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Poverty in Bangladesh during 2010-2016: Trends, Profile and Drivers

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This paper uses the latest round of the Household Income and Expenditure Survey to provide an initial assessment of Bangladesh's poverty trends from 2010 to 2016/17. The paper documents that Bangladesh has made remarkable gains in reducing poverty. However, with almost 1 in 4 people still living in poverty today, the country needs to make further progress. Economic growth has led to gains in welfare, but even though economic growth has accelerated in recent years, it has delivered less poverty reduction. Consumption has grown at a slower rate and has been less equally shared since 2010 than in the prior decade. Welfare differences between the historically poorer West and the rest of the country have re-emerged, as poverty has increased in the North-western division of Rangpur. The decline in urban poverty has also slowed. Slower agricultural growth, combined with slower job creation in manufacturing, could explain why growth has become less poverty reducing over time in Bangladesh.

Keywords: Bangladesh, Poverty, Measurement, Profile
JEL Classification: I30, I32, I39, O53

I. RECENT PROGRESS IN POVERTY REDUCTION

Official poverty statistics for 2016/17 shows that almost 1 in 4 Bangladeshis, 24.5 per cent, live on less than the national poverty line.[1,2] These individuals cannot

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[1] The *Household Income and Expenditure Survey* (HIES), used to estimate poverty in Bangladesh, is conducted over the course of one year. The HIES 2016/17 data was collected from April 2016 to March 2017. For the rest of this paper, we refer to these poverty estimates as from 2016.

[2] For a full discussion of how poverty is measured in Bangladesh and comparability across rounds of the HIES, see Paper 9 in this volume, "Official Methodology used for Poverty Estimation based on the Bangladesh Household Income and Expenditure Survey 2016/17: A Technical Note." Standard errors for poverty estimates are included in graphs to indicate the precision with which poverty is measured in Bangladesh.

cover basic food and non-food needs. Half of them, 13 per cent of the population, live on less than the national extreme poverty line. The international poverty line, a measure that allows the level of poverty in Bangladesh to be compared to the level of poverty in other countries, shows that the rate of poverty in Bangladesh is relatively high by regional standards.

Although poverty is still high, Bangladesh has made remarkable progress in reducing it. As recently as 2000, half of the country's population lived in poverty based on the national poverty line; by 2010, 31 per cent of Bangladeshis lived in poverty. The estimates for 2016 thus represent sustained progress in reducing poverty. Measures of extreme poverty and the international poverty line show the same trend (Figure 1).

Bangladesh's continued progress in reducing poverty reflects sustained economic growth. For more than a decade, Bangladesh has experienced high and stable economic growth. Between 2000 and 2016, average GDP growth was 6 per cent per year, and average GDP per capita growth was 4.4 per cent per year.

However, growth has delivered less poverty reduction than in the past. Even though average annual economic growth increased from 6.1 per cent between 2005 and 2010 to 6.5 per cent between 2010 and 2016, the pace of poverty reduction slowed. After falling 1.7 percentage points annually from 2005 to 2010, the national poverty rate dropped 1.2 percentage points annually from 2010 to 2016. The amount of poverty reduction each percentage point of growth per capita delivers (the elasticity of poverty reduction to growth) thus fell from 0.88 to 0.73.[3] Measures of the depth and severity of poverty tell the same story. While both measures fell from 2010 to 2016, the rate of progress has been slower than in previous periods. As a result, at the extreme poverty line the elasticity of poverty reduction to GDP growth per capita has fallen by a third, from 1.24 to 0.86.

[3]The elasticity of poverty reduction to growth per capita is given by the per cent reduction in poverty divided by GDP growth per capita. The values using the growth rate instead of growth per capita are 0.70 and 0.58, respectively. In general, the elasticity of poverty reduction to growth per capita is higher at lower levels of poverty (Ravallion 2012). This is partly for arithmetic reasons: it is easier to halve the poverty rate when going from, for example, 5 per cent poverty (this requires a 2.5 percentage point reduction in poverty) than from 50 per cent poverty (which would require a 25-percentage point reduction in poverty) (Cuaresma, Klasen and Wacker 2016). In order to take this into account, the semi-elasticity can also be considered, which is the percentage point reduction in poverty for each per cent of GDP growth per capita. This has fallen even more substantially, from 0.35 in 2005-2010 to 0.23 in 2010-2016 (at the national poverty line).

Strong national poverty reduction masks differences in welfare trends between rural and urban Bangladesh. The upper poverty rate[4] fell in rural and urban Bangladesh from 2010 to 2016, but the rate of reduction was much slower in urban areas (Figure 1). There was no progress in reducing extreme poverty in urban areas: the proportion of the urban population living in extreme poverty was 7.7 per cent in 2010 and 8 per cent in 2016. Bangladesh continued to urbanise during this time, albeit more slowly (the urban share of the population increased from 26.3 to 29.1 per cent from 2010 to 2016). Thus, there are now more people living in extreme poverty in urban Bangladesh (3.7 million) than in 2010 (3 million). Since Bangladesh will continue to urbanise, this is a worrisome trend. Interventions to strengthen urban poverty reduction will be increasingly important to achieving poverty reduction in the future.

Poverty reduction in rural Bangladesh accounts for 90 per cent of all poverty reduction that occurred from 2010 to 2016. This is explained by the fact that Bangladesh is a predominantly rural country (3 in 4 Bangladeshis live in rural areas), and that the pace of poverty reduction in rural areas was faster than in urban areas.

There have also been stark differences in welfare trends across divisions. Poverty has risen in Rangpur[5] division, the historically poorer Northwest of the country; stagnated in Rajshahi and Khulna in the West; fallen moderately in Chittagong; and declined rapidly in Barisal, Dhaka, and Sylhet (Figure 2 and Table I). The stronger progress of poverty reduction in the Eastern regions widened a gap between Eastern and Western Bangladesh that had narrowed between 2005 and 2010 (Jolliffe *et al*. 2013). This highlights the need for further investments to increase income growth in the West.

