Bangladesh Poverty Assessment



© 2019 International Bank for Reconstruction and Development / The World Bank 1818 H Street NW, Washington, DC 20433 Telephone: 202-473-1000; Internet: www.worldbank.org

Some rights reserved

This work is a product of the staff of The World Bank with external contributions. The findings, interpretations, and conclusions expressed in this work do not necessarily reflect the views of The World Bank, its Board of Executive Directors, or the governments they represent. The World Bank does not guarantee the accuracy of the data included in this work. The boundaries, colors, denominations, and other information shown on any map in this work do not imply any judgment on the part of The World Bank concerning the legal status of any territory or the endorsement or acceptance of such boundaries.

Nothing herein shall constitute or be considered to be a limitation upon or waiver of the privileges and immunities of The World Bank, all of which are specifically reserved.

Rights and Permissions

This work is available under the Creative Commons Attribution 3.0 IGO license (CC BY 3.0 IGO) http://creativecommons.org/licenses/by/3.0/igo. Under the Creative Commons Attribution license, you are free to copy, distribute, transmit, and adapt this work, including for commercial purposes, under the following conditions:

Attribution—Please cite the work as follows: World Bank (2019). Bangladesh Poverty Assessment: Assessing progress from 2010 to 2016/17. Washington DC. © World Bank.

Translations—If you create a translation of this work, please add the following disclaimer along with the attribution: *This translation was not created by The World Bank and should not be considered an official World Bank translation. The World Bank shall not be liable for any content or error in this translation.*

Adaptations—If you create an adaptation of this work, please add the following disclaimer along with the attribution: *This is an adaptation of an original work by The World Bank. Views and opinions expressed in the adaptation are the sole responsibility of the author or authors of the adaptation and are not endorsed by the World Bank.*

Third-party content—The World Bank does not necessarily own each component of the content contained within the work. The World Bank therefore does not warrant that the use of any third-party-owned individual component or part contained in the work will not infringe on the rights of those third parties. The risk of claims resulting from such infringement rests solely with you. If you wish to re-use a component of the work, it is your responsibility to determine whether permission is needed for that re-use and to obtain permission from the copyright owner. Examples of components can include, but are not limited to, tables, figures, or images.

All queries on rights and licenses should be addressed to World Bank Publications, The World Bank Group, 1818 H Street NW, Washington, DC 20433, USA; e-mail: pubrights@worldbank.org.

Foreword

Bangladesh has an inspiring story of reducing poverty and advancing development. Since 2000, the country has reduced poverty by half. In the last decade and a half, it lifted more than 25 million out of poverty.

The country's economy remained robust and resilient even in the face of many challenges. All sectors of the economy have contributed to poverty reduction. This has been accompanied by enhanced human capital, lower fertility rates and increased life expectancy, which have also significantly contributed to increase households' ability to earn more and exit poverty.

Yet, behind this progress, there are emerging contrasts. As the country is rapidly urbanizing, its rural and urban areas did not experience the same level of poverty reduction. The rural areas reduced poverty impressively, accounting for 90 percent of the poverty reduction since 2010. But, in urban areas, progress has been slower and extreme poverty has not decreased.

The country's higher economic growth in the last decade has not led to a faster poverty reduction. Specially, poverty has stagnated and even increased in the Western divisions while the Eastern divisions fared better.

This report highlights the need for both traditional and fresh solutions. To end extreme poverty by the next decade, Bangladesh will need to continue to build on its successes, such as family planning, educational attainments, and growth in agriculture and manufacturing. But at the same time, it will need solutions to overcome new and re-emerging frontiers of poverty reduction.

The world can learn from Bangladesh's development and poverty reduction experiences. But with about one out of four people still living in poverty, much needs be done to create equal opportunities for all citizens. The country also faces new questions where more evidence is needed. Answers will come from its own experiences as well as from other countries that have followed similar transformative paths.

I hope this report provides policy makers and researchers with sound empirical evidence to decide on policy actions that will help Bangladesh become an upper middle-income country.

