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**SOCIAL PROTECTION FOR ALL:
LEARNING FROM LESSONS ON THE GROUND**

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SOCIAL PROTECTION FOR ALL: LEARNING FROM LESSONS ON THE GROUND

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I. Introduction

As Bangladesh strives to become a middle-country country, the concern for social protection for all has come to the fore with greater vigour than ever before. The reasons are not far to seek. On the one hand, it is well-known that structural transformations that accompany rapid economic growth create different types of vulnerabilities even as they ensure a higher living standard for the general population. Protection for those segments of the society that may face adversities amidst prosperity thus naturally becomes a major concern. On the other hand, the very achievement of sustained growth potentially enables the society to devote more resources to social protection than has been possible in the past. In this milieu, a number of recent studies have examined both the current status of the social protection system in Bangladesh and examined the ways and means of making it more effective.¹ The present paper seeks to make a contribution to this discussion by thinking about possible directions for the future on the basis of lessons learnt on the ground.

In so doing, the paper limits itself in a couple of important ways. First, it focuses exclusively on rural areas, partly because the material to be used for the purpose of learning lessons on the ground is derived from a large-scale rural survey and partly because the urban context demands certain distinctive considerations that will be difficult to handle with the kind of empirical rigour that we intend to apply to the rural context. Second, the paper looks primarily at the economics of social protection, with little attention to the political considerations without, however, belittling the importance of the latter in any way.

The paper is structured as follows. Section II looks at the structure and reach of social protection in rural Bangladesh as seen from the perspective of actual beneficiaries as distinct from the perspective of official records of the authorities who administer the programmes. Section III attempts an assessment of the impact of the social protection system as it currently exists. On the basis of lessons learnt from these two sections, section IV then offers some thoughts for the future. Section IV offers some concluding remarks.

¹ A valuable recent contribution is a strategy paper prepared by the Bangladesh Planning Commission (GOB, 2014). Other major contributions include Ahmed (2009), Rahman *et al.* (2014), PPRC (2011) and World Bank (2006).

Section II: The Structure and Reach of the Social Protection System

This section presents an analysis of the current status of social protection in rural Bangladesh based on a nation-wide survey carried out in 2010 by the Institute of Microfinance. The survey was designed for a study on the dynamics of rural poverty and as part of the enquiry detailed information was collected on rural households' participation in various safety net programmes. The sample was chosen following a stratified random sampling design similar (but not identical) to the one adopted by the Bangladesh Bureau of Statistics for its Household Income and Expenditure Surveys (HIES) and the sample size of 6300 households was also close to the size of HIES's rural component. The sampling design and the coverage ensure that the sub-sample of the households found to be participating in various safety net programmes can be taken to be representative of the overall rural population served by these programmes.

Before providing an account of the reach and effectiveness of social protection in rural Bangladesh, it is first necessary to identify the programmes that count as social protection. There is, however, no unanimity on this matter. The Sixth Five Year Plan listed 82 programmes delivered by 20 different Ministries but there are good reasons to doubt if many of them can be reasonably described as social protection measures (Ahmed, 2009, World Bank, 2006). For our purpose, we considered 24 major programmes, which account for more than 80 per cent of the allocations on social protection broadly defined, and for analytical purposes classified them into three groups: (a) transfer programmes, (b) employment programmes, and (c) education programmes. Transfer programmes constitute by far the largest component, and it includes targeted programmes such as Vulnerable Group Feeding (VGF), Vulnerable Group Development (VGD) for women, old age pension, and allowances for widows, disabled persons, freedom fighters, disaster-stricken households and so on. Examples of employment programmes include Hundred Days Employment Scheme, Test Relief, and Food for Works. The education component offer stipends for primary and secondary education. We shall later comment on the reasonableness of treating educational stipends as part of social protection measures, but we include them in the present analysis in view of their importance in the current scheme of social protection as defined by the government.

The structure of safety net programmes as operating in rural Bangladesh in 2010 (strictly speaking from mid-2009 to mid-2010) is laid out in Table 1. The programmes we considered together covered some 37 per cent of the rural population in that period.² Of the three broad categories of programmes, the transfer category was found to be the most important, covering 23 per cent of the population and accounting for 63 per cent of all funds disbursed. The education component was the next in importance, covering 17 per cent of the population and accounting for 24 per cent of funds. The least important was the employment component, which covered only 2.6 per cent of the population and accounted for just 12 per

² HIES 2010 found the rural coverage to be 30 per cent, with a somewhat different list of programmes.

cent of funds. However, in terms of average benefit per beneficiary household, employment programmes offered the most – Tk 3847 per year as compared with Tk. 2231 offered by transfer programmes and Tk 1128 by education programmes.

Table 1
The Structure of Social Safety Net in Rural Bangladesh: 2010

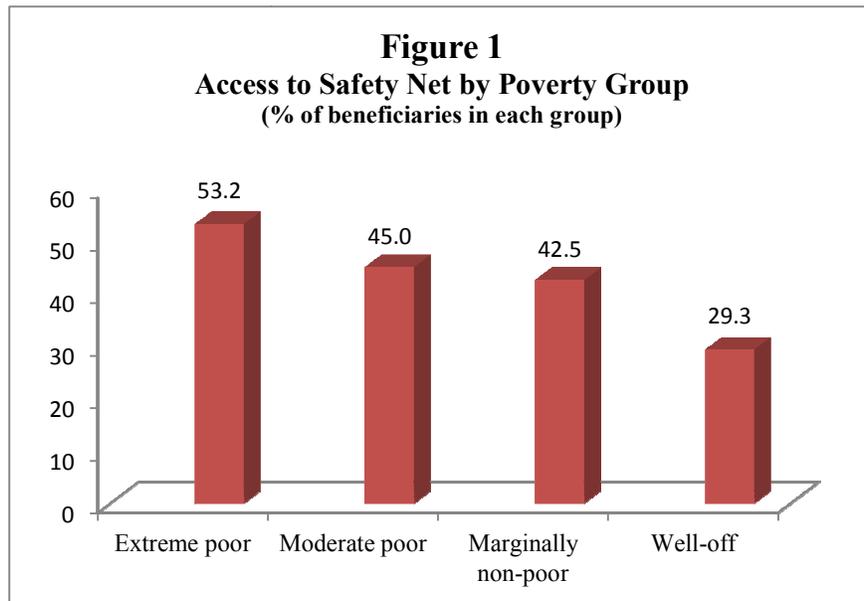
Safety Net Category	Percentage of rural households covered (%)	Share of total funds disbursed (%)	Benefit per beneficiary household (Taka/year)
All Programmes	37.0	100.0	2199.87
Transfer programmes	23.1	63.3	2230.90
Education programmes	17.6	24.3	1127.49
Employment programmes	2.6	12.4	3846.93

Note: The sum of coverage by the three categories of programmes exceeds total coverage because of a (small) overlap in the coverage of programmes. The main overlap is between transfer and education programmes; some 5% of rural households (or 13 per cent of beneficiary households) belong to both types of programmes.

