only 11%.

Not only are the female headed households over represented in extreme poverty, their socio-economic condition is also much worse than that of male headed households. A comparison is made here between male and female headed households using EEP/Shiree panel survey data (Annex Table 6.3). At the baseline, where the average value of assets and shops for the male headed households were Taka 2,865, it was Taka 1,625 only for the female headed households. Similarly, where the average daily income per person for the male headed households was Taka 20, the corresponding figure for female headed households was Taka 15.6 only. Nutritional status, especially anemia, is also much worse for females than males. While 32.3 percent of males were found anemic at the baseline, the matched figure for females was as high as 54.5 percent.

When we look into the impact and graduation as a result of extreme poverty interventions, we observe significant improvements among both the male and female headed households. Improvements have been noted in asset accumulation, income generation, savings, housing, etc. as well as graduation out of extreme poverty. However, improvements among male headed households have been faster than that of the female headed households. Annex 6.3 presents these differential improvements which were estimated employing the difference-in-difference method. As it is observed from the data, net impact of programme intervention on male headed households over female headed is substantially higher, especially in respects of land use, asset accumulation, income and savings. On average, male headed households could accumulate Taka 8,537 worth of incremental assets (including shops) over the female headed households during 2010-2014. With respect to overall graduation, although we do not observe much difference between the male and the female headed households

(only 2.4 percentage point difference between them), sustainability in graduation (as captured by the status of graduated in the last three surveys) is more pronounced for the male headed households than that of the female headed households (Graph 6.3).

GRAPH 6.3:**Graduation pattern by head of household in surveys 2012, 2013 and 2014**



Source: EEP/Shiree Graduation Report, 2014

6.6 Correlates of Extreme Poverty and Unsuccessful Households: Experience from EEP/Shiree

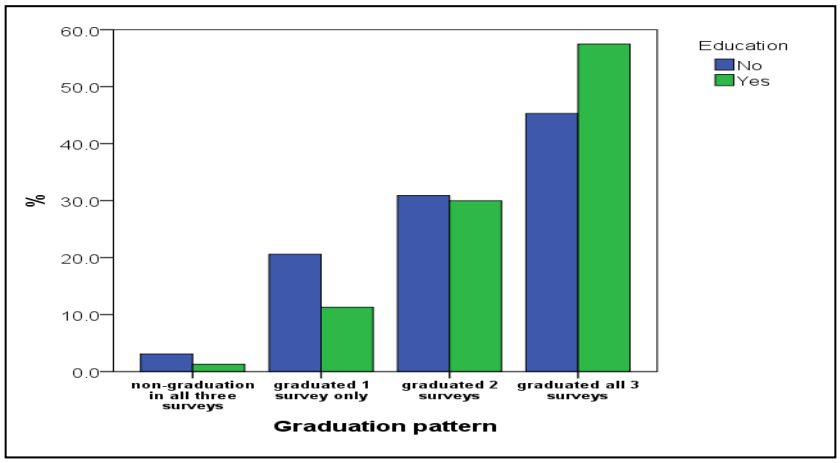
Correlates of Extreme Poverty

Most of the extreme poor households are landless. Majority of the heads of the extreme poor households are also illiterate. Schooling, especially at the secondary level, is also very poor among the extreme poor households. A large proportion of extreme poor households are also female headed households. Housing condition of a large proportion of extreme poor households is also very shabby and about half of the extreme poor households still practise open defecation. They do not have any savings. Many of them have no or only one source of income and suffer from food insecurity as well.

Unsuccessful Extreme Poverty Households

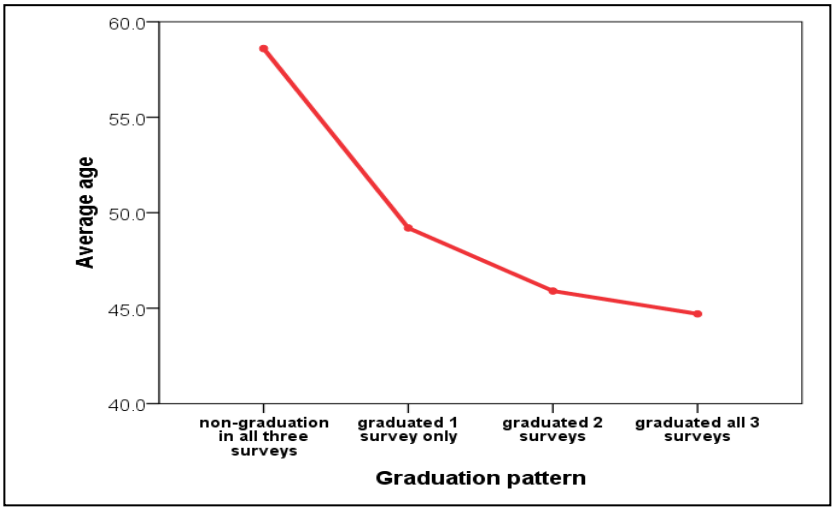
Three factors, among other, came up as correlates of non-graduation among the extreme poor households. They include: elderly, female headedness and illiteracy of the heads of the households (see Graphs 6.4-6.6). This is certainly not an exhaustive list, but this can give some ideas about the households that cannot make progress.

GRAPH 6.4:**Graduation pattern by education of household head in surveys 2012, 2013 and 2014**



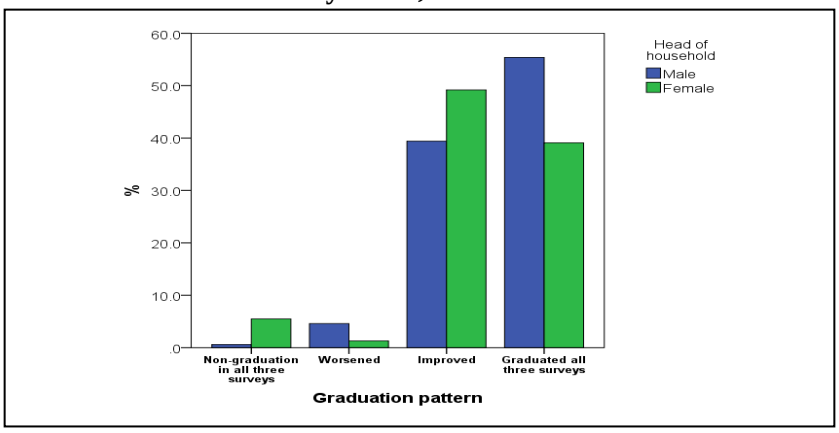
Source: EEP/Shiree Graduation Report, 2014

GRAPH 6.5:**Graduation pattern by age of household head in surveys 2012, 2013 and 2014**



Source: EEP/Shiree Graduation Report, 2014

GRAPH 6.6:**Graduation pattern by head of household in surveys 2012, 2013 and 2014.**



Source:EEP/Shiree Graduation Report, 2014

TABLE 6.1

COSTS OF REACHING OUT OF EXTREME POOR BENEFICIARY HOUSEHOLDS IN MAJOR EXTREME POVERTY PROGRAMS

Programmes	Total Cost (million Tk)	Duration under consideration (years)	No. of Beneficiary Households (BHH)	Total Cost per BHH (Tk)	Total Cost per BHH (US$)	Annual Cost per BHH ($)
CLP-II	9,804.0	6	78,000	125,692	1571	262
CFPR-TUP-III	16,240.0	5	400,000	40,600	508	102
UPPR	7,680.0	5	326,995	23,487	294	59
SHOUHARDO	10,400.0	5	370,000	28,908	361	72
REOPA	3,030.0	4	140,000	21,643	271	68[30]
EEP/Shiree	10,080.0	8	309,000	32,621	408	51
Weighted Average	-	-	-	35425	443	82

Sources: Respective Project Documents including:
CLP: Annual Financial Reports 2005-2006 to 2012-2013, Char Livelihoods Programme.
TUP: Source: BRAC Audit Reports, various year, BRAC.
UPPR: Financial Progress, key results, Urban Partnership for Poverty Reduction.
SHOUHARDO: Programme Profile and Monitoring Finding 2012, 2013, CARE SHOUHARDO.
REOPA: Final Financial and Narrative Project Report of REOPA.
EEP/Shiree: Analysis of Budgets and Costs, EEP/Shiree.

