Urban Poverty, Vulnerability, and Social Protection: An Assessment Using HIES 2022

Mohammad Abdur Razzaque, Jillur Rahman, Mahedi Hasan

Prepared for

UNDP

Empowered lives.
Resilient nations.

Prepared by

RAPID

Empowering Development

March 2025

Final Policy Paper

Urban Poverty, Vulnerability, and Social Protection: An Assessment Using HIES 2022

Mohammad Abdur Razzaque, Jillur Rahman, Mahedi Hasan

March 2025

Prepared for
United Nations Development Programme

Empowered lives.
Resilient nations.

Prepared by
Research and Policy Integration for Development (RAPID)

Empowering Development

House: 18 (Flat 504), Road: 101, Gulshan 2, Dhaka-1212
Phone: +8801711287444 | Website: www.rapidbd.org | Email: info@rapidbd.org

This study has been prepared with support from the United Nations development Programme (UNDP) Bangladesh. The authors of this study are Mohammad Abdur Razzaque, Chairman, Research and Policy Integration for Development (RAPID); Jillur Rahman, Deputy Director of RAPID and Assistant Professor of Economics at Jagannath University; and Mohammad Mahedi Hasan, Coordinator, RAPID Data Innovation Lab. Helpful research assistance was provided by RAPID research associates Samiha Chowdhury and Khawaja Sazzad Ali. Any limitations and/or views expressed in this paper are those of the authors.

Table of Contents

Table of Contents i

Executive Summary ii

I. Background 1

II. Salient Features of Urban Poverty, Vulnerability, and Income Disparities 3

State of poverty and vulnerability in urban Bangladesh 3

Multidimensional poverty 11

Income distribution and inequality 14

An income determination model 16

Factors affecting poverty: a poverty propensity analysis using logistic regression model 18

Factors affecting poverty and vulnerability: a poverty propensity analysis using a multinomial logistic regression model 20

III. Social Protection Support for the Urban Poor and Vulnerable Populations 23

Social protection programme coverage 23

Who are the beneficiaries of SSPs? 28

Targeting errors in social protection schemes 30

Impact of social protection programmes: simulation exercises 33

Factors affecting enrollment into social protection programs 35

Determinants of an individual's enrollment into social protection programs 35

Determinants of a household's enrollment into social protection programs 37

IV. Policy Recommendations 40

V. Conclusion 48

VI. References 50

VII. Annex 53

Executive Summary

Background

The urgency of addressing urban poverty and vulnerability in Bangladesh stems from rapid urbanisation and rural-to-urban migration, which are reshaping the country's economic and demographic landscape. While cities drive economic growth, they also concentrate poverty, with many urban poor living in overcrowded settlements, working in informal jobs, and lacking access to essential services. Rising living costs, congestion, and unemployment have further compounded these challenges, making urban deprivation a growing policy concern.

Despite economic progress, urban poverty reduction has been slow, declining at only 0.5 percentage points annually from 2010 to 2022, significantly trailing the comparable progress in rural poverty reduction. With urbanisation accelerating at an unprecedented rate, Bangladesh is projected to become a predominantly urban country by the late 2030s and thus addressing urban poverty and inequality will require a stronger focus on social protection.

However, social protection policies remain overwhelmingly rural-focused, failing to adapt to Bangladesh's urban transformation. While the National Social Security Strategy (NSSS), adopted in 2015, recognised the need for urban-focused interventions, implementation has been slow and fragmented. Urban poor populations remain largely excluded, reflecting gaps in coverage, limited funding, and weak institutional coordination.

This paper examines urban poverty and vulnerability situations in Bangladesh, drawing on findings from the latest Household Income and Expenditure Survey (HIES) 2022. It analyses the state of social protection for urban populations, assessing coverage, identifying gaps, and evaluating targeting errors. Based on these insights, the paper proposes policy recommendations to enhance urban social protection frameworks, ensuring they are better aligned with the realities of urban poverty and vulnerability.

Salient Features of Urban Poverty, Vulnerability, and Income Disparities

State of Urban Poverty and Vulnerability

Bangladesh has experienced sustained economic growth over the past three decades, contributing to a steady decline in poverty rates. However, urban poverty reduction has been significantly slower compared to rural areas. Between 1991-92 and 2022, urban moderate poverty declined from 42.7 per cent to 14.7 per cent, but the annual rate of reduction was only 0.9 percentage points, compared to 1.3 percentage points for rural poverty. The trends in extreme poverty reveal a similar pattern, with urban extreme poverty falling from 24 per cent in 1991-92 to just 3.8 per cent in 2022—substantially slower than the decline observed in rural areas.

A key challenge is that while poverty rates have decreased, the absolute number of urban poor has increased over time. In 2010, Bangladesh had 7.4 million urban poor, a figure that has now risen to 7.9 million in 2022. A similar trajectory is evident among the vulnerable population, which expanded from 13.3 million to 15.3 million during the same period. This underscores a shift in Bangladesh's poverty dynamics, with cities increasingly becoming the focal points of economic distress.

Beyond those classified as poor, a large segment of the population remains vulnerable to falling into poverty due to economic shocks, inflationary pressures, and employment instability. Vulnerability is typically measured by identifying households with incomes above the upper poverty line but below 1.25 times that threshold, making them highly susceptible to external shocks. In 2022, approximately one-third of Bangladesh's total population was either poor or

vulnerable, highlighting the precarious nature of economic security. In urban areas, the poverty and vulnerability rate stood at 28.5 per cent, meaning that more than one-fourth of urban residents were either already poor or at high risk of slipping into poverty. While vulnerability declined over the last decade, the rate of reduction in urban areas has been much slower than in rural regions, reinforcing the need for comprehensive social protection strategies that extend beyond the poor to include at-risk populations.

Multidimensional Poverty in Urban Areas

Urban poverty is not solely a function of income deprivation; it is also deeply rooted in multiple dimensions of deprivation. Traditional headcount poverty measures fail to account for inadequate access to health, education, and essential services. A modified Multidimensional Poverty Index (MPI) was estimated using Household Income and Expenditure Survey (HIES) 2022 data, revealing that 24.1 per cent of Bangladesh's population—around 41 million people—were multidimensionally poor in 2022. Deprivations in access to safe drinking water, sanitation, and clean cooking fuel remain significant in urban areas, further entrenching poverty.

Rising Inequality and Income Disparities

Income inequality in urban areas has increased substantially, reflecting a growing concentration of wealth among a small segment of the population. The urban income Gini index surged from 0.46 in 2010 to 0.54 in 2022, surpassing levels typically associated with high inequality. Over the same period, the richest 5 per cent of urban households increased their income share from 22.8 per cent to 33.4 per cent, while the poorest 5 per cent saw their share decline from 1 per cent to 0.48 per cent. These disparities highlight the need for targeted policy interventions to curb rising urban inequality.

Social Protection Support for the Urban Poor and Vulnerable Populations

Despite Bangladesh's rapid urbanisation, social protection programmes remain disproportionately focused on rural areas, leaving the growing urban poor and vulnerable population largely underserved. The latest Household Income and Expenditure Survey (HIES) 2022 data reveal that social protection coverage in urban areas is critically low. Nationally, only about 20 per cent of all social protection beneficiaries reside in urban areas, despite the increasing concentration of poverty in cities. Even within major schemes designed to serve both urban and rural populations, urban representation remains minimal. For instance, just 17 per cent of beneficiaries under the old-age allowance scheme are from urban areas, while the widow allowance programme, which covers only 15 per cent of urban beneficiaries, is not operational in city corporation areas.

The exclusion of urban populations from social protection is further evident in household-level coverage disparities. While 37.5 per cent of households nationwide receive support from at least one social protection programme, only 24 per cent of urban households benefit from such assistance, compared to 44 per cent in rural areas. Stipend programmes constitute the largest share of urban social protection coverage, but their benefits remain minimal. Furthermore, many schemes do not explicitly prioritise poverty and vulnerability in their eligibility criteria, leading to significant inclusion errors, whereby a substantial share of social protection beneficiaries are neither poor nor vulnerable.

Targeting Inefficiencies and Beneficiary Composition

The misalignment between social protection objectives and actual beneficiaries is a critical concern. Among all households receiving at least one social protection benefit in 2022, only 6.6 per cent were from the extreme poor category, 13.5 per cent from the moderate poor (excluding

the extreme poor), and 17.1 per cent from the vulnerable category. Alarmingly, a staggering 62.8 per cent of beneficiary households were neither poor nor vulnerable. The figures for urban areas reflect even greater targeting inefficiencies, with 62 per cent of urban beneficiary households classified as non-poor and non-vulnerable.

The exclusion of poor and vulnerable populations from social protection is also stark. Nationally, nearly half (48 per cent) of extreme poor households are not covered under any social protection programme, with urban exclusion rates significantly higher at 63.9 per cent compared to 43.9 per cent in rural areas. Similarly, over two-thirds of urban households in moderate poverty receive no support, compared to 47 per cent in rural areas.

Impact of Social Protection

Simulation exercises conducted in the study reveal that social protection programmes have had only a modest impact on poverty and vulnerability reduction, particularly in urban areas. The findings indicate that urban moderate poverty was reduced by 0.5 percentage points due to social protection programmes, while extreme poverty declined by 0.43 percentage points. This implies that social protection programmes contributed to lifting just 0.25 million urban residents out of extreme poverty and 0.3 million people out of moderate poverty. Vulnerability in urban areas was reduced by 0.67 percentage points, which translates to half a million people graduating from vulnerability.

Further simulations demonstrate that eliminating inclusion errors—redirecting resources from non-poor beneficiaries to eligible poor households—could more than double the poverty-reduction impact of social protection programmes. This underscores the critical importance of improving targeting efficiency to maximise the effectiveness of social protection interventions.

Policy Recommendations: Strengthening Urban Social Protection in Bangladesh

As Bangladesh undergoes rapid urbanisation, the social protection system must adapt to effectively address the distinct challenges faced by urban low-income populations. With increasing numbers of poor and vulnerable households concentrated in cities, expanding and refining urban social protection is imperative for ensuring inclusive growth and addressing vulnerability. Existing programmes remain overwhelmingly rural-focused, with urban social protection receiving limited budgetary allocations and coverage. Addressing urban poverty necessitates a strategic recalibration of social protection policies, targeting the unique vulnerabilities of urban populations, improving access to essential services, and enhancing programme efficiency. The following policy recommendations provide a roadmap for strengthening urban social protection to meet the evolving needs of urban communities.

Key Policy Recommendations

- Expand Lifecycle-Based Social Protection Programmes in Urban Areas: The coverage of key lifecycle-based social protection schemes, such as the Old Age Allowance, the Mother and Child Benefit Programme, the Allowance for Persons with Disabilities, and stipends for students, must be significantly expanded in urban areas. Current social protection allocations are disproportionately skewed toward rural populations, with many urban households left out of critical support systems. As urban populations grow, strengthening lifecycle-based programmes will be essential for mitigating income insecurity and ensuring social inclusion for vulnerable urban residents.

- Introduce and Scale Up Urban Workfare Programmes: Workfare programmes, which provide employment-linked social protection, have been largely absent in urban areas,

despite their potential to address urban job insecurity and poverty. Existing rural employment programmes, such as the Employment Generation Programme for the Poorest (EGPP), should be adapted for urban settings, incorporating urban-relevant public works initiatives, infrastructure improvements, and municipal service delivery projects. Expanding workfare schemes can help stabilise livelihoods and provide an income cushion for urban low-income workers.

- Strengthen Social Insurance for the Urban Working Population: The National Social Security Strategy (NSSS) envisioned a National Social Insurance Scheme (NSIS) covering unemployment, maternity, sickness, and accidental insurance for the working-age population, with an initial focus on formal sector workers. However, implementation has been slow, with only the Employment Injury Scheme (EIS) being piloted in the RMG sector. Expanding the EIS to all formal sector workers and gradually introducing tailored insurance schemes for informal sector workers will be essential for improving income security and reducing employment-related risks in urban areas.

- Expand Food-Based Social Protection for Urban Households: Rising inflation and high living costs have exacerbated food insecurity among urban low-income populations. Social protection measures should prioritise the expansion of food-based programmes, such as the Open Market Sale (OMS) initiative, and consider introducing targeted food assistance schemes for the urban poor. Additionally, existing rural food security schemes, such as the Vulnerable Group Feeding (VGF) and Vulnerable Group Development (VGD) programmes, should be adapted for urban settings to mitigate nutritional insecurity.

- Enhance Skill Development and Active Labour Market Policies for Urban Youth: Youth unemployment remains disproportionately high in urban areas, with many young people either unemployed or engaged in low-paying informal jobs. Strengthening skill development-related social protection programmes, such as vocational training and digital literacy initiatives, is essential for improving youth employability. Existing programmes under the National Skill Development Authority (NSDA) and other urban skill-building initiatives should be expanded and integrated with active labour market policies to bridge the gap between labour supply and demand.

- Implement a Multifaceted Approach to Improve Targeting Efficiency: Targeting inefficiencies—both exclusion and inclusion errors—undermine the effectiveness of social protection schemes. A significant proportion of eligible urban poor remain outside the safety net, while non-poor households continue to benefit from social protection allocations. Strengthening beneficiary identification mechanisms, conducting public awareness campaigns, enhancing local government training, and incorporating community-based verification processes with NGO involvement can improve transparency and efficiency. Additionally, the government should accelerate efforts to develop a functional social registry for better beneficiary identification.

- Integrate Climate-Responsive Social Protection into Urban Programmes: Adaptive Social Protection (ASP) must be embedded into urban social protection strategies to enhance resilience against climate-induced risks. Given the increasing frequency of climate shocks, social protection should include targeted interventions for disaster-affected urban populations, such as emergency cash transfers, climate-resilient housing support, and employment guarantees in post-disaster reconstruction. Strengthening adaptive

mechanisms will ensure that urban social protection remains responsive to evolving climate challenges.

- Expand Access to Essential Public Services for the Urban Poor: Social protection in urban areas must go beyond income support to ensure better access to essential services. Strengthening urban healthcare infrastructure, expanding mobile health clinics, improving water and sanitation facilities, and investing in housing for low-income populations should be key priorities. Leveraging digital platforms to enhance service delivery, introduce grievance redress mechanisms, and streamline enrolment in social protection schemes can improve efficiency and accessibility.

- Implement the Urban Social Protection Strategy and Action Plan (USPSAP): The Urban Social Protection Strategy and Action Plan (USPSAP) provides a strategic framework for expanding social protection in urban areas. However, its implementation has been slow. Priority measures include expanding rural schemes to urban areas, developing social insurance systems, and designing interventions specific to urban slum dwellers. Strengthening coordination among government agencies, local authorities, and NGOs will be critical for ensuring effective execution of the USPSAP.

Bangladesh's ongoing economic and demographic transformation necessitates a paradigm shift in social protection policies, ensuring that urban populations are adequately covered and supported. Expanding and reforming urban social protection will not only improve the well-being of the urban poor but also contribute to broader economic stability, social cohesion, and sustainable urban development.

Urban Poverty, Vulnerability, and Social Protection: An Assessment Using HIES 2022

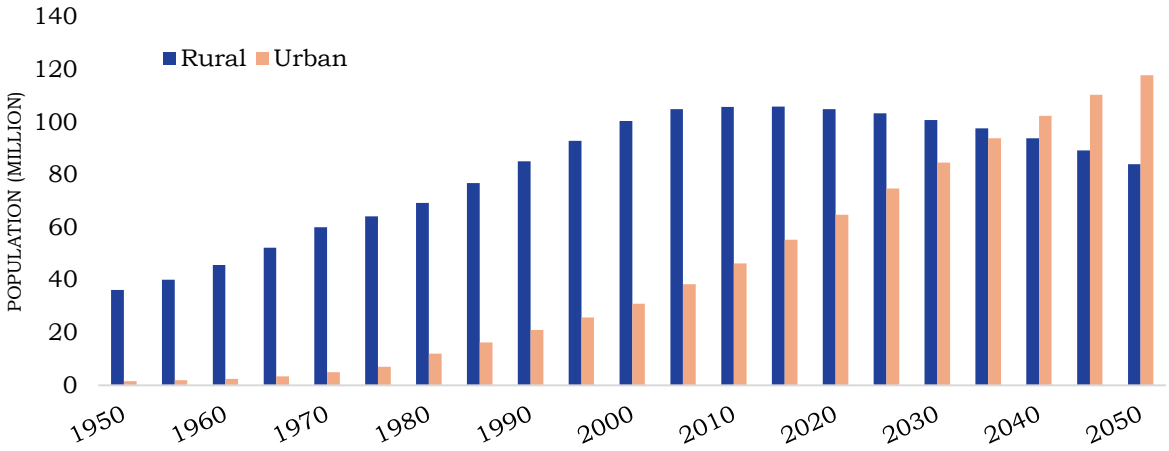
I. Background

The growing urgency of addressing urban poverty and vulnerability in Bangladesh's evolving economic landscape reflects the country's rapid structural and demographic transformation, marked by accelerating urbanisation and rural-to-urban migration. As cities expand, they serve as engines of economic activity, drawing a continuous influx of people seeking better livelihoods. Yet, this process has also deepened urban poverty and vulnerability, with a large segment of the urban population confined to overcrowded and poorly serviced settlements, engaged in informal employment, and lacking access to essential services such as adequate housing, healthcare, and education. Over time, urban poverty has grown into a complex and multi-dimensional challenge (Rahman & Hill, 2019), compounded by rising living costs, congestion, crime, and persistent unemployment, particularly in urban peripheries. While rural poverty has historically been the primary concern, Bangladesh's ongoing demographic shift is relocating the poverty burden to cities, necessitating a strategic policy shift to address the pressing realities of urban deprivation.

Despite sustained economic growth, the pace of urban poverty reduction has remained modest, lagging significantly behind the progress observed in rural areas. Official estimates from the Bangladesh Bureau of Statistics (BBS) indicate that between 2010 and 2022, urban poverty declined at an annual rate of just 0.5 percentage points, a stark contrast to the 1.2 percentage point annual reduction in rural poverty over the same period. The reduction in urban extreme poverty was even slower, at only 0.32 percentage points per year, underscoring the persistent economic vulnerability of urban low-income populations. With urbanisation accelerating at an unprecedented rate, Bangladesh is projected to become a predominantly urban country by the late 2030s. Estimates from the United Nations Department of Economic and Social Affairs (UNDESA) suggest that by 2050, nearly 60 per cent of the population will reside in urban areas. As cities become home to a growing share of the poor and vulnerable, addressing urban poverty and inequality will require a major focus of social protection policies.

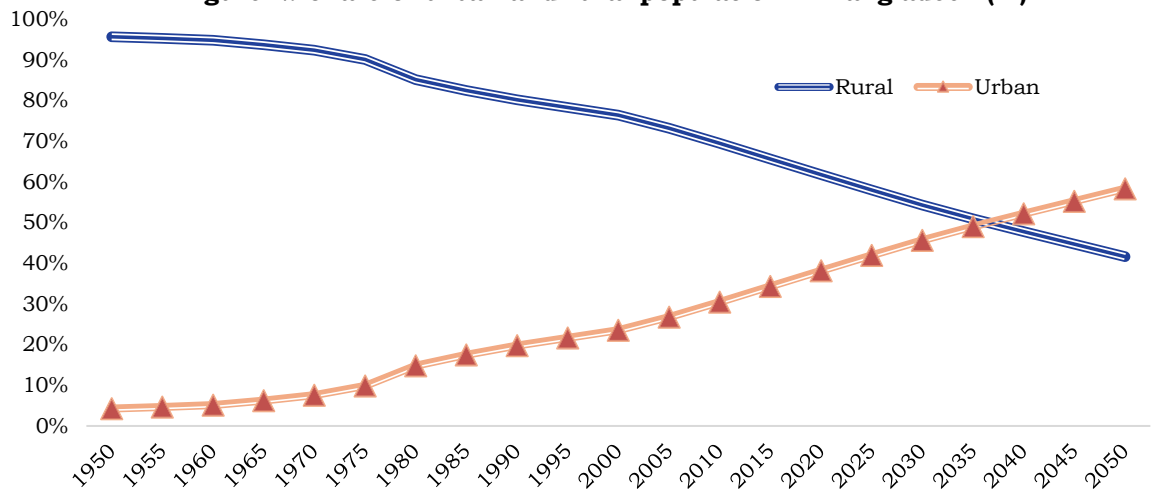
A well-designed social protection system has the potential to mitigate urban poverty and vulnerability by providing targeted support to at-risk households. However, Bangladesh's current social protection system remains overwhelmingly rural-focused, failing to adapt to the changing urban-rural demographic balance. Although the National Social Security Strategy (NSSS), adopted in 2015, recognised the emerging challenges of urban poverty, the actual implementation of urban-focused social protection measures has been slow and fragmented. The NSSS proposed expanding core life-cycle-based schemes to cover vulnerable groups across both urban and rural areas, including women, children, adolescents, youth, the elderly, and persons with disabilities. Yet, despite this recognition, the urban poor continue to be inadequately covered, reflecting gaps in policy implementation, limited budget allocations, and weak institutional coordination.

Figure 1: Urban and rural population in Bangladesh (million)



Source: United Nations Department of Economic and Social Affairs (UNDESA) World Urbanization Prospects.

Figure 2: Share of urban and rural population in Bangladesh (%)



Source: UNDESA World Urbanization Prospects.

Against this backdrop, this paper examines the features of urban poverty and income disparities in Bangladesh, using the latest Household Income and Expenditure Survey (HIES) 2022. It then analyses the state of social protection for urban populations, assessing its coverage, identifying gaps, and evaluating targeting errors. Based on these findings, the paper offers a set of policy recommendations aimed at strengthening urban social protection frameworks to better respond to the realities of urban poverty and vulnerability.

The structure of the paper is as follows: Following this introduction, Section II explores the key characteristics of urban poverty, vulnerability, and income disparities, providing a detailed assessment of the economic and social challenges faced by urban populations. Section III

analyses the existing social protection system, evaluating its coverage, effectiveness, and targeting accuracy, while highlighting policy gaps that undermine its impact on urban poverty reduction. Section IV presents a set of strategic policy recommendations to strengthen urban social protection measures, ensuring a more inclusive, responsive, and sustainable approach to tackling urban poverty in Bangladesh.

II. Salient Features of Urban Poverty, Vulnerability, and Income Disparities

State of poverty and vulnerability in urban Bangladesh

With sustained economic growth, Bangladesh has witnessed declining poverty incidence. The headcount poverty, defined as the proportion of the households living below the upper poverty line incomes, dropped from 56.6 per cent in 1991-92 to 48.9 per cent in 2000, to 31.5 per cent in 2010, then, further to18.7 per cent in 2022.

- Although poverty has declined in both rural and urban areas over recent decades, urban poverty reduction has been slower compared to that in rural areas (Rahman & Hill, 2019). Between 1991-92 and 2022, urban moderate poverty decreased from 42.7 per cent to 14.7 per cent - at an annual rate of just 0.9 percentage points. In comparison, the incidence of rural moderate poverty declined from 58.7 per cent to 20.5 per cent – annually at 1.3 percentage points. Similar disparities in extreme poverty reduction have been observed.

- Extreme poverty declined from 41.1 per cent in 1991-92 to 5.6 per cent in 2022, i.e., a reduction of 35.5 percentage points over the three decades. During the same time, urban extreme poverty reduced from 24 per cent to 3.8 per cent in comparison with a drop from 43.8 per cent to 6.5 per cent in rural areas.

The disparities in poverty reduction between urban and rural areas were more pronounced from 2010 to 2022. Over this period, urban moderate poverty declined by 6.6 percentage points, from 21.3 per cent to 14.7 per cent, at an average annual reduction rate of 0.55 percentage points. In contrast, rural moderate poverty saw a more substantial decline of 14.7 percentage points, from 35.1 per cent to 20.5 per cent, with an annual reduction rate of 1.2 percentage points. Similarly, the reduction in extreme poverty was significantly slower in urban areas, decreasing by just 3.9 percentage points over the period (at 0.33 percentage points annually), whereas rural extreme poverty fell by 14.6 percentage points, at a much faster rate of 1.2 percentage points per year.