Source: InM Dynamics of Rural Poverty Survey, 2010.

Effective targeting of safety net measures is an important concern. Although different programmes are aimed at specific target groups, the general aim of most of them is to reach the weaker and more disadvantaged segments of the society. As such, we tried to assess the effectiveness of targeting by comparing the relative access to safety net by worse off and better off groups as defined by various criteria. The first criterion was general economic well-being as measured in relation to the poverty line. For this purpose, we identified four groups: extreme poor, moderate poor, marginally non-poor and the well-off.³ As Figure 1 shows, the coverage of safety net programmes displays a clear progressivity, with the poorer groups being covered relatively more than the richer groups in proportionate terms. Thus, while 53 per cent of the extreme poor had access to some type of safety net programme or the other, the rate of access was 45 per cent for the moderate poor, 43 per cent for the marginally non-poor and 29 per cent for the well-off.

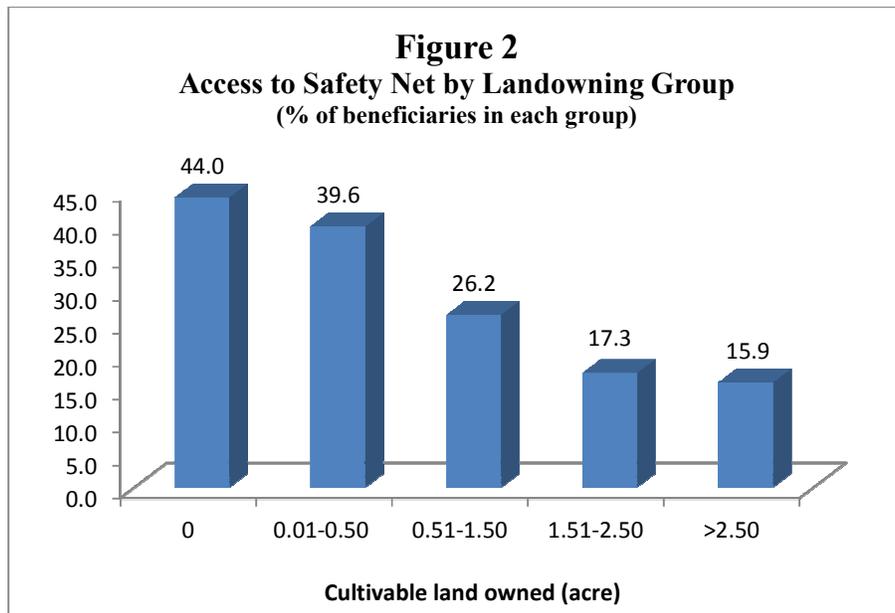
³ Extreme poor and moderate poor were identified with reference to a lower poverty line and an upper poverty line respectively. For identifying the marginally non-poor, we used a cut-off point above the upper poverty line, the distance between the two being the same as that between the upper and lower poverty lines. All those above this cut-off point were defined as well-off. Our poverty lines were constructed following roughly the same methodology as that adopted by BBS and our estimates of poverty and extreme poverty are also close to those reported by HIES 2010. For further details, see Osmani and Latif (2013).



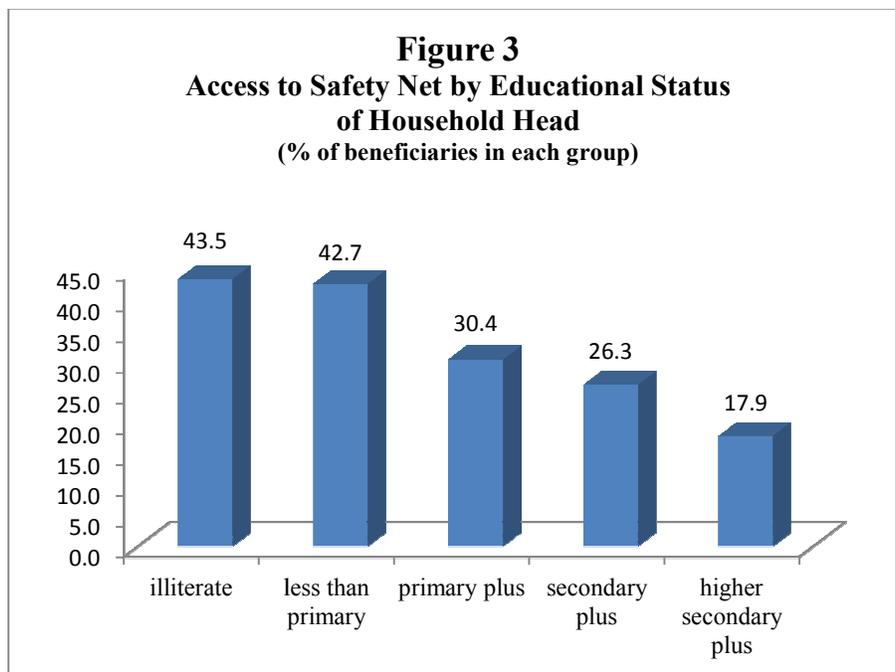
Source: InM Poverty Dynamics Survey 2010.

Judging the effectiveness of targeting by using a poverty-line based criterion may be somewhat problematic, however, because of the endogeneity problem: namely, that the criterion may itself be affected by the object of measurement. In this case, the specific problem is that a household's consumption level, which is compared to the poverty lines in order to form the poverty groups, will be directly affected by the benefits received from safety net programmes. The result would be a negative bias in the extent of progressivity, i.e., the incidence of benefits would appear less progressive than it actually is. The fact that we still observe progressivity despite the negative bias makes the observation all the more credible.

Still, in order to explore the matter further, we used alternative criteria that are less likely to be subject to the endogeneity problem. Two such criteria were used – namely, ownership of land and educational status of the household head – and both confirm the progressivity of coverage: households owing less land are covered relatively more than those owing more and households whose heads are educated less are covered relatively more than households with more educated heads (see Figures 2 and 3 respectively).

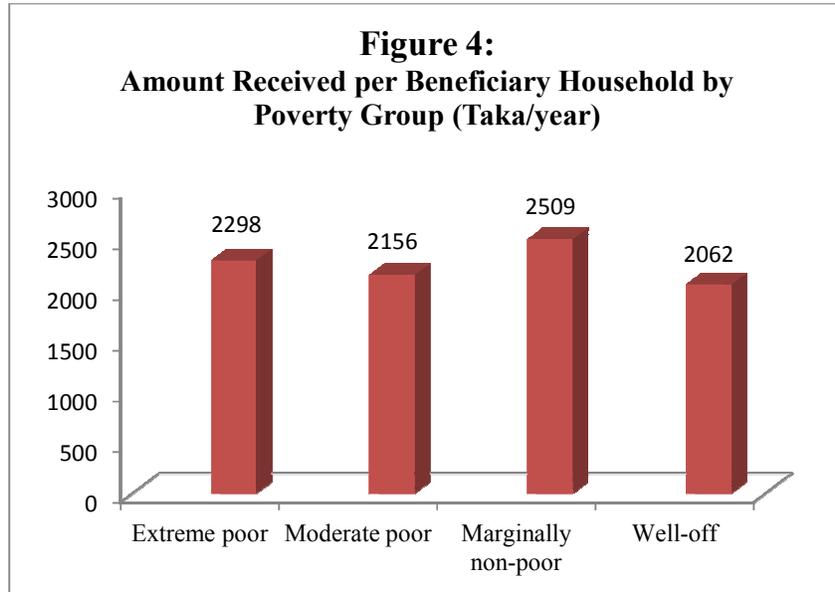


Source: InM Poverty Dynamics Survey 2010.