[30]However, in REOPA, the 24,444 women were the core beneficiaries, and excluding costs (as well as the target beneficiaries) for short-term employment and service delivery, the total cost of the road maintenance plus graduation component was US $ 34,350,000, which means a cost of $ 1,400 or BDT 112,000 per BHH.

TABLE 6.2

EVALUATION OF EXTREME POVERTY PROGRAMME: EVIDENCE FROM EEP/SHIREE

Indicators	Project			Control			Net Impact
	Before (B)	After (A)	A-B=P	Before (B)	After (A)	A-B=C	P-C
School attendance (5-15 yrs. %)	77.9	92	14.1	77.9	78.8	0.9	13.2
Chronic illness (all members, %)	14.2	0.2	-14	14.2	0.4	-13.8	-0.2
Morbidity status (%):							
diarrhea	14	3.3	-10.7	14	4.9	-9.1	-1.6
fever	38.3	6.3	-32	38.3	13.7	-24.6	-7.4
Main occupation of HH head (%):							
unemployed	5.5	0.8	-4.7	5.5	1.4	-4.1	-0.6
agricultural day labourer	28.1	20.2	-7.9	28.1	27.2	-0.9	-7
non-agri day labourer	15.2	7.7	-7.5	15.2	22.9	7.7	-15.2
petty trade	3.4	6.4	3	3.4	4.2	0.8	2.2
own rickshaw/van	0	6.7	6.7	0	0.9	0.9	5.8
leased in land/water body	0	2.3	2.3	0	0	0	2.3
livestock	0	4.5	4.5	0	0	0	4.5
domestic maid	15.5	8.5	-7	15.5	11.1	-4.4	-2.6
begging	7	2.5	-4.5	7	4.1	-2.9	-1.6
Average no. of days worked (HH head - last 30 days)	18.5	19.5	1	18.5	18.9	0.4	0.6
Access to land (%):							
landless	87.7	73.1	-14.6	87.7	82.2	-5.5	-9.1
share-cropper	3.1	24.7	21.6	3.1	8.9	5.8	15.8
all types	19.2	50.9	31.7	19.2	45.8	26.6	5.1

(Continue Table 5.2)

Indicators	Project	Control	Net Impact

	Before (B)	After (A)	A-B=P	Before (B)	After (A)	A-B=C	P-C
Housing condition:							
size (sq. meter)	14.1	18.3	4.2	14.1	14.9	0.8	3.4
roof material (tin) (%)	71.9	78.2	6.3	71.9	70.8	-1.1	7.4
roof material (grass, bamboo) (%)	24.3	15.8	-8.5	24.3	22.8	-1.5	-7
Sources of d-water (un-safe) (%)	15	7.2	-7.8	15	8.9	-6.1	-1.7
Access to sanitary toilet (%)	50	77.4	27.4	50	62.2	12.2	15.2
Open defecation (%)	35.8	7.1	-28.7	35.8	19.9	-15.9	-12.8
Access to electricity (%)	3.8	16	12.2	3.8	12.3	8.5	3.7
Average savings per household (Taka)	150	6257	6107	150	525	375	5732
Asset ownership:							
cattle (%)	1.6	33.1	31.5	1.6	2.9	1.3	30.2
average value of total assets (Taka)	2335	19122	16787	2335	3815	1480	15307
Average income (Tk/person/day)	20.8	61.4	40.6	20.8	31.4	10.6	30
Average expenditure (Tk/person/day)	23.3	33.3	10	23.3	25.7	2.4	7.6
Average no. of food consumed	5.9	9.3	3.4	5.9	6.5	0.6	2.8
Consumption of egg in 3+ days a week (%)	3.4	19.1	15.7	3.4	4.2	0.8	14.9
Food coping strategies (%):							
eat smaller proportion	44	0	-44	44	35.5	-8.5	-35.5
eat less than 3 meals a day	48.7	0	-48.7	48.7	7.1	-41.6	-7.1
Female feels frightened of moving alone outside the village (%)	40.6	14.9	-25.7	40.6	27.4	-13.2	-12.5
Nutritional status (%):						0	0
under-five stunting	47.6	35.7	-11.9	47.6	41	-6.6	-5.3
under-five anemia	56.1	31	-25.1	56.1	53.3	-2.8	-22.3

Source: Figures for 'project' are taken from EEP/Shiree CMS-3 and Graduation Reports 2014, and figures for 'control' are authors' own calculation.

TABLE 6.3

GRADUATION OF THE BENEFICIARY HOUSEHOLDS IN EXTREME POVERTY PROGRAMME: EVIDENCE FROM EEP/SHIREE

Graduation Criteria	Project			Control			Net Graduation
	Before (B)	After (A)	A-B=P	Before (B)	After (A)	A-B=C	P-C
Food coping	15.4	99.6	84.2	15.4	34	18.6	65.6
Poverty line	26.9	76.1	49.2	26.9	40.9	14	35.2
Income sources	38.9	82.1	43.2	38.9	53.6	14.7	28.5
Cash savings	4.3	76.1	71.8	4.3	17.2	12.9	58.9
Productive assets	0.9	59	58.1	0.9	1.8	0.9	57.2
Non-productive assets	36.3	68.8	32.5	36.3	41.9	5.6	26.9
Food diversity	15.4	77.8	62.4	15.4	36.7	21.3	41.1
Nutrition	30.8	30.3	-0.5	30.8	34	3.2	-3.7
Health	47.9	82.1	34.2	47.9	81.3	33.4	0.8
Empowerment	28.2	85.9	57.7	28.2	35.7	7.5	50.2
Safe drinking water	83.5	91.5	8	83.5	89.6	6.1	1.9
Sanitation	50	77.4	27.4	50	60.1	10.1	17.3
Land access	20.3	53.8	33.5	20.3	45.7	25.4	8.1
Overall Graduation	6.4	91.5	85.1	6.4	18.9	12.5	72.6

Source: Figures for 'project' are taken from EEP/Shiree CMS-3 and Graduation Reports 2014, and figures for 'control' are authors' own calculation.

VII. SOCIAL SAFETY-NET PROGRAMMES IN BANGLADESH: OVERVIEW AND COSTS

7.1 Social Safety-net Programmes in Bangladesh: An Overview

Bangladesh has a long history of implementing anti-poverty and social safety net programs. Rural public works program (RPWP) has been an important policy instrument for the government since the early sixties to augment the employment and income of the rural labor during the lean agricultural season. The objectives of the RPWP as enunciated by the national authority had elements of employment creation, income generation, asset creation, popular participation, leadership and skill training embodied in them. It has been in operation in one form or other with varying degrees of emphasis in Bangladesh for quite a long time. One of the immediate responses of the Government of Bangladesh in the aftermath of the 1974 famine was to open *langarkhanas* (gruel kitchens) for feeding the destitute all over the country. Once the worst of the famine was over, the GOB decided to meet the relief needs on a more regular basis through the RPWP (Chowdhury and Ali 2006).

The existing safety net programs (SNPs) in Bangladesh, though not small, provide limited coverage, which cannot cope with the magnitude of extreme poverty that still exists in the country. It has also been found that while many deserving candidates do not get access to it, some non-deserving candidate get access to it. Moreover, the SNPs cover mostly the rural poor, whereas the number of urban poor is also very large and growing and the nature of urban poverty is more severe than rural poverty in certain respects.

Participation of Extreme Poor in Social Safety-net Programmes

Based on a study conducted earlier observed that only about 36 percent of total programme beneficiary were actually extreme poor (defined using the subjective criteria of food availability throughout the year[31]) and another 39 percent were moderate poor which gives the figure for poor participating in the social safety-net programmes at 74 percent. This means, another 26 percent of the beneficiaries came from non-poor households. Among the four programmes (FFW, VGF, VGD, Old-age/Widow Allowance) taken into account in the study, participation of the extreme poor households was higher in the cash transfer programmes (old-age/widow allowance) than the other programmes. Furthermore, in other programmes (and considering all four together), the largest category of participants is the moderate poor, not the extreme poor (see Annex Table 7.1). A similar pattern is also observed now. As found from EEP/Shiree data, only about 20.8 percent of EEP/Shiree beneficiary households, who are extremely poor, have got access to social safety-net programmes (EEP/Shiree Second Baseline Report, August 2014).