Figure 3: Trends in poverty (moderate) incidence in Bangladesh, 1992-2022 (%)

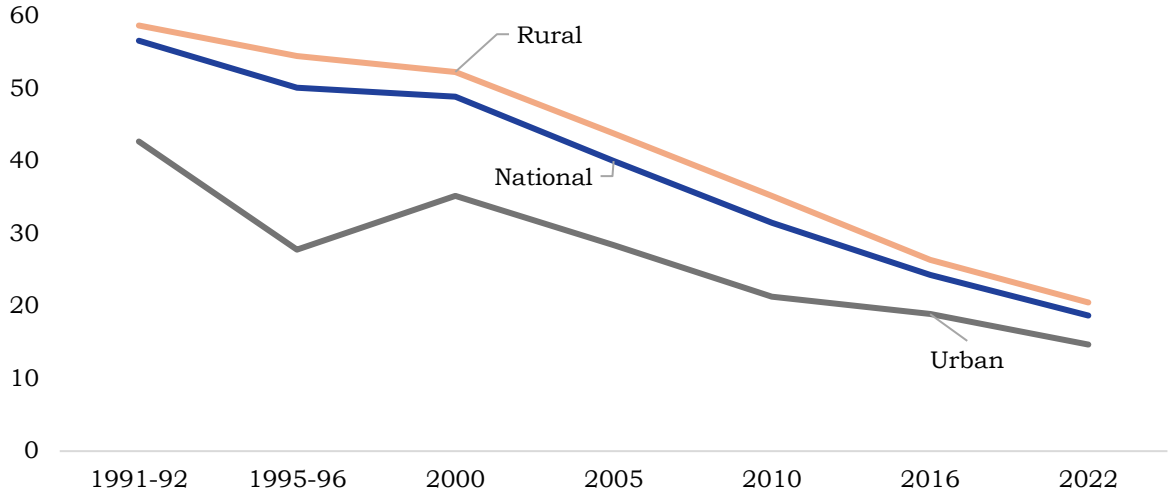
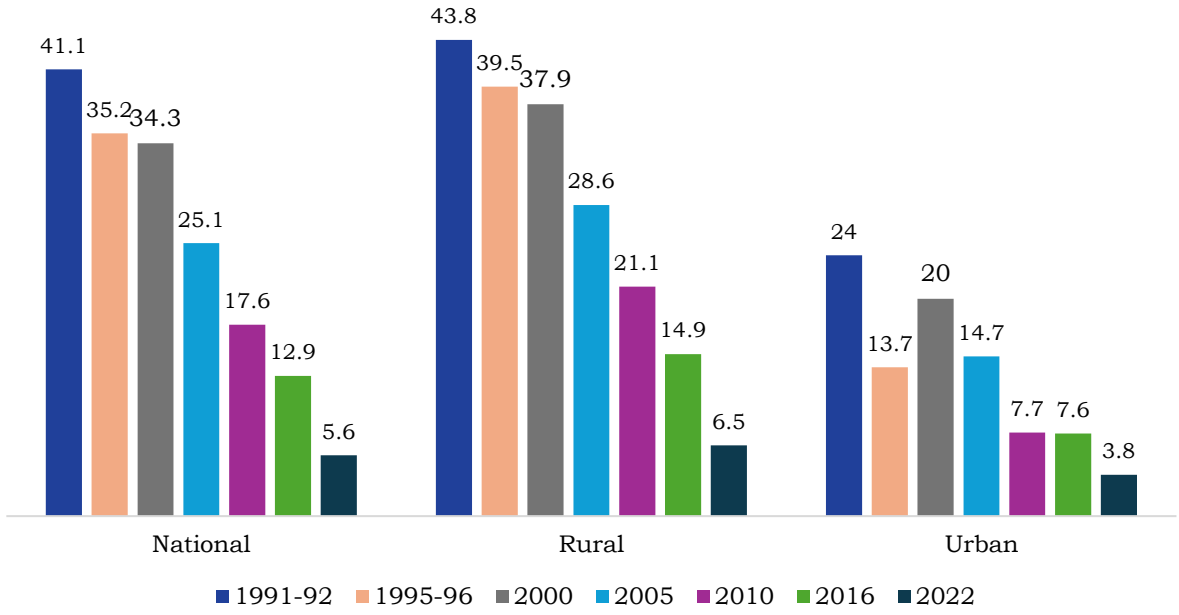


Figure 4: Extreme poverty in Bangladesh, 1992-2022 (%)



Source: Household Income and Expenditure Survey (HIES), various years, Bangladesh Bureau of Statistics (BBS).

Table 1 provides a comparative overview of moderate and extreme poverty trends across Bangladesh's eight divisions from 2010 to 2022. Key insights from the table can be summarised as follows.

- Urban poverty has declined, but the reduction is uneven across divisions
    - Khulna experienced the most significant decline in moderate urban poverty (-25.9 percentage points), reducing from 35.8% in 2010 to just 9.9% in 2022.
    - Barishal and Rajshahi also saw notable declines in urban moderate poverty by 18.6 and 14.1 percentage points, respectively.
    - Dhaka, Chattogram, and Sylhet registered much smaller reductions in urban moderate poverty, with declines of only 3.7, 0.5, and 0.6 percentage points, respectively.
    - Rangpur is the only division where urban moderate poverty increased, rising by 2 percentage points from 27.9% in 2010 to 29.9% in 2022.
- Rural poverty reduction is more consistent and greater in magnitude
    - Unlike urban areas, rural poverty has declined significantly in all divisions, with the largest reductions in Rangpur (-20.9 percentage points), Dhaka (-17.1), and Khulna (-14.8).
    - Even in divisions where urban poverty did not improve significantly (e.g., Chattogram and Sylhet), rural poverty reduction was much stronger, with declines of 13.1 and 12.4 percentage points, respectively.
- Extreme poverty has plummeted in rural areas, particularly in Dhaka
    - Dhaka's rural extreme poverty rate fell dramatically from 23.5% in 2010 to just 1.9% in 2022 (-21.6 percentage points).
    - Sylhet and Rangpur also saw large reductions in rural extreme poverty, with declines of 18.3 and 19.1 percentage points, respectively.
    - The highest remaining rural extreme poverty rate in 2022 is in Rangpur (10.3%), followed by Rajshahi (8%).
- Urban extreme poverty is now quite low in most divisions
    - In 2022, urban extreme poverty is below 5% in all divisions except Rangpur (8.7%) and Mymensingh (8.5%).
    - Khulna (3.1%), Rajshahi (2.5%), and Chattogram (2.3%) now have very low extreme urban poverty rates.
    - Sylhet had the sharpest reduction in urban extreme poverty, falling from 5.5% in 2010 to just 1.3% in 2022.
- Rangpur remains the most poverty-stricken division
    - Rangpur has the highest rural moderate poverty rate (23.6%) and the second-highest urban moderate poverty rate (29.9%) in 2022. It also has the highest extreme poverty rates in both urban (8.7%) and rural (10.3%) areas.

Table 1: Urban and rural poverty trends by division, 2010-2022

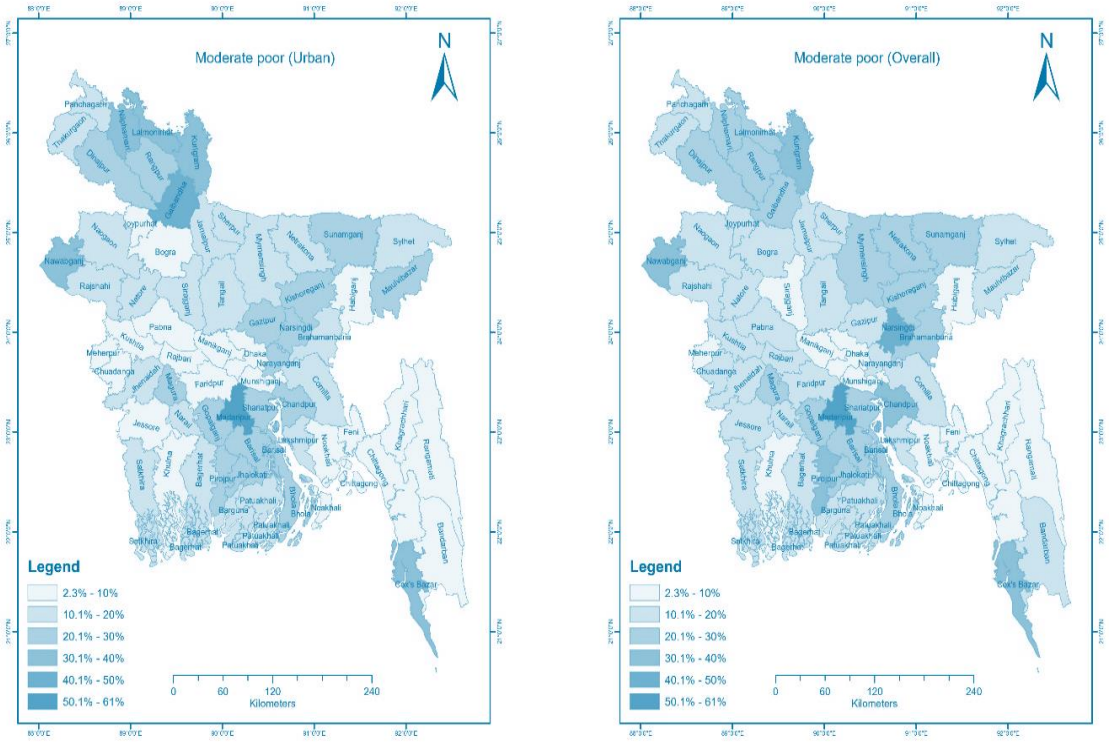
Divisions	Urban				Rural			
	2010	2016	2022	Percentage points reduction 2010-2022	2010	2016	2022	Percentage points reduction 2010-2022
Moderate poverty								
Barishal	39.9	30.4	21.3	-18.6	39.2	25.7	28.4	-10.8
Chattogram	11.8	15.9	11.3	-0.5	31	19.4	17.9	-13.1
Dhaka	18	12.5	14.3	-3.7	38.8	19.2	21.7	-17.1
Khulna	35.8	28.3	9.9	-25.9	31	27.3	16.2	-14.8
Mymensingh		32	16			32.9	26.2	
Rajshahi	29	22.5	14.9	-14.1	30	30.6	17.2	-12.8
Rangpur	27.9	41.5	29.9	2	44.5	48.2	23.6	-20.9
Sylhet	15	19.5	14.4	-0.6	30.5	15.6	18.1	-12.4
Extreme poverty								
Barishal	24.2	12.2	6.7	-17.5	27.3	14.9	13.1	-14.2
Chattogram	4	6.5	2.3	-1.7	16.2	9.6	6.3	-9.9
Dhaka	3.8	3.3	3.7	-0.1	23.5	10.7	1.9	-21.6
Khulna	16.4	10	3.1	-13.3	15.2	13.1	2.8	-12.4
Mymensingh		13.8	8.5			18.3	10.3	
Rajshahi	13.2	10.7	2.5	-10.7	17.7	15.2	8	-9.7
Rangpur	17.2	26.3	8.7	-8.5	29.4	31.3	10.3	-19.1
Sylhet	5.5	9.5	1.3	-4.2	23.5	11.8	5.2	-18.3

Source: Household Income and Expenditure Survey (HIES), various years.

Figure 5 illustrates the spatial distribution of overall and urban poverty at the district level. The two maps visually represent moderate poverty rates in Bangladesh at the district level, distinguishing between urban poverty (left map) and overall poverty (right map). Certain districts in the northern and southwestern regions, as well as parts of the Chattogram Hill Tracts, exhibit higher concentrations of urban poverty. For the overall moderate poverty, encompassing both urban and rural areas, the intensity of poverty appears to be higher in the northern and western districts, with some central and southern areas also showing significant poverty levels.

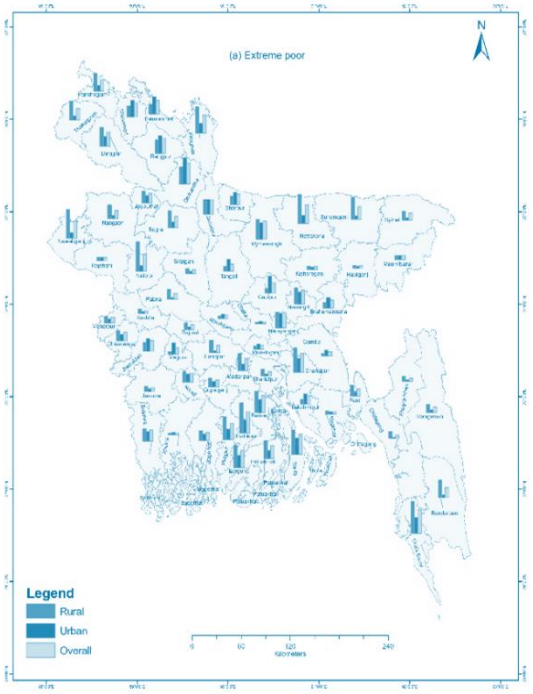
In Figure 6, a district-level extreme poverty map illustrates the distribution of extreme poverty across Bangladesh, with bar charts embedded in each district to differentiate between rural, urban, and overall extreme poverty rates. It highlights regional disparities, with northern and southwestern districts showing persistently high levels of extreme poverty. While urban areas tend to have lower extreme poverty, the presence of significant urban extreme poverty in some regions is worth noting.

Figure 5: District-level poverty map (moderate poverty) – urban and national, 2022



Source: Authors' estimation and illustration using HIES data.

Figure 6: District-level extreme poverty map, 2022



Source: Authors' estimation and illustration using HIES data.

Alongside those classified as poor, a substantial segment of the population remains vulnerable individuals who, while not meeting the official poverty definition, face a significant risk of falling into poverty. As defined in Bangladesh's National Social Security Strategy (NSSS), the vulnerable population comprises those whose income lies above the national upper poverty line but remains within 25 per cent of this threshold (i.e., up to 1.25 times the upper poverty line income).

- Nationally, nearly one-third of the total population falls within either poverty or vulnerability (Figure 4).
- In urban areas, the combined poverty and vulnerability rate stands at 28.5 per cent, indicating that more than one in four urban residents are either poor or at risk of poverty. Between 2010 and 2022, this rate declined by 10 percentage points, dropping from 38.1 per cent to 28.5 per cent. In rural areas, the decline was more pronounced, with poverty and vulnerability falling by 18.6 percentage points, from 55 per cent to 36.4 per cent.

A more granular perspective on the distribution of poverty and vulnerability across districts is presented in Figure 7, which illustrates the proportion of poor and vulnerable individuals in both urban and rural areas at the district level in 2022.

Although poverty and vulnerability rates have declined in both rural and urban areas over recent decades (Figure 8), the absolute reduction in the number of people experiencing poverty and vulnerability in urban areas remains a significant challenge.

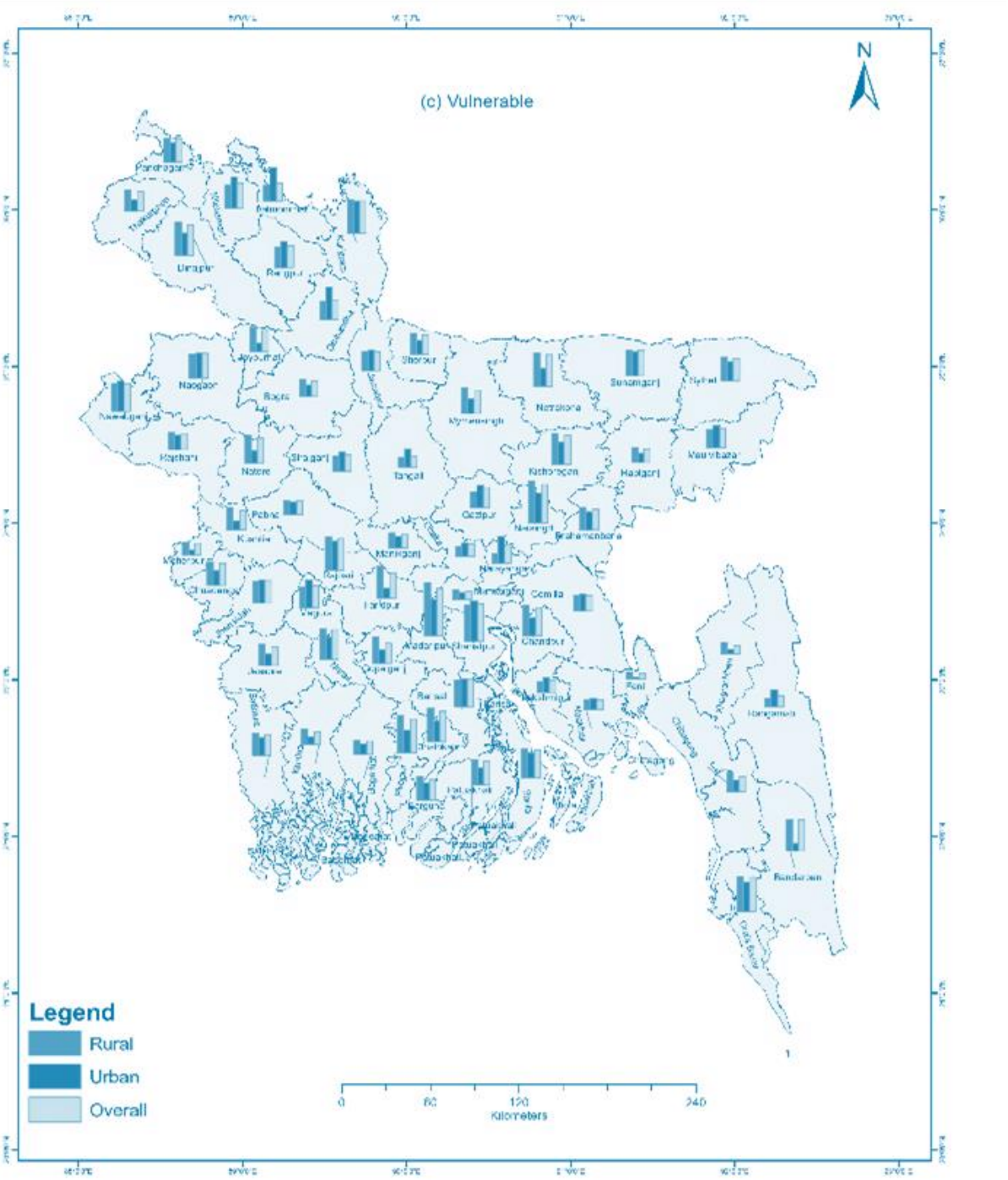
- In fact, the total number of poor individuals in urban areas has risen, increasing from 7.4 million in 2010 to 7.9 million in 2022, reflecting an overall increase of half a million (Figure 9).
- A similar trend is observed among the vulnerable population, which grew from 13.3 million to 15.3 million over the same period.

In contrast, the rural poor population has declined sharply, from 34.2 million in 2010 to 23.7 million in 2022, marking a substantial reduction of 10.5 million people. At the national level, 57.6 million people in Bangladesh were classified as either poor or vulnerable in 2022. While the number of poor and vulnerable people in urban areas surged from 13.3 million in 2010 to 15.3 million in 2022 (Figure 5), the rural poor and vulnerable population dropped significantly from 53.4 million in 2010 to 42 million in 2022. The key trends and the underlying contributing factors can be highlighted as: The increase in urban poverty and vulnerability, despite the overall decline in national poverty rates, points to structural challenges in urban areas.

- Rural-to-urban migration remains a key driver, as a large segment of the population moves to cities in search of better economic opportunities.
- Insufficient job creation in urban areas, coupled with a rising cost of living, has made it difficult for many migrants to escape poverty and vulnerability. Around 80 per cent of household heads in Dhaka were not born in the city. Migration trends indicate that 47 per cent moved to Dhaka within the last decade, and about a quarter (23.8 per cent) arrived within the five years preceding a 2016 survey (Rahman, 2016).[1]
- These trends highlight the need for targeted urban poverty reduction strategies, focusing on job creation, affordable housing, and expanded social protection measures.

[1] https://www.researchgate.net/publication/309786740_Social_Safety_Nets_in_Bangladesh_Vol_1pdf

Figure 7: District map of poor and vulnerable, 2022



Source: Authors' estimation and illustration using HIES data.

Figure 8: Poverty and vulnerability in Bangladesh (% of total population), 2010-2022

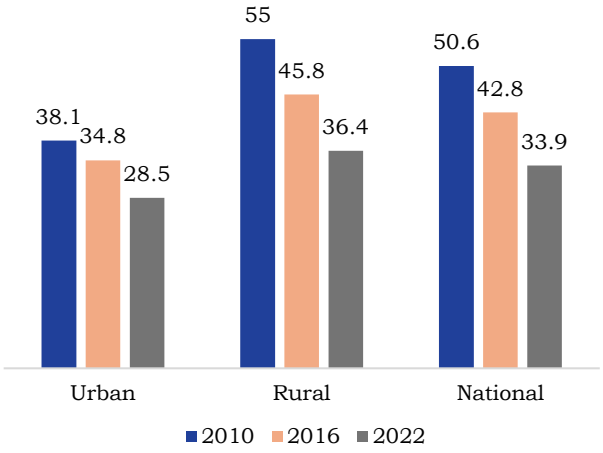
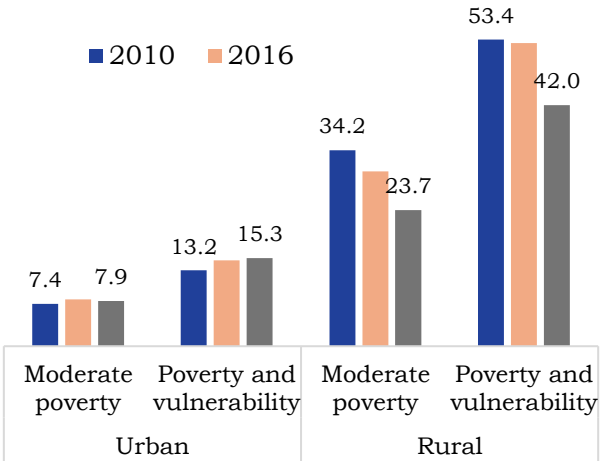


Figure 9: Number of poor and vulnerable in urban and rural areas (million)



Source: Authors' analysis using HIES data.

The depth and severity of poverty decreased more in rural areas, compared to urban areas. The poverty gap (PG) ratio, which measures the depth of poverty, fell from 6.5 per cent to 2.9 per cent in urban areas, between 2010 and 2022, a reduction of 3.6 percentage points (Figure 10). In comparison, the same ratio in rural areas declined from 9.8 per cent to 4.2 per cent, a reduction of 5.6 percentage points (Figure 11). A similar uneven reduction in the squared poverty gap (SPG) ratio, which assesses the severity of poverty, has been observed in both urban and rural areas (Figure 11).