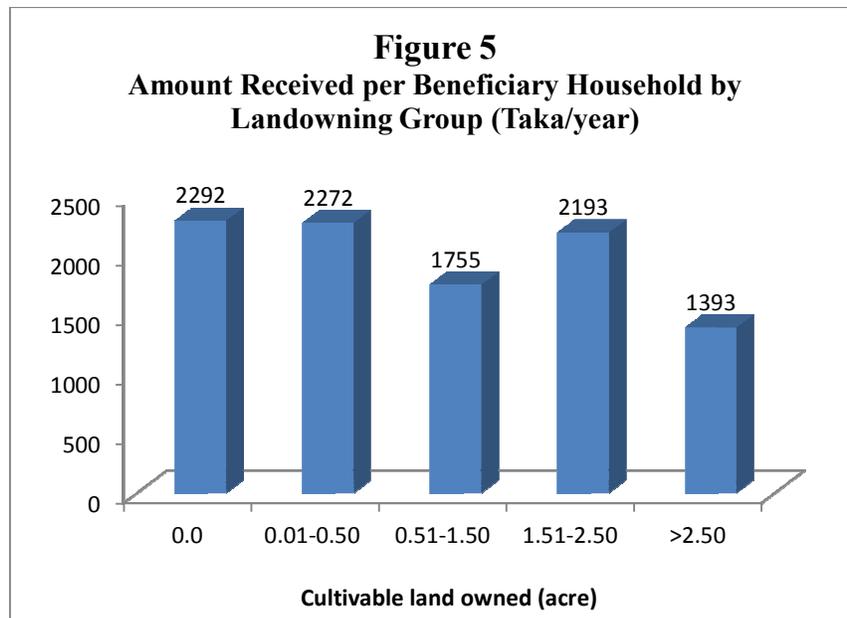


Source: InM Poverty Dynamics Survey 2010.

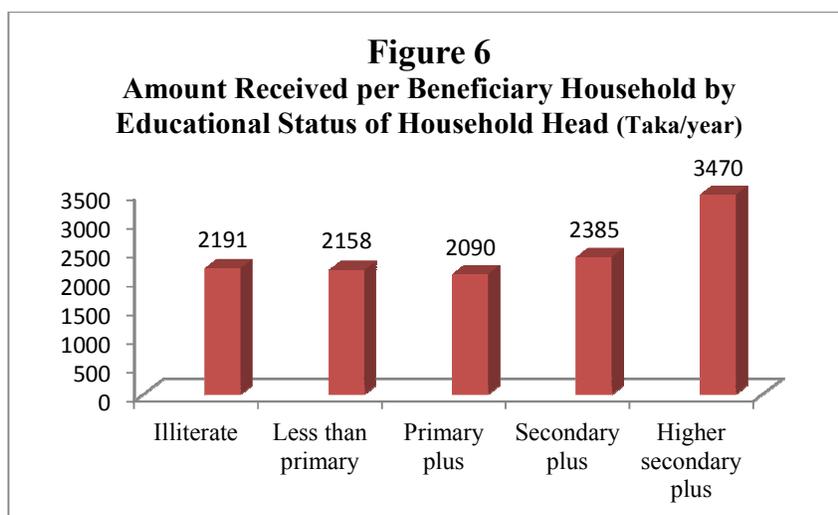
Coverage, however, is not the only aspect of progressivity that matters. Also important is the extent of benefit, as measured in this case by the amount of money received per beneficiary household within each group. This is shown in Figures 4-6. Evidently, progressivity is much less pronounced when measured by the amount of benefit received per household, although there is no clear sign of regressivity either.



Source: InM Poverty Dynamics Survey 2010.



Source: InM Poverty Dynamics Survey 2010.



Source: InM Poverty Dynamics Survey 2010.

In order to gauge the effectiveness of targeting, it is also useful to compare the beneficiary and non-beneficiary households in terms of some attributes that might reflect relative disadvantage of the groups. We do this in Table 3 in terms of some socio-economic and demographic variables that might be taken as exogenous to participation in social protection programmes. For economic attributes we look at the initial assets with which the households started their journey in life i.e., the assets they had inherited at the time the household was formed. Both land and non-land physical assets were considered.⁴ In addition, we have information on the schooling of the household head and the number of dependants (non-working members) in the households. In terms of all these attributes, the beneficiary households are found to be significantly disadvantaged in comparison with non-beneficiary households.

Table 3
Difference in Endowments between Beneficiaries and Non-Beneficiaries: 2010

Endowments	Beneficiaries	Non-beneficiaries	t -statistic
Initial land owned (decimal)	44.0	82.0	10.7
Initial non-land physical assets (‘000 Tk)	39.7	99.5	1.9
Schooling of household head (yrs)	2.8	4.2	13.0
Number of dependants (no.)	1.7	1.4	9.9

Notes: Initial non-land physical assets are valued at constant prices of 2010.

Source: InM Poverty Dynamics Survey 2010.

⁴ Information on initial financial assets was not sought in the questionnaire as it was felt that error in memory recall would be unacceptably large for this type of asset.

We explore this issue further with the help of a regression analysis of the determinants of participation in safety net programmes; the object is to try to answer the questions: what types of households are more likely to participate (through either self-selection or selection by programme administrators)? A probit model is set up for this purpose, with participation as the dependent variable, and the explanatory variables chosen so as to have a reasonable chance to be exogenous i.e., they are likely to affect the probability of participation but are unlikely to be themselves affected by the act of participation or non-participation. These variables include some characteristics of the household head (his/her age, gender and principal occupation, some household-level characteristics (initial assets, number of working members and number of dependants), some access-related variables (access to foreign and domestic remittance) and some village-level characteristics (distance from important places, fertility of soil, and scope for non-farm activities in the vicinity of the village). The starting hypothesis is that households that more disadvantaged in terms of these variables are more likely to participate since after all the purpose of operating the social protection programmes is to reach this type of households.

The results of the exercise are presented in Table 4. The hypothesis of relative disadvantage of participants is strongly borne out by these results. We find that the probability of participation is statistically significantly higher for households whose heads are older, are single females, have less education and work mainly in the farm sector. Probability of participation is also higher for households who started their life with fewer assets, have more dependants and are not blessed with access to foreign remittance. Finally, households who live in villages with little scope for non-farm activities in nearby areas are also more likely to participate.