If we compare participation of extreme poor in the social safety-net programmes against participation of the moderate poor, we see noticeable difference between the two with extreme poor being more deprived. While only 26 percent of the moderate poor households was found deprived from safety-net programme, the matched figure for extreme poor was 64 percent (Annex 7.2). This difference is the highest in case of FFW and the lowest in case of old-age/widow allowance programs.

[31] See Zulfiqar et al (2006) for details.

Existing Social Safety-net Programmes in Bangladesh

As many as nearly 100 social safety-net programmes are in operation in the country at the moment with varying degrees. They are categorized into five types as follows: allowances to vulnerable groups/persons with special needs, food security and disaster assistance, public works/employment generation, human development and social empowerment, and urban poverty[32]. The same report also highlights that of the programmes, only 10 top programmes accounted for 80.5% of total SSNP allocations for 2010-11 (Table 7.1).

The inventory exercise carried out by PPRC and UNDP 2011 has brought out a number of interesting observations as follows: (i) While public sector safety nets account for the bulk of the coverage, NGOs and donor-supported programs have pioneered many path-breaking initiatives. (ii) The safety net portfolio shows that Bangladesh is addressing the broad range of vulnerabilities though coverage is far from adequate. There are also issues of coordination and synergies. (iii) Not all of the programs listed in government budget documents can strictly be categorized as safety net programs as these lack distinctive safety net characteristics and are more in the nature of sectoral development programs.

Kidd and Khondker (2013)[33] also pointed out that while many government schemes in Bangladesh are classified as social protection, in reality, many would not be regarded as social protection under narrower definitions that focus on *regular and predictable transfers for individuals, families andhouseholds.* Under this definition, only 13 schemes could be considered as core social protection schemes which are only around 0.77 percent of GDP as they have pointed out. The report also pointed out that impacts from the current social protection system are low, and the reasons for poor performance include: low coverage (25% only); uneven geographical coverage; poor targeting performance (with only 35 percent of households under the poverty line in 2010 receiving a benefit; and, transfer levels that are too low to impact on poverty.

7.2 Effectiveness of Social Safety-net Programmes and Associated Costs

It is clearly beyond the scope of the present paper to review all the social safety-net programmes to see how effective they are. Here, some of the important social safety-net programmes have been taken into account to see how effective they are in bringing about positive changes in the lives of the beneficiaries.

A recent study conducted by PPRC and UNDP[34] describes the changes across ten selected programmes including some of the extreme poverty focused livelihood support programmes discussed earlier (e.g., CLP, TUP, etc.). As observed in the study, the general trend of improvement in food security is evident for all the programmes with extreme poverty focussed livelihoods support programmes showing comparatively higher rates of improvement on this indicator (Table 7.2). On income changes, while incomes have risen for all programmes, the extent of rise has been very modest as the study observes. Adjusting for inflation, average increase in per capita monthly income for all beneficiaries is 14.5% (Annex Table 7.3).

[32] Social Safety Nets in Bangladesh: Review of Issues and Analytical Inventory (volume 1), PPRC and UNDP, 2011.
[33] Scoping Report on Poverty and Social Protection in Bangladesh, prepared by Stephen Kidd and Bazlul Khondker, March 2013.
[34] Social Safety Nets in Bangladesh (Volume 2): Ground Realities and Policy Changes, PPRC and UNDP, March 2012.

Although the PPRC and UNDP study observed some positive impact of the social safety net programmes, monthly allowance for cash transfer programmes is meagre (Taka 300 a month for old age and widow allowances which means they are not even equivalent of 2 days of agricultural wage). With this token amount, it is in fact difficult to make any sustainable impact upon its beneficiaries.

However, as one of the most important food security based social safety-net programmes, vulnerable Group Development (VGD) programme has been discussed here to some detail. Calculation of cost per beneficiary for VGD has also been done here for making some comparisons with livelihoods support programmes.

The VGD programme has evolved over time as one of the largest social safety net programmes in Bangladesh and its current coverage is 750,000 destitute rural women spread across almost all over the country. It is an important food security programme, it also protects its beneficiaries from vulnerabilities and provide support to take income generating activities so that they can overcome the cycle of chronic food insecurity.

However, there were several challenges that the programme is facing in its implementation, as pointed out by several studies. The challenges include: using VGD card as source of patronage leading to high inclusion errors, lack of adequate man-power in the Union Parishads leading to poor targeting, somewhat inefficient way of distributing the VGD card among Upazilas, Unions and villages, and leakages though various channel (supply chain, partial sale, misallocation of cards, giving less amount to the clients, etc.) [35].

Despite the limitations mentioned above, it also has some advantages as pointed out by WFP and the Ministry of Women and Children Affairs. They include the following:

- VGD is entirely government driven and government funded (MOWCA and DWA); it is implemented through local NGOs.
- The cost of VGD is relatively low so it offers good value for money.
- Though the length of one cycle is 2 years, VGD exists already almost 40 years and has been implemented under the support of many governments. Apparently the programme has the potential to address poverty on a sustainable basis. The programme may form a component in future for a more comprehensive government owned social safety and security framework.
- VGD targets two of the three mentioned challenges: the presence of long-term poverty and targeting marginalized people. It reaches 750,000 extreme poor women per 2 years.
- The beneficiary selection process of VGD guarantees that the ultra-poor are reached.
- VGD will have a focus on nutrition starting from the 2015/2016 cycle. WFP is offering technical assistance to this approach, funded by DFID. Models from NGO implemented promotional safety nets and international experience and knowledge on mainstream nutrition to prevent child stunting are used to introduce the nutrition focus into this promotional safety nets.

[35] Rahman, H. Z. and Sabina, N. 2012. Vulnerable Group Development (VGD): Emerging Challenges and New Opportunities - Outcome of an Assessment Workshop, September 2012.

- The acquired nutrition related capacity in MOWCA, DWA and national NGOs will be sustainable and valuable in the implementation of other current and future programmes and projects.
- An improved nutritional status as aimed for by VGD will contribute to lowering child mortality, which is highest in the lowest wealth quintile, the exact target group of VGD.

IFPRI has also conducted an impact evaluation study on Transfer Modality Research Initiative (TMRI) to investigate which of the methods of delivering the VGD package (only cash, only food, cash and food, BCC and cash, or BCC and food) is the most beneficial for nutrition. They came up with the following findings:

- If policy objective is to improve the diets of poor households, both cash and food transfers are effective
- If policy objective is to improve the nutritional status of poor children, transfers alone are inadequate
- High quality Behavior Change Communication (BCC) together with transfers – especially cash transfers – appear to deliver large improvements in both inputs into pre-school child nutrition and anthropometric outcomes

Comparative estimates of costs per beneficiary in delivering the VGD package between existing programme and the new and improved programme are presented in Tables 7.3 and 7.4. Cost per beneficiary under the existing programme comes up at US$ 302 and cost per beneficiary under the new programme is US$ 565. Although the per beneficiary cost under the new programme is about 87% higher than the existing programme, it is in fact comparable to average per beneficiary cost for average extreme poverty programmes (which is about US$ 500) presented earlier. The reasons for higher per beneficiary cost under the new VGD package includes: 5% premium for fortification of rice, one-off cash grant of BDT 15,000 per participant, and micro-entrepreneurship training and BCC for nutrition.

7.3 Targeted Human Capital Development in Bangladesh: Review of Selected Interventions in Education and Health Sectors

Human capital development is crucial, not only to attack poverty and extreme poverty now, but also inter-generationally. It is, therefore, important to have targeted human development programmes for the people in the country in general, but for the poor and the extreme poor in particular. There are some human capital development programmes in operation in the country, and this section tries to assess the effectiveness of these programmes in reaching out of the extreme poor and helping them benefit out of being involved in these programmes. Again, review of all the programmes is clearly beyond the scope of this paper, and hence some selected programme have been reviewed in this section.