Figure 10: Poverty gap ratio in Bangladesh (%) – based on upper poverty line

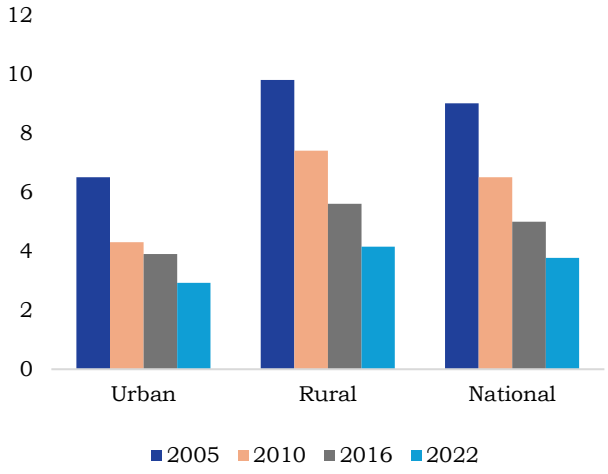
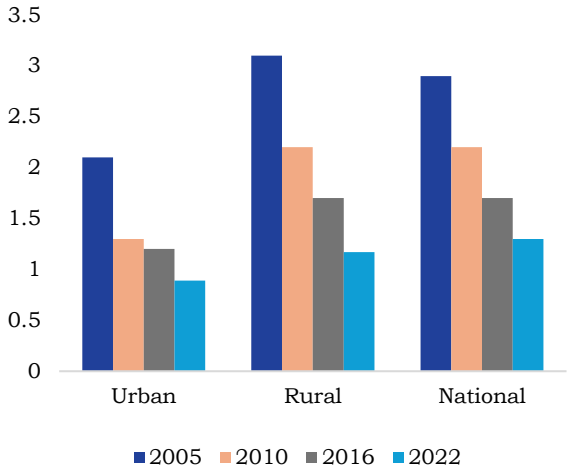


Figure 11: Squared poverty gap ratio in Bangladesh (%) – based on upper poverty line



Source: Household Income and Expenditure Survey (HIES), various years, Bangladesh Bureau of Statistics (BBS).

Multidimensional poverty

The traditional headcount poverty incidence is overwhelmingly focussed on household income and consumption alone without considering other deprivation such as in health, education and other dimensions of living standards. Multidimensional poverty accounts these attributes. For Bangladesh, the Multidimensional Poverty Index (MPI) is typically estimated using the Multiple Indicator Cluster Survey (MICS), with the latest round conducted in 2019. Consequently, MPI estimates using more recent data are unavailable. Therefore, an attempt is made to estimate the MPI using the Household Income and Expenditure Survey (HIES) 2022 data, despite its lack of health-related indicators required for MPI calculation. Our estimation, therefore, used nine indicators, excluding the one health-related indicator.[2] The results indicate that 24.1 per cent of the population—approximately 41 million people—were multidimensionally poor in 2022, meaning they were deprived in at least one-third of the nine weighted indicators.

Box 1: Indicators and deprivation thresholds for Multidimensional Poverty Index (MPI)

The definitions of the indicators and the deprivation thresholds, used in RAPID's analysis based on HIES 2022 data, are as follows:

a. Education (each indicator is weighed equally at 1/6)

- **Years of schooling:** The entire household is considered deprived if no household member aged 11 years or older has completed at least five years of schooling.
- **Child School attendance:** The entire household is considered deprived if any school-aged child is not attending school up to "Class 8".

b. Standards of living (each indicator is weighed equally at 1/18)

- **Housing condition:**
  - (i) Flooring: Members of the household are considered deprived if the household has a dirt, sand or dung floor;
  - (ii) Wall: Members of the household are considered deprived if the household has wall is made of natural or rudimentary materials;
  - (iii) Roof: Members of the household are considered deprived if the household has roof made of natural or rudimentary materials.
- **Drinking water:** Members of the household are considered deprived if the household does not have access to safe drinking water according to MDG guidelines, or safe drinking water source is more than a 30-minute walk from home roundtrip.
- **Electricity:** Members of the household are considered deprived if the household has no electricity.
- **Cooking fuel:** Members of the household are considered deprived if the household cooks with solid fuels, wood, charcoal, crop residues or dung.
- **Sanitation:** Members of the household are considered deprived if the household's sanitation facility is not improved, according to MDG guidelines, or it is improved but shared with other households.
- **Asset ownership:** Members of the household are considered deprived if the household does not own more than one of: radio, TV, telephone, bike, motorbike or refrigerator and does not own a car or tractor.

c. Health (each indicator is weighed equally at 1/6)

- **Child mortality:** The household is deprived if any children died in the household in the last 5 years from the survey year.
- **Nutrition:** Deprived if any adult or child (in the household) for whom there is nutritional information, is malnourished.

[2] Multidimensional Poverty Index (MPI) is calculated with respect to 10 predefined indicators (Box 1). For this paper, the MPI is calculated based on nine indicators from HIES data. Child mortality data is not available in the HIES dataset; therefore, the full health-related weight (1/3) was assigned to nutrition. Since direct nutrition data is also unavailable, food poverty was used as a proxy. Households with food consumption expenditures below the food poverty line—equivalent to an average intake of less than 2,122 kcal per person per day—were considered to be experiencing malnutrition. Other indicators of multidimensional poverty can be calculated from the HIES data.

Between 2010 and 2022, multidimensional headcount poverty in urban areas declined from 30.8 per cent to 14.9 per cent, a reduction of 15.9 percentage points. In rural areas, it fell from 59 per cent to 28.3 per cent, marking a 30.7 percentage points decrease. This period saw nearly 25 million rural people lifted out of multidimensional poverty, compared to just 3 million in urban areas, highlighting a faster reduction in rural poverty.

Nationally, the intensity of poverty—reflecting the average share of deprivations experienced by each poor person—remained high at 49.4 per cent, indicating that multidimensionally poor individuals were, on average, deprived in nearly half of the weighted indicators. In urban areas, the intensity of poverty declined from 53.2 per cent in 2010 to 47.5 per cent in 2022, a reduction of 5.7 percentage points. In rural areas, it dropped from 59.2 per cent to 49.9 per cent, a more significant decline of 9.3 percentage points, suggesting a faster reduction in average deprivation among rural poor households.

The National MPI, which combines the percentage of poor people with the intensity of their poverty, was estimated at 0.119, indicating that poor people in Bangladesh experience 11.9 per cent of the possible deprivations that a society would experience if all people were multidimensionally poor and deprived in all indicators. The MPI for urban and rural areas stood at 0.07 and 0.14, respectively.

Figure 12: Multidimensional headcount poverty rate (%), 2010-2022

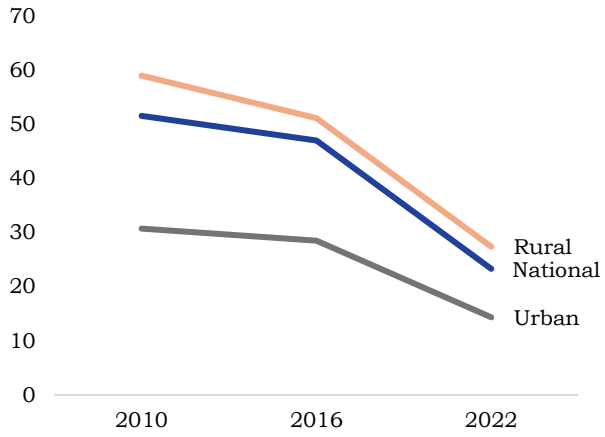
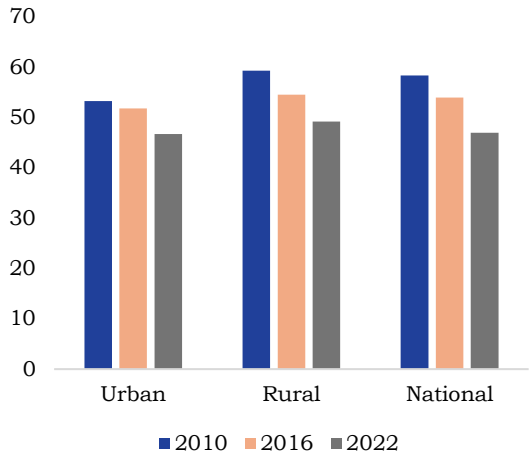


Figure 13: Intensity of multidimensional poverty (%)



Source: Authors' estimation using HIES data, various years.

Similar estimates are found in an Oxford Poverty & Human Development Initiative (OPHI) and United Nations Children's Fund (UNICEF) study (OPHI and UNICEF, 2024) that used MICS 2019 data to estimate MPI. According to the study the multidimensional headcount poverty in Bangladesh was 24.1 per cent in 2019, i.e., almost a quarter of the population were multidimensionally poor (Figure 14). The corresponding figure in urban and rural areas are 13.6 per cent and 27 per cent, respectively. Between 2012-13 and 2019, multidimensional headcount poverty in both urban and rural areas almost halved (Figure 14). However, the intensity of poverty in urban areas declined at a lower rate (from 44.9% to 41.2%) compared to rural areas (from 46.5% to 41.9%). The multidimensional poverty index (MPI) was estimated at 0.168 nationally. The MPI was 0.106 in urban areas compared to 0.185 in rural areas.

Figure 14: Multidimensional headcount poverty (%)

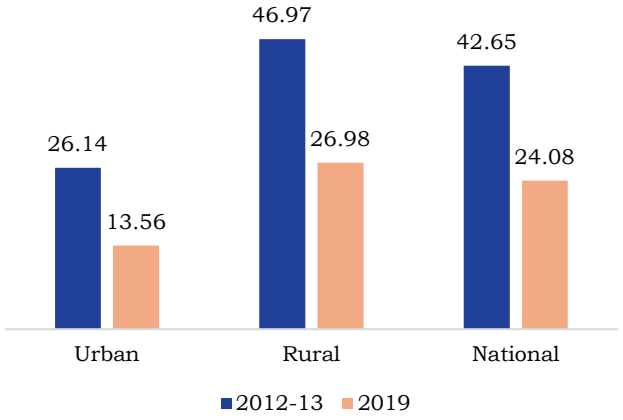
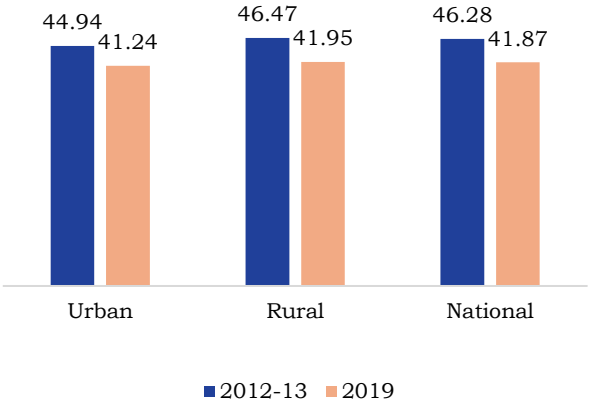


Figure 15: Intensity of multidimensional poverty (%)



Source: Oxford Poverty & Human Development Initiative (OPHI) and United Nations Children's Fund (UNICEF) (2020).

Breaking down the MPI by indicator is valuable for understanding its composition and guiding the formulation of targeted policy measures. The headcount ratio of an indicator reflects the proportion of the population that is multidimensionally poor and deprived in that specific indicator.[3] Table 2 shows indicator-wise headcount ratios in urban, rural and national levels. It reflects that multidimensional deprivation varies in urban and rural areas. Urban households are relatively more deprived in access to safe drinking water, with more than 60 per cent of urban populations being deprived in this indicator. On the other hand, rural populations face greater deprivation in housing conditions, access to clean cooking fuel, and sanitation.

Table 2: Headcount ratios by indicators (% of population poor and deprived)

	Urban	Rural	National
Education			
Years of schooling	4.71	8.88	7.57
School attendance	7.21	6.44	6.68
Health			
Nutrition	10.3	19.34	16.5
Living standard			
Housing condition	26.14	63.26	51.6
Safe drinking water	60.99	7.62	24.38
Electricity	1.22	3.33	2.67
Cooking fuel	36.26	88.84	72.33
Sanitation	31.5	65.43	54.77
Asset ownership	18	35.76	30.18

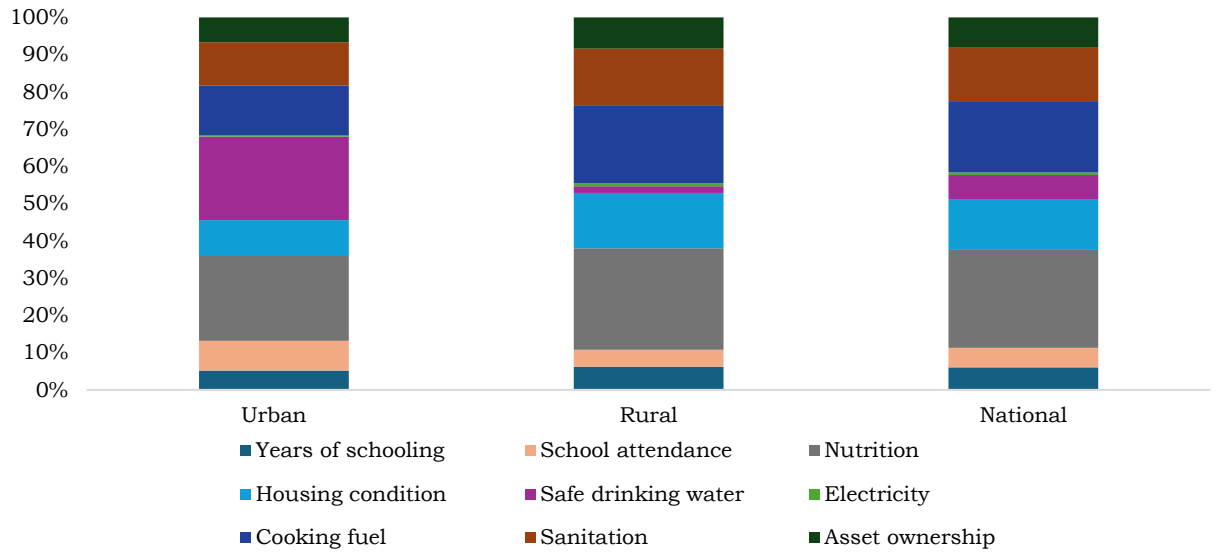
Source: Author's estimation using HIES data (various years), Bangladesh Bureau of Statistics (BBS).

The percentage contribution of each indicator to multidimensional poverty offers valuable insights into the nature of urban and rural poverty in Bangladesh. Nutritional deprivation is the largest contributor to multidimensional poverty in both urban and rural areas. In urban settings,

[3] The National MPI is calculated as the sum of the weighted indicator-wise headcount ratios.

the second-largest contributor is the lack of access to safe drinking water, followed by deprivation in clean cooking fuel and sanitation. Conversely, in rural areas, apart from nutritional deprivation, the primary drivers of multidimensional poverty are lack of access to clean cooking fuel, followed by deficiencies in sanitation, housing, and asset ownership. These findings highlight the need for targeted interventions tailored to the specific factors driving multidimensional poverty in urban and rural contexts.

Figure 16: Per cent contribution of each indicator to multidimensional poverty



Source: Author's estimation using HIES data (various years), Bangladesh Bureau of Statistics (BBS).

Income distribution and inequality

Rising inequality has emerged as a significant challenge for Bangladesh, particularly in urban areas.

- It can be estimated from the HIES data, one-third of the total income generated by urban residents was concentrated in the hands of just 5 per cent of households.
- The income share of the richest 5 per cent increased sharply, from 22.8 per cent in 2005 to 33.4 per cent in 2022—a rise of 10.6 percentage points. In stark contrast, the income share of the poorest 5 per cent of urban households dropped by more than half, from 1 per cent in 2005 to 0.48 per cent in 2022 (Figure 10).
- In rural areas, the richest 5 per cent saw their income share rise from 20.4 per cent to 24.2 per cent between 2005 and 2022, while the share for the poorest 5 per cent fell from 1.2 per cent to 0.37 per cent.

Figure 17: Share of richest and poorest 5% of households in urban areas (% of urban total income)

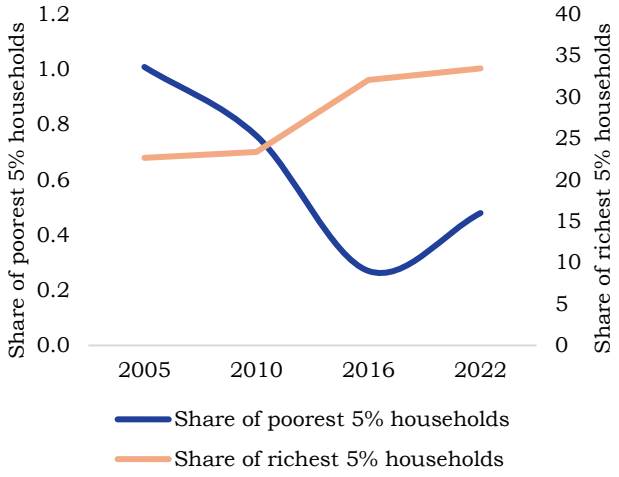
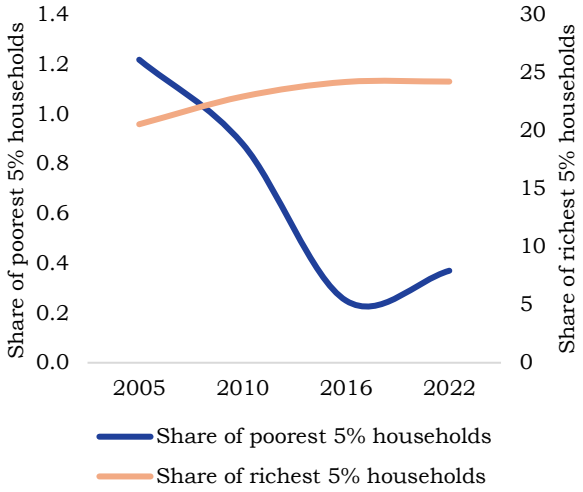


Figure 18: Share of richest and poorest 5% of households in rural areas (% of rural total income)



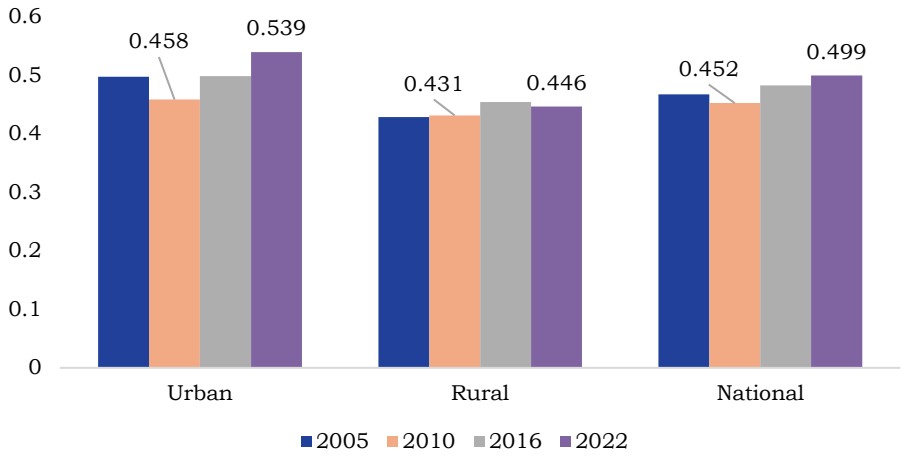
Source: Authors' estimation using HIES (BBS) data.

The Gini index,[4] the most widely accepted measure of income inequality, effectively highlights the growing disparity in income distribution between urban and rural areas. It quantifies the extent to which income or consumption deviates from perfect equality, where a Gini value of 0 represents complete equality (everyone earning the same income) and 1 signifies absolute inequality (all income concentrated in a single individual) (World Bank, 2024). A Gini index above 0.5 is considered indicative of very high inequality.

In urban areas, the Gini index based on income distribution (Income Gini) rose significantly from 0.46 in 2010 to 0.54 in 2022, surpassing the high inequality threshold. In rural areas, it increased modestly from 0.43 to 0.45 during the same period (Figure 12). This disproportionate rise in urban inequality reveals a growing concentration of wealth among a small segment of the population, intensifying economic disparities. The findings underscore the urgent need for targeted policy interventions to address urban income inequality. It underscores the need for targeted measures to address urban poverty and ensure more equitable income distribution, such as expanding urban social protection schemes.

[4] Gini index measures the extent to which the distribution of income (or, in some cases, consumption expenditure) among individuals or households within an economy deviates from a perfectly equal distribution. A Lorenz curve plots the cumulative percentages of total income received against the cumulative number of recipients, starting with the poorest individual or household. The Gini index measures the area between the Lorenz curve and a hypothetical line of absolute equality, expressed as a percentage of the maximum area under the line. Thus, a Gini index of 0 represents perfect equality, while an index of 1 implies perfect inequality.

Figure 19: Income inequality in Bangladesh - Gini index



Source: Authors' analysis based on HIES (various years), Bangladesh Bureau of Statistics (BBS)

An income determination model

The Ordinary Least Squares (OLS) method is employed to identify the factors that influence household income. Table 8 presents the results from the OLS model. In this model, the factors influencing income are examined at the urban, rural, and national levels, providing a scope of comparative analysis across various regions. This analysis considers several factors, such as household size and dependency ratio, education level of household head, working hours of house head, and asset holdings, which are important for income determination across all the regions. This analysis suggests that average schooling years and working hours of household head, asset holdings, household size and employment sector are positively associated with household income. By contrast, the dependency ratio and household's shock experience (rural and national level) show a negative impact on income. All these mentioned factors influencing household income, whether positively or negatively, have been found to be statistically significant. Among other findings, the results suggest:

- The OLS estimates suggest that an additional year of schooling for a household head increases household income at rural, urban, and national levels. In the same manner, A study conducted by Vu (2020) also reported that a higher level of education brings higher income to households.
- As expected, household asset richness influences its aggregate income positively. A one per cent increase in asset value increases income at rural, urban and national levels by 0.038, 0.017, and 0.026 per cent, respectively.
- In terms of household size, this study reveals that an additional increase in household members pushes household income up by, on average, 16 per cent throughout the country. One possible reason behind it is, large household often has multiple employed members. Hence, the diversified income sources of multiple earning members increase the total household income.
- Moreover, the positive coefficient of working hours of household heads reveals that an additional increase in household heads' working hours increases income by 1.8 per cent, 2.8 per cent and 2.4 per cent at rural, urban and national levels. This finding states that

the increase in earnings is higher in urban areas compared to rural areas due to a rise in working hours. Likewise, Beckmannshagen and Schröder (2022) revealed that low working hours reduce employees' earnings.

- It is also evident from the study that the employment sector plays a vital role in determining household income. An additional increase in workers from the non-farm sector leads to a 29.8 per cent rise in household income in rural areas, 47 per cent in urban areas, and about 35 per cent nationwide. This disparity in findings shows that although the presence of non-farm workers affects both urban and rural regions, the impact on income is greater in urban areas, possibly as a result of variations in economic opportunity and work availabilities.
- The dependency ratio has a strong negative influence on household income. For a one per cent increase in the dependency ratio, on average, the household income decreases by 79.4 per cent, 51.3 per cent and 68.1 per cent, respectively, at the rural, urban, and national levels. It is evident from the analysis that rural areas are more vulnerable to the negative effects of an increasing dependency ratio than urban areas. This finding is similar to the result suggested by Hadley et al. (2011).
- However, region-wise contrasting findings have been observed in terms of access to credit facilities. Table 8 reports that a unit increase in household access to credit facilities increases income by 9.5 per cent in rural areas, whereas the urban scenario reflects the opposite result. In urban areas, income decreases by 8.5 per cent on average if a household gets access to more credit facilities. Furthermore, from a national perspective, this study explored that there is no association between access to credit facilities and household income. This might happen in rural areas, as credit helps farmers and small businessmen invest more in productive activities that will generate income for them. On the other hand, in urban areas, easy access to credit might lead to borrowing, which will result in a higher debt burden and, thereby, eventually decrease household income. Besides, at the national level, these opposite findings might balance out, describing no impact of access to credit on household income.
- Nationwide, whether a household experiences shock has a strong negative impact on income compared to households that do not experience it. However, rural areas revealed a negligible effect of shocks on income. Again, this association is insignificant in urban areas.
- Furthermore, this study reveals that as household heads become older, their income goes up by 1.8 per cent in urban areas and 1.4 per cent at the national level. By contrast, this result turned out to be insignificant in the case of rural areas, describing no association between the age of the household head and income.
- Again, if the household head is male, then at the national level, household income increases by nearly 11 per cent. It is expected that mostly male household heads play the main role of breadwinners in Bangladesh.
- The households belonging to the urban region have significantly higher incomes compared to rural households.