In summary, the analysis of the present section has established that the targeting of social protection system currently operating in rural Bangladesh has been reasonably effective in the specific sense that (a) the beneficiaries are on the average more disadvantaged in multiple dimensions in comparison with non-beneficiaries and (b) a higher proportion of the disadvantaged groups had access to it as compared with the better off groups.⁵

Section III: Assessing the Impact of Social Protection Programmes

The finding of the preceding section leads naturally to the next relevant question: did participation in safety net programmes actually help the disadvantaged groups in a discernible way? We examine this question in a number of ways.

⁵ It should be emphasized that effectiveness of targeting in the sense specified above does not necessarily ensure that benefits of social protection have gone largely to the disadvantaged groups. This is a separate issue, which we discuss towards the end of the next section.

Table 4
Determinants of Participation in Social Safety Net Programme

<i>Dependent variable</i>		
Participation in safety net	Coefficient	t-value
<i>Explanatory variables</i>		
Access to foreign remittance (dummy)	-0.41136	-5.3
Access to domestic remittance (dummy)	-0.02987	-0.4
Initial land asset (decimal)	-0.00151	-6.9
Initial non-land physical asset ('000 Tk)	-0.00048	-3.3
Age of the household head (years)	0.00958	5.7
Educational status of household head (code)	-0.06842	-3.5
Gender of household head (dummy)	0.57927	6.4
Principal occupation of household head (code)	-0.09164	-2.5
No. of working age members	0.02040	1.3
No. of dependants	0.14976	7.5
Average distance from important places (km)	0.00908	0.6
Scope for non-farm work near village (code)	-0.14576	-2.1
Soil fertility in the village (code)	0.02456	0.4
No. of observations	(5802)	

Notes:

- (1) The equations were estimated using the probit model. A negative coefficient means that higher values of the explanatory variable reduce the probability of participating in social safety net; conversely for a positive coefficient.
- (2) The remittance dummies take the value 0 for non-receivers and 1 for receivers.
- (3) Initial non-land physical assets are valued at 2010 prices, using official deflator for private capital formation. The comparison had to exclude 430 very old households as consistent deflators for assets values were not available for pre-1972 years. All the variables in this table are computed excluding those 430 households.
- (4) The score for 'Educational status of household head' varies from 0 to 4; 0 stands for 'illiterate', 1 for 'less than primary level', 2 for 'primary plus but not completing secondary education', 3 for 'secondary plus but not completing higher secondary level', and 4 for 'higher secondary plus'.
- (5) Gender dummy is defined as 1 for 'widow/divorced/separated females', and 0 otherwise (i.e., males as well as currently married females).
- (6) Principal occupation dummy takes the value 1 for farm activities, 2 for non-farm activities and 3 for others (such as living on remittance income, old-age pension, rental income, etc.)
- (7) The score for 'Scope for non-farm activities near village' varies between 1 and 3, higher score signifying better scope.
- (8) The score for 'Soil fertility in the village' varies from 1 to 3: 1 stands for 'poor', 2 for 'average' and 3 for 'good'.
- (9) Standard errors were adjusted for stratified cluster sampling design.

Source: *InM Poverty Dynamics Survey 2010.*

First, we ask whether participation in social safety net has helped reduce poverty: in particular, do the participants suffer from less poverty compared to non-participants after controlling for other factors that might affect poverty? This question is answered with the help of a probit regression, in which the (latent) dependent variable is the probability of being poor. The explanatory variables include most of the variables that were used in the regression on the determinants of participation as a little reflection will show that the same variables that are theoretically likely to affect the probability of participation are also likely to affect the probability of being poor. Access to microcredit has been included as an additional explanatory variable. In addition, the variable representing the age of household head has been replaced by the age (and squared age) of the household (i.e., the number of years ago when the household was first formed as a separate entity) to capture any possible life-cycle effect on poverty. Furthermore, a set of district dummies were included to capture location-specific fixed effects (but the results are not reported here).

The results reported in Table 5 are striking – they bear out the intuition behind the inclusion of almost all the explanatory variables with the sole exception of participation in safety net! As the sign of the coefficients (and the associated t-values) demonstrate, the probability of being poor falls with greater access to initial assets, to remittance income, microcredit and non-farm activities, with greater education of the household, by having more working members in the household and by living in villages with greater opportunities for working in non-farm activities in their vicinity; on the other hand, the probability of being poor rises if the head of the household is a single female, if there are too many members of the household and if one lives in remote villages⁶. These are all results that one would intuitively expect. The sole exception is the variable representing participation in safety net programmes; the positive coefficient implies the counter-intuitive result that participation actually increases the probability of being poor, other things remaining the same!

Our first response to this counter-intuitive result was to suspect that standard regressions that show the effect of explanatory variables on the ‘mean’ value of the dependent variable may not be correctly capturing the effect of safety net since the beneficiaries of safety net programmes are likely to reside well below the mean as testified by the relative disadvantage of the beneficiaries (in the preceding section). In order to check the validity of this suspicion, we carried out two other regressions trying to capture any possible effect that might exist below the level of ‘mean poverty’.

First, we carried out a probit regression on ‘extreme poverty’ where poverty is measured with reference to the ‘lower poverty line’ as opposed to just ‘poverty’ (as in Table 5) which is measured with reference to the ‘upper poverty line’. Next, we did a quantile regression on the level of household consumption expenditure, trying to capture the effect on the 25th percentile of consumption distribution (as opposed to the mean of the distribution as in a standard regression).

⁶ Although the reported coefficient of the remoteness variable (as measured by distance from important places) is statistically insignificant, further examination shows that it is because of multicollinearity with the variable representing the scope for non-farm activities in the vicinity of the village. When the latter variable was dropped the distance variable became significant with a positive sign.

Table 5
Determinants of Household Poverty in Rural Bangladesh: 2010

<i>Dependent variable</i>	Coefficient	t-value
Household poverty		
<i>Explanatory variables</i>		
Access to social safety net (dummy)	0.19340	4.1
Access to foreign remittance (dummy)	-0.65008	-6.8
Access to domestic remittance (dummy)	-0.32625	-4.2
Access to microcredit (dummy)	-0.11223	-2.5
Initial land asset (decimal)	-0.00416	-6.6
Initial non-land physical asset ('000 Tk)	-0.00092	-2.4
Age of the household (years)	-0.02810	-3.5
Squared age of the household (years)	0.00044	1.9
Educational status of household head (code)	-0.24471	-10.8
Gender of household head (dummy)	0.45488	4.7
Principal occupation of household head (code)	-0.08166	-2.1
No. of working age members	-0.27189	-10.9
Size of the household (no.)	0.40660	19.0
Average distance from important places (km)	0.03559	1.9
Scope for non-farm work near village (code)	-0.17818	-1.8
Soil fertility in the village (code)	-0.07786	-0.9
No. of observations	(5802)	

Notes:

(1) The equations were estimated using the probit model. A negative coefficient means that higher values of the explanatory variable reduce the probability of being poor; conversely for a positive coefficient.

(2) The safety net dummy, the remittance dummies and the microcredit dummy take the value 0 for non-receivers and 1 for receivers.