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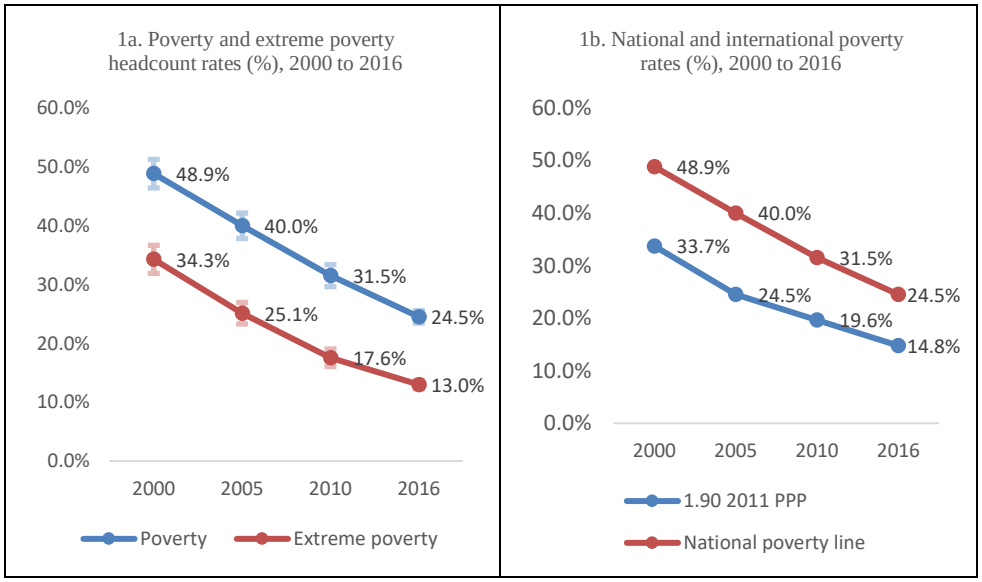
[4]The official methodology used to estimate poverty numbers in Bangladesh was based on the Cost of Basic Needs (CBN). The CBN method calculates the cost of obtaining a consumption bundle considered to be adequate to satisfy basic consumption needs. If a person cannot afford the cost of this bundle, then this person is considered poor. The upper poverty line is the cost of a bundle that includes basic food and non-food items. The lower poverty line is the cost of a bundle that mostly includes food, along with a small share of non-food items, and aims to measure extreme poverty. For a full discussion of how poverty is measured in Bangladesh, see Paper 9 in this volume."

[5] There are two new divisions in the sampling frame for HIES 2016/17, Mymensingh and Rangpur. Although some trends have been presented for Rangpur since 2010, neither of these divisions were in the sampling frame until this round of HIES. In the Annex, we present the trends for the six 2000 divisions and the eight 2016 divisions, with their respective standard errors.

The HIES 2016/17 is the first survey that provides district poverty estimates.[6] Figure 3 shows that, although there are poor districts in all provinces, poor districts are much more likely to be in the periphery of the country than in the center, and are more likely to be in the Northwest.

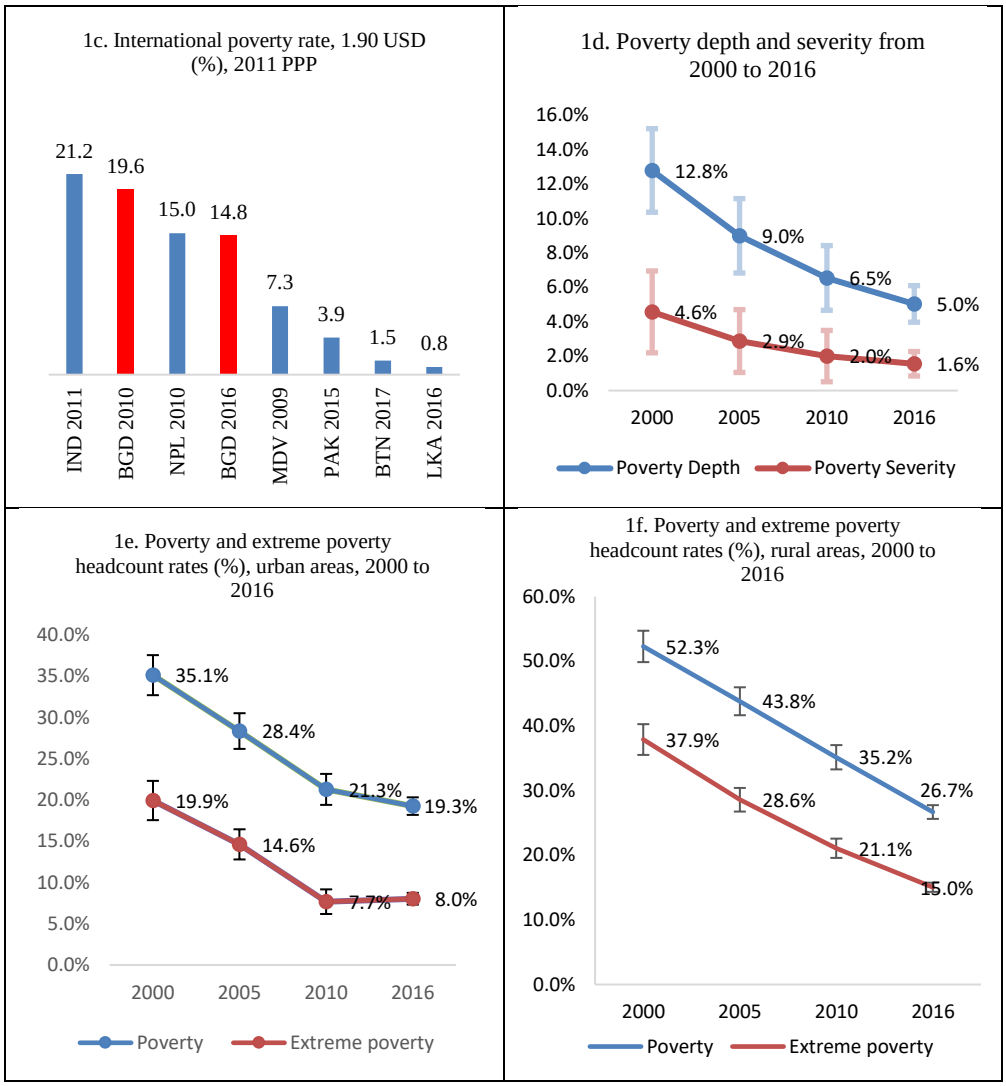
Poverty declined in Bangladesh's largest city, Dhaka, but increased in the second largest city, Chittagong. In Chittagong Statistical Metropolitan Area (SMA), the poverty rate rose from 6.6 to 16.9 per cent. Poverty fell in other urban centres, but more slowly than in rural areas (Figure 4). Although poverty rates in Dhaka SMA are low at 10.7 per cent (and 9 per cent in Dhaka City Corporation), parts of the city have very high poverty rates. A slum survey conducted in Dhaka City Corporation in conjunction with the first quarter of the HIES showed that poverty in slums in Dhaka was 23.3 per cent–much higher than the urban average.

FIGURE 1: **Trends in Poverty Reduction in Rural and Urban Areas, 2000 - 2016**



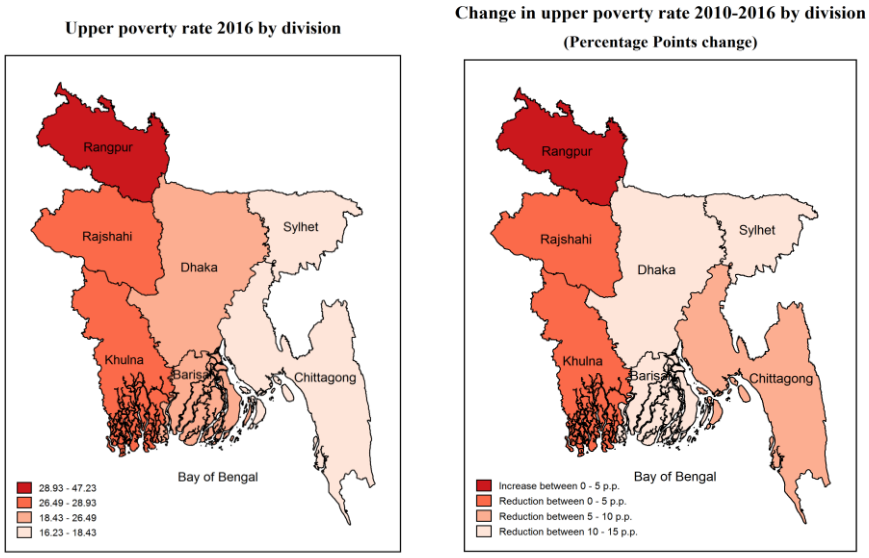
(Contd. Figure 1)

[6] For a full discussion of the sampling strategy used in HIES 2016/17 and how it compares to previous years, see Ahmed *et al*. (2017).