Table 8: Estimation results from the income determination analysis using the OLS model (dependent variable = log of household income)

Factors affecting household income	Rural	Urban	National
Age of the household head in years	0.004	0.018**	0.014***
Age Square	-0.000018	-0.000063	-0.00007*
Sex of household head (male=1; female/others=0)	0.123*	0.080	0.111**
Dependency ratio	-0.794***	-0.513***	-0.681***
Average years of schooling of household head	0.144***	0.250***	0.214***
Log of household's asset value	0.038***	0.017***	0.026***
Household access to credit facilities (yes=1; no=0)	0.095***	-0.085***	0.001
Working hours of the household head	0.018***	0.028***	0.024***
Household size (number)	0.165***	0.159***	0.164***
Household shock experience	-0.057*	-0.065	-0.058**
Urban household (yes=1; no=0)			0.136***
Employment sector (non-farm sector=1, agricultural sector=0)	0.298***	0.470***	0.352***

Source: RAPID's estimation using the data from HIES 2022, BBS. Statistical significance at the 1, 5 and 10 per cent levels are indicated as ***, **, *, respectively.

Factors affecting poverty: a poverty propensity analysis using logistic regression model

The paper utilises a logistic regression model to analyse the factors affecting poverty of a household. Table 9 shows the result of logistic regression analysis. It represents how different factors such as household income, age of household head, household head's gender, household size and dependency ratio, schooling year of head, asset holdings, access to credit facilities, and household experience of shock impact the probability of household poverty. Results from logistic regression show how the probability of a household being poor varies based on household and regional factors. From Table 9, it is evident that some significant factors that make households more likely to experience poverty are the gender of the household head, dependency ratio and household size. On the other hand, educational qualification and access to credit facilities (extreme poverty) contribute to reducing household poverty. A summary of the significant findings of logistic regression are described below:

- Table 10 shows that if household income increases by one per cent, then the probability of households falling into the poor category reduces by 0.084 per cent in rural areas. However, this probability is lower in urban areas which is 0.077 per cent. Again, at the national level, the probability reduces by 0.082 per cent. This finding suggests that household income has a stronger impact on reducing the log odds of households falling into the poor category in rural areas compared to urban areas.
- Whether the household experiences poverty or not is not correlated with the age of the household head.
- This study reveals that male-headed households are more likely to experience poverty. The coefficient of male-headed households is about 0.097 in rural areas, which indicates that an additional unit increase in male-headed households increases the probability of being poor by 9.7 per cent in rural areas. On the other hand, in urban areas, the

likelihood of household poverty rises by 6.2 per cent in urban areas for each unit increase in male-headed households. Hence, the coefficient size indicates that male-dominated households in urban areas are less prone to experience poverty than all other regions. One possible reason for this outcome might be that households led by women, compared to men, typically allocate resources more effectively, giving priority to necessities like food, healthcare, and education (Lastrapes & Rajaram, 2015).

- Again, the probability of households being poor decreases if the educational qualification of the household head increases. This finding is consistent with the result of Bilenkisi et al. (2015), who reported that household head education and the probability of a household being poor are negatively associated.
- Across all regions, an increase in dependency ratio appears to elevate the likelihood of a household falling into poverty. If the dependency ratio increases by one per cent, then the household poverty likelihood goes up by 25.4 per cent, 21.9 per cent and 23.5 per cent, respectively, at the rural, urban and national levels. Nevertheless, the impact is lower in urban areas compared to the rural counterpart.
- Table 9 also reveals that for household size in rural areas, the marginal effect of 0.0600 means that each additional household member increases the probability of a household being poor by around 6 per cent points, assuming other factors remain unchanged. Similarly, in urban areas, the marginal effect of household size is 0.0508, implying that an increase in household size by one member raises the probability of being poor by 5.08 per cent. At the national level, the marginal effect of 0.056 suggests that, on average, an additional household member increases the likelihood of poverty by 5.6 per cent across all regions. Comparing rural and urban areas, the impact of household size on poverty is more intensified in rural regions. This suggests that larger households in rural areas are more vulnerable to poverty, likely due to fewer economic opportunities, lower wage levels, and limited access to essential services such as education and healthcare. In urban areas, the slightly lower marginal effect may reflect better access to income-generating opportunities and social services, which can help offset the economic burden of a larger household.
- In rural areas, the coefficient for access to credit is -0.0370, which describes that access to credit significantly reduces the likelihood of poverty. For each unit increase in household access to credit, the odds of being poor decrease in rural areas. In urban areas, the impact of access to credit is negligible. The coefficient of about -0.0166 indicates a smaller reduction in poverty compared to rural areas. This suggests that while access to credit still helps reduce poverty in urban areas, its effect is weaker than in rural areas.
- In terms of household head working hours, the marginal effect suggests that an extra hour of work by the household head increases the likelihood of the household being poor by 0.4 per cent in rural areas. On the other hand, in urban areas, the marginal effect is 0.0035, meaning that an additional hour of work increases the likelihood of poverty by approximately 0.35 per cent. When comparing rural and urban areas, the impact of working hours on poverty reduction is slightly greater in rural areas. Some possible reasons behind this result might be that many individuals, especially in the informal sector, work long hours but earn very little, preventing them from escaping poverty. Again, increasing working hours does not always translate to higher income if wages remain low.

Table 9: Marginal effects from the logistic regression model (dependent variable = poverty)

	Rural	Urban	National
Log of household income	-0.0842***	-0.0769***	-0.0819***
Age of the household head (years)	0.00074	-0.0020	-0.0010
Age square	-0.000041*	-0.000009	-0.000023
Sex of household head (male=1; female/others=0)	0.0972***	0.0629***	0.0784***
Dependency ratio	0.2541***	0.2193***	0.2347***
Average years of schooling of household head	-0.0202***	-0.0226***	-0.0223***
Log of household's asset value	-0.0038***	0.0010664	-0.0012
Household access to credit facilities (yes=1; no=0)	-0.0370***	-0.0166*	-0.0255***
Working hours of the household head	0.0044***	0.0035***	0.0039***
Household size	0.0600***	0.0508***	0.0558***
Urban household			0.0010
Employment sector (non-farm sector=1, agricultural sector=0)	-0.0010	0.0217	0.0094

Source: RAPID's estimation using the data from HIES 2022, BBS. Statistical significance at the 1, 5 and 10 per cent levels are indicated as ***, **, *, respectively.

Factors affecting poverty and vulnerability: a poverty propensity analysis using a multinomial logistic regression model

This analysis estimates the impact of different factors such as age, education and sex of household head, household size, dependency ratio and employment sector on household poverty status using a multinomial logistic regression model. In the same vein, Cherif et al. (2024) also applied a multinomial logit model to find out the significant determinants of household poverty. This model is used when the dependent variable has more than two categories (El-Habil, 2012). In this study, poverty is classified into four categories: no poverty (base outcome), extreme poverty (coded as 1), moderate poverty (coded as 2) and vulnerable to poverty (coded as 3). Hence, the multinomial logit model is appropriate for assessing the influence of various social, demographic, economic, and spatial factors on the likelihood of households falling into different poverty categories.

Table 10 illustrates the marginal effect of the multinomial logistic regression model. This analysis divides poverty into four categories: no poverty, extreme poverty, moderate poverty and vulnerability. The marginal effects show how various factors impact the household to appear in the four categories of poverty. From this analysis, it is evident that dependency ratio, household size, and household head's working hours (except in the case of extreme poverty in rural areas) increase the probability of household poverty. By contrast, household income and the household head's educational qualification reduce the likelihood of household poverty. The urban, rural and nationwide findings of multinominal logit are summarised as follows:

- This analysis shows that household income has a strong negative influence on poverty at the rural, urban and national levels. As household income increases by one per cent, then the probability of households falling into extreme poverty, moderate poverty, and vulnerability decreases by 0.0221 per cent, 0.0312 per cent and 0.0303 per cent,

respectively, in rural areas. For urban areas, the likelihood of falling into extreme poverty moderate poverty and vulnerability decreases by 0.0114 per cent, 0.0319 per cent and 0.0332. From the national perspective, if household income increases, then the possibility of households falling into the three categories of poverty goes down by 0.0168 per cent, 0.0321 per cent and 0.0327 per cent, respectively. This indicates the impact of rising household income on extreme poverty is significantly stronger in rural areas (0.0221 per cent reduction) than in urban areas (0.0114 per cent reduction). This suggests that rural households are more sensitive to income expansion in terms of reducing extreme poverty. However, in terms of moderate poverty and vulnerability, urban households experience a slightly larger reduction. A study conducted by ILO (2015) also reveals that higher wages and income can reduce poverty.

- It is also evident from this study that the age of the household head is not important in determining whether a household experiences any form of poverty or not.
- Table 10 reports that in rural areas, the sex of the household head does not influence the household's probability of being poor. However, in urban areas, the coefficient is much larger at 0.0283, indicating that a male-headed household has a 2.83 per cent higher probability of being in extreme poverty. On the national level, the coefficient is 0.0184, suggesting that male-headed households are 1.84 per cent more likely to be in extreme poverty, and this effect is also statistically significant. This indicates that the negative impact of male-headed households in terms of extreme poverty is more prominent in urban areas than in rural ones. However, in the case of moderate poverty sex of head is important to determine poverty across the country. In the same vein, Lastrapes and Rajaram (2009) concluded in their study that male-headed households are poorer compared to female-headed households.
- As far as the education level of households is concerned, there is a significant negative correlation with the probability of all forms of household poverty across all regions. This finding is consistent with the finding of Bawane (2011), who explored a negative association between education level and poverty. One possible reason behind it might be that higher education level among household heads increases their income opportunity, which in turn reduces poverty.
- Moreover, a higher household dependency ratio increases the likelihood of falling into extreme poverty, moderate poverty, and vulnerability across rural, urban, and national levels. A higher dependency ratio means that a large portion of household members are dependent compared to the earning members. Hence, with fewer earners, the aggregate household income is lower, which increases the risk of poverty for the whole nation. However, the magnitude of the impact is higher in rural areas compared to urban areas. For instance, the coefficient of extreme poverty is 0.0768 in rural areas and 0.0733 in urban areas. Research conducted by Ginting et al. (2020) and Muhammad and Ali (2017) revealed that an increase in the dependency ratio increases poverty.
- Again, across all the regions, the household's probability of falling into extreme poverty decreases if it gets access to credit facilities. A similar finding is suggested by Ampah et al. (2017). Overall, while credit access is effective in reducing poverty, its impact is most effective in rural areas and less in urban areas.

Table 10: Marginal effect of the multinominal logistic regression model (base category = non-poor and non-vulnerable)

	Rural	Urban	National
Extreme poverty			
Log of household income	-0.0221***	-0.0114***	-0.0168***
Age of the household head (years)	-0.0011	-0.0012	-0.0012
Age square	-0.000004	0.0000034	0.00000093
Sex of household head (male=1; female/others=0)	0.0066	0.0283***	0.0184***
Dependency ratio	0.0768***	0.0733***	0.0755***
Education of household head (years of schooling)	-0.0066***	-0.0052***	-0.0060***
Log of household's asset value	-0.0004	0.00008	-0.00017
Household access to credit facilities (yes=1; no=0)	-0.0221***	-0.0087*	-0.0154***
Working hours of the household head	0.00017	-0.0025***	-0.0012**
Household size	0.0173***	0.0099***	0.0135***
Urban household (yes=1; no=0)			-0.0105***
Employment sector (non-farm sector=1; agricultural sector=0)	0. .0102*	0.0049	0.0047*
Moderate poverty			
Log of household income	-0.0312***	-0.0319***	-0.0321***
Age of the household head (years)	-0.0009	-0.0013	-0.0013
Age square	-0.0000006	0.000007	-0.0000043
Sex of household head (male=1; female/others=0)	0.0514***	0.0001	0.0233**
Dependency ratio	0.1219***	0.0916***	0.1056***
Education of household head (years of schooling)	-0.0087***	-0.0086***	-0.0089***
Log of household's asset value	-0.0018**	0.00028	-0.0007
Household access to credit facilities (yes=1; no=0)	-0.01081	-0.0052	-0.0077
Working hours of the household head	0.0213***	0.0032***	0.0020***
Household size	0.0244***	0.0216***	0.0217***
Urban household (yes=1; no=0)			0.0090
Employment sector (non-farm sector=1; agricultural sector=0)	0.0084	0.0153	0.0099*
Vulnerability			
Log of household income	-0.0303***	-0.0332***	-0.0327***
Age of the household head (years)	0.0029	0.0008	0.0016
Age square	-0.000042	-0.00002	-0.00003*
Sex of household head (male=1; female/others=0)	0.0404**	0.0359**	0.0377***
Dependency ratio	0.0572***	0.0565***	0.0555***
Education of household head (years of schooling)	-0.0051***	-0.0089***	-0.0077***
Log of household's asset value	-0.0015**	0.0007	-0.0003
Household access to credit facilities (yes=1; no=0)	-0.0040	-0.0023	-0.0022
Working hours of the household head	0.0211***	0.0029***	0.0031***
Household size	0.0269***	0.0191***	0.0204***
Urban household (yes=1; no=0)			0.0024
Employment sector (non-farm sector=1; agricultural sector=0)	-0.0196**	0.0016	-0.0088

Source: RAPID's estimation using the data from HIES 2022, BBS. Statistical significance at the 1, 5 and 10 per cent levels are indicated as ***, **, *, respectively.

- Across all the nations, household size has a positive correlation with the likelihood of household poverty. In urban areas, an additional increase in household members increases the probability of households falling into the extreme, moderate and vulnerable category of poverty by 0.99 per cent, 2.16 per cent and 1.9 per cent, respectively. On the other hand, in rural areas, the likelihood of falling into extreme, moderate and vulnerable categories of poverty increases by 1.7 per cent, 2.4 per cent and 2.7 per cent, respectively,

for an additional increase in household size. This rural-urban comparison shows that the negative impact of larger household size is higher in rural areas across all three poverty categories

- In urban areas, an additional working hour for the household head makes that household more likely to experience vulnerability to moderate poverty and extreme poverty. On the other hand, in rural areas, the working hours of household heads are found to have a positive impact on the probability of experiencing moderate poverty and vulnerability. A similar finding is also suggested by Bardasi and Wodon (2009). The findings of this analysis imply that, in urban areas, longer working hours may lead to household financial stability. Still, it does not entirely prevent households from falling into vulnerability, moderate poverty or extreme poverty. By contrast, increased working hours in rural areas may not necessarily improve financial stability in the same way as in urban areas.

III. Social Protection Support for the Urban Poor and Vulnerable Populations

Social protection programme coverage

The coverage of social protection, however, has not kept pace with Bangladesh's ongoing structural changes or the rural-urban demographic shift. Bangladesh's social protection system remains predominantly focused on rural areas. In 2024-25, of over 100 social protection programmes, only 23 targeted the urban population exclusively, accounting for just 4.1 per cent of the total social protection budget, even as the urban poor population continues to grow (Figure 13). On the other hand, around 50 rural-centric social protection programmes comprise 27.4 per cent of social protection spending. In 2024-25, there were 70 social protection programmes targeting both urban and rural beneficiaries, covering more than two-thirds of the social protection budget.

Open Market Sale (OMS) is the largest urban-centric social protection scheme, serving 10.95 million beneficiaries and covering 1.5 per cent of the total social protection budget. The OMS provides staple food items to the urban poor and vulnerable populations at subsidized prices. The other mentionable urban-specific social protection programmes include the Accelerating and Strengthening Skills for Economic Transformation (ASSET), Bangladesh Environmental Sustainability and Transformation (BEST), Coastal Towns Climate Resilience, and Khurushkul Special Ashrayan Project receiving an allocation of Tk. 24.12 billion in total. The largest five major urban-centric programmes together capture 3.25 per cent of the total social protection budget. Apart from OMS, the other four social protection programmes' targeting of the urban poor and vulnerable remains questionable.

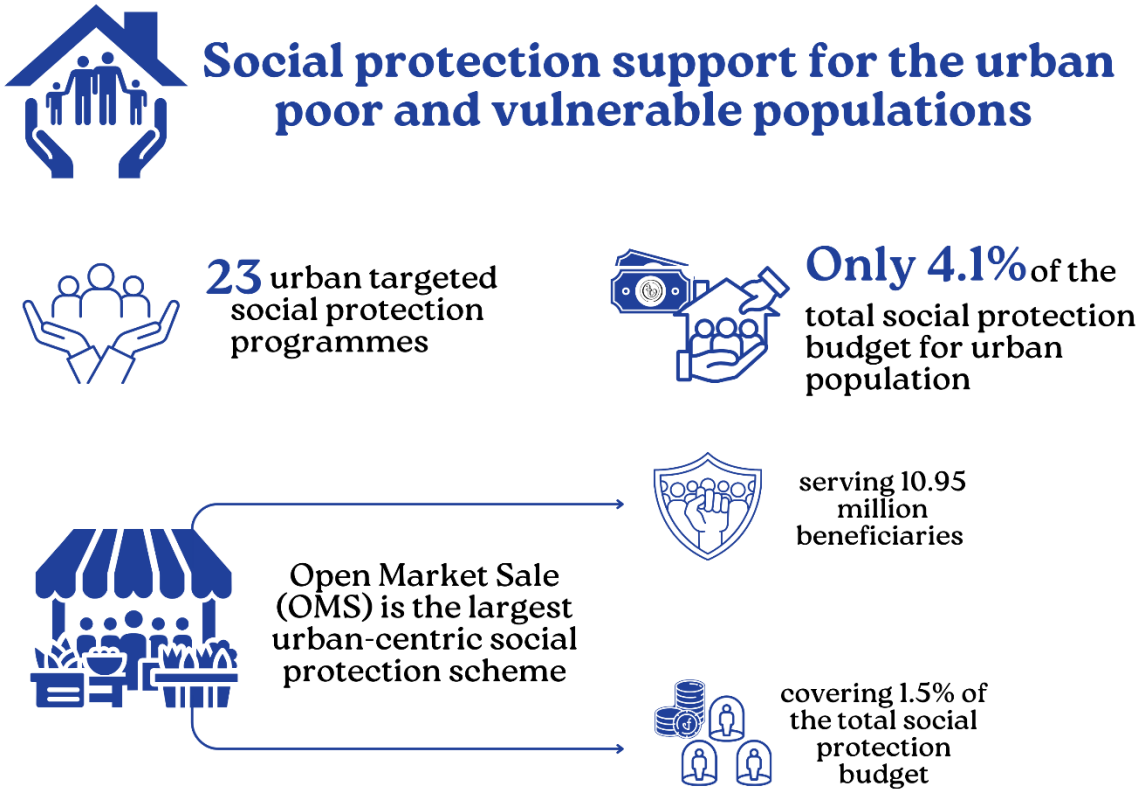
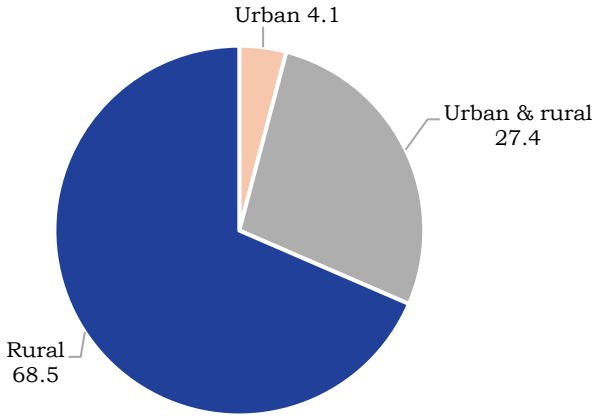


Figure 20: Distribution of social protection programmes by urban and rural areas (%)



Source: Authors' analysis from Social Protection Budget Report 2024-25, Ministry of Finance (MoF).

Table 4: Major urban-centric social protection programmes in FY 2024-25

	Name of the programme	Beneficiaries (million)	Allocation (billion Tk)
1	Open Market Sale (OMS)	10.95	20.04
2	Accelerating and Strengthening Skills for Economic Transformation (ASSET) Project	-	9.50
3	Bangladesh Environmental Sustainability and Transformation (BEST) Project	0.50	7.93
4	Coastal Towns Climate Resilience Project	-	4.50
5	Khurushkul Special Ashrayan Project	0.01	2.20

Source: Authors' analysis from Social Protection Budget Report 2024-25, Ministry of Finance (MoF).

The largest rural-focused SSP is the agriculture subsidy management scheme capturing 12.5 per cent of the total social protection budget and serving 21.3 million beneficiaries. The major ten rural-centric programmes account for 23.3 per cent of the total social protection spending (Table 5). A list of major programmes that cover both urban and rural populations is provided in Table 6. It is important to note that many of these schemes are perceived as not fully aligned with international social protection standards and thus may not be regarded as social protection.[5] For example, the allocation for Pension Management is spent to provide monthly pensions for retired government employees, who are not necessarily poor and vulnerable, therefore cannot be considered as social protection. The Interest on National Savings Schemes is used to pay interest for national saving certificates and the benefits are not directed to any beneficiaries. Again, the Fund for Mitigating Impacts of Economic and Natural Disasters managed by the Ministry of Finance, remains mostly unspent. Similarly, Free textbook distribution among students and the Printing and distribution of free textbooks programmes should not be considered as social protection.

Table 5: Major rural-centric SSPs, 2024-25

	Name of the programme	Beneficiaries (million)	Allocation (billion Tk)
1	Agriculture Subsidy Management	21.3	170.0
2	Food Friendly Programme (FFP)	5.0	32.6
3	Relief Operation–General	2.0	23.9
4	Vulnerable Women Benefit (VWB) Programme	1.0	22.0
5	Development of Rural Infrastructure (Earthwork)	1.8	15.1
6	Employment Generation Programme for the Poorest (EGPP)	0.52	15.0
7	VGF Programme	18.0	11.8
8	Food for Work (FFW)	1.0	10.2
9	Ashroyan–2 Project	0.015	8.8
10	Programm for Supporting Rural Bridges (Social Security Part)	-	8.0

Source: Authors' analysis from Social Protection Budget Report 2024-25, Ministry of Finance (MoF).

[5] As per the ILO, social protection provides benefits based on lifecycle risks and support those facing poverty or exclusion, funded by taxes or contributory schemes (social insurance).