(3) Initial non-land physical assets are valued at 2010 prices, using official deflator for private capital formation. The comparison had to exclude 430 very old households as consistent deflators for assets values were not available for pre-1972 years. All the variables in this table are computed excluding those 430 households.

(4) The score for 'Educational status of household head' varies from 0 to 4; 0 stands for 'illiterate', 1 for 'less than primary level', 2 for 'primary plus but not completing secondary education', 3 for 'secondary plus but not completing higher secondary level', and 4 for 'higher secondary plus'.

(5) Gender dummy is defined as 1 for 'widow/divorced/separated females', and 0 otherwise (i.e., males as well as currently married females).

(6) Principal occupation dummy takes the value 1 for farm activities, 2 for non-farm activities and 3 for others (such as living on remittance income, old-age pension, rental income, etc.)

(7) The score for 'Scope for non-farm activities near village' varies between 1 and 3, higher score signifying better scope.

(8) The score for 'Soil fertility in the village' varies from 1 to 3: 1 stands for 'poor', 2 for 'average' and 3 for 'good'.

(9) Standard errors were adjusted for stratified cluster sampling design.

Source: *InM Dynamics of Rural Poverty Survey 2010*

In both cases, the explanatory variables were the same as in the regression on poverty as reported in Table 5. The results, as reported in Table 6, still come up with the puzzling finding that participation in safety net tends to reduce economic well-being, while nearly all other variables have intuitively plausible effects.

Table 6
Determinants of Extreme Poverty and Consumption
in Rural Bangladesh: 2010

<i>Dependent variables</i>	Extreme Poverty		Consumption	
Extreme Poverty & Consumption	Coefficient	t-value	Coefficient	t-value
<i>Explanatory variables</i>				
Access to social safety net (dummy)	0.21465	3.8	-0.07395	-6.3
Access to foreign remittance (dummy)	-0.55910	-5.3	0.20043	10.3
Access to domestic remittance (dummy)	-0.23037	-3.1	0.05645	3.3
Access to microcredit (dummy)	-0.13836	-2.8	0.03102	2.7
Initial land asset (decimal)	-0.00509	-7.0	0.00088	16.8
Initial non-land physical asset ('000 Tk)	-0.00098	-1.9	0.00001	12.6
Age of the household (years)	-0.03273	-3.4	0.01740	8.5
Squared age of the household (years)	0.00061	2.2	-0.00038	-6.7
Educational status of household head (code)	-0.24471	-9.2	0.08501	16.9
Gender of household head (dummy)	0.49873	4.8	-0.32785	-12.7
Principal occupation of household head	-0.10773	-2.2	0.01608	1.7
No. of working age members	-0.25784	-8.8	0.04753	7.4
Size of the household (no.)	0.39596	18.0	0.11086	22.0
Average distance from important places	0.03013	1.5	-0.00884	-3.1
Scope for non-farm work near village	-0.20423	-2.0	0.03324	2.5
Soil fertility in the village (code)	-0.03931	-0.4	0.00764	0.6
No. of observations	(5802)			

Notes: (1) In the second equation the dependent variables is the logarithm of household consumption expenditure.

(2) The regression on extreme poverty was carried out with the probit model, while quantile regression was used for consumption expenditure, capturing the effect on the 25th percentile of consumption distribution.

(3) For description of the explanatory variables, see the notes for Table 5.

Source: *InM Dynamics of Rural Poverty Survey 2010*

Usually, such counter-intuitive findings would indicate the existence of reverse causation. For instance, if the beneficiaries are generally poorer than the non-beneficiaries, which they are, the coefficient of the participation variable could capture the sum of two effects: the effect of safety net on poverty and the effect of being poor on the likelihood of participating in safety net. The first effect is the one we are looking for, and we expect it to be negative. The second effect is the reverse causation and it is likely to be positive. The sign of the estimated coefficient would show the net result of these two opposing effects. If the

positive effect of reverse causation is strong enough to swamp the expected negative effect of safety net on poverty, the sign of the estimated coefficient could well be positive, which is what we have found.

However, the problem with this interpretation is that the methodology of our estimation should have eliminated the effect of reverse causation, at least to a large extent. Recall that while answering the question ‘who participates in social safety net’ in Table 4 we identified the set of variables that predispose a household towards participation. But as noted in the context of poverty regressions, these same factors also have an effect on poverty. In other words, these factors tend to make the participating households poor and thereby tend to predispose them towards participating in safety net programmes. Therefore, when we control for these variables in our poverty regressions we also control for the fact that poorer households are more likely to participate in safety net – in other words, we control for the effect of reverse causation.

The situation is actually quite similar to that of the microcredit variable. There is also a potential problem of reverse causation there because just as access to microcredit is expected to reduce the probability of being poor, the fact of being poor also increases the probability of participating in microcredit programmes.⁷ Therefore, unless the effect of reverse causation is eliminated the estimated coefficient of the microcredit variable could well turn out to be positive in the poverty regressions if reverse causation happens to be stronger than direct causation. We took care of this problem in exactly the same way as we tried to do for the safety net variable. It so happens that as in the case of safety net, the factors that predispose households towards participating in microcredit programmes also tend to make them poorer; so we controlled for reverse causation by including those factors as explanatory variables in poverty regressions. As a result, the negative sign that we find for the microcredit variable is expected to capture only the direct causation – one that suggests that microcredit tends to reduce poverty.

Yet, we do not find the same result for safety net by following the exactly the same procedure. This could mean one of two things. First, it could mean that the effect of safety net is indeed what we have found – namely, that it tends to increase the probability of being poor. But this is implausible; there are no conceivable mechanisms through which social protection of the kind that exists in rural Bangladesh can systematically worsen the economic condition of the beneficiaries. The worst that can happen is that it may not yield any discernible benefits. This leaves open the only other possibility, which is that we may have failed to eliminate the effect of reverse causation entirely. There may exist other observable or unobservable variables which simultaneously create predisposition to participate in safety net and to be poor, in addition to the ones that we have controlled for. But if such a residual effect of reverse causation still remains, and if this residual effect is still strong enough to swamp the expected direct effect, it would imply that the direct effect, to the extent it exists,

⁷ For the evidence on this account, see Osmani (2012).

must be very weak. Thus the most charitable, albeit indirect, interpretation of our finding would be that the effect of social protection on the economic well-being of rural households is at best minimal, if not insignificant. As we shall presently see, there are other pieces of evidence which suggest that the effect of social protection on the economic status of beneficiaries is indeed likely to be very small.

But before discussing that evidence, we intend to examine the effect of safety net on a couple of other dimensions of the beneficiaries' welfare. One of them relates to the ability of households to cope with shocks and the other to what we call 'asset transition' i.e., fact that over time some households move up the asset ladder by accumulating assets and some move down by depleting assets. If a system of social protection is to serve the goal of protection in any meaningful sense, it ought to be able to help households to cope better with periodic shocks and to prevent them from falling down the asset ladder, if not help them to move up. But does it?