Note: PPP denotes Purchasing Power Parity. Standard error estimates are presented for Figures 1a/1d/1e and 1f.

FIGURE 2: **Poverty Reduction by Division, 2010-2016**



Source: Authors' calculations based on HIES 2010 and 2016.

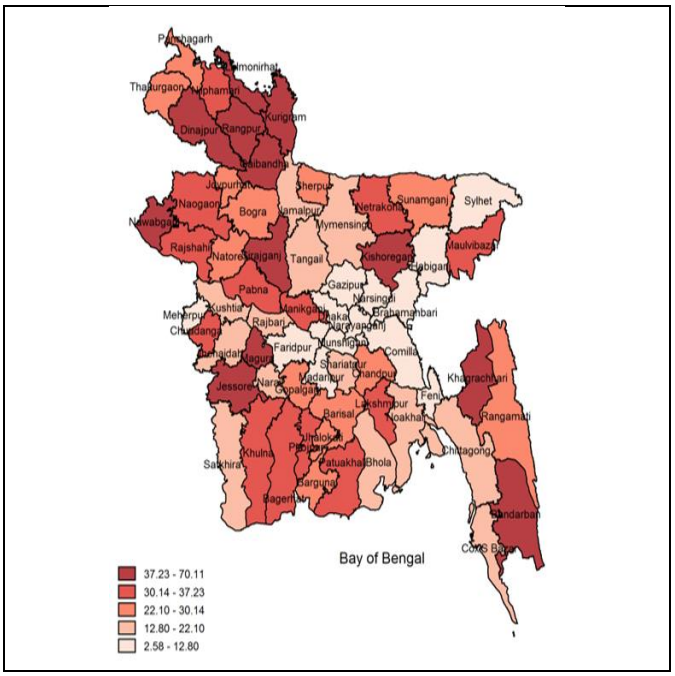
TABLE I

POVERTY REDUCTION BY DIVISION, 2010-2016

	Poverty rate		Extreme poverty rate	
	2010	2016	2010	2016
Barisal	39.4	26.4	26.7	14.4
	(3.3)	(1.5)	(3.2)	(1.3)
Chittagong	26.2	18.3	13.1	9.0
	(2)	(1.2)	(1.4)	(0.9)
Dhaka	30.5	20.5	15.6	9.9
	(1.6)	(1.1)	(1.1)	(0.7)
Khulna	32.1	27.7	15.4	12.1
	(2.3)	(1.3)	(1.6)	(0.8)
Rajshahi	29.7	29.0	16.0	14.3
	(2.1)	(1.5)	(1.6)	(1)
Rangpur	42.3	47.3	27.7	30.6
	(3.2)	(1.3)	(2.9)	(1.2)
Sylhet	28.1	16.2	20.7	11.5
	(3)	(1.7)	(2.5)	(1.4)

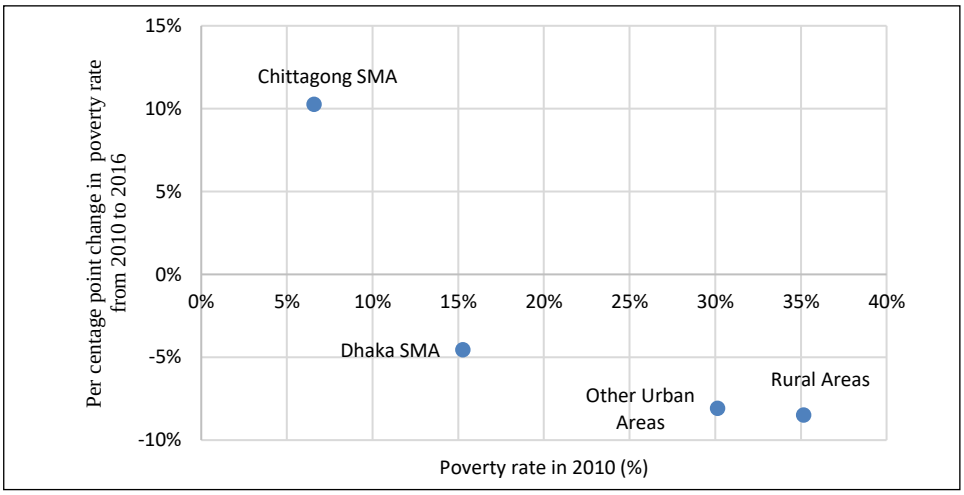
Source: Authors' calculations using HIES 2010 and 2016.
Note: Standard errors are in parentheses.

FIGURE 3: **District Upper Poverty Rates in 2016**
(Percentage of the population)



Source: Authors' calculations based on HIES 2016.

FIGURE 4: **Poverty across Urban Cities, Other Urban, and Rural Areas, 2010-2016**



Source: Authors' calculations using HIES 2010 and 2016.
Note: SMA stands for Statistical Metropolitan Area. Poverty lines for SMA areas were recalculated entirely after reassigning households to recover the SMA areas across time. For details, refer to Ahmed *et al.* (2019).

II. INCIDENCE OF PROGRESS AND SHARED PROSPERITY

Higher GDP growth has not caused faster poverty reduction, partly because average consumption growth did not keep up with GDP growth. Although GDP growth accelerated between 2010 and 2016, compared to years before 2010, household survey data show consumption growth has been slower. This reflects the declining importance of private consumption in total GDP; the share of private consumption in total GDP declined from 74 to 69 per cent between 2010 and 2016, while investment increased by 3.4 percentage points. Figure 5 presents the growth incidence curve, which indicates the growth in consumption for people at each level of consumption (from the poorest on the left to the richest on the right) for 2000-2005, 2005-2010, and 2010-2016. The bottom right quadrant summarises the average growth of the bottom 40 per cent and the average growth of the top 60 per cent. Average consumption growth fell from 2.2 in the period 2000 to 2005 to 1.8 in the period 2005 to 2010 and 1.4 in the period 2010 to 2016.