Mercy Tembon

World Bank Country Director for Bangladesh and Bhutan

Acknowledgements

This poverty assessment has been prepared by a team led by Ruth Hill (Lead Economist, EA2PV) and Maria Eugenia Genoni (Senior Economist, ESAPV). Joaquin Endara (Consultant, ESAPV), Faizuddin Ahmed (Consultant, ESAPV), Yurani Arias Granada (Consultant, ESAPV), Kelly Yelitza (Consultant, ESAPV), Nelly V. Obias (Program Assistant, ESAPV) and Shegufta Shahriar (Team Assistant, SACBD) have been core team members. The report draws on eleven background papers that are published in full in Volume 2 of the assessment. The authors of the background papers (in addition to the above-mentioned core members) include: Monica Yanez-Pagans (Senior Economist, HLCED), Nobuo Yoshida (Lead Economist, EA1PV), Dipankar Roy (Project Director HIES, Bangladesh Bureau of Statistics) and Abdul Latif (Deputy Project Director HIES, Bangladesh Bureau of Statistics) who co-authored the methodological note about poverty measurement using the Household Income and Expenditure Survey; Mohammad Yunus (Senior Research Fellow, Bangladesh Institute of Development Studies) who wrote the paper on poverty convergence across districts; Binayak Sen (Senior Research Fellow, International Food Policy Research Institute, IFPRI) who led the analysis on rural transformation; Hossain Zillur Rahman (Executive Chairman, Power and Participation Research Centre, PPRC) who co-authored the analysis on urban poverty; Wameq Raza (Economist, ESAPV and Aphichoke Kotikula (Senior Economist, HGNDR) who led the work on female labor force participation; Markus Poschke (Associate Professor, McGill University) who authored work on the urban labor market; and Saurav Dev Bhatta (Senior Economist, HSAED), Uttam Sharma (Consultant, HSAED), Buyant Erdene Khaltarkhuu (Statistician, DECDG), and Laura Maratou-Kolias (Consultant, ESAPV) who co-authored the analysis on education outcomes. Hossain Zillur Rahman, Binayak Sen and Mohammad Yunus also provided comments on other aspects of the poverty assessment.

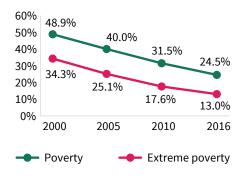
This work has benefited greatly from generous comments from several people. Zahid Hussain (Lead Economist, ESAMU), Johannes Hoogeveen (Lead Economist, ESAPV), and Christian Eigen-Zucchi (Program Leader, ESADR) commented on early drafts of background papers and guided the team as the overview was put together. Dean Jolliffe (Lead Economist, DECIS), Ambar Narayan (Lead Economist, EPVGE), and Akhter Ahmed (Country Representative, IFPRI Bangladesh) provided peer review comments on this volume. Background papers were reviewed by: Dean Jolliffe (Lead Economist, DECIS), Nandini Krishnan (Senior Economist, ESAPV), Sarosh Sattar (Senior Economist, EA2PV), Iffath Sharif (Practice Manager, HAFS3), Gabriela Inchauste (Lead Economist, ELCPV), Tom Bundervoet (Senior Economist, EA1PV), Johannes Hoogeveen (Lead Economist, ESAPV), Christina Weiser (Economist, ESAPV), Urmila Chatterjee (Senior Economist, ESAPV), Alan Fuchs (Senior Economist, EECPV), Sailesh Tiwari (Senior Economist, EEAPV), Hiroki Uematsu (Senior Economist, ESAPV), Madhur Gautam (Lead Agriculture Economist, SAGGL), Forhad Shilpi (Senior Economist, DECEE), Syud Amer Ahmed (Senior Economist, HSASP), Ana Maria Munoz (Senior Social Scientist, EPVGE), Sonya Sultan (Senior Social Development Specialist, SSASO), and Monica Robayo (Economist, EECPV). Participants in seminars at the Bangladesh Institute of Development Studies (BIDS), Center for Policy Dialogue (CPD), Dhaka University, and the Bangladesh Club at the World Bank also provided excellent comments that improved the work. In addition, the report benefited from discussions with participants at a workshop organized by the General Economics Division, Planning Commission. We would like to extend our thanks to Dr. Shamsul Alam, Senior Secretary of the General Economics Division, Ministry of Planning, Government of Bangladesh, for providing feedback on preliminary findings and chairing a workshop for his staff at which the findings were presented and discussed. We benefited immensely from all the comments and guidance received. This work has been prepared under the direction and guidance of Benu Bidani (Practice Manager, ESAPV), Qimiao Fan (Director, Strategy and Operations, GGEVP), Robert Saum (Director, OPSPF), and Dandan Chen (Operations Manager, SACBD).

Executive Summary

Bangladesh has come a long way in a short time in its fight to end poverty. In 2016, about 1 in 4 Bangladeshi were poor.¹ The country has halved poverty rates in a decade and a half, lifting more than 25 million people out of poverty (Figure E1). Between 2010 and 2016, about 8 million Bangladeshi were lifted out of poverty.