7.3.1 Review of Primary Education Stipend Programme (PESP)

An evaluation of primary education stipend programme (PESP) shows that the stipend ensured education for all and increased the coverage. The stipends are mainly spent on the students and it has created larger interest in education amongst the rural population. It has increased both enrollment and attendance of the children. It has also decreased

the dropout rate substantially[36]. This study reports that the primary education stipends have made changes in the attitudes of both the children and the parents in respect of enrolling and attending schools. There are also some spill-over effects of stipends such as - empowerment of mothers, improvement of child rights, increased accountability of schools, increased competitiveness among students, etc.

However, the report also indicates that though this primary education stipend program is for poor, remote rural areas are lagging behind. This is mainly because the poor in this regions lack information and awareness about stipends. Furthermore, there exist some administrative bottlenecks that lead to dropout even after providing stipends. Sometimes disbursement of stipend money got delayed, and as a result, some students go back to work as the opportunity cost of work is higher. In addition, there is a problem of inflation that reduces the real value of stipend amount. Adjusting for inflation, the real value of the BDT 100 primary stipend stood at BDT 50.51 in 2012. In terms of rice equivalents, the real value of the stipend has declined from 7 kg of rice to 3.7 kg. By both measures, the value of the primary stipend has declined by half since it was introduced in 2003 as mentioned in the report (see Table 7.5 for details). The report also indicates that the available stipends are not adequate as the number of poor children is quite large.

7.3.2 Female Secondary Stipend Programme (FSSP)

Female secondary school stipend programme has been implemented in the country to provide incentives to female students to enroll themselves at secondary level so that they can complete secondary education, move towards higher secondary level, participate in labor force, and delay marriages. It is also expected that if the programme achieves its objectives, it will contribute significantly in reducing both moderate and extreme poverty among the beneficiary households. Studies show that FSSP has been quite successful in increasing the enrollment of girls in secondary education and reducing gender gap at secondary level (Janet and Kate 2006; Asadullah, M. N.2008; and Mahmud, S. 2003). Asadullah (2008) also pointed out that it has in fact reversed the gender gap and now secondary enrollment for girls is even higher than that of the boys. However, Mahmud (2003) pointed out that the effect on school participation of girls has been mixed. While enrollment has significantly improved for girls, retention in school and performance have been poorer. The study pointed out that both enrollment and performance have been much lower at the higher secondary level. The study also concluded that the programme has been able to mitigate the direct money costs of sending girls to school, as well as some non-money costs, but that the improvement in education quality is not sufficient to mitigate the costs of keeping girls in school or providing an alternative to early marriage.

7.3.3 Review of Demand Side Financing (DSF) in Health: Maternal Voucher Scheme

An evaluation of Demand Side Financing (DSF): Maternal Health Voucher Scheme in Bangladesh indicates that there exists a clear positive effect on DSF areas compared to non-DSF areas. The delivery systems and procedures are much more easy, smooth and safe due to maternal health voucher scheme. It also promotes equity. However, the quality of care for maternal health is poor and more or less same in both DSF and non-DSF areas. In addition, this voucher scheme has some problems. There is very low

[36] Primary Education Stipends: A Qualitative Assessment, prepared by MOPME, PPRC and UNICEF, 2013.

general awareness about voucher, and irregularity in voucher distribution also exists. At the same time, people do not have a clear idea about the benefit of demand side financing which is a problem for the project implementation as well[37].

Regarding cost, as the above report has outlined, the incremental costs of the DSF is US$ 37,886,935 as of February 2013. This amount translates to an average cost per year of approximately 7 million USD. Hence, the total incremental cost per voucher distributed is approximately US$ 47 and the total number of vouchers distributed was 806,640. When existing infrastructure and personnel costs is included in the calculation, the estimated cost per delivery come at approximately US$ 57.50. The additional base cost of US$ 10.50 is estimated to be the same in both DSF and non-DSF facilities.

Based on the results of the evaluation, the study recommends continuing the scheme with scale-up. However, they warned that the existing DSF programme must be strengthened to reduce vulnerabilities to the programme and its clients through improvement of financial and administrative management.

7.3.4 Review of Health, Population and Nutrition Sector Development Programme (HPNSDP): Stakeholders' perspectives

Strategies for Health, Population and Nutrition Sector Development Programme (HPNSDP) include expanding the access and quality of Maternal, Neo-natal and Child Health (MNCH) services, strengthening various family planning interventions to attain replacement level fertility, mainstreaming nutrition within the regular services of DGHS and DGFP, strengthening preventive approaches as well as control programs to communicable diseases and non-communicable diseases, strengthening support systems and increasing health workforce at all levels, improving MIS with ICT and establishing a proper and efficient monitoring and evaluation system, strengthening drug management and improving quality drug provision, increasing service coverage through public, NGO and private sector coordination and pursuing priority institutional and policy reforms.

Based on the Stakeholder Consultation for Annual Program Review (APR) of HPNSDP 2012, it is evident that there is significant convergence of the views of the various stakeholders regarding the successes of HPNSDP. There is convergence regarding the achievements which include, but are not limited to provision of primary health care, the success of the Expanded Program of Immunization (EPI), provision of maternal and child health and the resulting reduction in maternal and child mortality rates, success in treating and containing the spread of TB, etc.[38].

There are, however, challenges facing HPNSDP which include, but are not limited to, the lack of adequate doctors and nurses, inadequate equipment at hospitals and the lack of medicine, especially the more expensive medicines such as antibiotics, the fact that doctors were absent from duty without leave, the fact that doctors are not sincere about patients, problems associated with doctors practicing at private clinics, making patients go to them at private clinics and the imposition of often unnecessary and numerous diagnostic tests, lack of gynecologists and anesthetists, lack of adequate beds in hospitals, low quality of food at hospitals, etc.

[37] Program Evaluation for Demand Side Financing: Maternal Health Voucher Scheme in Bangladesh, prepared by Iqbal Anwar, Aaron Blackman, and Sadika Akhter, September 2013.

[38] Report on the Stakeholder Consultation for Annual Program Review (APR) of HPNSDP 2012, Zulfiqar Ali, Wajid Hasan Shah and Iqbal Hossain, 2012.

Based on the views expressed by the stakeholders (recipients, service providers and relevant others), the reports suggested the following way forward: the provision of specialist doctors and gynecologists at the hospitals, having more beds and more doctors and nurses at the government hospitals, changing the mentality (especially the business-minded mentality) of doctors, improving the quality of food and sanitation at the hospitals, providing good quality medicine, making improvements in monitoring system, stopping political interference and interference of middlemen (*dalals*), and having an annual work-plan and targets and reviewing them annually as part of monitoring.

In short, the stakeholder consultation observes that while the HPNSDP is making progress on the foundation laid by its predecessors HPSP and HNPSP, there is still a long way to go in fulfilling the stated objectives of HPNSDP and achieving the desired outcomes of it.

TABLE 7.1

TOP 10 SOCIAL SAFETY-NET PROGRAMMES

Types	Number	Programmes
Allowances	2	Old Age, Insolvent FFs
Food security and disaster assistance	4	VGF, OMS, TR, VGD
Public works/Employment	2	FFW, EGPP
Human development and social empowerment	2	Primary stipends, secondary stipends
Urban poverty	0	-

Source: Social Safety Nets in Bangladesh: Review of Issues and Analytical Inventory (volume 1), PPRC and UNDP, 2011.