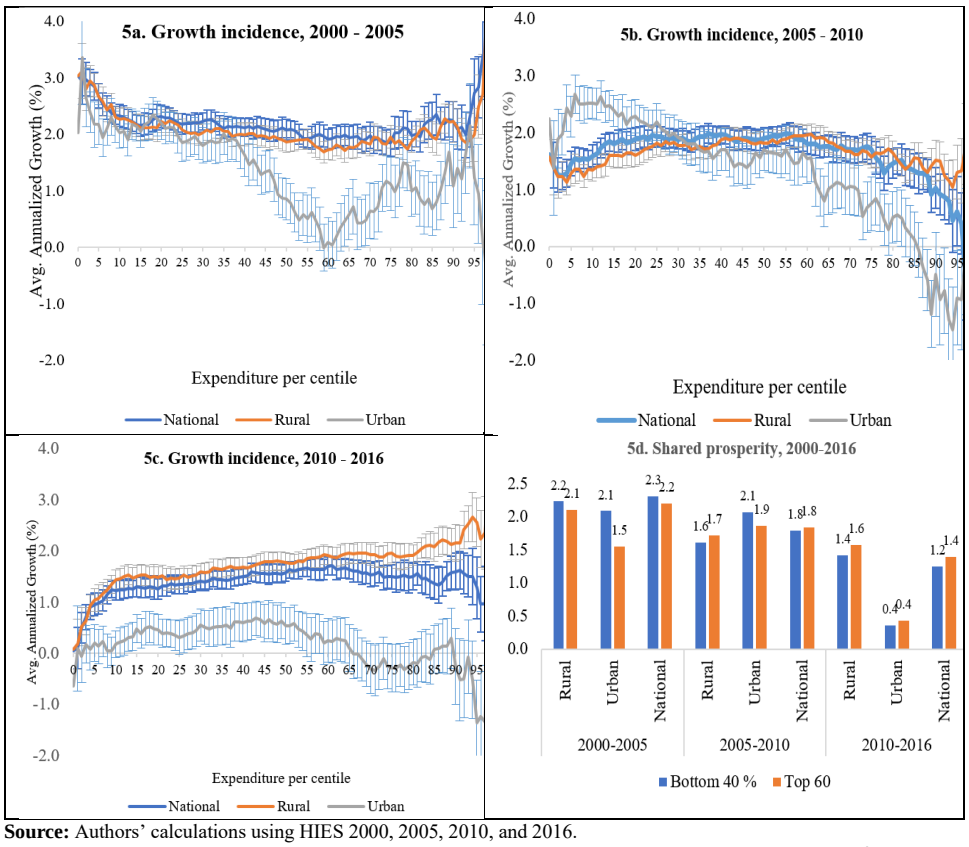
In addition, consumption growth has become more unequal over time. Poorer households experienced slower consumption growth (1.2 per cent among the bottom 40 per cent) than richer households (1.4 per cent among the top 60 per cent) from 2010 to 2016; from 2000 to 2005, consumption growth had been higher among poorer households. From 2010 to 2016, consumption growth was highest for people in the 40th to 75th per centiles. It was lower for the poorest and for the richest, particularly those in the top third of the urban distribution. The richest households experienced slow consumption growth most likely because of lower consumption growth in urban areas (which tend to be richer than rural areas). Consumption growth was highest for the most well-off rural households. As a result, although Bangladesh recorded healthy consumption growth among the bottom 40 per cent, it did not fare well on measures of equality and shared prosperity.

There was a slight increase in inequality from 2000 to 2016, particularly in rural areas. The Gini coefficient increased by one percentage point and the Theil index (with alpha equal to one) by two percentage points (Figure 6). It is in rural areas that inequality has particularly increased. The rural Gini increased from 0.27 to 0.29 because the bottom 10 per cent of households in rural areas did not fare well, and because rich rural households experienced higher consumption growth. Inequality in urban areas fell because of the low growth of consumption at the top end of the consumption distribution.

Poverty reduction was largely driven by growth and not redistribution of consumption. Figure 7 quantifies the cost of rising inequality on poverty reduction

in Bangladesh. Of the 8.5 percentage points of poverty reduction from 2005 to 2010, 6.2 percentage points can be attributed to the overall growth in consumption and 2.3 percentage points can be attributed to the fact that consumption growth was equalizing (i.e., consumption grew faster among poorer households). In contrast, all of the 7.2 percentage points of poverty reduction from 2010 to 2016 can be attributed to growth in average consumption. Inequality in the growth of consumption slowed the overall rate of poverty reduction.

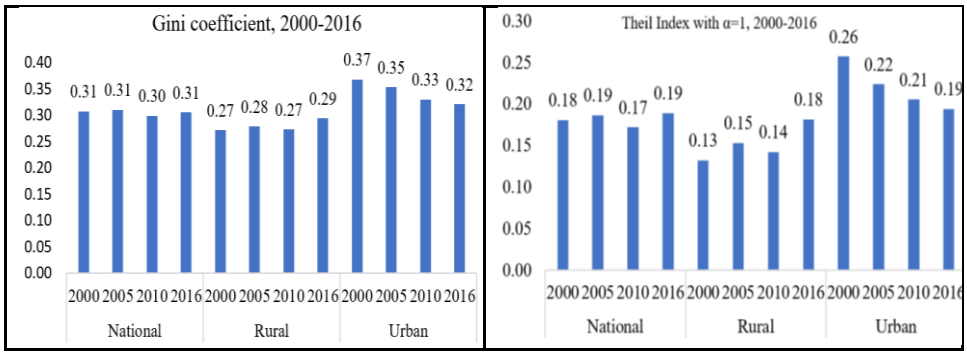
FIGURE 5: **Growth Incidence Curves and Shared Prosperity Measures, 2000-2016**



Source: Authors' calculations using HIES 2000, 2005, 2010, and 2016.

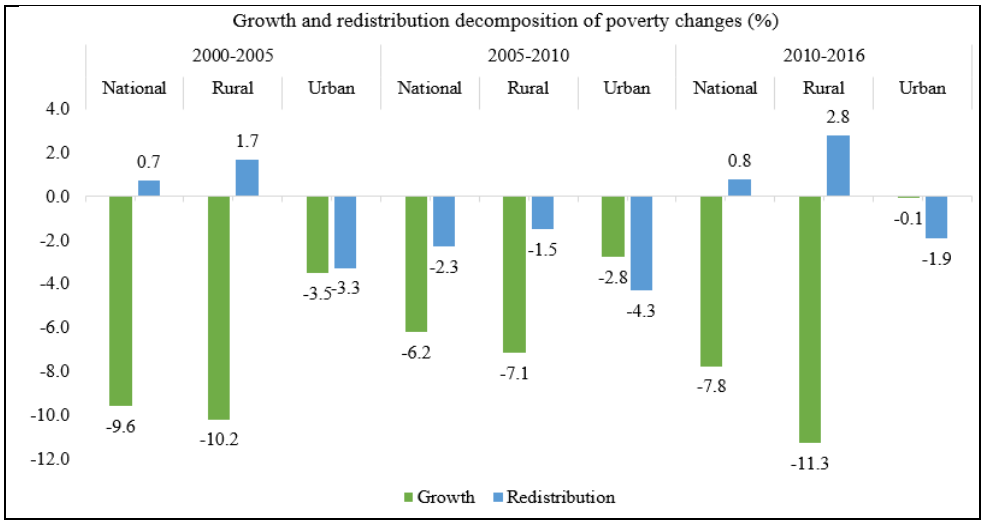
Notes: Figures 5a, 5b, and 5c present growth incidence curves, which indicate the growth in consumption for people at each level of consumption (from the poorest on the left to the richest on the right). Standard errors are presented in brackets. Figure 5d compares the annualized growth rate of the mean household per capita consumption of the poorest 40 per cent of the population (bottom 40) and the richest 60 per cent (top 60), where the bottom 40 and top 60 are determined by their rank in household per capita consumption.