Substantial improvements in other dimensions of wellbeing have also been recorded. Reductions in poverty were accompanied by sustained drops in fertility and child mortality, improvements in nutrition and life expectancy, enhanced access to electricity, clean water and sanitation, broad based

Figure E1. Bangladesh achieved strong poverty reduction from 2000 to 2016



Source: Staff calculations using Household Income and Expenditure Survey (HIES) 2000, 2005, 2010, and 2016.

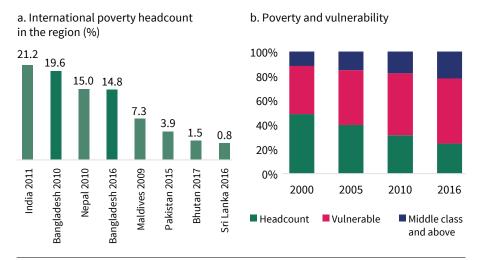
Notes: Poverty and extreme poverty rates based on the Cost of Basic Needs approach (Ahmed et al 2019).

expansions in education, and other improvements in non-monetary dimensions of well-being. Bangladesh is not only one of the top performers in poverty reduction in the South Asia region, it is equally a top performer in improving these non-monetary dimensions of welfare.

However, there is no room for complacency. The job of ending extreme poverty is not complete. About 1 in 4 Bangladeshi still live in poverty, while almost half of those living in poverty live in extreme poverty and are unable to afford a basic food consumption basket. Using the international poverty line, a measure that allows comparison with poverty levels in other countries, the rate of poverty in

¹ Poverty headcount rates based on the official upper poverty line using the Cost of Basic Needs (CBN).

Figure E2. Despite improvements, poverty and vulnerability remain high



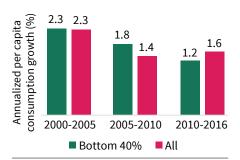
Source: Staff calculations using HIES 2000, 2005, 2010 and 2016 and World Development Indicators. **Notes:** The international poverty line has a value of US\$1.90 purchasing power parity (PPP). Vulnerable denotes the population living between the national poverty line and twice the national poverty line. Middle class and above denotes the population living above twice the national poverty line.

Bangladesh is relatively high by regional standards (Figure E2a). In addition, more than half of the population can be considered vulnerable to poverty, as their levels of consumption are close to the poverty threshold (Figure E2b).

To sustain progress, potential spoilers demand attention

First, robust economic growth continued driving poverty reduction but not as effectively as before. Between 2010 and 2016, GDP growth accelerated while the pace of poverty reduction slowed. Higher economic growth has not led to faster poverty reduction, because average consumption growth was slower and less equal than before. From 2010 to 2016, consumption growth for the poorest 40 percent was slower than for the whole population, while the reverse was true in previous periods (Figure E3).

Figure E3. Consumption growth across periods



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

Notes: Bottom 40% denotes the poorest 40 percent of the population based on households' per capita consumption.

Second, very little poverty reduction occurred in urban areas. Rural Bangladesh spearheaded poverty reduction from 2010 to 2016, accounting for about 90 percent of the drop. Even though the poverty rate fell in urban Bangladesh, the rate of reduction was much slower than in previous periods (Figure E4). The national slowdown in poverty reduction has occurred largely due to an inability of urban Bangladesh to sustain progress.

a. Rural poverty headcount (%) b. Urban poverty headcount (%) 60% 40% 52.3% 35.1% 35% 50% 43.8% 28.4% 30% 35.2% 40% 21.3% 25% 19.3% 26.7% 37.9% 30% 20% 19.9% 15% 28.6% 20% 14.6% 21.1% 10% 15.0% 10% 5% 8.0% 7.7% 0% 0% 2000 2005 2010 2000 2005 2016 2010 2016 Extreme poverty Poverty

Figure E4. Urban and rural poverty reduction

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

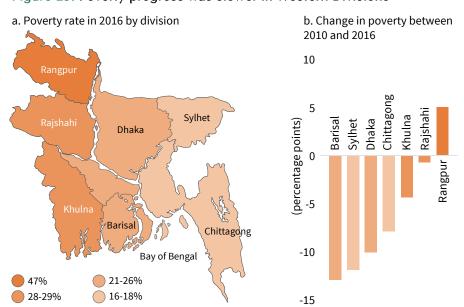


Figure E5. Poverty progress was slower in Western Divisions

Source: Staff calculations using HIES 2010 and 2016.