Table 6: Major social protection programmes covering both urban and rural populations, 2024-25

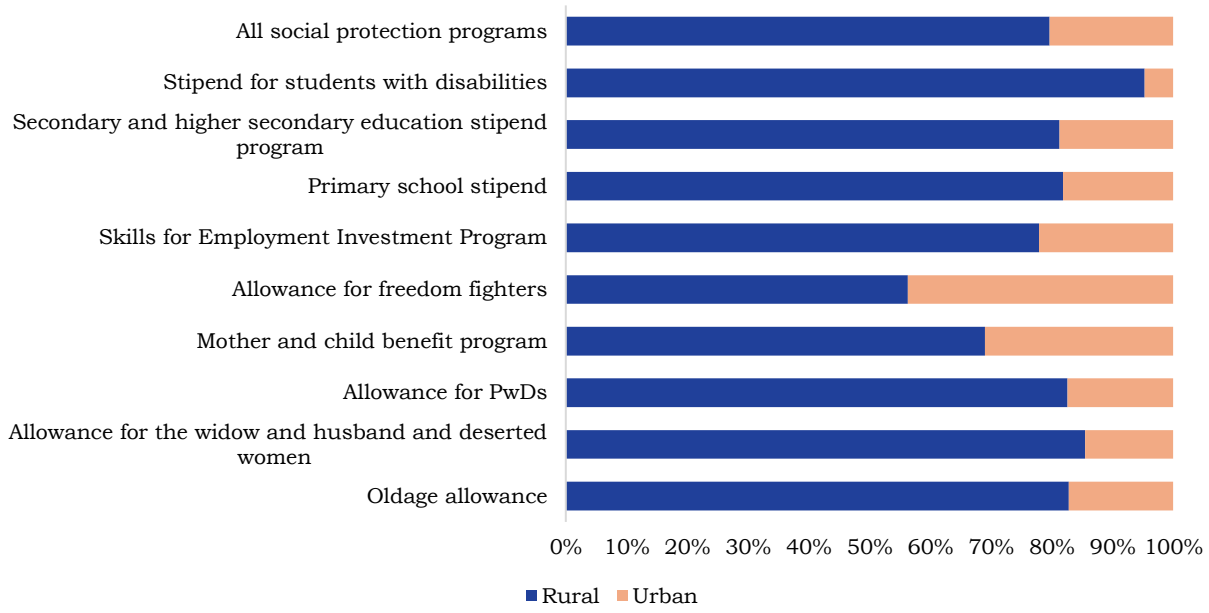
	Name of the programme	Beneficiaries (million)	Allocation (billion Tk)
1	Pension Management	0.8	365.8
2	Interest on National Savings Schemes	2.4	88.3
3	Fund for Mitigating Impacts of Economic and Natural Disaster	-	80.0
4	Honorarium for Heroic Freedom Fighter	0.20	47.3
5	Old Age Allowance	6.0	43.5
6	Fourth Primary Education Development Programme (Stipend Part)	-	38.0
7	Allowance for physically challenged persons	3.2	33.2
8	Food Subsidy	-	28.9
9	Improving Access and Retention Through Harmonized Stipend Programme	6.8	26.2
10	Allowance for Widow and Destitute Women	2.8	18.4
11	Stipend for Primary School Students	11.6	17.9
12	Mother and Child Benefit Programme (MCBP)	1.7	16.2

Source: Authors' analysis from Social Protection Budget Report 2024-25, Ministry of Finance (MoF).

Estimates from HIES 2022 indicate that the coverage of social protection programmes in urban areas remains critically low. Overall, only one in five social protection beneficiaries—approximately 20 per cent—reside in urban areas (Figure 21). Even among major schemes designed to cover both urban and rural populations, urban representation remains minimal.

- Under the old-age allowance scheme, just 17 per cent of beneficiaries are from urban areas.
- The widow allowance programme covers only 15 per cent urban beneficiaries, and it is not operational in city corporation areas.
- The Allowance for Persons with Disabilities (PwDs) includes only 17 per cent urban recipients.
- The primary school stipend reaches just 18 per cent urban beneficiaries, while the stipend for students with disabilities is even lower, at only 5 per cent.
- The secondary and higher secondary stipend has a slightly higher urban coverage, at 19 per cent.

Figure 21: Urban-rural social protection coverage (% of total), 2022

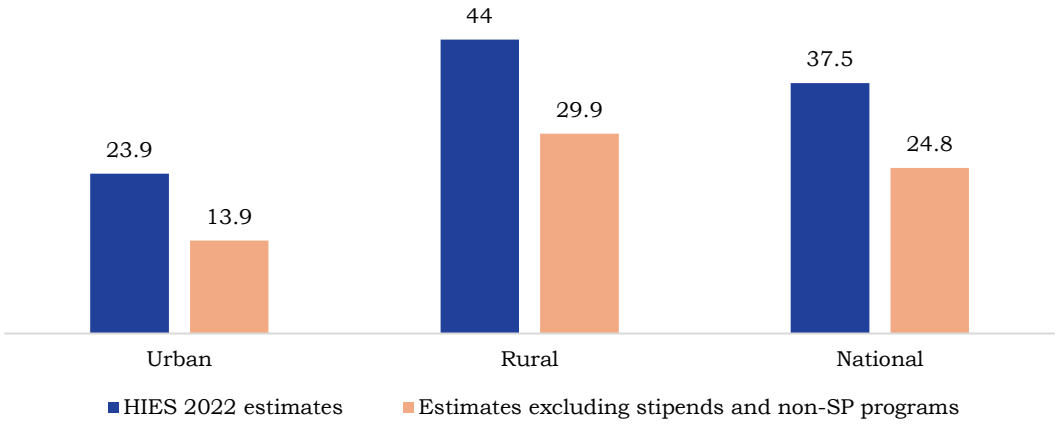


Source: Authors' analysis using HIES 2022 data.

The exclusion of urban populations from social protection programmes is further evident in the limited coverage of urban households. According to HIES 2022 data, 37.5 per cent of households nationwide receive benefits from at least one social protection programme (Figure 22). However, urban coverage remains disproportionately low, with only 24 per cent of urban households benefiting from at least one social security programme (SSP), compared to 44 per cent in rural areas.

Although stipend programmes account for the largest share of social protection beneficiaries, the actual benefits provided are minimal. Moreover, many schemes in Bangladesh do not prioritise poverty and vulnerability as core eligibility criteria, resulting in a significant portion of resources being allocated to non-poor households. When stipend programmes and other schemes that do not directly or indirectly target poor or vulnerable populations—such as allowances for freedom fighters and pensions for retired government employees—are excluded, the gap in coverage becomes even more pronounced. Under this narrower definition, only 14 per cent of urban households receive support from at least one social protection scheme, compared to 30 per cent in rural areas.

Figure 22: Households covered by at least one social protection programme (% of all households)



Source: Authors' estimation based on data from BBS.

Who are the beneficiaries of SSPs?

The primary objective of social protection programmes (SSPs) is to mitigate lifecycle risks, reduce poverty and vulnerability, and address economic insecurity by providing financial assistance, essential goods and services, and other forms of support to disadvantaged populations (Barrientos, 2013; Devereux & Sabates-Wheeler, 2004). These programmes serve as a buffer against economic shocks, safeguard livelihoods, and build resilience, ensuring a minimum standard of living (ILO, 2021). According to the literature, SSPs aim to protect the extreme poor, support the moderate poor in sustaining livelihoods, and prevent vulnerable households from falling into poverty due to socio-economic shocks (Gentilini et al., 2022; World Bank, 2018). Target groups typically include low-income families, the elderly, persons with disabilities, children, and marginalised populations, such as women-headed households and those residing in rural or disaster-prone areas (UNICEF, 2019; Holzmann et al., 2003). These groups face heightened socio-economic risks, making them the primary focus of social protection interventions. By addressing both immediate needs and long-term structural challenges, SSPs promote social inclusion and create pathways for economic opportunities for underserved communities (Barrientos & Hulme, 2009).

Although the National Social Security Strategy (NSSS) recognises poverty reduction, vulnerability mitigation, and protection against economic shocks as the core objectives of social protection, the absence of large-scale, well-targeted interventions significantly undermines the system's effectiveness. The distribution of beneficiaries in 2022 highlights the misalignment between programme objectives and actual coverage:

- Among all households receiving at least one social protection benefit:
  - 6.6 per cent were extreme poor
  - 13.5 per cent were moderate poor (excluding the extreme poor)
  - 17.1 per cent were vulnerable
  - A staggering 62.8 per cent were neither poor nor vulnerable (Figure 23)

- In urban areas, the misalignment is even more pronounced:
    - Only 4.9 per cent of beneficiary households were extreme poor
    - 12 per cent were moderate poor
    - 16.2 per cent were vulnerable
    - A significant 62 per cent were neither poor nor vulnerable

- In rural areas, the pattern is similar, though slightly less pronounced:
    - 7.1 per cent of beneficiary households were extreme poor
    - 13.9 per cent were moderate poor
    - 17.3 per cent were vulnerable
    - 61.8 per cent were neither poor nor vulnerable

The disproportionately high share of non-poor and non-vulnerable households among social protection recipients underscores serious inefficiencies in targeting, diverging from the stated goals of the NSSS. The exclusion of many poor and vulnerable households from receiving any form of assistance further exacerbates these disparities.

Data from HIES 2022 reveal that a substantial share of poor and vulnerable households remain entirely excluded from social protection programmes:

- Nationally, nearly half (48 per cent) of extremely poor households do not receive any social protection benefits (Figure 24).
- In urban areas, exclusion is even higher—63.9 per cent of extremely poor households receive no social protection, compared to 43.9 per cent in rural areas.
- Among moderately poor households, more than two-thirds in urban areas receive no support, compared to 47 per cent in rural areas.
- Urban vulnerable households face the highest exclusion rate, with 68.6 per cent receiving no social protection benefits, while the figure is 48.5 per cent for rural vulnerable households.

These findings underscore deep structural issues in Bangladesh's social protection framework, where urban poverty and vulnerability remain largely overlooked. Despite rapid urbanisation and the rising concentration of the poor in cities, existing programmes continue to exhibit a strong rural bias, leaving urban low-income populations without adequate support. Addressing these disparities will require more precise targeting mechanisms, expansion of urban-focused programmes, and a shift towards inclusive policies that better align with the realities of poverty and vulnerability in Bangladesh.

Figure 23: Households with any social protection coverage, by poverty status (%), 2022

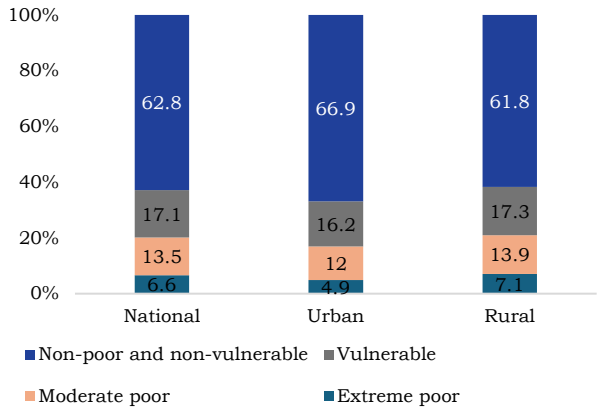
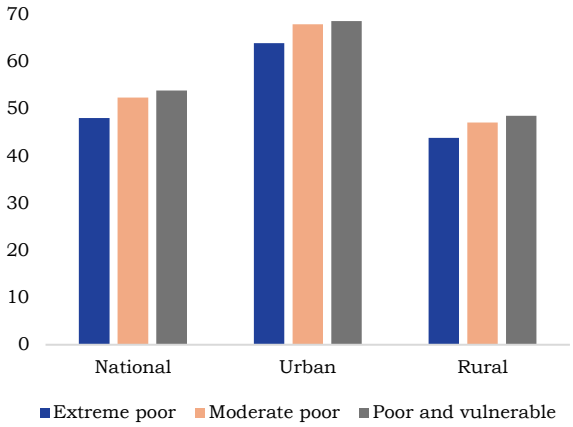


Figure 24: Poor and vulnerble households not covered by any social protection schemes (%)



Source: Authors' analysis using HIES 2022 data.

Targeting errors in social protection schemes

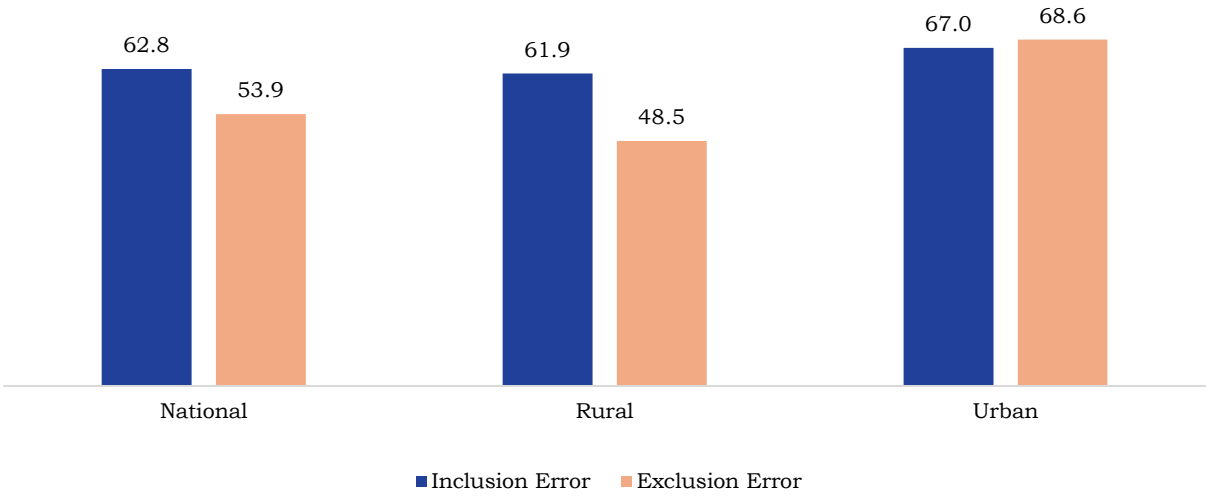
The large proportion of poor and vulnerable households without social protection coverage, along with the significant percentage of non-poor and non-vulnerable households receiving benefits, is often seen as evidence of targeting inefficiencies. These inefficiencies manifest in two ways: exclusion errors, where eligible individuals are not covered by any social protection programme (also termed coverage inefficiency), and inclusion errors, where ineligible individuals receive benefits (also termed targeting inefficiency) (Razzaque & Rahman, 2019). Limited resources for social protection often make beneficiary selection a subjective process, compromising the effective distribution of transfers to those in need. The lack of sufficient resources prevents the inclusion of all eligible individuals, leading to significant exclusion errors. Additionally, political influence and corruption in the selection process frequently cause inclusion errors, allowing ineligible individuals to receive benefits. These inaccuracies contribute to social inequities, as both inclusion and exclusion errors remain widespread. At the local level, the complexity of eligibility criteria—such as income, land ownership, and age—further complicates the process, often resulting in the unintended omission or inclusion of individuals.

A key challenge in assessing targeting errors is determining whether to base eligibility on poverty and vulnerability levels or adhere to programme-specific criteria.

- If poverty and vulnerability are considered as eligibility criteria, targeting errors are estimated to be very high.
- When poverty and vulnerability are used as the basis for eligibility, targeting errors appear to be high.

If households are considered as the unit of measurement, and poverty and vulnerability criteria are applied to HIES 2022 data, the exclusion error in urban areas is estimated at 68.6 per cent as against of 48.5 per cent in rural areas. The inclusion error, on the other hand, is estimated at 67 per cent (around two-thirds) in urban areas, compared to 62 per cent in rural areas (Figure 25).

Figure 25: Targeting errors in social protection - based on poverty and vulnerability criteria, 2022



Source: Authors' analysis using HIES 2022 data.

One possible criticism of using poverty and vulnerability criteria in estimating targeting errors is that most schemes have programme-specific eligibility criteria such as age, sex, marital status, land ownership, individual/household income, etc.

- Although the NSSS emphasises prioritising poor and vulnerable groups, most schemes have specific criteria that often fail to align with the core objective of addressing poverty. For example, major programmes such as the old-age allowance, widow allowance, and mother-and-child benefit schemes, apply income criteria for individual beneficiaries without considering the poverty or vulnerability status of their households. This oversight allows many non-poor and non-vulnerable households to be included in the schemes, while leaving many eligible poor and vulnerable households.
- Furthermore, a significant proportion of social protection beneficiaries consist of households receiving such benefits as school stipend programmes and allowances for freedom fighters, which do not consider income or poverty status as eligibility criteria.
- The absence of robust income support measures, such as cash transfers or employment guarantees tailored for households below the poverty line, creates a critical gap in addressing both moderate and extreme poverty.

Using programme-specific criteria, targeting errors—exclusion and inclusion errors—have been estimated for major social protection programmes based on Household Income and Expenditure Survey (HIES) 2022 data (Table 7).

- If programme-specific selection criteria are applied, the exclusion error for the Old Age Allowance (OAA) programme in urban areas is estimated at 34.7 per cent, meaning that more than one-third of eligible elderly individuals are not included in the scheme (Table 5). The corresponding figure for rural areas is 22.7 per cent.

- The inclusion error for this scheme is relatively low, ranging between 16 and 17 per cent in both urban and rural areas. The expanded coverage of the Old Age Allowance in recent years has contributed to the relatively low targeting errors in this programme.

In contrast, exclusion errors in other programmes remain significantly high. More than 90 per cent of eligible widowed individuals in urban areas are not covered under the Widow Allowance (WA) scheme, compared to 84 per cent in rural areas. Meanwhile, about 20 per cent of ineligible widowed individuals are included in the scheme in urban areas, compared to 28 per cent in rural areas.

According to HIES 2022 data, a staggering 98 per cent of eligible women do not receive benefits from the Mother and Child Benefit Programme (MCBP) in both urban and rural areas. The inclusion errors in this scheme are also notably high, with 63–65 per cent of beneficiaries failing to meet the eligibility criteria.

Recently, the government universalised the Disability Allowance (DA) scheme to cover all persons with disabilities (PwDs), effectively making the income criterion irrelevant. However, the programme's implementation manual still specifies an annual income threshold of BDT 36,000 for eligibility. Based on this threshold, the exclusion error among persons with severe disabilities is much higher in urban areas (82.3 per cent) compared to rural areas (73.4 per cent). The inclusion errors are also substantial, at 57.5 per cent in urban areas and 55.8 per cent in rural areas. However, when individuals with wider definition of disabilities are included in the assessment, inclusion errors drop significantly, to 25 per cent in urban areas and 28 per cent in rural areas.

In summary, exclusion errors in urban areas are higher across all major schemes due to lower coverage. Inclusion errors significantly decline when programme-specific eligibility criteria are considered. The higher coverage of social protection programmes in rural areas might have contributed to relatively higher inclusion errors in some schemes.

Table 7: Programme-specific targeting errors in urban and rural areas (%)

Programme and eligibility criteria	Exclusion error		Inclusion error	
	Urban	Rural	Urban	Rural
Old age allowance: Minimum age (male 65 years, female 62 years) and annual personal income below Tk. 10,000	34.7	22.7	16.9	16.2
Widow allowance: Widow/deserted by husband/destitute, annual individual income less than Tk. 15,000	90.1	83.7	19.8	27.6
Mother and child benefit programme (MCBP): Age (20-35) and income criteria (up to Tk 8,000 for rural areas; and up to Tk 12,000 for urban areas)	98.8	98.9	62.9	64.8
Disability allowance: Severe disability and annual income of beneficiary (less than 36000)	82.3	73.4	57.5	55.8
Secondary and higher secondary education stipend programme: student belongs to poor and vulnerable family	90.9	85.7	72.1	70.7

Source: Authors' analysis using HIES 2022 data.

Impact of social protection programmes: simulation exercises

Social protection is widely recognised as a vital tool for mitigating risks and reducing poverty. According to the International Labour Organization (ILO), there is a strong and positive relationship between levels of investment in social protection expenditure and poverty reduction (ILO 2021). if social protection systems were absent, the poor would likely face increased vulnerability to economic shocks, health crises, and other risks, leading to a rise in chronic poverty, social instability, and hindered economic growth (Rahman et al., 2011).

In Bangladesh, social protection programmes aim to alleviate poverty and vulnerability by providing financial assistance to disadvantaged populations. To design effective social protection strategies, it is crucial to understand their impact on reducing poverty and vulnerability. One way to evaluate this impact is by simulating the removal of social protection transfers from beneficiary households and examining whether their poverty status changes—such as a previously non-poor household falling below the poverty line. This approach helps determine the extent to which social protection benefits contribute to lifting households out of poverty or preventing them from becoming poor.

Microsimulation analysis, a widely recognised ex-ante analytical approach, provides a simple framework for assessing the potential impact of social protection interventions and policy reforms on poverty and vulnerability. By modelling different policy scenarios, microsimulation can offer valuable insights into the effectiveness and targeting of social protection programmes, helping policymakers refine interventions for greater efficiency and inclusivity.[6]

This study employed microsimulation analysis using HIES 2022 data, which provides detailed information on social protection coverage, aggregate and per capita income, and household expenditure. To estimate the impact of social protection on poverty and vulnerability, counterfactual consumption data were generated by deducting monthly social protection allowances from household per capita expenditure. It was assumed that the marginal propensity to consume (MPC) is unity, meaning that all social protection transfers were fully allocated to consumption.

Using the counterfactual consumption data, the headcount poverty and vulnerability rates were recalculated based on the poverty line and vulnerability thresholds defined in HIES 2022. These counterfactual estimates represent the levels of poverty and vulnerability in the absence of social protection benefits. By comparing the actual poverty and vulnerability rates with their counterfactual counterparts, the study quantifies the extent to which social protection programmes contribute to poverty reduction and vulnerability mitigation.

- The microsimulation analysis reveals that social protection programmes in 2022 contributed to reducing national moderate poverty by 0.8 percentage points.
- In terms of extreme poverty, the reduction was 0.6 percentage points.
- The effectiveness of social protection programmes in urban areas is particularly limited. The results show that urban moderate poverty was reduced by 0.5 percentage points due

[6] Microsimulation is a widely recognised tool for assessing the effects of public policies and their distributional impacts at the household and individual levels. By adjusting the benefit sizes of social protection programmes or other interventions, this method evaluates their outcomes on microeconomic agents such as individuals, households, or firms.

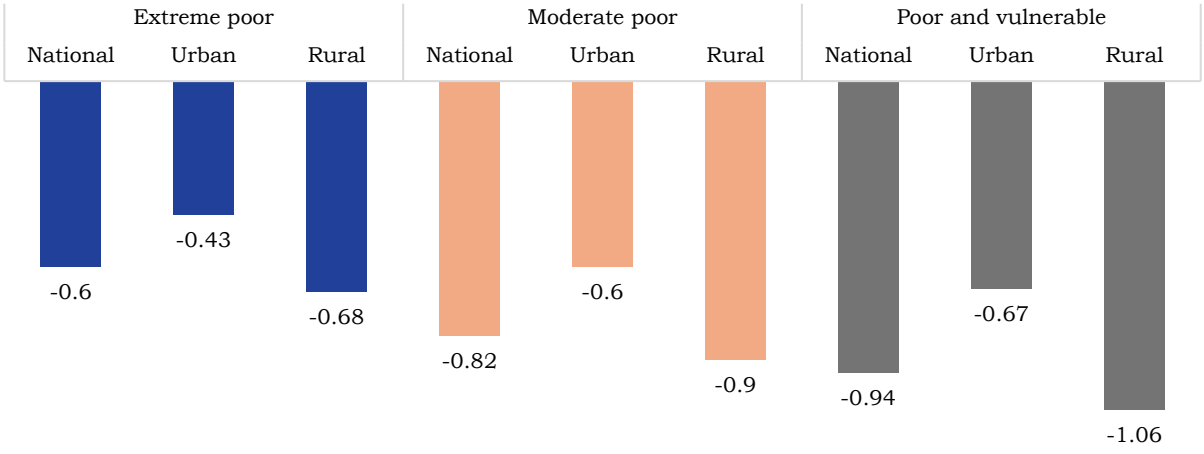
to social protection programmes, while extreme poverty declined by 0.43 percentage points. This implies that social protection programmes contributed to lifting just 0.25 million urban residents out of extreme poverty and 0.3 million people out of moderate poverty.

- Vulnerability in urban areas was reduced by 0.67 percentage points, which translates to half a million people graduating from vulnerability.
- The small reduction in poverty and vulnerability suggests that the benefits provided under these programmes are insufficient to address the complex socio-economic challenges faced by urban populations. Factors such as higher living costs and limited programme coverage may have contributed to the relatively small impact in urban areas.

The impact of social protection programmes in rural areas is also small but relatively higher than that of in urban areas. The analysis indicates that rural extreme poverty decreased by 0.68 percentage points, moderate poverty by 0.9 percentage points, and vulnerability by 1.06 percentage points. These reductions lifted 0.8 million rural people out of extreme poverty, 1 million out of moderate poverty, and 1.2 million out of vulnerability. The relatively higher impact in rural areas can be attributed to the greater coverage of social protection schemes in these regions, where poverty rates are higher.