TABLE 7.2

BEFORE AND AFTER CHANGES: FOOD SECURITY: PROGRAMME CHANGES

Programme	Some periods of hunger during the year (%)		2 Meals a day throughout the year (%)		3 Meals a day throughout the year (%)	
	3 yrs. ago	Now (2010)	3 yrs. ago	Now (2010)	3 yrs. ago	Now (2010)
Old age	25.6	18.7	47.9	33.8	26.5	47.5
Widow	32.6	20.4	44.8	41.2	22.6	38.5
VGD	19.6	12.2	57.1	51.9	23.3	36.0
EGPP	15.5	12.5	56.0	35.0	28.5	52.5
S. Stipend	21.0	12.1	46.9	46.4	32.1	41.5
SHOUHARDO	13.1	7.0	54.7	38.8	32.2	54.2
CLP	21.6	4.4	64.7	48.0	13.7	47.5
REOPA	41.9	10.2	50.0	53.4	8.1	36.4
VGDUP	32.8	15.8	58.5	58.5	8.7	25.7
TUP	27.8	14.4	55.1	36.9	17.1	48.7
All	24.9	12.6	53.3	44.5	21.8	42.8

Source: Social Safety Nets in Bangladesh (Volume 2): Ground Realities and Policy Changes, PPRC and UNDP, March 2012.

TABLE 7.3

PER BENEFICIARY COST UNDER EXISTING VGD PACKAGE

	Total Cost (Taka)	**Total Cost (US$)**	**No. of beneficiary**
Food	16,735,404,000	216,359,457	
Admin/NGO costs	762,900,000	9,862,961	
Total	17,498,304,000	226,222,418	
No. participants			750,000
Cost per beneficiary	**23,331**	**302**	

TABLE 7.4

PER BENEFICIARY COST UNDER NEW/IMPROVED VGD PACKAGE

	Total Cost (Taka)	**Total Cost (US$)**	**No. of beneficiary**
Food	18,492,621,420	239,077,200	
Cash	11,250,000,000	145,442,793	
Admin/NGO costs	3,051,600,000	39,451,842	
Total	32,794,221,420	423,971,835	750,000
Cost per beneficiary	**43,726**	**565**	

TABLE 7.5

CHANGING VALUE OF PRIMARY STIPEND, 2003-2012

Year	**Rate of inflation (%)**	**Inflation adjusted stipend value (Taka)**	**Primary stipend in terms of rice equivalent (Kg)**
2003		100	7.0
2004	6	94.33	6.9
2005	7	88.15	6.12
2006	7.2	82.23	5.69
2007	9.1	75.37	5.23
2008	8.9	69.21	3.59
2009	5.4	65.46	3.64
2010	8.1	60.55	3.88
2011	10.7	54.55	3.7
2012	7.7	50.51	3,7

Source: Primary Education Stipends: A Qualitative Assessment, MOPME, PPRC and UNICEF, 2013.

VIII. POLICY IMPLICATIONS

Success has many claimants and like all stories of success, this tale can be told differently. However, the true measure of a success story lies in its sustainability (internally) and replicability (externally). The discussion on future challenges can be grouped into two categories (a) consolidation of past success in extreme and chronic poverty reduction, and (b) facing new challenges that are being encountered by the current strategy of addressing extreme and chronic poverty. These two parts are not easy to narrate separately, as they in reality form a continuum.There are *five ingredients* in the making of a successful strategy for ending extreme poverty by 2021, as described below.

8.1 Role of Favourable Macro Growth in Reducing Extreme poverty

We cannot overlook the overall importance of the favourable macro context that underpinned decline in extreme and chronic poverty. It is "easier to pull a boat when wind is in your favor", as any boat-puller in rural Bangladesh would corroborate.

For the last two decades, many things were going right: per capita growth accelerated, volatility of annual growth has been minimal, inflation was kept within single-digit, domestic industrial entrepreneurship developed beyond expectation, exports and remittances increased, and an English educated urban economic middle class weakly but surely started making its presence felt in real estate sector, self-employed business, and in formal services as salaried workers, including the new avenues of financial services, printing and publications, advertisement, electronic and print media, art and entertainment industries, and other modes of cultural productions. In this milieu of new affluence combined with proud nationalism, it was possible to continually support broad-based policies of human development and social protection programs for the poorest and poorer groups.

It is, therefore, crucial to maintain this favourable macroeconomic context for sustaining decline in extreme and chronic poverty in the next decade. This would mean sustaining the 5 major drivers of growth—agriculture, rural non-farm sector, exports, remittances and urbanization—in the days ahead. Prospects are bright on these fronts provided measures are taken in advance to prevent slippages. Sustained investments in research and development and acquiring/ adopting new technology will be required to see further yield growth in crop agriculture; rural non-rice and non-farm growth would be more dependent on the development of marketing linkages with upstream urban markets; factory compliance on work-conditions and labor standards will have to be maintained in order to support past trends of robust growth in manufactured exports within and beyond readymade exports; ease of migration financing and measures undertaken for further skilling will facilitate labor migration to overseas work beyond traditional destinations; managing the current rapid pace of urbanization to continue to tap effectively the agglomeration economies and reduce congestion diseconomies.

More can be added to this list. These measures are in any case necessary for attaining the national target of becoming a "Middle Income country" by 2021. Nevertheless, the central point is to maintain the current pattern of stable and decent poverty-reducing growth in the coming decade to see further improvements on the front of chronic poverty through effecting more pro-poor structural transformations not just in the area of labor market tightening but also in the area of service delivery.

8.2 Replication of the Micro Successes in Eradicating Extreme Poverty

Micro successes have been many and they are marked by diversity in approaches. They need to be nationally replicated on a wider scale. Some have been in the area of poverty reduction (as in case of targeted microfinance a la the Grameen Bank, BRAC, ASA and the likes), while others have taken place in the area of human development (as in the case of female stipend schemes and immunization programs). But, there have been some innovative programs—especially in the 2000s—in combating more difficult case of extreme and chronic poverty as well.

The recently published *Manifesto for the Extreme Poor* (Shiree 2013) lists some such programs as TUP, REOPA, UPPR, DSK-Shiree and a few more. A defining marker of many of these programs is that they aimed to provide consequential transfer of resources (assets or financial savings) to the extreme poor clients. The size of the needed transfer is reckoned to be 400-500 US dollar per beneficiary spread over 1.5-2 years of program intervention. This amount of money, if properly executed, can lift an extremely poor household from severe poverty.

Whether simple cash transfer will do is a debatable question, since these project interventions help develop/ support savings habit, organizational, literacy, asset management, financial and marketing skills, which are "non-tradable" and cannot be overnight developed by transfer of money alone. The aim should be now to replicate—and suitably modified where applicable—these programs to cover all extreme and chronic poor groups in the country so as to eradicate extreme poverty as such by 2022. Such approach while ambitious is within the zone of possible: every year the total costs of such replication will not exceed 2% of GDP annually, permitting the escape of 6 million extreme poor per year (altogether 36 million extreme poor in 2015-21) from the grip of extreme and chronic poverty.

8.3 Undertaking Measures for Preventing and Mitigating Shocks

As discussed earlier in Section 5.1, shocks play a decisive role in shaping the pace of extreme poverty reduction. As Krishna (2010) points out, "looking for any grand or mono-causal theory of poverty reduction is a misguided enterprise". We have to give equal emphasis to asset generation as well as preventing asset erosion. Shocks make poor people poorer, and turn the extreme poor into destitute. The new panel analysis of rural households over a period of 1988-2008 based on 62-Village data is revealing in this respect: out of 684 non-split matched households tracked in both 1988 and 2008, 15% fell into poverty while 37% moved out of poverty (another 27% were "never poor" and 21% remained in poverty).[39] More than two-thirds of the falling events are due to shocks. Had there been no slippages into poverty due to preventable shocks, Bangladesh would have experienced much faster decline in poverty and extreme poverty. Since health shock is found to be single most important explanatory factor underlying fall into extreme poverty, effective health protection for the poor and the poorest should be the given top policy priority in the Seventh Plan. Debate should be now about alternative policy packages and institutional forms of health protection for the extreme poor.

[39] This is based on the on-going analysis of the 62-Village panel data carried by out by Binayak Sen and Mansur Ahmed. For an earlier account on the methodology based on the same set of data, see Sen (2003); Hossain and Bayes (2009).