When faced with shocks households try to cope with them through various means, but coping comes at a cost and some coping mechanisms cost more than others. For the present purpose, a useful way of classifying coping mechanism is to distinguish between 'erosive' and 'non-erosive'. Erosive mechanism, as the name suggests, erodes the resource base of the household – for example, when it draws down past savings or sells some assets to meet a crisis. Non-erosive mechanism, on the other hand, seeks to meet the crisis without depleting the resource base – for example, when the household borrows money, works harder, or migrates to places where work is available. Clearly, erosive mechanisms involve potentially greater cost to the household economy over the longer term as assets once sold are very difficult to retrieve even in good times. It stands to reason, therefore, that households would try to avoid such strategies as far as possible, and get by with the non-erosive ones. The extent to which they are actually able to do so would depend to a large degree on the external support they receive – for example, support from the social safety net. One way of assessing the effectiveness of the social protection system, therefore, is to find out how far it has enabled shock-stricken households to avoid erosive coping mechanisms.

For this purpose, we undertook an empirical analysis of the determinants of coping strategies using the same sample survey that was used for the earlier analysis of the effect of safety net on poverty.⁸ The explanatory variables were also mostly the same as in the poverty regressions with a few exceptions. We added variables on (a) the severity of shocks on the presumption that the more severe the shocks the harder it would be to avoid erosive coping, (b) social capital on the presumption that stronger social capital would make it easier to avoid erosive coping by drawing upon support from one's social network, and (c) availability of physical and financial assets at the beginning of the reference period (a year). A probit model was estimated, the (latent) dependent variable being the probability of adopting erosive strategies in the face of shocks. The results are reported in Table 7.

⁸ For a more complete analysis, see Osmani and Ahmed (2013)

Table 7
Determinants of Erosive Coping in Rural Bangladesh: 2010

<i>Dependent variable</i>		
Whether erosive strategy was adopted or not	Coefficient	t-value
<i>Explanatory variables</i>		
Severity of shocks	-3.47E-07	-0.9
Participation in social safety net	0.010321	0.2
Access to foreign remittance	-0.214238	-1.7
Access to microcredit	-0.201623	-3.1
Age of the household	0.016849	1.9
Age of the household squared	-0.00043	-2.3
Educational status of household head	0.014939	0.5
Gender of household head (dummy)	-0.064743	-1.0
No. of working age members	0.006022	0.2
Household size	0.012447	0.5
Financial assets one year ago (taka)	0.030424	1.5
Physical assets one year ago (taka)	1.99E-08	0.9
Social capital (score)	0.030424	1.6
Scope for non-farm work near village	-0.190489	-2.0
No. of observations	(2083)	

Notes: (1) The equations were estimated using the probit model. A negative coefficient means that higher values of the explanatory variable reduce the probability of adopting erosive coping; conversely for a positive coefficient.

(2) Social capital is an ordinal variable, with higher values indicating higher level of social capital.

(3) For description of all other explanatory variables, see notes for Table 5.

Source: InM Dynamics of Rural Poverty Survey 2010

Only a few variables turn out to be statistically significant. Access to microcredit is one of them – it significantly reduces the probability of adopting erosive coping. So does the availability of non-farm activities in the vicinity of the village. Access to foreign remittance also helps, although its statistical significance is somewhat weaker. What is noteworthy in the present context, however, is that access to social safety net does not have a statistically significant effect on way or the other. Evidently, the social protection system as it currently operates in rural Bangladesh fails in one its most important functions – namely, to enable the beneficiaries to cope with shocks better.

Asset transition is another dimension where a social protection system is expected to play an important role. No household likes to sell assets, although sometimes they have to – either in event of some unanticipated shock or to pay for some long-term investment such as children’s education. A good social protection system should enable households to meet face

these exigencies without having to lose assets and thereby having to move down the asset ladder. In order to investigate whether the social protection system currently operating in rural Bangladesh effectively performs this function, we examined the nature and determinants of asset transition among our sample households. By comparing the level of assets they currently own with the amount of assets inherited at the time the households were formed, we classified our households into three groups – faller, stayer and mover. We then undertook an econometric analysis of the determinants asset transition, with access to safety net as one of the explanatory variables and the rest being essentially the same as we have used for the previous regressions. The dependent variable was an ordinal categorical variable with three values – 0 for faller, 1 for stayer and 2 for mover. An ordered probit model was used for this purpose. Positive sign of the estimated coefficient of an explanatory variables would indicate that a higher value of that variable increases the probability of being a mover and reduces the probability of being a faller; and conversely, for negative values.

The results of this exercise, as reported in Table 8, are similar in nature to the ones for poverty regressions reported in Tables 5 and 6, i.e., almost all the explanatory variables are found to have intuitively plausible effects, with the sole exception of social safety net.

Table 8
Determinants of Asset Transition in Rural Bangladesh: 2010

<i>Dependent variable</i>		
Transition in non-land physical assets	Coefficient	t-value
<i>Explanatory variables</i>		
Participation in social safety net	-0.151635	-3.4
Access to foreign remittance	0.298283	4.9
Access to microcredit	0.077847	2.3
Initial land asset (decimal)	0.000467	3.7
Initial non-land physical asset ('000 Tk)	-0.000018	-1.3
Age of the household	0.063934	9.6
Age of the household squared	-0.001586	-9.4
Educational status of household head	0.090462	5.9
Gender of household head (dummy)	-0.385007	-5.6
No. of working age members	0.068698	5.0
Average distance from important places (km)	-0.023720	-1.3
Scope for non-farm work near village (code)	0.066899	0.8
Soil fertility in the village (code)	0.153202	2.1
No. of observations	(5802)	

Notes: (1) The equations were estimated using the ordered probit model. A positive coefficient means that higher values of the explanatory variable increase the possibility of moving up and reduce the probability of falling down the asset ladder; conversely for a negative coefficient.

(2) For description of all explanatory variables, see notes for Table 5.

Source: InM Dynamics of Rural Poverty Survey 2010

Thus, for example, while access to foreign remittance and microcredit increases the probability of moving up the ladder and reduces the probability of falling, the opposite is true for access to safety net – it seems to reduce the probability of moving up and increase the probability of falling. Our interpretation of this counter-intuitive result is the same as in the case of poverty regression – namely, that a trace of residual reverse causation still probably remains even after attempts to control for it. Our conclusion therefore is also the same: if the residual effect of reverse causation manages to swamp the direct effect, the strength of the direct effect, if any, must be rather minimal.

Thus, whichever way we look at the effect of social protection in rural Bangladesh – whether in its effect on poverty and general economic well-being, or in its ability to help households to cope with crises better, or in its power to prevent households from falling down the asset ladder over the longer term – it’s contribution has been negligible at best. This is so despite the fact that the incidence of benefits has been reasonably progressive, with the proportion of beneficiaries being higher for relatively disadvantaged groups as compared with the better off groups. So where lies the problem?