Third, Western divisions did not see the same gains as the East. Since 2010, poverty has risen in Rangpur division, the historically poorer Northwest of the country; it has stagnated in Rajshahi and Khulna in the West. The East and central Bangladesh have fared much better: poverty has fallen moderately in Chittagong, and declined rapidly in Barisal, Dhaka, and Sylhet (Figure E5). The stronger rate of poverty reduction in the Eastern regions widened a welfare gap between Eastern and Western Bangladesh that had previously been narrowed between 2005 and 2010 (Jolliffe et al. 2013). The re-emerging divergence between the East and West has occurred largely in rural, instead of urban areas.

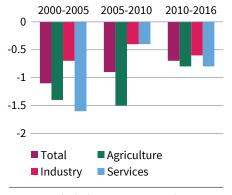
What lies behind these trends?

Lower fertility and education gains fuel consumption growth and reductions in poverty. From 2010 to 2016, changes in household demographics, education gains, and asset holdings contributed to about 50 percent of consumption growth. The amount of consumption growth explained by these gains was very similar across rural and urban areas, indicating that the different poverty progress between urban and rural areas was not explained by these factors. However, within rural areas the gains were not uniform: the rural West recorded slower progress on education and demographic change, contributing to the re-emergent East-West divide.

The changing sectoral composition of economic growth also explains the different progress in poverty reduction. Since 2000, there have been large shifts in the sectoral composition and geographical focus of economic activity in Bangladesh,

accompanied by rapid structural transformation and urbanization. Between 2010 and 2016, growth in the agricultural and service sectors slowed down. Growth in industry was strong, but there was limited job creation in manufacturing. During 2010-2016, growth in the agricultural sector became less poverty reducing, while growth in industry and services became more poverty reducing (Figure E6). The different performance of the economic sectors compared to previous years affected the returns from working in different activities and shaped the changes in poverty.

Figure E6. Implied growth-poverty elasticities, 2000-2016



Source: Staff calculation using HIES and WDI. **Notes:** Elasticities are calculated from GDP growth data and sectoral poverty rates presented in Table 2.3. For more details see Hill and Endara (2019a). Poverty reduction was rural but not predominantly agricultural. Although 47 percent of rural households were primarily engaged in agriculture in 2010, such households accounted for just 27 percent of rural poverty reduction between 2010 and 2016. This contrasts with the period 2005 to 2010, when 69 percent of rural poverty reduction was among households primarily engaged in agriculture (Figure E7). Most rural poverty reduction between 2010 and 2016, 59 percent, occurred among households whose primary sector of employment was industry or services (Figure E7). This reflects the slower growth in agriculture during this period but also the fact that agriculture growth was less poverty reducing, compared to the past and other sectors.

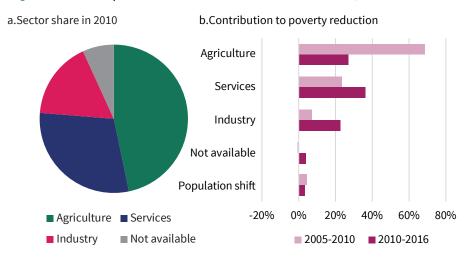


Figure E7. Poverty reduction across sectors in rural areas, 2005-2016

Source: Staff calculations using HIES 2005, 2010, and 2016. **Notes:** 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, and an interaction (not

displayed). Sector of employment defined based on reported hours of work in each sector.

The smaller share of rural households in the West pursuing non-agricultural livelihoods contributed to the re-emergent East-West divide after 2010. Both in 2010 and 2016, households in the West were more likely than households in the East to report their main sector of work as agriculture. Structural transformation also seems to have been faster in the East than in the West: the proportion of households reporting agriculture as their main form of employment fell by 22 percent in the East compared to 12 percent in the West. Thus, although some of the divergence in poverty-reduction performance between East and West from 2010 to 2016 can be explained by less favorable changes in education attainment and demographics, differences in sectors of work also seem to have played an important role.

In urban areas, industry, led by the garments sector, has driven urban poverty reduction. In 2010, poverty rates for households mainly engaged in industry were higher than for those engaged in services (26 percent compared to 17 percent). By 2016, poverty rates among households in industry were almost at the same level as for households working in the services sector. This convergence was driven by rapid poverty reduction among households in industry and no change in poverty for households engaged in the service sector (Figure E8b). This contrasts with the period 2005-2010, when both households in industry and services experienced reductions in poverty (Figure E8a). The stagnation in poverty reduction in services is concerning, given that around 44 percent of the poor in urban areas are part of households primarily engaged in this sector. Within industry, most gains were driven by the garment sector.

a. Sector share in 2010

Agriculture
Services
Industry
Not available
Population shift

Agriculture
Services

Industry
Not available
Population shift

2005-2010

2010-2016

Figure E8. Poverty reduction across sectors in urban areas, 2005-2016

 $\textbf{Source:} \ \mathsf{Staff} \ \mathsf{calculations} \ \mathsf{using} \ \mathsf{HIES} \ \mathsf{2005}, \mathsf{2010}, \ \mathsf{and} \ \mathsf{2016}.$

Notes: 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, and an interaction (not displayed). Sector of employment defined based on reported hours of work in each sector.