FIGURE 6: **Trends in Consumption Inequalities in Rural and Urban Areas, 2000-2016**



Source: Authors' calculations using HIES 2000, 2005, 2010, and 2016.

FIGURE 7: **Decomposition of Poverty Changes into Growth and Redistribution Components, by Subperiods from 2000 to 2016**



Source: Authors' calculations using HIES 2000, 2005, 2010 and 2016.

III. DRIVERS OF POVERTY REDUCTION: AN INITIAL ASSESSMENT

The last Bangladesh Poverty Assessment showed that poverty reduction from 2005 to 2010 was driven primarily by growth in labour income (Jolliffe *et al*. 2013). Labour income increased mainly thanks to higher agricultural incomes driven by real wage growth in agriculture. Bangladesh conforms to the international norm of poverty reduction being driven mostly by changes in labour

income, with changes in transfers—be it safety net transfers or remittances—having an important but smaller impact (Azevedo *et al*. 2013).

An initial look at the 2016 data suggests that poverty reduction in Bangladesh has continued to be delivered by changes in labour income rather than transfers. The proportion of households receiving the main sources of transfers to households (social protection programmes and international and domestic remittances) has not increased at the lower end of the consumption distribution. Indeed, the proportion of households in the bottom 40 per cent receiving international remittances fell from 4.1 to 2.5 per cent. The proportion of households receiving social protection transfers fell from 33.2 to 29.6 per cent (Table II).

The amount of international remittances that households report receiving has fallen quite dramatically. This is a result of a combination of factors: fewer households report having a member that migrated; fewer households report receiving remittances; and when remittances are transferred, the average value of remittances received per household is lower (Figure 9). It is not clear why the average value of remittances would have fallen so much, as the characteristics of those that migrate have not changed substantially since 2011. It could reflect households being less willing to report remittances that are being transmitted through informal channels.

The decline in remittances observed since 2012 is unlikely to have had a large effect on national poverty rates or explain the slowdown in poverty reduction. HIES data indicates that the amount of international remittances that households report receiving has fallen significantly, confirming the trend in national accounts remittance data. However, as households at the bottom of the income distribution were less likely to have migrants and receive remittances in the first place, this reduction is unlikely to have affected overall poverty rates. Assuming that the share of households with international migrants and the size of remittances had remained at 2010 levels, the annual rate of poverty reduction would have increased only slightly, to 1.4 percentage points, between 2010 and 2016. The fall in remittances has particularly affected incomes of the top 60 per cent, who are more likely to benefit from international remittances. However, the slowdown in remittances may have had some impacts at the local level, due to indirect benefits of migration. More information is needed to assess this hypothesis.

TABLE II

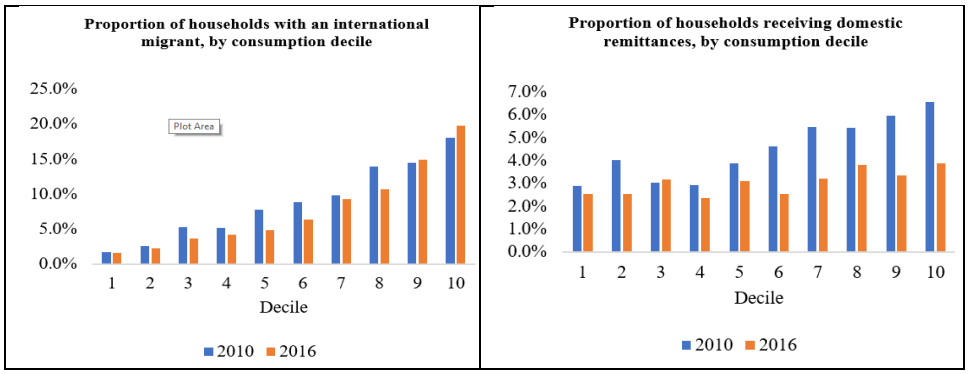
SHARE OF HOUSEHOLDS RECEIVING REMITTANCES AND SOCIAL PROTECTION TRANSFERS

	2010		2016	
	All	Bottom 40	All	Bottom 40
International remittances (%)	9.6	4.1	5.0	2.5
Internal remittances (%)	12.3	10.5	13.1	11.7
Social protection transfers (%)	24.6	33.2	21.4	29.1

Source: Authors' calculations using HIES 2010 and 2016.

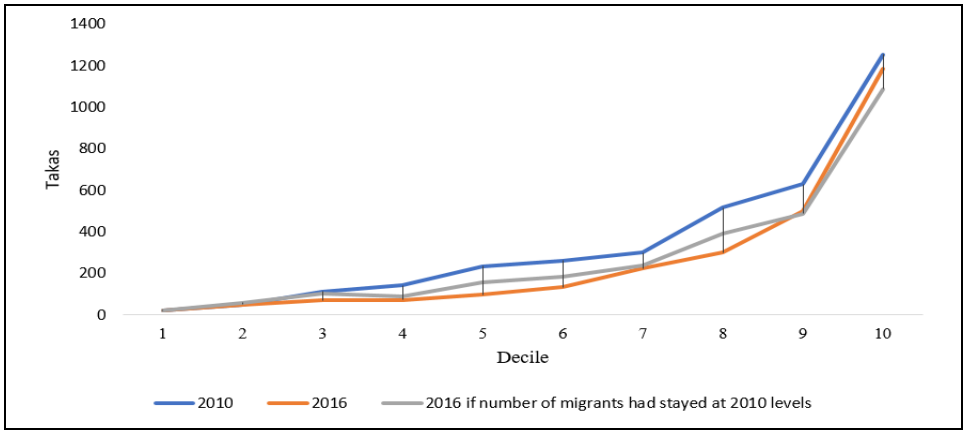
Note: Bottom 40 denotes the poorest 40 per cent of the per capita consumption distribution**.**

FIGURE 8: **Proportion of Households with Access to Remittances from 2010 to 2016, by Consumption Decile**



Source: Authors' calculations using HIES 2010 and 2016.

FIGURE 9: **Value of Remittances Received (per capita), by Consumption Decile**



Source: Authors' calculations using HIES 2010 and 2016.

Note: In the graph on the right-hand side, the grey line represents the value of international remittances per consumption decile that would have been observed, if the number of migrants per household had stayed the same as in 2010. It assumes the 2016 value of remittances per international migrant.