While social protection programmes have contributed to poverty and vulnerability reduction, the overall impact remains small, particularly in urban areas. This underscores the need for reforms aimed at increasing benefit sizes and improving coverage in urban areas.

Figure 26: Impact of social protection programmes on poverty and vulnerability (percentage points), 2022

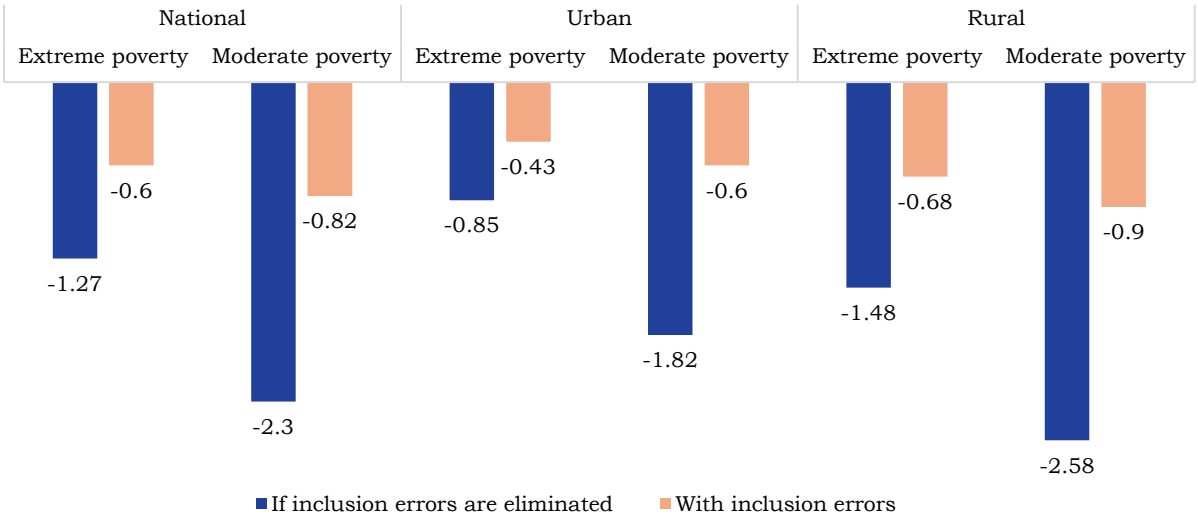


Source: Authors' analysis using HIES 2022 data.

Social protection could have a significantly greater impact on poverty reduction if inclusion errors were eliminated. To assess this, an additional simulation analysis was conducted to estimate the effects of redistributing resources saved by eliminating inclusion errors among poor households (Figure 27). The findings suggest that if inclusion errors were entirely removed and the resources saved were spent on expanding coverage of the eligible but currently excluded beneficiaries, the poverty-reducing impact of social protection programmes would more than double. This

highlights the critical importance of improving targeting efficiency to maximise the effectiveness of social protection interventions.

Figure 27: Poverty impact of social protection if inclusion errors could have been eliminated, 2022



Source: Authors' analysis using HIES 2022 data.

Factors affecting enrollment into social protection programs

In this study, the logistic regression approach (Logit model) is used to estimate the likelihood of social protection program enrollment at both the individual and household levels. The dependent variable in both cases is binary, indicating whether an individual or household is enrolled in a social protection program or not. Since the outcome is dichotomous, the logit model is the appropriate method for estimating the probability of enrollment, with explanatory variables being either continuous, categorical, or a mix of both.

Determinants of an individual's enrollment into social protection programs

A logistic regression analysis was undertaken to assess the factors influencing an individual's enrollment in social protection programs. Table 8 presents the marginal effects of this analysis, which examines determinants of individual enrollment across National, Rural, and Urban contexts. The marginal effects represent the changes in the probability of an individual enrolling in social protection programs associated with changes in explanatory variables. Factors such as household income, the individual being a child, widow, or older member significantly influences the likelihood of participating in social protection programs.

- Household income negatively affects the probability of enrolling in social protection programs across all regions. A 10 per cent increase in household income corresponds to a very small reduction in enrollment probability of 0.087 per cent at the National level. This

suggests household income has a very small impact on the individual's probability of being enrolled in a social protection program.

- Working hours of individuals negatively impact the likelihood of enrolling in social protection programs, with a minor yet consistent marginal effect. Each additional working hour is associated with a 0.54 per cent decrease in enrollment probability at the national level, suggesting individuals who work more hours have slightly lower reliance on external assistance. The negative effect is somewhat stronger in rural areas (-0.64 per cent) compared to urban areas (-0.47 per cent), though the magnitude of this effect remains small overall.
- Experiencing a shock increases enrollment probabilities by a small margin at the National level by approximately 0.66 per cent, with a particularly strong effect in urban areas (1.40 per cent). This observation aligns with Bharadwaj et al. (2020), who claim that safety nets in Bangladesh provide significant support to those facing shocks and crises that may push them into poverty.
- Demographic characteristics significantly influence enrollment probabilities. Children exhibit increased enrollment probabilities nationally by approximately 6 per cent, with a stronger impact observed in rural areas (7.6%) compared to urban areas (4.4%). Widowed individuals experience even greater increases, nationally at 10.91 per cent, with rural areas showing stronger effects (12.7%) relative to urban areas (8.9%). Similarly, elderly individuals exhibit the most substantial increases, nationally around 16.61 per cent, with rural areas again demonstrating stronger effects (18.7%) compared to urban areas (14.6), indicating greater reliance on social protection in rural settings, where access to healthcare and social services is often limited (Allieu, 2019). In contrast, gender does not significantly influence enrollment likelihood.
- Urban households exhibit lower odds of enrollment in social protection schemes at the individual level compared to Rural households, supporting the data presented in a report by the Cabinet Division, Government of Bangladesh (2020), with the National level showing a 3 per cent decrease in enrollment likelihood for urban dwellers.
- Education negatively impacts enrollment likelihood in social protection programs for individuals, with each additional year of schooling reducing the probability by approximately 0.38 per cent nationally. The effect is slightly higher in rural areas (0.46 per cent) than in urban areas (0.31 per cent), corroborating the findings of Selim & Hossain (2018), who argue that higher education levels diminish dependency on social protection schemes due to improved socio-economic opportunities.
- Employment status positively affects enrollment probabilities, with employed individuals nationally experiencing about a 5.98 per cent higher probability of enrollment. This finding aligns with Middlebrook's (2002) observation that employment generation programs can effectively integrate participants into broader social protection systems, as demonstrated by the Employment Generation Program for the Poorest (EGPP) in Bangladesh, which provides stable income to over 700,000 vulnerable individuals. The positive impact is slightly higher in rural areas (6.99 per cent) compared to urban areas (5.23 per cent).

- Individuals who have experienced an economic or health shock are more likely to enroll in social protection programs, supporting the claim that safety nets in Bangladesh provide significant support to those facing shocks and crises that may push them into poverty (Bharadwaj et al., 2020). At the National level, individuals facing shocks have a 0.7 per cent higher likelihood of enrolling, with a stronger effect in Urban areas (1.2 per cent increase) compared to Rural areas (0.5 per cent increase) suggesting that individuals in distress due to unforeseen circumstances are more likely to turn to social protection programs, with urban households demonstrating the strongest response.
- Poverty levels significantly affect enrollment. Extreme poverty increases enrollment probability nationally by approximately 0.91 per cent, moderate poverty by 1.24 per cent, and vulnerable poverty by 1.20 per cent. Urban areas experience slightly stronger effects for moderate poverty (1.8%) and vulnerable poverty (1.5%) compared to rural areas, reflecting the targeted nature of social protection programs in addressing varying levels of poverty and vulnerability.

Table 8: Marginal effects from logit model estimates for individual-level determinants of enrollment in social protection programs (dependent variable= individual's enrollment into social protection)

	Rural	Urban	National
log of household income	-0.00704***	-0.00974***	-0.00866***
Working hours of the individual	-0.00636***	-0.0047***	-0.00539***
Household experienced a shock (yes=1; no=0)	0.001666	0.013998***	0.006644**
The person is a child (yes=1; no=0)	0.076204***	0.043635***	0.059958***
The individual is a widow (yes=1; no=0)	0.127179***	0.089374***	0.109061***
The individual is an elder member (yes=1; no=0)	0.187382***	0.145498***	0.166073***
Gender (male=1; female=0)	0.000061	0.003155	0.001554
Urban (yes=1; no=0)			-0.0299***
Individuals' average years of schooling	-0.004634***	-0.0031***	-0.00384***
Employment status (yes=1; no=0)	0.069907***	0.052308***	0.059839***
Extreme poor (yes=1; no=0)	0.006985	0.011433	0.009063*
Moderate poor (yes=1; no=0)	0.006155	0.01844***	0.012438***
Vulnerable (yes=1; no=0)	0.008708*	0.015021***	0.011978***

Source: RAPID's estimation using the data from HIES 2022, BBS. Statistical significance at the 1, 5 and 10 per cent levels are indicated as ***, **, *, respectively.

Determinants of a household's enrollment into social protection programs

After discussing the individual-level determinants of social protection program enrollment, we now turn to the household-level estimates. Table 9 provides marginal effects derived from logistic regression, exploring factors influencing household enrollment in social protection programs across National, Rural, and Urban contexts. These marginal effects represent the change in the probability of household enrollment associated with changes in explanatory variables.

- Household income consistently demonstrates a negative association with enrollment probability across all examined regions, reflecting the poverty-targeted orientation of social protection programs. At the National level, a 10 per cent increase in household income is associated with a mere 0.13 per cent reduction in the likelihood of household enrollment. The effect is notably more substantial in Urban areas, registering a 0.18 per cent decrease, while the effect in Rural areas remains relatively small (0.05 per cent) but statistically insignificant. This pattern aligns closely with the explicit poverty-targeting objectives outlined within Bangladesh's National Social Security Strategy, intended to prioritise low-income households.
- Enrollment probability significantly differs by the gender of household heads, with male-headed households displaying lower likelihoods of participation compared to their female-headed counterparts. At the National level, male-headed households show approximately a 4.20 per cent reduction in enrollment probability, with a larger and significant disparity evident in Rural areas (5.25 per cent). In contrast, Urban areas display a smaller and statistically insignificant reduction (2.73 per cent), suggesting stronger gender-based enrollment differences in rural communities.
- The dependency ratio negatively affects the likelihood of household enrollment at the national level, where each incremental increase leads to a 7.31 per cent reduction in probability. This negative association is stronger in Rural areas, with a decrease of 10.69 per cent, possibly due to greater economic constraints in managing higher numbers of dependents (Sharif, 2009). Conversely, the effect is weaker but statistically insignificant in Urban areas (2.83 per cent).
- Household access to credit facilities consistently associates positively with enrollment probability across all geographic settings. At the National level, households with credit access experience a higher probability of enrollment by about 6.27 per cent, closely mirrored in Rural (6.14 per cent) and Urban (6.05 per cent) areas. This result emphasises the link between financial inclusion and enhanced household participation in social protection systems. Through access to credit, individuals gain crucial knowledge about navigating institutional processes, thereby facilitating greater participation in social safety nets (Leite et al., 2017).
- The number of working hours by the household head has a slightly positive influence on enrollment likelihood, with each additional working hour at the National level resulting in a 0.40 per cent increase in the probability of household enrollment. This effect is somewhat higher in Urban areas (0.51 per cent) compared to Rural areas (0.32 per cent), indicating that increased economic engagement may not substantially decrease household reliance on social protection schemes, possibly due to persistent low incomes despite extensive working hours. This situation is especially prevalent among households involved in informal employment, where extended working hours do not necessarily translate into higher income.
- Household demographic characteristics substantially influence enrollment probabilities in social protection programs. Nationally, households with widowed members exhibit an increased enrollment probability of approximately 11.45 per cent, while households containing elderly members display an even higher likelihood of around 21.44 per cent. Rural

households demonstrate stronger effects (14.01 per cent for widowed members and 25.16 per cent for elderly members), highlighting increased reliance on social protection in rural contexts due to heightened vulnerability. Conversely, households with children show minimal and statistically insignificant effects nationally, with a slight negative effect in urban areas (-2.11 per cent) and a negligible positive impact in rural areas (0.39 per cent).

- Education levels of household heads are consistently associated with lower probabilities of social protection enrollment across all regions. Nationally, each additional level of education corresponds to approximately a 4.75 per cent decrease in enrollment probability, with very similar effects observed in both Urban (4.61 per cent) and Rural (4.49 per cent) contexts. This inverse relationship suggests that better educational attainment may enhance access to alternative economic resources (Faris & Nilasari. 2024), thereby reducing dependence on social protection.
- Experiencing a household shock significantly increases enrollment likelihood nationally by approximately 2.56 per cent. The increase in enrollment probability is particularly notable in Urban areas (3.5%), surpassing the increase observed in Rural areas (2.1%), suggesting that urban households experiencing unexpected challenges may turn more readily toward social protection programs for assistance.
- Households residing in urban areas consistently show lower enrollment probabilities compared to rural households, with national-level probabilities reduced by about 6.5 per cent. This observation suggests that urban households typically have greater access to alternative social and economic resources, thereby decreasing the necessity for formal social protection participation.
- Poverty levels considerably influence enrollment likelihood, with extreme poverty at the National level increasing household enrollment probability by around 6.90 per cent. Rural areas display stronger effects (9.9%) relative to Urban areas (3.7%), suggesting that social protection programs effectively target rural areas with higher poverty incidence. Similarly, moderate poverty significantly increases the likelihood of enrollment nationally (6.2%), with rural effects (7.7%) exceeding urban effects (4.5%). Conversely, vulnerable poverty demonstrates negative marginal effects, which aligns logically with the definition of this group. Vulnerable poor households are positioned just above the poverty threshold and typically do not directly qualify as poor; therefore, their relatively lower likelihood of enrolling in social protection programs is consistent with their economic status, as they are generally less likely to seek or require immediate social protection support unless experiencing a shock.

Table 9: Marginal effects from logit model estimates for household-level determinants of enrollment in social protection programs (dependent variable= household's enrollment into social protection)

	Rural	Urban	National
log of household income	-0.00548	-0.0181***	-0.01307***
Sex of the household head (male=1; female/others=0)	-0.05251**	-0.02725	-0.04197***
Dependency ratio	-0.10689***	-0.02832	-0.07312***
Household access to credit facilities (yes=1, no=0)	0.06144***	0.06046***	0.06274***
Working hours of the household head	0.00317**	0.00509***	0.00405***
Household size (number)	-0.00624*	0.00241	-0.00203
Household has a widowed member (yes=1, no=0)	0.14007***	0.09737***	0.11450***
Household has an elderly member (yes=1, no=0)	0.25163***	0.17565***	0.21440***
Household has a child (yes=1, no=0)	0.00391	-0.02114	-0.00584
Household head's education (years)	-0.04493***	-0.0461***	-0.04746***
Household experienced a shock (yes=1; no=0)	0.02066*	0.03489***	0.02557***
Urban (yes=1; no=0)			-0.0652***
Extreme poor (yes=1; no=0)	0.09896***	0.03678***	0.06897***
Moderate poor (yes=1; no=0)	0.07706***	0.04468***	0.06167***
Vulnerable (yes=1; no=0)	-0.00548***	-0.0181***	-0.01307***

Source: RAPID's estimation using the data from HIES 2022, BBS. Statistical significance at the 1, 5 and 10 per cent levels are indicated as ***, **, *, respectively.

IV. Policy Recommendations

The number of poor and vulnerable individuals in urban areas has risen over the past decade, and with urban populations projected to continue growing, the scale and complexity of urban poverty will only intensify. Low-income urban residents face multiple, overlapping challenges, including a severe lack of affordable housing, overcrowded and substandard living conditions in slums, inadequate water and sanitation facilities, escalating living costs, and persistent food insecurity. Limited access to affordable healthcare and quality education further compounds their vulnerability, while the highly informal nature of the urban labour market exposes millions to unstable employment, low wages, and the absence of social security protections. These structural challenges underscore the urgent need for a stronger and more inclusive urban social protection framework. Social protection can play a transformative role in mitigating economic insecurity, stabilising livelihoods, and enhancing access to essential services for the urban poor. However, existing programmes remain fragmented, inadequately funded, and poorly aligned with the realities of urban deprivation.

This paper presents key policy recommendations to strengthen social protection in urban areas, ensuring that interventions are targeted, scalable, and responsive to the evolving needs of urban populations. These recommendations align with and complement the objectives set out in the Urban Social Protection Strategy and Action Plan (USPSAP), offering a pathway toward more effective, sustainable, and inclusive urban social protection systems.

1. *Increasing the coverage of key lifecycle-based social protection in urban poor and vulnerable constitutes a priority.*

To effectively address urban poverty in Bangladesh, it is crucial to expand and scale up major social protection programmes such as the Old Age Allowance, Mother and Child Benefit Programme (MCBP), Allowance for Widow, Husband Deserted and Destitute Women, Allowance for Persons with Disabilities, and stipend programmes.

- Currently the widow allowance programme is not operational in city corporation areas. An estimate based on HIES data shows that there are around 150,000 vulnerable widowed women eligible for widow allowance programme. There is thus the urgent need for taking immediate steps to introduce widow allowance programme in city corporation areas and include the vulnerable widow into the scheme.

- Given the rapid urbanization, social protection programmes must be expanded and adapted to better support urban populations. Existing schemes remain limited in scale and accessibility, leaving many vulnerable urban households without adequate support. The Old Age Allowance, Mother and Child Benefit Programme, Allowance for Widow, Husband Deserted and Destitute Women, Allowance for Persons with Disabilities, and students' stipend programmes, for instance, require greater urban outreach. As cities continue to grow, ensuring that social protection policies reflect the realities of urban deprivation is essential for building resilience and improving the well-being of poor and vulnerable urban populations.

- A comprehensive approach should be adopted, similar to the old age and widow allowance programmes, to expand the above mentioned schemes.[7] These programmes must receive increased budget allocations to ensure comprehensive coverages for all eligible individuals, particularly the poor and vulnerable in urban areas.

- A calculation based on HIES data shows that expanding major life cycle programmes in urban areas to match the coverage in rural areas would require an additional Tk. 705 crore, equivalent to 0.01 per cent of GDP (Table 10).

- Additionally, if these schemes are made universal, to cover all eligible individuals in both urban and rural areas, an additional allocation of Tk. 252 billion, equivalent to 0.5 per cent of GDP, will be needed (Table 11).

[7] The OAA and WA schemes were expanded to all eligible individuals in 262 most poverty-stricken upazilas in 2020-21 and 2021-22

Table 10: Additional resources required to expand the major life-cycle based schemes for urban social protection

Programme	Urban rural coverage gap (percentage points)	Total eligible in urban areas (lakh)	Benefit amount	Additional beneficiaries to include for equal coverage	Amount required (Crore Tk)
Old Age Allowance (all elderly people)	12.7	28.7	600 Tk/month	3.6	261.6
Widow Allowance	8.0	19.7	550 Tk/month	1.6	104.0
Secondary and Higher Secondary Education Stipend	8.6	22.3	300 Tk/month (approximatel y from HIES)	1.9	69.2
Mother and Child Benefit Programme	4.3	27.5	800 Tk/month	1.2	113.7
Allowance of PwDs	7.1	21.6	850 Tk/month Tk/month	1.5	156.2
Total					704.7

Source: Authors' estimation based on data from HIES 2022, BBS; National Budget 2024-2025, MoF.

Table 11: Additional resources required to universalize major lifecycle-based social protection schemes in both urban and rural areas

Programme	Additional beneficiaries to be included		Benefit amount per person	Amount required (Crore Tk)		
	Urban	Rural		Urban	Rural	Total
Old Age Allowance (all elderly people)	18.4	37.7	600 Tk/month	1763.2	3618.4	5381.6
Widow Allowance	15.7	32.4	550 Tk/month	1505.4	3112.6	4618.0
Secondary and Higher Secondary Education Stipend	14.6	18.1	300 Tk/month (approximately from HIES)	1402.5	1734.7	3137.2
Mother and Child Benefit Programme	22.4	53.8	800 Tk/month	2150.9	5163.5	7314.4
Allowance of PwDs	16.0	34.0	850 Tk/month Tk/month	1537.0	3266.5	4803.5
Total				8359.0	16895.7	25254.7

Source: Authors' estimation based on data from HIES 2022, BBS; National Budget 2024-2025, MoF.

2. Expanding food-based social protection programmes in urban areas is essential to ensuring food security for poor and vulnerable households, particularly in the face of sustained inflationary pressure.

With rising inflation over the past few years, ensuring food security has become increasingly challenging. According to HIES 2022 data, 18.4 per cent of the urban population experienced

moderate to severe food insecurity – higher than the urban poverty rate – and 0.9 per cent encountered severe food insecurity. Addressing food security necessitates the expansion of food-based social protection programmes, such as Open Market Sale (OMS) and the truck sale initiatives of the Trading Corporation of Bangladesh (TCB). Additionally, introducing such schemes currently available to rural beneficiaries as Vulnerable Group Development (VGD) and Vulnerable Group Feeding (VGF) to urban areas can help mitigate food and nutritional insecurity for vulnerable urban populations.

3. *Introducing workfare programmes tailored to the urban context can serve as an effective mechanism for providing protection against poverty and vulnerability*

Bangladesh has extensive experience in implementing workfare and employment generation programmes for rural working-age populations. These programmes aim to provide temporary employment during the lean season, protect against job losses due to disasters. The major workfare programmes, such as EGPP, FFW, WFM, and TR, are operated by the Ministry of Disaster Management and Relief and are primarily designed for rural areas. Despite their rural focus, there is a need for workfare programmes in urban areas, as they can be effective social protection tools for the urban poor. Some of the existing rural workfare and employment generation programmes could potentially be introduced in urban settings, with appropriate modifications. For example, the EGPP and WFM could be expanded to urban areas with adjustments to the working areas and the inclusion of necessary public works in their portfolios.

4. *Strengthening social protection for the urban working population requires the introduction of critical social insurance programmes for protection against employment-related risks.*

The National Social Security Strategy (NSSS) recommended the introduction of a National Social Insurance Scheme (NSIS) to provide unemployment, maternity, sickness, and accidental insurance for the working-age population, financed through joint contributions from employers and employees. The scheme was initially designed to cover urban formal sector workers, with plans for gradual expansion. Under the NSSS Action Plan Phase II (2021–2026), the NSIS framework was scheduled for completion by June 2022, followed by unemployment insurance piloting in July 2024 and a national rollout by July 2025. However, progress has been slow, with only the Employment Injury Scheme (EIS) being piloted in the RMG sector, while preparatory activities for unemployment insurance remain in their early stages.

A draft NSIS framework has identified several critical gaps that must be addressed before it can be legally enacted and fully implemented, including the establishment of an employment database, awareness campaigns, institutional capacity building, and the creation of a comprehensive legal framework. Without a robust operational model, effective implementation of NSIS components will remain challenging. Given its ongoing pilot, the EIS should first be expanded to cover all formal sector workers before being extended to the informal sector, ensuring broader protection for vulnerable workers. Other social insurance schemes must follow a clear and structured roadmap, ensuring gradual and sustainable implementation to strengthen social protection for Bangladesh's growing urban workforce.

5. *Strengthening skill development programmes and active labour market policies for urban youth is essential to enhancing employability, reducing reliance on informal and low-paying jobs, and improving access to stable economic opportunities in rapidly growing cities.*

Youth unemployment in Bangladesh is disproportionately high, especially in urban areas, where it stands at 11.1 per cent compared to 7.2 per cent in rural areas. Additionally, the rate of young people not in employment, education, or training (NEET) is a significant challenge, with 37.2 per cent in urban areas compared to 15.2 per cent in rural areas. To address these issues, there is an urgent need for strengthening skill development-related social protection programmes for urban youth. Several social protection related skill development programmes target youth across the country, including Driving Training for Employment at Home and Abroad, Employment Creation through Freelancing Training for Educated Job Seekers, women entrepreneurship development initiatives under the Joyeeta Foundation, etc. Additionally, the National Skill Development Authority (NSDA) oversees several skill development initiatives though these are not classified as social protection schemes.