Poverty rates increased most among the self-employed in services, which set back overall progress in urban areas. The strongest contributor to overall progress was poverty reduction among wage and daily workers in industry. Good progress was also seen for wage and daily workers in services. However, poverty rates increased among the self-employed in the service sector in urban areas.

Slow manufacturing job creation curbed urban poverty reduction and reduced female labor force participation. There has been little growth in the share of the

Bangladeshi labor force engaged in industry, and this has limited the amount of poverty reduction derived from the country's industrial growth. The slowdown in job creation in the garments and textiles sector is also likely responsible for the diminishing rates of female labor force participation (FLFP). Between 2005 and 2010, overall labor force participation in urban areas increased because of a substantial increase in FLFP. The expansion of the garment sector was an important force in raising FLFP, as 80 percent of employees in this sector are female. Between 2010 and 2016, however, female labor force participation declined about 4 percentage points.

Distilling the evidence and looking ahead

This poverty assessment tells a story of continued remarkable progress that started decades ago. Critical actions taken decades ago allowed Bangladesh to perform economically and realize high levels of per capita GDP growth as well as improve human development outcomes. Investments in human capital supplied a rapidly transforming economy with the labor force capable of benefiting from expanded job opportunities outside agriculture. These elements have been important contributors for the current success in poverty reduction. Looking forward, several suggestions can be distilled:

What has worked in the past may not in the future. Educational attainment, lower fertility rates, agricultural growth, and international migration have helped reduce poverty in rural areas. Growth in rural services and manufacturing re-emerged as an important driver of progress. In urban areas, lower fertility rates and welfare gains among manufacturing employees have been important. However, if the country is to succeed in its ambitions to eradicate extreme poverty by the end of the next decade, it will need to go above and beyond traditional catalysts of poverty reduction. The overall smaller elasticity of poverty reduction to GDP growth is an indication that such adjustments are needed (Figure E6).

Improving the targeting and quality of service delivery will become more important. Gains in educational attainment were more limited in the rural West and in urban centers across the country, and returns to education fell substantially in urban areas. Closing education gaps remains important; however, increased targeting as well as higher quality spending will become crucial for education investments to continue supporting poverty reduction.

Agriculture must become more poverty reducing. In this regard, there is significant potential to increase productivity and incomes by supporting more

diversification in agriculture. Improved connectivity can also support more rapid transformation of the rural West and increased access to opportunities outside agriculture.

Urban is the frontier in poverty reduction. Even though 8 in 10 poor live in rural areas, at current trends more than half of Bangladesh's poor households will live in urban areas by 2030. While economic density is much higher in Dhaka and Chittagong, living standards and poverty rates do not reflect this difference. Many poor urban households live in slums, facing poor housing, insecurity, and overcrowding to be near work. Mobility is limited for the poorest households in Dhaka, limiting the degree to which they can gain from the benefits of agglomeration. There was no reduction in the poverty rate among urban dwellers engaged in informal service sector activities, suggesting the importance of finding ways to increase their productivity. Few jobs were created in the manufacturing sector, even as manufacturing delivered strong welfare gains for those it did employ. Female labor force participation rates fell, thus, lifting economic and social constraints for female participation in labor markets arises as an important venue for poverty reduction.

As the country is facing new and re-emerging frontiers of poverty reduction, namely tackling urban poverty and poverty in the West, approaches that uncover effective traditional and new solutions must be embraced. Building on the past successes without falling into the trap of complacency will be key to eradicate poverty. Policies to reduce poverty when poverty incidence is high are different from those when poverty is lower. In the past, relatively straightforward measures like the introduction of high-yielding rice varieties could kick-start a process of welfare improvement; however, more sophisticated policies are needed to reduce poverty over a sustained period and in a more complex economy. Such policies need to be synergistic and are both drivers as well as consequences of improved welfare outcomes. Evidence on the importance of that has been seen for education and fertility programmes. Continuing Bangladesh's practices of innovative policy experimentation, as well as learning from other country experiences of similar economic and development transformation, will be important to tackle some of the challenges presented in this poverty assessment.