The answer is two-fold: first, the aggregate amount of benefits has been abysmally low in comparison with needs, and secondly, even the small amount of benefit that has been made available has been distributed disproportionately in favour of better off groups. The first problem is evident from Tables 9 and 10 and the second from Table 11.

Table 9
Contribution of Social Safety Net to Household Consumption
by Category of Programmes
 (benefit as % of household consumption expenditure)

Safety Net Category	Beneficiary households	All rural households
<i>All Programmes</i>	<i>2.67</i>	<i>0.84</i>
Transfer programmes	3.16	0.53
Education programmes	1.13	0.20
Employment programmes	5.51	0.10

Source: InM Dynamics of Rural Poverty Survey, 2010.

In Table 9, we show the amount of benefit received as percentage of average household consumption – for rural households as a whole and also for beneficiary households alone. The total amount of benefit is not even one per cent of the consumption expenditure of an average rural household. Even when only the beneficiary households are considered, the contribution of social safety net is just 2.7 per cent of average consumption expenditure. Of the three broad categories of safety net programmes, the employment programmes

contributes most to the beneficiaries' consumption – 5.5 per cent. But as we have seen earlier, employment is by far the smallest component in terms of coverage. The most extensive categories in terms of coverage – namely, transfer and education – contribute the least to household consumption: transfer only 3.2 per cent and education a paltry 1.1 per cent.

Going beyond the average household and considering the poorer groups alone, the picture improves only slightly (Table 10). Even for the extreme poor households among the beneficiaries, the contribution of safety net to household consumption is only about 4 per cent and for the moderate poor just 3.4 per cent. Taking the rural population as a whole, the extreme poor households receive only 2.2 per cent of their household consumption from safety net programmes and moderate poor households receive only 1.5 per cent.

Table 10
Contribution of Social Safety Net to Household Consumption
by Poverty Group
 (benefit as % of household consumption expenditure)

Poverty group	Beneficiary households	All rural households
Extreme poor	4.05	2.19
Moderate poor	3.39	1.49
Marginally non-poor	3.47	1.47
Well off	1.94	0.50
Total	2.67	0.84

Source: InM Dynamics of Rural Poverty Survey, 2010.

These figures clearly reveal how inadequate the aggregate contribution of social protection measures is to household consumption in rural Bangladesh. The problem is made worse by perverse distribution. Table 11 shows the distribution of both beneficiaries and money among the four poverty groups. The non-poor groups, comprising the well-off and marginally non-poor households, account for roughly 60 per cent of both beneficiaries and money offered by the social protection programmes. The well-off group alone accounts for 46 per cent of all beneficiaries and 43 per cent of funds.⁹ When a small amount of fund is distributed so heavily in favour of those who need protection the least, it should come as little

⁹ Distribution of benefits happens to be perverse in spite of the fact, as noted above, that the incidence of benefit is distinctly progressive (i.e., the percentage of beneficiaries is higher among the poorer groups) and per household benefit is also mildly progressive. The reason for this apparent anomaly lies in the difference in absolute numbers. The non-poor groups are much larger in size in terms of number of households – some 70 per cent of rural households belong to these groups. So even with slightly lower percentage of beneficiaries and per household benefits, the total amount of benefit accruing to these groups turns out to be much larger than the benefit accruing to the poorer groups.

surprise that the social protection system fails to achieve its objective of helping the disadvantaged segments of the society to shore up their living standard, enable them to cope with crises better and to prevent them from falling down the asset ladder.

Table 11
Distribution of Benefits of Safety Net Programmes
by Poverty Group: 2010

Poverty group	Share of beneficiary households (%)	Share of total funds received (%)
Extreme poor	24.5	25.6
Moderate poor	15.1	14.8
Marginally non-poor	14.6	16.6
Well off	45.8	42.9
Total	100.0	100.0

Source: InM Dynamics of Rural Poverty Survey, 2010.

Section IV. Moving Forward

In trying to look ahead to how a social protection system should look like in 2030, the first obvious point to note is that it should be a much more generously funded endeavour. Whether or not Bangladesh achieves its goal of becoming a middle income country by that time, there is little reason to doubt that the country will be capable of generating much more internal revenue than it does now, and as befits an aspiring prosperous nation it should be both willing and able to protect its less fortunate members from avoidable economic hardship. A well-financed social protection system must be deemed to be an essential attribute of any civilized society.

Financing alone, however, will not be enough. Serious consideration must be given to the issues of design and implementation. The current scenario of a large number of programmes being run by multiple authorities with little co-ordination and thinly spread out resources is hardly a sustainable model for the future. In particular, setting priorities should itself be a priority of the first order. In this regard, we once again draw upon lessons from the ground to provide some general guidance for the policymakers.

We noted in the preceding section that the failure of the existing social protection system stems partly from inadequate resources and partly from perverse distribution of benefits. Financing on a larger scale, made possible by an expanded economy, may help deal with the first problem to some extent. But rationalization of the existing system would still be

necessary for making more resources available to those who need them most. Some guidelines in this regard may be gleaned from Table 12, where we expand Table 11 to show the distribution of benefits separately under the three broad categories of programmes.

Table 12
Distribution of Benefits by Categories of Safety Net Programmes and
by Poverty Groups: 2010

Poverty group	Employment		Transfer		Education	
	Share of beneficiary households (%)	Share of funds received (%)	Share of beneficiary households (%)	Share of funds received (%)	Share of beneficiary households (%)	Share of funds received (%)
Extreme poor	30.1	32.7	28.5	25.6	22.8	22.1
Moderate poor	16.6	16.3	17.3	15.9	12.4	11.2
Marginally non-poor	12.9	16.0	14.8	17.4	14.8	14.7
Well off	40.5	35.0	39.4	41.0	50.0	52.0
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: InM Dynamics of Rural Poverty Survey, 2010.

Note the contrast between the employment and education programmes. Among the three broad categories, employment programme is most generously tilted towards the extreme poor households while the education programme is most generously tilted towards the well-off group. The simple reason why the education programme is so heavily biased towards the well-off group is that unlike the other two categories it has more of a character of a universal, as distinct from a targeted, programme and as such the well-off households, who are the largest group in terms of number, claims most of the benefit. This is understandable at the current state of our economic evolution: promoting access to basic education should be considered worthy of universal support when the economy is trying to create the foundations of a modern skill-based economy.

But some rethinking might be in order as the economy approaches the middle-income status. Two points are worthy of consideration here. First, as the well-off group becomes even better-off in the course of sustained economic growth, the idea of near-universal support for basic education should be questioned, for it would make sense to take out of the protective umbrella those who are able to bear the cost of education on their own shoulders.