A substantial block of measures for preventing fall relates to further deepening of the credit market access for the extreme poor. The package includes neo-traditional microfinance access along with the development of new and innovative financial products for the poor and the poorest, including savings, credit and investment opportunities for every household belonging to the extreme poor. Every extreme poor family should be provided with a bank account, extending further the successful experiment already in place which was initiated by the Bangladesh Bank a few years earlier. This may demand not just micro interventions but also enthusiastic refashioning of the macro financial policy instruments (Sobhan 2010).

Governance shocks are also be reckoned with while attaining the goal of ending extreme poverty. While citizens in general suffer from misgovernance, the poor and the poorest are affected most by protracted period of political instability marked by blockades and strikes. They are also greatly affected by corruption in service delivery and deterioration in law and order situation. However, it has become exceedingly difficult to "manage development" from "one center". This is especially true for Bangladesh. It is ranked 7th out of 221 countries (8th being Russia)! Putting emphasis on pro-poor rural and urban decentralization of services along with credible improvements in overall governance conditions would accelerate the pace of extreme poverty eradication.

8.4 Addressing the Growing Human Development Needs of the Extreme Poor

This is a broad agenda that includes addressing inequality in human development and responding to new challenges that afflict all groups but where the poorest come last. First, there are areas of deprived pockets in overall progress in human development that tended to bypass in the past the extreme and chronic poor. While access to antenatal care improved for the lowest wealth quintile, access to antenatal care from "medically trained providers" has not improved (actually remained stagnated at 30% during 2007-2011 as opposed to 84% and increasing for the highest wealth quintile). Child nutrition is another area where the extreme and chronic poor households made only modest improvements. The proportion of children underweight in the lowest wealth quintile has dropped from 59% to 51% during 2004-2007, but remained stagnated at that level in 2011.

Second, as income of the extreme and chronic poor grows, their demand for human development needs will also increase. This relates to the demand for education, especially quality education. The latter is a concern for all wealth groups, but it particularly affects the extreme and chronic poor because they lack supplementary resources to invest in private tutoring to compensate for the quality deficiency in the public schools. The same holds for the quality of the curative health care. With development, demand for health services increases. Earlier, the extreme poor used to content with what they have: the self-morbidity rate was low, but as income increases they become acutely concerned about the health concerns of their families. This leads to a change in the treatment seeking behavior, demanding more quality services, shifting away from traditional quacks to modern or alternative medicine. However, this increased need is barely or inadequately met by either market or public health services.

Third, some of the human development targets require social actions and cannot be addressed by policy alone. Making breakthroughs in these areas require longer time and creation of innovative norms-changing institutional interventions. High prevalence of dowry, for instance, leads to early marriage—'age at first marriage' for girls in 70% of

cases in rural Bangladesh tend to be below the legally permissible age of 18. It leads to a vicious cycle of early marriage-low maternal nutrition-low birth weight-high stunting rates of the children, affecting future schooling, occupational choice and productivity. The extreme and chronic poor are particularly affected by this, as they tend to decide their daughters to be married at a relatively early age to avoid high dowry payments that come with "delayed age at marriage".

8.5 Role of Substantive and Inclusive Social Protection Schemes to Support Extreme Poverty Reduction

Currently, in Bangladesh, there are 95 social protection schemes—large, small and very small—operating within the budgetary envelop equivalent to "2.2% of GDP". Not all of these resources can be termed, strictly speaking, as "core social protection programs". Kidd and Khondker (2013) suggests the figure of 0.77% that can be assigned to "core social protection programs". In reality, even a smaller fraction of social protection funds can be viewed as being currently targeted to the extreme poor. A bulk of the resources earmarked for these programs is spent wastefully or prone to leakage and corruption and serve the needs of the socially non-priority groups.

Renewed emphasis on the social protection is a welcome move, but it needs to ensure that it is not sidelining the extreme and chronic poverty agenda. The two approaches can analytically complement each other provided reform of social protection along life-cycle approach ensures that it is the extreme and chronic poor—as the socially most priority group—that will be served first at each stage of the life-cycle. The Rawlsian Maximin principle dictates such prioritizing before moving towards coverage of other groups. This principle also ensures that social protection will become broad-based and universalized as it becomes fiscally affordable with passage of development. Fiscal affordability, in turn, depends on the strength of the tax and tax-financed instruments. The country has made virtually no use of wealth and inheritance tax options: propertied class contributed proportionately much less compared to income tax and wealth tax. While there has been some progress in recent years, with tax-GDP share of 12%, Bangladesh still suffers from one of the lowest tax efforts notwithstanding rising income and affluence in the recent decade (lower than India, for example, by 7 percentage points). Additional tax mobilization—through broadening of the income tax net, removing the loopholes in the implementation of "property surcharge", and introduction of the wealth tax measures--will help to cover other extreme and chronic poor groups under social protection who may be currently left out or inadequately served.

In short, there should be a meeting of minds in the dialogue between extreme poverty reduction and social protection strategies, lack of which may act against the long-term interests of the extreme and chronic poor.

8.6 Financing Zero Extreme Poverty: Resource Projections and Options

The central message regarding financing "zero extreme poverty" is that *eradicating extreme poverty is not only desirable but also a fiscally feasible* plan-target. If we ignore for the moment the problem of "fallers" discussed earlier, the aggregate cost involved in lifting all currently deemed extreme poor out of such poverty turns out to be relatively modest in magnitude. While this remains a valid proposition under different cost scenarios, the resource projection needs to be nuanced further by taking

the ground realities into consideration. Specifically, we need to factor the unavoidable costs of leakage and intermediation into our calculations.[40]

First, it is true that the aggregate poverty gap index for Bangladesh in 2010, as per the lower line, is only 3% according to our analysis of HIES 2010 data. This means roughly 3% of aggregate national income (or 3% GDP, roughly speaking, as assessed in 2010) needed to be *redistributed* to bring all extreme poor households listed in 2010 above the extreme poverty line. Of course, this is under the *unrealistic assumption* that there is no cost of targeting involved in the process of redistribution (i.e. there is zero search and intermediation cost). In practice, however, the studies show that there are often considerable leakages of benefits due to corruption and mis-targeting whereby the access of the extreme poor is severely undermined (see, for instance, PPRC 2012; Rahman et al. 2014; Barkat et al. 2014).[41] Hence, we make two further assumptions. The first assumption is that *one-third of the resources* earmarked for the extreme poor may be captured by the non-extreme poor groups. The second assumption is that we also need to accommodate some resources—assumed to be equivalent to one-third of the aggregate funds earmarked for redistribution to the extreme poor--to cover the cost of intermediation (the so-called "non-program" costs, including overhead costs). Factoring these two assumptions, we can see that aggregate cost needed just to lift the extreme poor households out of ultrapoverty, as implied initially by the poverty gap index—may go up by another 2% of GDP. Thus, the total costs for lifting the extreme poor out of extreme poverty would be around 5% in 2010. Second, it is possible that the aggregate poverty gap index has come down further during 2010-15, reducing further the net resources needed to tackle extreme poverty. On the other hand, leakage and intermediation costs may have gone up due to greater search costs in getting to the hard-to-reach segments of the extreme poor and greater corruption in the transfer system. Without having the actual survey data for the recent period, we assume that the aggregate poverty gap index may have dropped to roughly 2%.[42] Assuming the same targeting error and costs of intermediation as in 2010, the costs for financing Zero Extreme Poverty would now be 4% of GDP. Spread over the Seventh Plan period, this amounts to 0.8% of GDP—a very fiscally feasible target. However, the situation of financing is complicated by the aggravating and persistent problem of "fallers".

Second, for sustainable extreme poverty eradication, one needs to prevent decline into extreme poverty and/or lift the additional number of fallers out of extreme poverty (i.e.

[40]There is also the implicit assumption that such redistributive transfer will not entail distortionary taxation harmful for economic growth. This is valid concern only if the objective of zero extreme poverty is to be attained within a single year. This, however, is not the case here, as the goal of attaining extreme poverty eradication is addressed only gradually—working through the entire Seventh Plan period.