3.1 Labour Force Participation

Labour force participation increased between 2003 and 2010, driven by a 10-percentage point increase in female labour force participation (from 26 to 36 per cent). This increase in labour force participation was made possible by strong job creation in the Bangladesh economy, particularly in the readymade garment (RMG) sector, which favoured female employment (Farole and Cho 2017).

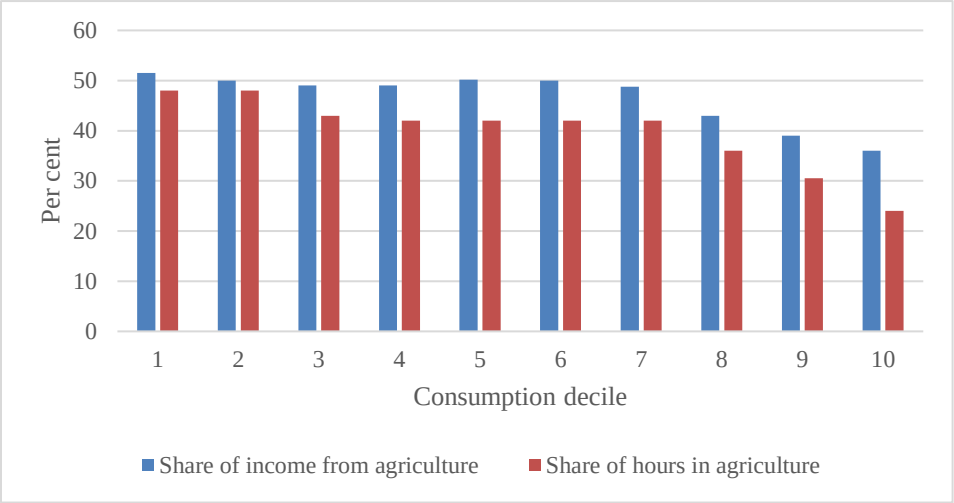
However, this trend has reversed since 2010. Job growth slowed despite accelerating GDP growth. Female labour force participation in urban areas declined by 4 percentage points, from 35 to 31 per cent, between 2010 and 2016, most likely reflecting the rapid slowdown in job creation in the RMG and textiles sector (Farole and Cho 2017).[7] Data on employment in the last seven days collected in HIES does not point to such a large drop in employment rates among household heads, and poverty reduction has occurred equally across households with employed and inactive heads.

3.2 Sectors

The pattern of growth became less favourable to the sectors poor households are more engaged in, and not enough jobs were created to increase employment in more dynamic sectors. In 2010, poorer households spent more of their time and derived more of their income from agriculture (Figure 10). Agricultural growth, if evenly distributed, would have benefited them more. However, agricultural growth slowed after 2010, while industrial growth accelerated. Between 2011 and 2016, agriculture and industry output grew 3.4 and 9.5 per cent annually, respectively, in contrast to 4.5 and 7.4 per cent from 2000 to 2010. The service sector grew at a uniform 6 per cent across the period 2000-2016. However, accelerating growth in the industrial sector post 2010 was not matched by stronger job creation in this sector. Job creation in industry slowed sharply between 2010 and 2015 (Farole and Cho 2017).

[7] Data from the *Labour Force Survey 2015*.

FIGURE 10: **Share of Agriculture in Income and Employment in 2010, by Consumption Decile**

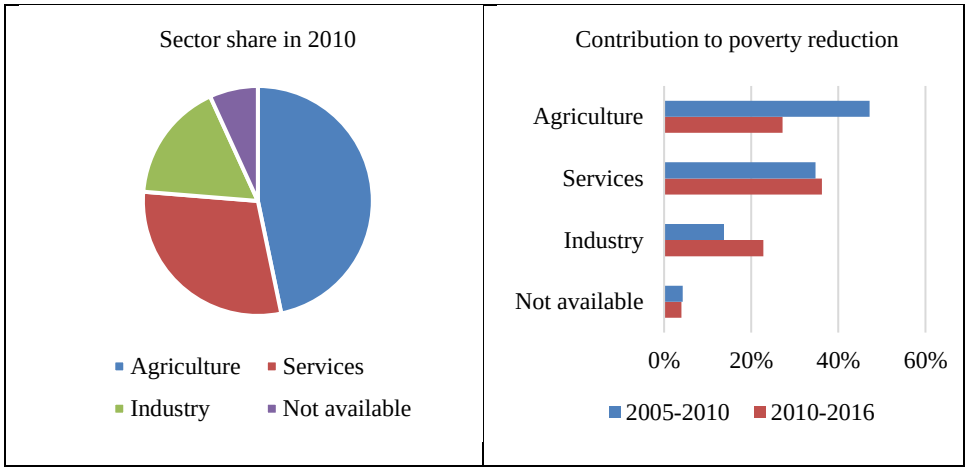


Source: Estimated from primary data of HIES 2010.

Decomposing poverty reduction by sector of employment shows that poverty did indeed fall faster among households in more dynamic sectors. Households do not tend to move in and out of sectors rapidly, so strong poverty reduction in one sector can often indicate that growth in incomes in that sector were of importance in bringing about poverty reduction. Changes in the share of the population engaged in any given sector can also be examined to assess whether there were any large structural changes in employment that may have contributed to changes in poverty.

A sectoral decomposition of poverty trends shows that although 90 per cent of poverty reduction took place in rural Bangladesh, it was gains among non-agricultural households that drove this. Although 47 per cent of rural households are primarily engaged in agriculture, they accounted for 27 per cent of rural poverty reduction. Most rural poverty reduction, 59 per cent, occurred among the 47 per cent of households whose primary sector of employment is industry or services (Figure 11). Data that follows the same households over time during this period documents the same trend: households with higher shares of non-farm income saw faster progress (Ahmed and Tauseef 2018). Despite strong growth in non-agricultural sectors, the share of the population in households primarily engaged in non-agricultural activities increased by only 3 percentage points. This shift contributed just 4 per cent to poverty reduction.

FIGURE 11: **Decomposing Poverty Trends in Rural Areas**



Source: Authors' calculations using HIES 2005, 2010, and 2016.
Note: Results obtained from Ravallion and Huppi (1991) decompose changes in poverty over time into intra-sectoral effects, a component due to population shifts across sectors (not displayed), and an interaction (not displayed). Sector of employment defined based on reported hours of work in each sector.

In addition, agricultural growth has become less equal and less poverty reducing. Each percentage point of agricultural growth delivered less poverty reduction among agricultural households. From 2005 to 2010, one percentage point of agricultural growth was associated with a fall in poverty among agricultural households of 1.18 per cent. From 2010 to 2016, the fall in poverty from each per cent of agricultural growth was just 0.58 per cent. Understanding why the nature of agricultural growth become less poverty reducing is important. Land ownership is highly skewed to richer households and daily wage labour in agriculture is much more important for poorer households.