To better support urban youth, social protection-related skill development programmes should be reinforced alongside other skilling, reskilling, and up-skilling initiatives. Increased investment in vocational training centres and urban-centric initiatives is essential. Incorporating technology and digital literacy courses into the curriculum can equip urban youth with the skills needed to navigate the evolving job market. Beyond skill development, Bangladesh should design and implement effective Active Labour Market Policies (ALMPs) to bridge the gap between labour supply and demand, ensuring a more dynamic and responsive urban labour market.[8]

6. *Refine the scope of social protection schemes to include poverty and vulnerability in eligibility criteria*

The absence of comprehensive, large-scale interventions explicitly targeting poverty and vulnerability weakens the effectiveness of Bangladesh's social protection system. While the National Social Security Strategy (NSSS) emphasises prioritising poor and vulnerable groups, many schemes fail to align with this core objective, resulting in limited impact on reducing moderate and extreme poverty and vulnerability.

To enhance targeting efficiency, social protection programmes should adopt a poverty- and vulnerability-focused eligibility framework. This requires refining the scope of social protection by prioritising schemes that directly address poverty, vulnerability, and lifecycle risks—in line with the principles outlined in the NSSS and International Labour Organization (ILO) guidelines. Non-poverty-focused schemes should be reassessed, ensuring that resources are concentrated on interventions that effectively support those most in need.

[8] ALMPs encompass job placement services, training programmes, and employment subsidies, are designed to improve labour market outcomes by enhancing the skills and employability of workers through matching mechanism and counselling.

7. A multifaceted approach must be undertaken to minimise targeting errors in social protection programmes.

Ensuring that social protection benefits reach those most in need requires a multifaceted strategy that addresses both exclusion and inclusion errors, enhances transparency, and strengthens coordination between government agencies and NGOs. Exclusion errors are particularly pronounced in urban areas, where limited resource allocation and poor beneficiary identification mechanisms leave many eligible poor and vulnerable households without support. Inclusion errors, on the other hand, result in a misallocation of resources, further constraining the effectiveness of social protection programmes.

To improve targeting, the National Social Security Strategy (NSSS) recommended the establishment of a National Household Database (NHD) and the adoption of a Proxy Means Test (PMT) for beneficiary selection. In 2018, the Bangladesh Bureau of Statistics (BBS) conducted a household census, covering 35 million households to develop the NHD. However, the database was never released, rendering the data outdated and obsolete. Given that poverty is dynamic, relying on stagnant data undermines the accuracy of beneficiary selection, leading to the exclusion of newly vulnerable populations. Furthermore, the high costs and logistical challenges of maintaining the NHD raise concerns that the government, already facing resource constraints, may not fully utilise its potential.

A cost-effective alternative to the NHD is the social registry currently being compiled by the Department of Social Services (DSS). The DSS routinely collects applications for cash-based social protection programmes, gathering data on income, assets, landholdings, and other socio-economic indicators. By expanding inter-agency coordination, government institutions can share application data, allowing for the creation of a comprehensive, regularly updated social registry. This registry can be used to generate PMT scores, enabling a more accurate and dynamic identification of eligible beneficiaries for social protection schemes.

Beyond database-driven targeting, addressing errors requires stronger grassroots-level validation mechanisms. Once an initial list of beneficiaries is generated through PMT scores, the final selection should be determined through transparent public meetings at the local level. Active participation from NGOs in these meetings can play a crucial role in verifying eligibility, monitoring implementation, and ensuring fairness. NGOs can also contribute by raising awareness among poor and vulnerable households about available social protection schemes, reducing exclusion stemming from lack of information.

Further, strengthening supervision and accountability measures for local authorities involved in beneficiary selection is essential to curbing inefficiencies and malpractice. Robust oversight mechanisms must be established to prevent political influence and corruption, ensuring that social protection resources are directed to those who need them most. By combining improved data systems, cross-agency collaboration, local-level verification, and NGO engagement, Bangladesh can build a more effective and inclusive social protection framework. Such a multifaceted approach will enhance the accuracy of targeting, minimise errors, and ensure that social protection programmes fulfill their mandate of reducing poverty and vulnerability in urban areas.

8. *Climate adaptive measures should be integrated in in all life-cycle social protection programmes to enhance the resilience of poor and vulnerable.*

To strengthen the resilience of poor and vulnerable populations, Adaptive Social Protection (ASP) must be embedded across all life-cycle social protection programmes in Bangladesh. Given the increasing frequency of climate-induced shocks, social protection must be more flexible and responsive to address the interconnected challenges of climate change, economic instability, and urbanisation. A well-integrated ASP framework can also help mitigate climate-induced rural-urban migration, thereby alleviating some of the pressures associated with rapid urbanisation and rising urban poverty.

Recognising the urgent need for adaptability, the Cabinet Division has issued the 'Strategic Guidelines and Action Plans for Adaptive Social Protection in Bangladesh', outlining a systematic roadmap for building a resilient and adaptable social protection system. These guidelines emphasise flexibility and responsiveness, inclusive targeting, cross-sectoral coordination, and long-term sustainability as core principles for integrating climate resilience into social protection.

To operationalise climate-adaptive social protection, additional measures must be prioritised and expanded, including:

- Promoting climate-resilient livelihoods by equipping vulnerable populations with skills and resources to sustain their income despite climate-induced disruptions.
- Enhancing capacity building for adaptation, ensuring that communities can proactively respond to climate risks rather than rely on post-disaster relief.
- Strengthening disaster preparedness and rapid recovery mechanisms, integrating early warning systems and fast-tracked social assistance to support affected populations.

To ensure ASP initiatives are effective, their implementation must align with existing strategic guidelines and action plans, while also fostering stronger institutional coordination, financing, and monitoring mechanisms. By embedding climate resilience into social protection, Bangladesh can safeguard vulnerable populations from climate shocks, reduce displacement pressures, and build a more sustainable and inclusive social protection system.

9. *Improving access to public services for urban inhabitants should help address urban vulnerability.*

Expanding and improving public service delivery is critical to addressing the needs of urban vulnerable populations, who often face systemic barriers in accessing transportation, water supply, sanitation, waste management, education, and healthcare services. To bridge these gaps, targeted interventions should prioritise innovative service delivery models that bring essential services closer to urban low-income communities.

- Strengthening healthcare accessibility through mobile clinics, an expanded network of community health workers, and upgraded urban health centres will ensure that marginalised populations receive timely and affordable medical care.
- Scaling up urban infrastructure for essential utilities, including reliable water supply, sanitation, and waste management systems, will improve public health outcomes and overall living conditions.

- Leveraging e-governance initiatives can streamline public service delivery, reduce bureaucratic inefficiencies, and enhance accessibility through digital platforms, mobile-based applications, and automated grievance redressal systems.

By targeted urban service expansion and improved governance, public services can become more inclusive, efficient, and responsive to the evolving needs of urban low-income populations, ensuring greater equity and improved quality of life.

10. Implementing the Urban Social Protection Strategy and Action Plan (USPSAP) should be given the due priority consideration.

The Cabinet Division and General Economic Division (GED) conducted an urban diagnostic study and developed an urban social protection strategy and action plan (USPSAP). It serves as a strategic guideline to address the critical needs of the urban poor and vulnerable. The USPSAP three key dimensions: (i) expanding rural schemes to urban areas, (ii) introducing social insurance, and (iii) creating programmes to address the challenges faced by the urban poor living in slums. It is critical to implement the USPSAP on a timely manner. The USPSAP recommended the following measures to address the needs of urban vulnerable populations and strengthen urban social protection:

- **Expand Social Protection Programmes to Urban Areas:** Extend existing rural social protection programmes (e.g., old age allowance, disability benefits, school stipends) to urban areas, especially in less developed urban regions and introduce new urban-focused programmes.
- **Urban Employment Schemes:** Create urban employment programmes to provide income-generating opportunities for the urban poor, including training for unskilled labourers and expanding cash-based employment schemes.
- **Social Insurance for Urban Poor:** Design and implement social insurance schemes to cover risks like unemployment, accidents, and illness, particularly targeting urban informal sector workers.
- **Housing and Land Tenure:** Address housing shortages by providing low-cost housing for urban poor and exploring innovative land leasing solutions to secure land tenures for slum dwellers.
- **Conditional Cash Transfers (CCTs):** Introduce CCT programmes with conditions linked to health, education, and nutrition, particularly for women and children in urban areas.
- **Implement a Single Registry System:** Develop a centralized Single Registry System to collect, record, and update data on poor households, including urban poor, to improve targeting and reduce exclusion errors.
- **Strengthen Urban Governance:** Adopt an inclusive urban sector policy to address issues like slum upgrading, access to basic services, and support for informal sector workers.
- **Awareness and Grievance Redress:** Use electronic and social media to create awareness about social protection programmes among urban poor. Establish a robust Grievance Redress System (GRS) to address grievances and ensure inclusion of excluded urban poor.
- **Monitoring and Evaluation:** Integrate urban social protection performance into a results-based M&E system to track progress and ensure accountability.

- **Collaboration with Local Governments:** Strengthen collaboration with local governments and NGOs to implement urban social protection programmes effectively.

V. Conclusion

Bangladesh is undergoing a profound structural and demographic transformation, with urbanisation accelerating at an unprecedented pace. Within the next decade or so, the urban population is expected to outnumber the rural population, marking a fundamental shift in the country's development landscape. While cities are driving economic growth and offering new opportunities, they are also intensifying socio-economic disparities, as the urban poor and vulnerable struggle with rising living costs, insecure livelihoods, inadequate access to essential services, and growing income inequality. The expansion of urban settlements—many of which are unplanned and lack basic infrastructure—has heightened deprivations in housing, water, sanitation, healthcare, and education, further exacerbating the risks faced by low-income urban populations.

Despite these realities, Bangladesh's social protection system remains overwhelmingly rural-focused, with only a small share of programmes explicitly designed to address urban poverty and deprivation. The limited budget allocations for urban social protection, coupled with the absence of comprehensive urban-targeted interventions, have left many poor and vulnerable urban households without adequate support. Given the increasing concentration of poverty in cities, this rural bias is no longer tenable. Social protection must evolve to meet the demands of an urbanising economy, ensuring that urban populations are not excluded from safety nets designed to reduce economic insecurity.

A major shift in social protection strategy is now imperative. Expanding urban-focused lifecycle-based programmes, such as the Old Age Allowance, Widow and Destitute Women's Allowance, Allowance for Persons with Disabilities, and the Mother and Child Benefit Programme (MCBP), is crucial to providing income security and essential support to low-income urban residents. These schemes require enhanced budget allocations to ensure that all eligible individuals, particularly those in urban areas, receive coverage. Beyond traditional cash transfers, Bangladesh must also introduce urban-specific workfare programmes, social insurance schemes, and skill development initiatives to support the urban workforce, particularly young people, who face significant employment challenges.

Ensuring that social protection benefits reach those most in need requires a significant improvement in targeting efficiency. Exclusion errors remain widespread in urban areas, leaving many deserving poor and vulnerable households without assistance, while inclusion errors divert resources to those who may not require support. A more dynamic and adaptive targeting system, supported by a well-maintained social registry, is necessary to enhance the accuracy of beneficiary selection. Strengthening institutional coordination and integrating proxy means tests (PMT) for urban contexts can help improve transparency and efficiency in social protection delivery.

Moreover, urban social protection must extend beyond income support to address the broader risks and vulnerabilities of urban life. Strengthening adaptive social protection mechanisms is critical for building resilience against climate shocks, economic fluctuations, and public health

crises, which disproportionately impact urban low-income populations. Expanding access to public services, including affordable housing, healthcare, and education, is equally vital in ensuring that social protection does not operate in isolation but is embedded within a holistic urban development strategy.

The transition towards an inclusive and urban-responsive social protection system will require strong political commitment, cross-sectoral collaboration, and institutional reforms. The National Social Security Strategy (NSSS) and the Urban Social Protection Strategy and Action Plan (USPSAP) provide a framework for this transformation, but their implementation has been slow, and significant gaps remain in coverage, targeting, and resource allocation. Moving forward, the timely implementation of urban-focused social protection reforms, coupled with greater coordination between government agencies, local governments, and NGOs, will be essential in ensuring that the benefits of Bangladesh's economic transformation are equitably shared.

Urban social protection is no longer an optional policy agenda—it is a necessity for fostering inclusive growth, reducing inequality, and building resilient cities that provide opportunities and security for all.

VI. References

Allieu, A. M. (2019). Implementing nationally appropriate social protection systems and measures for all: gaps and challenges facing rural area. In *A presentation at the UN DESA Expert Group Meeting on Eradicating Rural Poverty to implement the 2030 Agenda for Sustainable Development*.

Ampah, S., Fellow, Kenya, N., Ambrose, J., Omagwa, J., & Frimpong, S. (2017). Effect of Access to Credit and Financial Services on Poverty Reduction in Central Region of Ghana. *International Journal of Business and Social Science*, *8*(8). Retrieved from https://ir-library.ku.ac.ke/server/api/core/bitstreams/6d58fe1a-03c7-4553-bc36-5baa9edf3e3e/content

Annez, P. C., & Buckley, R. M. (2009). Urbanization and growth: Setting the context. In M. Spence, P. C. Annez, & R. M. Buckley (Eds.), Urbanization and growth. A report prepared for the Commission on Growth and Development, The International Bank for Reconstruction and Development, the World Bank.

Bardasi, E., & Wodon, Q. (2010). Working long hours and having no choice: Time poverty in Guinea. *Feminist Economics*, *16*(3), 45-78.

Barrientos, A. (2013). *Social Assistance in Developing Countries*. Cambridge University Press.

Barrientos, A., & Hulme, D. (2009). *Social Protection for the Poor and Poorest: Concepts, Policies and Politics*. Palgrave Macmillan.

Bharadwaj, R., Mitchell, T., Karthikeyan, N., Raj, N., Chaliha, S., Abhilashi, R., ... & McCabe, T. (2020). Delivering anticipatory social protection: country readiness assessment. *London.: IIED*.

Bilenkisi, F., Gungor, M. S., & Tapsin, G. (2015). The Impact of Household Heads' Education Levels on the Poverty Risk: The Evidence from Turkey. *Educational Sciences: Theory & Practice*. https://doi.org/10.12738/estp.2015.2.2354

Cabinet Division, Government of Bangladesh. (2020). Urban Social Protection Strategy and Action Plan in Bangladesh. Retrieved from https://socialprotection.gov.bd/2019/11/nsss-urban-social-protection-strategy-and-action-plan-in-bangladesh/

Castro, H. M., & Ferreira, J. C. (2023). Linear and logistic regression models: when to use and how to interpret them?. *Jornal brasileiro de pneumologia : publicacao oficial da Sociedade Brasileira de Pneumologia e Tisilogia*, *48*(6), e20220439. https://doi.org/10.36416/1806-3756/e20220439

Cherif, H. L., Badreddine, A., & Sabri, A. (2024). Determinants of Household Poverty: Identification Using Logistic Regression. *SocioEconomic Challenges*, *8*, 78-89. https://hal.science/hal-04556917v1/document

Devereux, S., & Sabates-Wheeler, R. (2004). *Transformative Social Protection*. IDS Working Paper 232.

El-Habil, A. M. (2012). An Application on Multinomial Logistic Regression Model. *Pakistan Journal of Statistics and Operation Research*, *8*(2), 271. https://doi.org/10.18187/pjsor.v8i2.234

Eusuf, M. A., Bhuiyan, I. H., et al. (2019). Diagnostics for Urban Poverty and The Social Security Needs of the Urban Poor. https://socialprotection.gov.bd/2021/01/a-compendium-of-social-protection-researches/

General Economics Division (GED), (2020). Urban Social Protection Strategy and Action Plan in Bangladesh (DRAFT). Bangladesh Planning Commission, Australian Aid & UNDP.

Gentilini, U., Almenfi, M., & Dale, P. (2022). *Social Protection and Jobs Responses to COVID-19: A Real-Time Review of Country Measures*. World Bank.

Ginting, T., Ketut Sudibia, I., Putu, N., Dewi, M., Istri, A., & Marhaeni, N. (2020). The Effect of Education and Dependency Ratio on Economic Growth and Poverty in Papua. *American Journal of Humanities and Social Sciences Research*, (6), 186–195. Retrieved from https://www.ajhssr.com/wp-content/uploads/2020/06/X2046186195.pdf

Holzmann, R., Sherburne-Benz, L., & Tesliuc, E. (2003). *Social Risk Management: The World Bank\u2019s Approach to Social Protection in a Globalizing World*. World Bank.

ILO. (2021). *World Social Protection Report 2020-22: Social Protection at the Crossroads*. International Labour Organization.

ILO. (2015). Effects on household income and poverty. Retrieved March 12, 2025, from International Labour Organization website: https://www.ilo.org/resource/78-effects-household-income-and-poverty

Julius, M., & Bawane, J. (2011). *EDUCATION AND POVERTY, RELATIONSHIP AND CONCERNS. A CASE FOR KENYA*. Retrieved from https://www.scientiasocialis.lt/pec/files/pdf/vol32/72-85.Julius_Vol.32.pdf

Kabeer, N. (2002). 'Safety Nets and Opportunity Ladders: Addressing Vulnerability and Enhancing Productivity in South Asia'. Development Policy Review, Vol. 20, Number 5, p.593.

Kidd, S., & Wylde, E. (2011). *Targeting the Poorest: An Assessment of the Proxy Means Test Methodology*. HelpAge International.

Lastrapes, W. D., & Rajaram, R. (2015). Gender, caste and poverty in India: evidence from the National Family Health Survey. *Eurasian Economic Review*, *6*(2), 153–171. https://doi.org/10.1007/s40822-015-0043-4

Leite, P., George, T., Jones, T., Leite, P., Lindert, K., & Sun, C. (2017). *Social registries for social assistance and beyond: a guidance note and assessment tool*. Washington, DC, USA: World Bank.

Muhammad, F., & Ali, A. (2017). Impact of Socio Economics Variables on Poverty: An Empirical Analysis for District Chitral of KPK Pakistan. *Journal of Social and Development Sciences*, *8*(3), 46–53. https://doi.org/10.22610/jsds.v8i3.1975

Murdoch, J. & Sharma, M. (2002). 'Strengthening Public Safety Nets from the Bottom Up'. Development Policy Review, Vol. 20, Number 5, November 2002, pp. 569-588

Panday, P. K. (2020). Urbanization and Urban Poverty in Bangladesh. DOI: 10.1007/978-981-15-3332-7_3. https://www.researchgate.net/publication/342196505_Urbanization_and_Urban_Poverty_in_Bangladesh

Rahman, H. Z., Hill, R. (2019). Poverty in Urban Bangladesh: Trends, Profiles and Spatial Differences. Bangladesh Development Studies Vol. XLII, June-September 2019, Nos. 2 & 3.

Rahman, H., Choudhury, L. & Ali, K. (2011). Social Safety Nets in Bangladeh Volume 1: Review of Issues and Analytical Inventory. PPRC & UNDP.

Razzaque, M., A., & Rahman, J. (2019). Targeting Errors in Social Security Programmes. Policy Insights, PRI.

Selim, I., & Hossain, S. M. (2018). *Access of Rural Employed Women to Social Safety-Net Programs: Empirical Evidence from Bangladesh*. Rajshahi University Journal of Social Science and Business Studies, Vol. 26 (2018), pp 1-19.

Sharif, I. (2009). *Building a targeting system for Bangladesh based on proxy means testing*. World Bank, Human Development Network.

UNICEF. (2019). *Global Social Protection Report: Universal Social Protection to Achieve the Sustainable Development Goals*. UNICEF.

Vu, H. V. (2020). The Impact of Education on Household Income in Rural Vietnam. *International Journal of Financial Studies*, *8*(1), 11. https://doi.org/10.3390/ijfs8010011

World Bank. (2009). World Development Report 2009: Reshaping economic geography. Washington, DC: The World Bank.

World Bank. (2020). Poverty & Equity Brief: Bangladesh. https://databankfiles.worldbank.org/public/ddpext_download/poverty/33EF03BB-9722-4AE2-ABC7-AA2972D68AFE/Global_POVEQ_BGD.pdf

World Bank. (2018). *The State of Social Safety Nets 2018*. World Bank.

VII. Annex

Annex 1: Methodology

To achieve the specific objectives of the study, a mix of qualitative and quantitative methods have been utilised. The use of such mixed methods in social science research is common. Such research techniques are most effective when the primary objective is not to test concrete hypotheses. Mixed methods research leverages the strengths of both qualitative and quantitative techniques, making it particularly useful in instances where quantitative data may be unavailable or where experimentation to generate information is not feasible. Additionally, when it is necessary to explore diverse perspectives from relevant stakeholders, quantitative methods alone may not be sufficient. In such cases, interviews and consultations are commonly employed to complement findings from quantitative exercises. The mixed methods approach requires careful synthesis and consistency checks to generate insights that are valuable for policy formulation.

Figure A1: Mixed-method research methodology at a glance

Source: RAPID illustration.

Quantitative methods

Descriptive Statistics: Descriptive statistics in the paper offer a snapshot of the urban poverty landscape. Analysing demographic characteristics contributes to a nuanced understanding of the urban poor's composition. HIES 2022 database will be the basis of this descriptive analysis.

Understanding urban-rural demographic transition

Bangladesh has been undergoing rapid urbanisation driven by rural-to-urban migration, influenced by factors such as limited job opportunities, natural disasters, and climate change. The rural-to-urban demographic transition has been assessed using data from the Bangladesh Population and Housing Census and population projections published by the United Nations Population Division. This analysis forms the basis for understanding the extent of urbanisation and identifying the social protection needs of urban populations.

Analysing urban poverty and vulnerability

Analysis of multiple rounds of HIES data reveals that poverty reduction in urban areas has been slower than in rural areas. Urban-rural poverty dynamics has been examined using HIES data on extreme and moderate poverty. Additionally, poverty gap and squared poverty gap analyses offer valuable insights into the depth and severity of urban poverty.

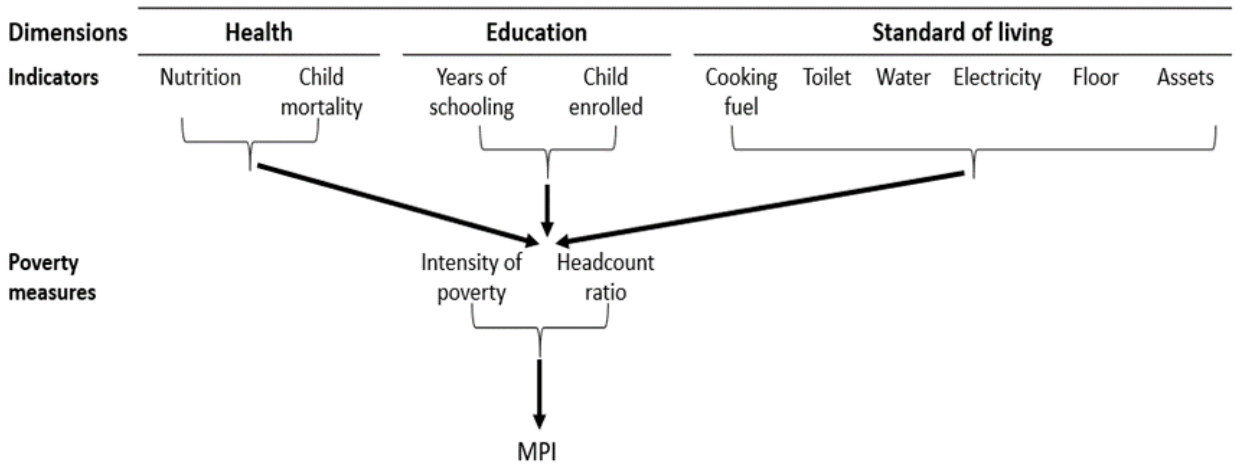
The paper leverages several rounds of HIES data to estimate poverty and vulnerability levels in both urban and rural areas at the district level. This analysis applies the standard Cost of Basic Needs (CBN) method, as employed by BBS in estimating poverty rates.