[41]Based on the analysis of HIES data, Barkat et al. (2014) notes that "on average, 14.5 per cent of non-eligible households are receiving SSNP benefit and 19.0 per cent eligible households are not receiving any SSNP benefit. Considering the definition of inclusion and exclusion error, this implies 14.5 per cent inclusion and 19.0 per cent exclusion error". However, these estimates are based on the "upper poverty line". If the criterion of lower poverty line corresponding to extreme poverty is used, the targeting error would be higher.

[42] This is slightly higher than the assumed rate of decline suggested by the recent poverty projections by the GED of the Planning Commission. According to the latter, the extreme poverty headcount declined from 24.2% in 2010 to 10.6% in 2014.

the so-called *new extreme poor*) during the Seventh Plan. We need to price this part of extreme poverty eradication not captured by the aggregate poverty index for resource projections mentioned earlier. Here we assume that aggregate cost of preventing the fall of a poor person into extreme poverty due to sudden shocks (triggered by ill-health, natural disaster or personal insecurity) would at least be half the costs of lifting an extreme poor person out of extreme poverty (implicitly giving more weight to movers than fallers). This will entail additional costs equivalent to another 0.4% of GDP (for fallers) and the previously mentioned 0.8% of GDP (for movers) to be incurred annually during the Seventh Plan period. Again, earmarking 1.2% of GDP every year for extreme poverty eradication over the Seventh Plan period is very much a fiscally affordable task.

Third, one could argue that we are already spending "2.2% of GDP annually on social protection", which begs the question: why should we be concerned with raising additional resources for extreme poverty eradication? The argument is that the latter objective is already supposedly taking place under social protection, or likely to be addressed in any case under the revamped National Social Development Strategy (NSDS). However, the devil is in the details. As explained above (Section 8.5), if one unmasks the range of activities financed by the existing social protection programs, one would find that less than 1% of GDP is, in reality, *intended*for the extreme poor through these social protection programs.[43] The plausibility of this is revealed when one excludes the formal pension scheme and human development programs, such as stipends, as well as maternal and child health programs not intended specifically for the extreme poor.[44] To make things worse, there are still persisting problems of high inclusion and exclusion errors (Barkat et al. 2014). Consequently, currently no more than 0.5% of GDP is likely to be actually spent on the extreme poor through existing social protection programs. As discussed in Section 7, most of the existing social protection programs are marked by "tokenism" whereby transfer per beneficiary does not exceed 1-2 days of agricultural wage labor (Hossain, Sen, and Sawada 2013). With such a paltry sum it is not possible to have any tangible effects on the significant upward mobility of the extreme poor, especially from the viewpoint of extreme poverty eradication. On the other hand, the *risk of negative labor supply effects is also addressed by the proposed "Mini-Big Push"* in the sense that it is expected to be channeled through time-bound income/ employment generating programs rather than via permanent income support.

Thus, the above discussion points out the need for additional resource mobilization over and above the current social protection programs (even if they are revamped under NSDS). The extreme poor need to get access to resources of at least 1.2% of GDP earmarked for them every year during the Seventh Plan period. What would be institutional modalities for channeling these resources? Some part (approximately 0.5% of GDP) is already provided by social protection programs, but they are inadequate to meet the challenge of Zero Extreme Poverty, given the pitiful size of the transfer. For

[43] See, Kidd and Khondker (2013).

[44]While the lack of focus on extreme poverty needs to be subjected to further research, we argue that the above pattern of allocation of social protection funds for the poorest is broadly consistent with ground realities (see also, Rahman et al. 2014).

that one needs to think of financing the "mini-Big Push" type of programs designed to support livelihood interventions for the extreme poor. The (weighted) average cost per beneficiary in those successful pilots is estimated to be roughly USD 443 (see Section 6). Applying this to the total number of extreme poor in 2010, one gets a figure of USD 1.15 billion, or 0.89% of GDP. This type of initiative can easily be supported by a re-prioritized donor funding geared at extreme poverty eradication and shared by the GoB during the Seventh Plan by displaying resource commitment for building ownership over the initiative. In particular, new tax avenues can be introduced (or existing ones revamped) to this end. In particular, the GoB can introduce wealth taxes in line with global best practices and tie it to financing extreme poverty eradication without sacrificing other competing budget heads for accelerated growth.

However, financing is not just about finding the right amount of resources, it is also about fostering the right kind of institutions and approaches. In these areas, Bangladesh has a long history of gainful interactions of ideas, resources, and interventions initiated by the government, NGOs, the private sector and donors. The GoB-Donor compact can lead to the replication of already successful pilots (see, Section 6) to include and deepen the interventions designed to lift the extreme poor from ultra-poverty and prevent their sliding further down along the poverty ladder. For the former goal, NGOs can play a crucial role.For preventing the latter downfall, the GoB must play a lead role in the arena of public health to address health shocks, support measures to mitigate adverse effects of natural disasters, and improve governance conditions to reduce, for instance, law-and-order shocks. Identifying the extreme poor and maintaining an extreme poor database is important, but it is equally important to install machinery for real time data collection through a decentralized information system given the fast changing poverty dynamic in the country. Decentralization is also needed for attaining other virtues of development—broad based and timely access to service delivery, increased beneficiary satisfaction, and deepening local democracy.

The upshot of the above is to point out that while extreme poverty eradication by 2021 is a fiscally desirable and quite affordable macro task, it will demand much micro attentions to addressing *coordination problems* within and across agencies, institutions and actors over and beyond conventional social protection.Perhaps, a *Permanent Secretariat for Eradication of Extreme Poverty* needs to be placed in the Planning Commission itself to define immediate measures (issues relating to scaling up, resourcing, interfacing between social protection and extreme poverty eradication, institutional buy-in and other coordination decisions) and to follow through the implementation of these measures at macro, meso and micro levels. Significant moral and political commitment is necessary to make the goal of "Zero Extreme Poverty by 2021" integral part of the mainstream development agenda.

IX. CONCLUDING REMARKS: THE NEED FOR A "MINI BIG-PUSH"

Bangladesh seems to present the "other narrative" where extreme poor has escaped poverty trap in large numbers over the last two and a half decades. The present paper examines this positive poverty reduction experience and points to the need for undertaking further action to ending extreme poverty forever. It takes into cognizance that accelerated economic growth over the past two and a half decades (1990-2014) has

been a powerful tool for extreme poverty reduction. However, only growth will not automatically trigger processes that will eradicate extreme poverty. Some consequential support package is needed—we call this policy package the "mini Big-Push". The paper highlights three main messages with supporting evidence and analysis.

First, growth in Bangladesh was transformative in being able to generate structural change that is beneficial to economic mobility of the extreme poor. This transformative role needs to be strengthened further, as the trade-off between rising inequality and extreme poverty reduction cannot be assumed to be acting always in line with the past trends in 2005-2010. The Kuznets process can kick in, with more rewards to skilled workers in non-agricultural sectors. Misgovernance can also be disequalizing: rising affluence can generate more greed than charity, especially in the context low accountability. This need not be so provided the transformative (in the sense of being pro-poorest) effects of growth can be magnified by adding policy initiatives to progressive structural transformations. In fact, the paper argues that extreme poverty reducing effects can be magnified if the growth itself becomes more transformative in both rural and urban areas.

Second, the package of mini big-push includes strong livelihood interventions. In contrast to tokenism in conventional income transfer and stipend programs-which often equals to not more than 1-2 days of agricultural wage labor—what is needed a substantive resource injection (to the tune of USD 500-600 to be given in total to an extreme poor participant over a period of 1.5-2 years) that can make a real difference to staying or escaping extreme poverty. Successful livelihood interventions have been developed in Bangladesh over and beyond microcredit and the experience of these interventions need to be factored in the resourcing of the Seventh Five Year Plan.

Third, shock-prevention (where it can be prevented) and shock-mitigating (where it occurs despite best intentions) measures should be simultaneously in place in order to address the risks of falling into extreme poverty. This would require reorienting social protection and human development schemes to the need of the poor in general. Resilience against shocks needs to be viewed as a central pillar for the strategy for ending extreme poverty. These measures need to be pinpointed, financing options worked out, and made part of the policy package for the Seventh Five Year Plan. Such policies will have beneficial effects for the non-poor households as well.