In urban areas, poverty reduction was entirely driven by welfare gains among households primarily engaged in industry, and more specifically in garments. The poverty rate among households engaged primarily in manufacturing fell from 26 per cent in 2010 to 19 per cent in urban areas in 2016. As a result, manufacturing alone accounted for 108 per cent of poverty reduction in urban areas (Figure 12a). It was households in the garment industry that contributed most to poverty reduction (Figure 12b). Construction was also an important sector in poverty reduction. There was very little poverty reduction among urban households in the service sector. However, closer inspection reveals different trends for different service sectors. There was almost no structural shift in the main sector of

employment, limiting the degree to which households could move into the more dynamic sectors and reduce poverty. The limited poverty reduction in the service sector and the lack of structural shift resulted in slower rates of poverty reduction in urban areas.

FIGURE 12A: **Decomposing Poverty Trends in Urban Areas**

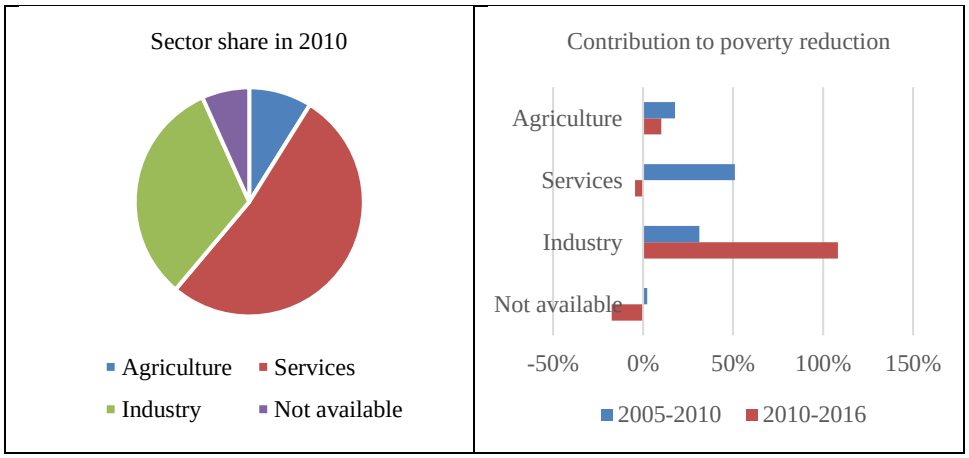
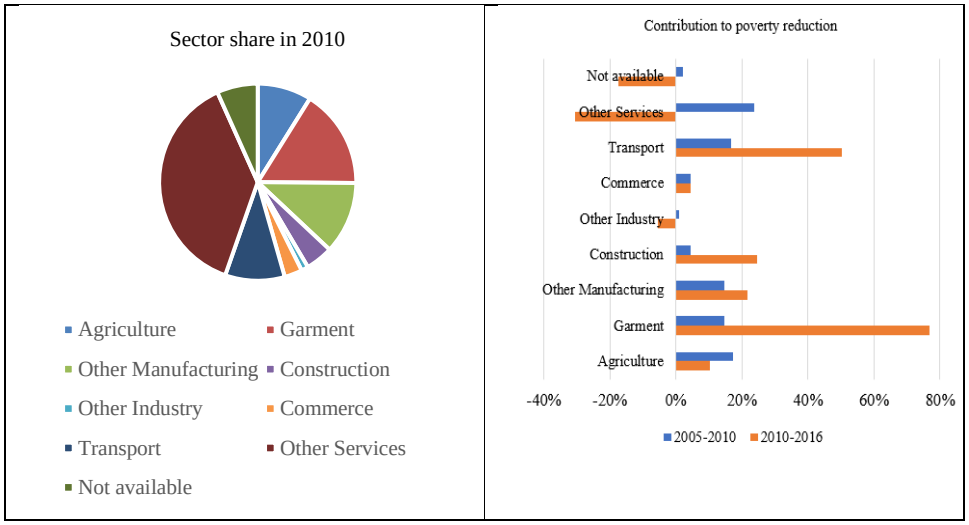


FIGURE 12B: **Detail Decomposing Poverty Trends in Urban Areas**



Source: Authors' calculations using HIES 2005, 2010, and 2016.
Note: Results obtained from Ravallion and Huppi (1991) decompose changes in poverty over time into intra-sectoral effects, a component due to population shifts across sectors (not displayed), and an interaction (not displayed). Sector of employment defined based on reported hours of work in each sector.

IV. WHO ARE THE POOR AND POOREST?

Section I of this paper highlighted the close relationship between poverty and geography in Bangladesh: An individual living in Rangpur division is three times more likely to be poor than one living in Sylhet division, for instance. Households in rural areas are more likely to be poor than those in urban areas.

Table III highlights other key characteristics of poor households compared to non-poor households, and tests whether the observed differences are large enough to be statistically significant.

Poor households are larger, so each working age adult in them has to support a larger number of non-working age members. Poor households are less likely to be headed by a female than non-poor households; this could reflect the fact that poor households are less likely to benefit from international migration and remittances, and that it is often male workers who migrate.

Poor households have just as high a share of adults who are working as non-poor households, but they work in less remunerative activities. Poor households are much more likely to be in agriculture and less likely to be in services than non-poor households; this is true even when considering only households in rural areas. In rural Bangladesh, 43 per cent of poor household heads are in agriculture, compared to 28 per cent of non-poor household heads.

Poorer households work in less remunerative activities because they have less access to human capital than non-poor households. This is seen starkly in measures of human capital. Literacy rates are much lower among heads of poor households (39 per cent) than among heads of non-poor households (59 per cent). Although these statistics do not establish causality between human capital and poverty, the large differences highlight the potential role for investing in human capital to improve the income generating abilities of poor households. Ownership of land is also lower among poor households, although the difference between poor and non-poor households is smaller than it used to be. Poor households have higher rates of access to microcredit than non-poor households (34 per cent of poor compared to 29 per cent of non-poor), reflecting more widespread use of microcredit services among poor urban households than non-poor urban households.

Access to social protection is higher among poor households. Thirty-two per cent of poor households have access to social protection programmes, compared to 19 per cent of non-poor households. This reflects the prevalence of social protection programmes in rural Bangladesh. Only 18 per cent of poor households in urban areas have access to social protection programmes (along with 7 per cent of non-poor households). These statistics indicate that there is still room to increase coverage of social protection programmes, particularly in urban areas, and to improve the quality of targeting.

TABLE III

CHARACTERISTICS OF POOR AND NON-POOR HOUSEHOLDS (AVERAGE)

	Non-poor	Poor	Test of difference (1)	Test of difference (2)
Demographics				
Household lives in an urban area (%)	32.13	22.72	***	
Household size	3.92	4.57	***	***
Household dependency ratio (3)	0.61	0.89	***	***
Age of household head	44.60	43.00	***	***
Household head is female (%)	13.88	10.73	***	***
Household head is married (%)	90.91	91.24		
Labour market				
Share of adults who are earners	0.33	0.29	***	
Share of adults in agriculture	0.10	0.13	***	
Household head in agriculture (%)	28.19	42.54	***	Ref. group
Household head in industry (%)	19.06	16.13	***	***
Household head in services (%)	31.54	25.60	***	***
Household member has a chronic illness/disability (%)	31.54	24.26	***	***
Human capital				
Household head is literate (can write a letter, %)	59.28	38.54	***	
Household head has no education (%)	41.47	62.65	***	***
Household head has some primary education (%)	8.55	10.04	***	***
Household head has completed primary education (%)	11.98	10.50	***	***
Household head has at least some secondary education (%)	37.89	16.63	***	Ref. group
Assets				
Household owns land (%)	35.20	21.91	***	***
Household owns a mobile phone (%)	93.93	87.81	***	***
Household has electricity (%)	80.72	59.04	***	***
Household has piped water (%)	13.92	5.23	***	***
Household has sanitary toilet (%)	28.79	14.30	***	***
Transfers and credit				
Household receives international remittances (%)	5.85	2.03	***	***
Household receives domestic remittances (%)	13.54	11.51	***	**
Household receives microcredit (%)	28.96	33.56	***	***
Household receives social protection programme (%)	18.52	31.69	***	***

Source: Authors' calculations using HIES 2000, 2005, 2010, and 2016.