The more fundamental issue relates to the question of whether support for basic education should be considered part of the social protection system at all. Continued state support for education can of course be justified from many distinct perspectives – for

example, from the human capital as well as the human development perspectives and from the perspective of a human rights-based approach to development. By contrast, justifying it from the perspective of social protection is not so straightforward. Education is better seen as part of a ‘development’ discourse, also as part of a ‘poverty alleviation’ discourse, than as a ‘protection’ discourse. These discourses are obviously not entirely distinct from each other; there are both overlaps and synergies among them, but they also have distinctive elements. ‘Development’ and ‘poverty alleviation’ have the connotation of secular progress – moving up over time, whereas ‘protection’ has the connotation of preventing temporary or permanent collapse for some groups of the population during the course of general progress. Education fits the agenda of secular progress better than the agenda of protection. It may of course be possible to contrive arguments that tend to blur these distinctions by pointing out possible protective role of education as well. It cannot be denied that any intervention may have impacts along multiple dimensions, but it is still important to distinguish the most salient impact from the less salient ones. Unless these distinctions are made, there is a danger of crowding the social protection agenda with too many activities that are better located elsewhere. This is indeed what has happened to the current state of the social protection system in Bangladesh, adding to its woes. Taking near-universal support for basic education out of the social protection system should, therefore, form an essential part of the necessary process of rationalization. This will not only facilitate the creation of a unified institutional framework for implementing a more focused social protection system, it will also make it easier to allocate more funds for elements that have a more genuine claim as ‘protection’.

One such element is the employment-based programme. It has emerged as part of our lessons from the ground that the employment component has the most pronounced bias in favour of the disadvantaged groups and yet it is the one with the least coverage and endowed with the least amount of resources. The fact that its coverage is so small – involving a mere 2.6 per cent of rural households – sits oddly with the fact that wage labour still remains the most predominant mode of employment for the rural poor. Small coverage is not a consequence of lack of need on the part of potential participants of the employment programmes. This becomes immediately clear from a look at Table 13, where we present data on the extent of underemployment in the rural economy.

It is noteworthy that out of all households that have some underemployment, only about 3 per cent participated in safety net employment programmes, and those who did not participate had nearly 60 per cent higher underemployment compared to those who did. This shows the great potential that exists for expanding these programmes. It needs to be recognised, though, that many of the underemployed will not necessarily be willing to work in public work types of projects. This is especially true of richer households, and especially the female members of such households. Thus a better measure of the potential can be found by considering only the poor households, who are more likely to be forthcoming. It is remarkable that even among poor households less than 5 per cent of underemployed

households actually participated in safety net employment projects, and among those who did not participate had 76 per cent higher underemployment than those who did. The huge potential for expansion of employment-based programmes is, therefore, quite obvious.

Table 13
Underemployment and Participation in
Safety Net Employment Programmes: 2010

Participation in safety net employment programmes	All underemployed households		Poor underemployed households	
	Share of households (%)	Under-employment (days/hh)	Share of households (%)	Under-employment (days/hh)
No	97.1	145	95.3	125
Yes	2.9	91	4.7	71
<i>All</i>	<i>100.0</i>	<i>143</i>	<i>100.0</i>	<i>123</i>

Notes: (1) Underemployment was measured by taking 228 days per working person per year as the norm of full employment.

(2) Underemployment of a household is measured by adding up the underemployment of individual members that were underemployed to some extent.

Source: InM Dynamics of Rural Poverty Survey, 2010.

Yet another area of expansion with great potential is health insurance. So far, we have not broached this subject at all, primarily because very little health insurance exists in practice. Yet, one could argue that some form of health insurance for all should be an essential ingredient of a social protection system. We have discussed before how a social protection system must ensure that vulnerable households can withstand the impact of shocks better. Any move in that direction cannot avoid the issue of health as it is well-known that ill-health is the single most important reason why rural households face shocks to their economic condition. In Table 14, we present evidence from our own survey, in which we asked what kind of shocks and how many of each kind the households faced in the three years preceding the survey. It turns out that some 40 per cent of all shocks were caused by large expenditures incurred because of health-related problems. A distant second was the death of poultry, accounting for 15 per cent of all shocks.

Not only is ill-health related expenditure the most pervasive type of shock in rural Bangladesh, it also has an especially pernicious effect on the long-term economic condition of households. For example, a panel survey of rural households found that health-related shocks are the primary reason why many non-poor rural households fall into poverty over time and poor households fall deeper into poverty (Quisumbing 2011). Clearly, a social protection system worthy of its name cannot but accord priority to the task of implementing an extensive health-insurance programme.

Table 14
Frequency Distribution of Various Types of
Economic Shocks in Rural Bangladesh: 2007-2010

	Percentage
<i>Asset shocks</i>	26.9
Death of poultry	15.1
Death of livestock	6.2
Theft/burglary/robbery	2.2
Others	3.4
<i>Income shocks</i>	24.7
Storms/cyclones/ tidal wave	10.3
Crop disease	5.2
Flood/excessive rainfall	3.5
Others	5.6
<i>Expenditure shocks</i>	48.4
Health-related expenditure	39.5
Maternity care	4.0
Litigation	3.0
Dowry	2.0
<i>All</i>	100.0

Source: InM Dynamics of Rural Poverty Survey, 2010.

In our discussion so far, we have singled out employment-related and health-related programmes for prioritization. This does not mean other programmes are not important; certainly greater allocation and better implementation must be ensured for several other worthy components such as old-age pension, and allowances for vulnerable women and disabled persons. The reason for singling out two components out of many is simply that they have not so far received the emphasis they deserve.

VI. Conclusions

The objective of this paper was to seek some guidance about future directions of a social protection system in Bangladesh on the basis of lessons learnt on the ground, focussing in particular on the rural context. For this purpose, an attempt was made to glean insights about the strengths and weaknesses of the existing social protection system by utilising a large-scale poverty survey that is representative of rural Bangladesh. Careful empirical investigation shows that despite the fact that the existing system is reasonably progressive in

the incidence of benefits, the system has failed to achieve the major objectives of serving the interest of disadvantaged groups by shoring up their living standard, by enabling them to cope better with periodic crises and by preventing them from falling down the asset ladder. The proximate reasons for this failure are two-fold. First, the aggregate amount of benefits is abysmally small in relation to the need; and secondly, even the small amount that is available is distributed heavily in favour of better-off households. It doesn't help that programmes that are relatively heavily biased in favour of better-off households, such as the education-based programmes, command more resources than those that are more favourable for the poor, for example, the employment-based programmes.

These findings hold important lessons for the future. In the light of lessons learnt, the paper argues that as part of necessary rationalization of the existing system, serious consideration should be given to taking out education-based programmes from the umbrella of social protection and housed elsewhere. This is so not only because of the distributional aspect of these programmes but also because the *raison d'être* of these programmes belongs to the arena of development and poverty alleviation rather than to social protection as such. Among the existing programme categories, special emphasis ought to be given to employment-based interventions. They are relatively more favourable for the poor and there exists enormous potential for expanding them manifold. Finally, the paper draws attention to a serious lacuna that exists in the existing system insofar as a comprehensive system of health insurance does not yet exist. Health-related shock is the most pervasive type of shock in rural Bangladesh and is the single most important reason why many non-poor households slide into poverty over time and poor households fall deeper into poverty. A social protection system worthy of its name cannot ignore the need for setting up an effective mechanism for protecting vulnerable households from the pernicious effect of this most pervasive of shocks.

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