As maintained in the paper, it is the most favorable time to attack the remaining vestiges of extreme (and chronic) poverty. The government is committed to its eradication; market conditions are also favorable with signs of rising wages and employment; development partners are interested in pursuing this social goal; and NGOs as well as private sector are playing supporting role in social development. Rarely have the interests of all these diverse actors converged in such a way on a single issue in this country's development history. By undertaking this historic task on the eve of the forthcoming anniversary celebrating the 50 Years of Independence, we can avoid the moral outrage at the persistence of the most stubborn face of poverty and be justly proud as a nation.

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ANNEX TABLES

ANNEX TABLE 6.1

EVALUATION OF EXTREME POVERTY PROGRAMME - RURAL-URBAN DIFFERENCES: EVIDENCE FROM EEP/SHIREE

Indicators	Urban			Rural			Net Impact: Urban against Rural
	Before (B)	After (A)	A-B=U	Before (B)	After (A)	A-B=R	U-R
Self-employment (hh head)	68.2	59.1	-9.1	42.8	56.9	14.1	-23.2
Access to land	9.1	22.7	13.6	20.3	53.8	33.5	-19.9
House size	10.6	15.1	4.5	14.1	18.3	4.2	0.3
Access to electricity	86.4	100	13.6	3.8	14	10.2	3.4
Access to toilet:							
open defecation	4.5	0	-4.5	35.8	7.1	-28.7	24.2
sanitary toilet	63.6	77.2	13.6	50	77.4	27.4	-13.8
Average savings per household	99	11997	11898	160.2	5109	4948.8	6949.2
Ownership of any animal	4.5	9.1	4.6	36.5	84.4	47.9	-43.3
Value of hh goods (per hh)	2400	16000	13600	900	10500	9600	4000
Average income (Tk/person/day)	33.7	82.4	48.7	20.8	61.4	40.6	8.1
Average expenditure (Tk/person/day)	47.1	78	30.9	23.3	33.3	10	20.9
Average no. food consumed	7.1	10.8	3.7	5.8	8.8	3	0.7
Food coping strategies adopted	2.2	0	-2.2	3.6	0	-3.6	1.4

Source: EEP/Shiree CMS-3 and Graduation Reports 2014.

ANNEX TABLE 6.2

GRADUATION OF THE BENEFICIARY HOUSEHOLDS IN EXTREME POVERTY PROGRAMME - RURAL-URBAN DIFFERENCES: EVIDENCE FROM EEP/SHIREE

Graduation Criteria	Urban			Rural			Net Graduation: Urban against Rural
	Before (B)	After (A)	A-B=U	Before (B)	After (A)	A-B=R	U-R
Food coping	31.8	95.5	63.7	13.7	100	86.3	-22.6
Poverty line	27.3	81.8	54.5	26.9	75.5	48.6	5.9
Income sources	54.5	40.9	-13.6	37.3	86.3	49	-62.6
Cash savings	0	90.9	90.9	4.7	74.5	69.8	21.1
Productive assets	0	36.4	36.4	0.9	61.3	60.4	-24
Non-productive assets	59.1	77.3	18.2	34	67.9	33.9	-15.7
Food diversity	54.5	81.4	26.9	11.3	76.9	65.6	-38.7
Nutrition	27.1	40.9	13.8	31.1	29.2	-1.9	15.7
Health	45.5	81.8	36.3	48.1	82.1	34	2.3
Empowerment	54.5	86.4	31.9	25.5	85.8	60.3	-28.4
Safe drinking water	-	-	-	83.5	91.5	8	-
Sanitation	-	-	-	50	77.4	27.4	-
Land access	-	-	-	20.3	53.8	33.5	-
Overall Graduation	9.1	95.5	86.4	6.1	91	84.9	1.5

Source: EEP/Shiree CMS-3 and Graduation Reports 2014.

ANNEX TABLE 6.3

EVALUATION OF EXTREME POVERTY PROGRAMME - MALE-FEMALE DIFFERENCES: EVIDENCE FROM EEP/SHIREE

Indicators	Male			Female			Net Impact: Male against Female
	Before (B)	After (A)	A-B=M	Before (B)	After (A)	A-B=F	M-F
Self-employment	47	56.8	9.8	46.9	58	11.1	-1.3
Access to land:							
landless	82.6	68.7	-13.9	92.7	77	-15.7	1.8
share-cropper	5.1	31.3	26.2	1	18	17	9.2
free use	5.1	17.9	12.8	0	2	2	10.8
House size	14.5	20.1	5.6	12.4	16.2	3.8	1.8
Average savings per household	160	7700	7540	140	5800	5660	1880
Ownership of cattle	2.2	32.1	29.9	1	34	33	-3.1
Average value of working equipment	400	2800	2400	110	1050	940	1460
Average no. of hh goods	3.8	6.4	2.6	2.5	4.1	1.6	1
Average value of hh goods	1560	10120	8560	1020	5980	4960	3600
Average value of hh assets and shop	2865	27366	24501	1625	17589	15964	8537
Average income (Tk/person/day)	20	55.7	35.7	15.6	48.9	33.3	2.4
Average expenditure (Tk/person/day)	21.8	34.2	12.4	30.6	41.9	11.3	1.1
Nutritional status:			0			0	0
BMI<18.5	48.5	51.1	2.6	51.1	47.5	-3.6	6.2
Anaemic	32.3	35.6	3.3	54.5	69.5	15	-11.7
Overall Graduation	**7.9**	**94.9**	**87**	**3.7**	**88.3**	**84.6**	**2.4**

Source: EEP/Shiree CMS-3 and Graduation Reports 2014.

ANNEX TABLE 7.1

PARTICIPATION IN SOCIAL SAFETY-NET PROGRAMS BY POVERTY STATUS

(Percent)

Poverty status (food availability)	Social Safety-Net Programs				All programs
	FFW	VGF	VGD	Old-age/Widow allowance	
Shortage throughout the year	28.3	29.5	38.4	48.3	35.6
Temporary shortage	41.3	40.2	40.9	33.3	38.8
Neither shortage nor surplus	15.2	22.3	17.0	17.2	19.5
Surplus	15.2	8.0	3.8	1.1	6.0
Total	100.0	100.0	100.0	100.0	100.0

Source: Zulfiqar Ali et. al. (2006): Rural Poverty Dynamics: Evidence from 64 Village Census Plus, BIDS.

ANNEX TABLE 7.2

EXTREME VS. MODERATE POOR IN SOCIAL SAFETY-NET PROGRAMS

(Percent)

Extreme vs. Moderate Poor	Social Safety-Net programs				
	FFW	VGF	VGD	Old-age/widow allowance	All programs
Proportion of moderate poor households deprived of access to safety-netprograms	30.4	30.3	20.8	18.4	25.5
Proportion of extreme poor households deprived of access to safety-netprograms	71.7	70.5	61.6	51.7	64.4

Source: Zulfiqar Ali et. al. (2006): Rural Poverty Dynamics: Evidence from 64 Village Census Plus, BIDS.

ANNEX TABLE 7.3

INCOME CHANGES

Programme	Monthly household income (Tk)		% Change	Number of income sources	
	3 yrs. ago	Now (2010)		3 yrs. ago	Now (2010)
Old age	2863	3201	11.8	2.48	3.42
Widow	2071	2299	11.0	2.35	3.10
VGD	3056	3466	13.4	2.16	3.19
EGPP	3494	3858	10.4	2.57	3.48
S. Stipend	3884	4324	11.3	2.59	3.51
SHOUHARDO	3399	3708	9.1	2.36	2.91
CLP	2588	3244	25.3	2.33	3.38
REOPA	2280	2929	28.5	2.28	3.44
VGDUP	2821	3067	8.7	2.31	3.04
TUP	2233	2763	23.7	1.67	2.55
All	2869	3286	14.5	2.27	3.16

Source: Social Safety Nets in Bangladesh (Volume 2): Ground Realities and Policy Changes, PPRC and UNDP, March 2012.