Notes: 1: Stars indicate whether mean for non-poor and poor is significantly different using a Wald test. Significance at the *10%, **5%, and *** 1% level. 2: Significance values are calculated for each year separately including division fixed effects. Significance at the *10%, **5%, and *** 1% level of probit regression correcting for the clustered nature of the errors. 3: Dependency ratio was calculated as the population aged zero to 14 and over the age of 65, to the total population aged 15 to 65.

V. SUMMARY OF EMERGING PRIORITIES

Bangladesh continues to make progress in eliminating poverty, thanks to strong growth across all sectors of the economy. Poverty has halved in 16 years, from 2000 to 2016.

However, the slower and uneven pace of progress in the last six years points to some emerging priorities to increase the pace of poverty reduction. These emerging priorities are drawn from the trends that have been documented in this

paper on the nature of poverty reduction in locales and sectors in Bangladesh, and differences in characteristics of the poor and non-poor. Although clear trends have emerged, further analysis is needed to identify what factors caused changes in poverty reduction in the past six years. This will allow more specific recommendations for action.

Stronger productivity growth is needed in agriculture and informal urban services and stronger job-creation in manufacturing. It is labour income growth that continues to drive poverty reduction in Bangladesh, but growth has not been high enough in the sectors in which poor people tend to be employed—agriculture and informal services in urban areas. Additionally, not enough people have been able to move into higher-productivity sectors, consistent with the finding that job creation in these sectors has slowed.

Addressing spatial inequality will require addressing constraints to income growth in Rangpur province, and in Western Bangladesh in general. The last six years of development in Bangladesh have led to the reopening of the welfare differences between East and West, and poverty rates are now much higher in the West than the rest of the country. Addressing this will likely require more than domestic migration, although this will continue to help.

Finally, there is room to examine social spending to improve coverage of social protection programmes and human capital outcomes for poor households. Poor households have just as many adults engaged in work as non-poor households, but the remuneration of their work is lower, in part because of lower levels of human capital. Addressing these differences is essential to enabling poor households to gain more productive employment. Bangladesh already invests significant amounts in health and education, so further analysis is needed to understand which investments are reaching poor households and how effective districts are in securing improved outcomes given the resources committed. Similarly, social protection programmes in Bangladesh are reaching poor households, but the proportion of poor households receiving social protection has fallen. There is room to increase coverage, particularly in urban areas, and to improve targeting in rural areas, to help reverse the trend of lower consumption growth among the poorest households.

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ANNEX

Table A1: **Poverty Rates by Division, using the 2000 Divisions**

	Poverty rate				Extreme poverty rate			
	2000	2005	2010	2016	2000	2005	2010	2016
Barisal	53.1	52.0	39.4	26.4	34.7	35.6	26.7	14.4
	(3.8)	(3.9)	(3.3)	(1.5)	(3.7)	(4.5)	(3.2)	(1.3)
Chittagong	45.7	34.0	26.2	18.3	27.5	16.1	13.1	9.0
	(2.9)	(2.7)	(2)	(1.2)	(2.9)	(1.8)	(1.4)	(0.9)
Dhaka	46.7	32.0	30.5	20.5	34.6	19.9	15.6	9.9
	(2.3)	(1.7)	(1.6)	(1.1)	(2.2)	(1.3)	(1.1)	(0.7)
Khulna	45.1	45.7	32.1	27.7	32.2	31.6	15.4	12.1
	(3.5)	(2.7)	(2.3)	(1.3)	(3.1)	(2.4)	(1.6)	(0.8)
Rajshahi	56.7	51.2	35.7	37.6	42.8	34.5	21.6	22.0
	(2.3)	(1.5)	(2)	(1)	(2.5)	(1.6)	(1.7)	(0.8)
Sylhet	42.4	33.8	28.1	16.2	26.7	20.8	20.7	11.5
	(3.3)	(5.2)	(3)	(1.7)	(3.2)	(4.1)	(2.5)	(1.4)

Source: Authors' calculations using HIES 2010 and 2016.

Note: Divisions are defined in a comparable way across time. Standard errors in parentheses. These results are by design representative across time.

Table A2: **Poverty Rates by Division, Using the 2016 Divisions**

	Poverty rate				Extreme poverty rate			
	2000	2005	2010	2016	2000	2005	2010	2016
Barisal	53.1	52.0	39.4	26.4	34.7	35.6	26.7	14.4
	(3.8)	(3.9)	(3.3)	(1.5)	(3.7)	(4.5)	(3.2)	(1.3)
Chittagong	45.7	34.0	26.2	18.3	27.5	16.1	13.1	9.0
	(2.9)	(2.7)	(2)	(1.2)	(2.9)	(1.8)	(1.4)	(0.9)
Dhaka	42.3	27.7	25.8	16.7	30.6	16.1	11.3	7.4
	(2.7)	(1.8)	(1.7)	(1.3)	(2.5)	(1.3)	(1.1)	(0.7)
Khulna	45.1	45.7	32.1	27.7	32.2	31.6	15.4	12.1
	(3.5)	(2.7)	(2.3)	(1.3)	(3.1)	(2.4)	(1.6)	(0.8)
Mymensingh	60.6	48.5	48.3	32.9	47.0	35.0	31.9	18.0
	(4.6)	(4.1)	(3.2)	(2)	(4.3)	(3.8)	(2.8)	(1.6)
Rajshahi	45.1	45.7	32.1	27.7	32.2	31.6	15.4	12.1
	(3.5)	(2.7)	(2.3)	(1.3)	(3.1)	(2.4)	(1.6)	(0.8)
Rangpur	60.6	48.5	48.3	32.9	47.0	35.0	31.9	18.0
	(4.6)	(4.1)	(3.2)	(2)	(4.3)	(3.8)	(2.8)	(1.6)
Sylhet	42.4	33.8	28.1	16.2	26.7	20.8	20.7	11.5
	(3.3)	(5.2)	(3)	(1.7)	(3.2)	(4.1)	(2.5)	(1.4)

Source: Authors' calculations using HIES 2010 and 2016.

Note: Divisions are defined in a comparable way across time. Standard errors are in parentheses. By design, only 2016 estimates are representative for Mymensingh and Rangpur.