Vulnerability is closely intertwined with poverty. In Bangladesh, the vulnerable population comprises individuals who are not currently poor but are at risk of falling below the poverty line due to unforeseen shocks affecting their income or livelihoods. Similar to the poor, this group has limited capacity to cope with crises. The National Social Security Strategy (NSSS) defines vulnerability as applying to those whose incomes lie above the national poverty line but below an income level 25 per cent higher than the poverty line (i.e., 1.25 times the poverty line income). Using this framework, the paper estimate vulnerability levels in urban and rural areas based on HIES 2022 data.

Multidimensional poverty analysis

Multidimensional poverty analysis goes beyond income-based assessments, considering factors such as education, health, and living standards. The Multidimensional Poverty Index (MPI) incorporates indicators like school attendance, child mortality, access to clean water and sanitation, electricity, and housing conditions, offering a comprehensive understanding of poverty. The MPI is an internationally recognised measure of acute poverty that captures the multiple deprivations individuals face in health, education, and living standards (Alkire and Jahan, 2018).

Figure A2: Dimensions and indicators of MPI



Source: Based on Human Development Reports published by UNDP.

The General Economic Division (GED) of Bangladesh recently conducted a study on multidimensional poverty using MICS 2019 data, in collaboration with OPHI and UNICEF, which

has been effectively utilised. Additionally, multidimensional poverty in urban and rural areas were estimated using HIES data from 2010, 2016, and 2022 rounds, following the methodology developed by the Oxford Poverty and Human Development Initiative (OPHI), with slight modification depending on the availability of the indicators. As the HIES data do not include all the indicators required to construct the MPI, customised indicators has been developed to estimate multidimensional poverty among urban and rural households.

Understanding income distribution and inequality among the urban population

Rising inequality has emerged as a significant challenge for Bangladesh. The income Gini index, one of the most widely accepted measures of inequality, increased substantially from 0.39 in 1991 to 0.499 in 2022. Income distribution is notably more unequal in urban areas compared to rural regions.

This study analyses income distribution and the extent of inequality across urban and rural areas using data from multiple rounds of HIES. Indicators such as the income share of the richest and poorest deciles, the income disparity between poor and non-poor households in urban areas, and the Gini index were employed for this analysis.

Income determination model

The Ordinary Least Squares (OLS) method is employed to identify the factors that influence household income. The similar methodology is suggested by Nadeem et al. (2005) to explore the determinants influencing household income and asset value, emphasizing its effectiveness in encapsulating the relationship between various socio-economic variables and income. Moreover, OLS is a common statistical method in econometrics for linear models based on the means of the conditional distribution of the variable explained by the regression. Also, this approach allows quantifying the effects of other controls such as age, dependency ratio, schooling year, household size and its access to social protection on household income. Hence, this investigation estimates the following equation of household income:

$$Y = X\beta + u \quad \text{---------- (1)}$$

Where,

Y= Log of household income.
X= Vector of independent variables, such as age of house head, sex of household head, dependency ratio, average years of schooling of household head, household's asset richness, household credit access, working hours of household head, household size, household experience of shocks, urban household and employment sector.
u= Stochastic error term.

Poverty propensity analysis

In this study, the logistic regression approach (Logit model) is used to estimate the poverty determination model as suggested by Kibet and Obare (2019) and Tomori et al. (2014). The logit model is applied when the dependent variable is binary in nature. A study conducted by Castro and Ferreira (2022) reported that this approach is suitable for cases where the predictand is dichotomous, whereas the explanatory variables can be continuous, categorical or a mix of both. In this analysis poverty has two categories such as poverty and no poverty. As the dependent

variable in the poverty propensity model is a binary response variable, hence the logistic regression model is an appropriate method to estimate the probability of poverty (Wooldridge, 2010).

The following equation is estimated to determine the poverty propensity:

$$\Pr(Y=1 \mid X) = \frac{e^z}{1+e^z} \quad \text{---------- (2)}$$

Here,
Y= Binary dependent variable (poverty=1 and no poverty=0)
X= Vector of other control variables such as; log household income, age of house head, sex of household head, dependency ratio, average years of schooling of household head, household's asset richness, households' credit access, working hours of household head, household size, households experience of shocks, urban household and employment sector.
$\Pr(Y=1 \mid X)$ =The probability that the dependent variable takes the value 1 (e.g., being in poverty) given the independent variables.
e^z= odds of the outcome occurring given the independent variables.

A mapping of the existing social protection for the urban population

According to the Social Protection Budget 2024–25, 140 social protection programmes are being implemented by various ministries and divisions. A mapping exercise has been conducted to categorise these programmes by urban and rural areas. This analysis provides a comprehensive understanding of the social protection coverage and the programmes available for the urban population. The Social Protection Budget Report 2024–25, published by the Finance Division, served as a key resource for this exercise.

The HIES report highlights the coverage of at least one social protection scheme in both urban and rural areas, revealing significantly lower coverage in urban areas compared to rural regions. An in-depth assessment using HIES 2020 data has be undertaken to evaluate social protection coverage across urban and rural areas. A programme-level analysis has been conducted to understand the coverage provided by individual schemes. This approach helps identify gaps in social protection coverage for urban populations.

Analysing targeting error in urban social protection

Bangladesh's social security programmes are widely recognised for high targeting errors in beneficiary selection, encompassing both exclusion and inclusion errors. Exclusion errors occur when eligible households or individuals are not covered by relevant programmes, while inclusion errors arise when non-eligible individuals are admitted into these programmes. Measures to estimate these errors often vary, causing confusion. For instance, errors are sometimes expressed as a proportion of the total population, including both eligible and non-eligible individuals. Since SSPs do not target the entire population, such measures can understate the severity of exclusion errors. Similarly, expressing the proportion of non-eligible recipients relative to the total non-eligible population is less relevant, as this group is not the intended target.

From a policymaker's perspective, more meaningful definitions are: exclusion error—the proportion of eligible individuals not covered by SSPs (coverage inefficiency); and inclusion error—the proportion of ineligible recipients among total programme beneficiaries (targeting inefficiency). Inclusion errors can also represent the opportunity cost of inefficiency: how many

additional eligible people could be covered within the existing programme budget if ineligible beneficiaries were excluded.

Suppose, the total population is N and is categorized into two groups, eligible (E) and not-eligible (NE) participants. The individuals who are regarded as belonging to the groups of extreme poor (EP), poor (P), and vulnerable (V) should ideally constitute the eligible population for programme beneficiaries, while the rest would be considered as ineligible. The decomposition of the population categories as covered by social security programmes (C) and not covered (NC) can be expressed as follows:

Table A1: Errors in targeting beneficiaries

	Eligible	Non-eligible	Total
Covered in Social Security Programmes (SSPs)	E_C	NE_C (inclusion error)	C
Not covered in SSPs	E_{NC} (exclusion error)	NE_{NC}	NC
	E	NE	N

Therefore, the exclusion and inclusion errors are defined as:
Exclusion error (coverage inefficiency):

Number of eligible people not covered/ total number of eligible individuals = E_{NC}/E

Inclusion error (targeting inefficiency):

Number of ineligible recipients/ numbers of total recipients = NE_C/C

Hence, the inclusion error refers to a subset of recipient population which is not supposed to be covered by social security programmes.

Using this definition and the specific eligibility criteria for social protection, inclusion and exclusion errors for major social protection programmes have been calculated based on HIES 2022 data. The analysis has been conducted separately for urban and rural areas, providing insights into coverage inefficiencies in urban areas compared to rural areas.

Micro-simulation analysis to assess the impact of social protection on poverty and vulnerability in urban areas

A microsimulation exercise has been conducted to evaluate the impact of social protection programmes on reducing poverty and vulnerability in urban areas. Microsimulation, an ex-ante analytical approach, is a widely recognised tool for assessing the effects of public policies and their distributional impacts at the household and individual levels. By adjusting the benefit sizes of social protection programmes or other interventions, this method evaluates their outcomes on micro-economic agents such as individuals, households, or firms.

This study utilised microsimulation analysis using data from the Household Income and Expenditure Survey (HIES) 2022, which provides detailed information on social protection coverage, aggregate and per capita income, and household expenditure. Counterfactual

consumption data were generated by deducting monthly social protection allowances from household per capita expenditure and assuming a marginal propensity to consume one. This implies that all transfer amounts from social protection were used solely for consumption purposes. Using counterfactual consumption data and comparing it with the poverty line in HIES 2022 and vulnerability thresholds, counterfactual headcount poverty and vulnerability rates were computed. These counterfactual rates reflect the poverty and vulnerability levels in the absence of social protection. By comparing the actual rates with the counterfactual ones, the impact of social protection on poverty reduction was estimated.

Determinants of social protection

The general logistic regression model for both individual and household levels is as follows:

$$\Pr(Y = 1|X) = \frac{e^{\beta_0 + \sum_{i=1}^{n} \beta_i X_i}}{1 + e^{\beta_0 + \sum_{i=1}^{n} \beta_i X_i}}$$

Where:

- Y is the binary dependent variable, representing enrollment in a social protection program (1 = enrolled, 0 = not enrolled),
- X is the vector of independent variables, which includes the log of household income, dependency ratio, household access to credit facilities, working hours of the household head, household size, education level of the household head, shock experience, presence of a widowed member, presence of an elderly member, gender, urban location, individual's average years of schooling, individual's employment status, and poverty status (extreme, moderate, and vulnerable poor).
- The term $e^{\beta_0 + \sum_{i=1}^{n} \beta_i X_i}$ represents the odds of the outcome occurring (in this case, enrollment in a social protection program). It is the exponentiation of the log odds, which is the logarithm of the ratio comparing the likelihood of an event happening to the likelihood of it not happening. By exponentiating the log odds, we obtain the odds ratio, which shows how the odds of enrollment change with respect to each independent variable.

This general formula applies to both models. The only difference is that in the individual-level model, we focus on variables that describe the individual's characteristics (e.g., schooling, employment), while in the household-level model, we focus on household characteristics (e.g., sex of the household head, household size).

Qualitative methods

Quantitative techniques alone cannot identify the depth and multifaceted nature of urban poverty. For this reason, the study uses a variety of qualitative techniques to complement the quantitative data. These include desk review of related studies and consultation with relevant stakeholders.

In-depth desk review

A comprehensive and in-depth desk review has been conducted to identify and analyse the related literature on urban poverty in Bangladesh and strategies for alleviating urban poverty in other countries. Government acts, policy documents, development plans, and other secondary

studies, reports, journal articles, books, dissertations, and newspaper editorials/opinion pieces have been analysed in this regard. A summary of available resources for the desk review is presented in Table A2.

Table A2: Secondary sources that will be used in the desk review.

Type of sources	Name of documents/reports/act/policy	Information to be collected
Strategic documents/reports	• National Social Security Strategy (NSSS) 2015. • Midterm Progress Review on Implementation of the NSSS 2020. • NSSS National Action Plan Phase-I (2016-2021) • NSSS National Action Plan Phase-II (2021-2026) • The 8th Five-Year Plan (2020-2025)	• Provisions for the urban poor in the NSSS and its accompanying Action Plan (2021-2026) • Provisions for the urban poor in the national strategic policy documents
Other relevant sources	• Journal articles on urban poverty • Analytical volumes dealing with Bangladesh particularly urban poverty • Newspaper editorial/ opinion pieces.	Any additional information on urban poverty, including strategies and policies in tackling urban poverty.

Annex 2: Social protection programmes

Table A3: Social protection programmes in urban areas, 2024-25

Name of the programme	Beneficiaries (lakh)	Allocation (crore Tk)
Open Market Sale (OMS)	109.48	2,004.22
Accelerating and Strengthening Skills for Economic Transformation (ASSET) Project	-	950
Bangladesh Environmental Sustainability and Transformation (BEST) Project	5	793.11
Coastal Towns Climate Resilience Project	-	450
Khurushkul Special Ashrayan Project	0.11	220
Urban Primary Health Care Services Delivery Project	-	180.13
Establishment of Sarkari Shishu Paribar and Baby Home	0.01	177.99
Enhancing Institutional Capacity for Skills Monitoring and Management	-	109.45
Earthquake's Risk Management Fund	-	100
Promoting Resilient of Vulnerable Through Access to Infrastructure, Improved Skills and Information	-	98.33
Her Power Project: Empowerment of Women Through ICT Frontier Initiative	0.17	78
Livelihoods Improvement of Urban Poor Communities Project	-	71.96
Construction of Multi– storied Residential Building Project for Cleaners (DNCC)	0.05	59.9
Promoting Gender Responsive Enterprise Development and TVET Systems	-	55
Integrated Management of Resources for Poverty Alleviation Through Comprehensive Technology	-	54.4
Construction of Residential Work Under the Chittagong City Corporation	-	50

Chattogram Hill Tracts Inclusive and Resilient Urban Water Supply and Sanitation Project	-	47.24
To Provide Driving Training For Employment at Home and Abroad	-	40
Safety Net Programme for Export Oriented Industry's Distressed Workers	0.2	30.34
Training in Automobile Driving	-	17.39
Urban Community Development (UCD) Programme : Revolving Small Loan	-	15
Rehabilitation and Alternative Livelihood Programme for the Persons Engaged in Begging	0.4	12

Source: Social Protection Budget Report 2024-25, MoF.

Table A4: Social protection programmes in urban areas, 2024-25

Name of the programme	Beneficiaries (lakh)	Allocation (crore Tk)
Agriculture Subsidy Management	213.06	17,000.0
Food Friendly Programme (FFP)	50	3,258.0
Relief Operation–General	20	2,390.6
Vulnerable Women Benefit (VWB) Programme	10.4	2,195.5
Development of Rural Infrastructure (Earth work)	18.2	1,510.0
Employment Generation Programme for the Poorest (EGPP)	5.18	1,504.5
VGF Programme	180	1,184.0
Food for Work (FFW)	9.8	1,024.0
Ashroyan–2 Project	0.15	884.2
Programme for Supporting Rural Bridges (Social Security Part)	-	799.4
Programme on Agricultural and Rural Transformation for Nutrition, Entrepreneurship and Resilience in Bangladesh (PARTNER)	-	629.2
Agriculture Rehabilitation Assistance	72	613.9
Rural Connectivity Improvement Project (Social Security Part)	-	613.3
VGF Programme for Fishermen	6	563.8
Rehabilitation Programme of Chattogram Hill Tracks Districts (Social Security Part)	5.82	428.4
Construction of Flood Shelter in the Flood Affected and River Prone Area	-	400.0
Employment Generation Programme for the Poorest Plus (EGPP+)	3.89	264.5
Water Supply Project in Coastal Area Through Rain Water Harvesting System	-	216.5
Rural Livelihood Project	2.25	195.0
Emergency Assistance Project for Water Supply and Sanitation at Ukhia and Teknaf Upazilla in Cox'sbazar District	-	168.4
Year–Round Fruit Production for Nutrition Improvement Project	-	115.0
Fund for Rehabilitation of People Affected by River Erosion	-	100.0
Integrated Rural Employment Support Project For the Poor Women (IRESPPW)	1.15	100.0
Promotion of Women Entrepreneurs for Economic Empowerment in Grassroot Level	-	96.0
Tottho Apa: Empowering Women Through ICT towards Digital Bangladesh Project	30	89.5

Improvement of Socio– Economic and Livelihood Development of Tribal/Minor Races People Through Integrated Livestock Project	-	89.0
Relief Activities	5	80.1
Relief Operation– Rehabilitation	1	70.1
Livelihood Development Programme for disadvantaged Community	0.91	68.4
Expansion of Irrigation in Greater Rangpur District	-	60.5
Micro Savings Mobilization for Poverty Alleviation Under Vision 2041	0.04	54.6
Investment Component for Vulnerable Group Development Programme (ICVGD)	-	50.5
Special Grant for the Development of Char, Haor and Backward Areas	0.4	50.0
Fund for Disaster Affected Marginal Farmer and Poultry Farm Owner	-	50.0
School Feeding Programme in Poverty Stricken Areas	36	45.1
Conservation and Development of Indigenous Fish Species and Snail Project	-	39.3
Livelihood Development Programme for the Tea Labors	0.6	36.3
Development of Important Rural Infrastructure Project (Social Security Part)	-	33.4
Char Development and Settlement Project (Social Security Part)	5.14	33.0
Development of the Living Standard of the Marginalized Professions of Bangladesh	-	30.0
Rural Social Service (RSS) Programme : Revolving Small Loan	0.27	30.0
Relief Operation– Rehabilitation (House Grant)	70	28.0
Installation of Water Source/Tube well in the Homes for Landless/ Homeless on the Occasion of Mujib Borsho	-	26.0
Modernization of Hand Looms and Provide Working Capital of the Hand loom Weavers with a View to Promote the Socio–Economic Condition of Hand Loom	0.12	26.0
Rural Mother Centre (RMC) Programme: Revolving Small Loan	-	25.0
Pilot Project on Tuna and Similar Pelagic Fishing in Deep Sea	-	13.3
Livelihood Development Programme for Bede Community	0.11	9.5

Source: Social Protection Budget Report 2024-25, MoF.

Table A5: Social protection programmes in both urban and rural areas, 2024-25

Name of the programme	Beneficiaries (lakh)	Allocation (crore Tk)
Pension Management	8.00	36,580.0
Interest on National Savings Schemes	23.50	8,828.3
Fund for Mitigating Impacts of Economic and Natural Disaster	-	8,000.0
Honorarium for Heroic Freedom Fighter	1.97	4,728.0
Old Age Allowance	60.01	4,351.0
Fourth Primary Education Development Programme (Stipend Part)	-	3,804.8
Allowance for physically challenged persons	32.34	3,321.8
Food Subsidy	-	2,893.3
Improving Access and Retention Through Harmonized Stipend Programme	67.72	2,617.2
Allowance for Widow and Destitute Women	27.75	1,844.3
Stipend for Primary School Students	116.00	1,785.0

Mother and Child Benefit Programme (MCBP)	16.55	1,622.8
Need Based Infrastructure Development of Government Primary School Project	-	1,250.0
Free Textbook Distribution Among Students	209.00	1,195.0
Housing Construction Project for The Insolvent Heroic Freedom Fighters	0.17	1,004.1
Economic Acceleration and Resilience for NEET (EARN)	-	722.8
Sustainable Coastal and Marine Fisheries Project	-	698.8
Maternal Neonatal Child Health (MNCH) and Health System Improvement Project	-	612.9
Stipend Under Technical and Madrasa Education Division	12.00	488.7
Honorarium for Injured and others Heroic Freedom Fighter	0.12	480.0
Establishment of Multipurpose Disaster Shelter Center	-	475.2
Festival Allowance for Heroic Freedom Fighters	2.00	456.0
Printing and Distribution of Free Textbooks	-	447.1
Performance Based Grants for Secondary Institutions	1.00	440.0
Resilient Infrastructure for Adaptation and Vulnerability Reduction Project (RIVER)	-	393.8
Ministry of Public Administration (Welfare Grants)	0.10	349.3
Procurement of Equipment for Search, Rescue Operation and Emergency Communication for Earthquake and Other Disaster	-	342.3
Financial Support Programme for Cancer, Kidney, Liver Cirrhosis, Paralyzed by Stroke, Born Heart Patients and Thalassemia	0.60	300.0
Grants to Non– Government Orphanages	1.11	280.0
Bangladesh Employees Welfare Board	1.20	192.9
Cash Transfer Modernization (CTM)	-	165.5
National Academy for Autism and Neuro Development Disabilities	0.34	150.0
National Pension Authority (Shamata Part)	-	150.0
Educational Stipend Programme for the Disabled Students with Disability	1.00	113.7
The Disaster Risk Management Enhancement Project	-	111.5
Foods Support to Residents in Government Orphanages and Other Institutions	0.18	102.4
Assistance to Women Entrepreneur Fund	0.25	100.0
Risk Management Fund on Climate Change	-	100.0
Development Assistance for Special Areas (Except Hill Tracts)	0.58	100.0
Sustainable Forest and Livelihoods (SUFAL) Project	4.00	96.0
Child–Sensitive Social Protection in Bangladesh (CSPB)	2.00	92.3
Bangladesh National Social Welfare Council	1.30	90.6
Food Stuff at Concessional Rate for Privileged Heroic Freedom Fighter	0.10	90.0
Capacity Building of Joyeeta Foundation	-	89.1
Service and Support Centre for Persons with Disabilities	12.00	80.3
Flood Reconstruction Emergency Assistance Project for Water Supply and Sanitation	-	70.9
Victory Day Allowance for Heroic Freedom Fighters	1.03	70.0
Hilsa Development and Management Project	-	70.0
Social Development Foundation (SDF) (Social Security Part)	-	64.0

Enhancing Adaptive Capacities of Coastal Communities, especially Women, to Cope with Climate Change Induced Salinity	-	61.2
Strengthening Women's Ability for Productive New Opportunities (SWAPNO)	-	59.1
Disaster Risk Management Enhancement Project (Social Security Part)	-	46.3
Leaving No One Behind: Improving Skills and Economic Opportunities for the Women & Youth in Cox's Bazar, Bangladesh	-	45.9
National Foundation for the Development of Persons with Disabilities	0.12	44.7
Bangla New year Allowance for Heroic Freedom Fighters	2.00	42.5
Grants for Cultural Activities	0.03	42.0
Cochlear Implant Activity	0.01	40.0
Trust for the Protection of the Persons with Neuro– Developmental Disabilities	3.15	39.6
Climate Resilient Sustainable Water Supply, Sanitation and Hygiene Project in Bangladesh	-	38.3
Accelerating Protection for Children (APC)	0.63	38.2
National Legal Aid Services Organization	2.00	30.2
Sheikh Russel Training and Rehabilitation Centre for Children	0.03	30.2
Special Assistance Fund for Woman Development	0.25	25.0
Physically Disabled Welfare Trust	0.09	22.0
Safe Motherhood Through Livelihood Improvement Facility (SAFE LIFE)	-	20.0
Employment Creation Through Freelancing Training for Educated Job Seekers	-	17.3
Honorarium for Heroic Freedom Fighter with Gallantry Awards	0.01	16.7
Grants for Research and Innovation Activity (Merit Scholarship)	0.00	14.5
Livelihood Development Programme for Hijra Community	0.13	12.3
Joyeeta Foundation	0.02	12.0
Special Grants to Students, Teachers and Educational Institutions	0.09	10.0

Source: Social Protection Budget Report 2024-25, MoF.

Table A6: Social protection programme coverage in urban and rural areas, 2022

Name of the programme	Rural	Urban	Total
Elderly Allowance Activities	82.82	17.18	100
Allowance for widow and destitute women	85.5	14.5	100
Allowance for indigent disabled	82.6	17.4	100
Maternity Allowance for Poor Mother	66.6	33.4	100
Working Lactating Mother Support	75.77	24.23	100
Freedom Fighters' Allowance	56.32	43.68	100
Medical and honorarium allowance for martyred families and war wounded freedom f	42.16	57.84	100
Retirement and family retirement allowance of government employees	31.07	68.93	100
VGD (Vulnerable Group Development)	92.42	7.58	100
VGF (Vulnerable Group Feeding)	81.16	18.84	100
GR (food)	79.2	20.8	100
Food for Work (kabikha)	94.76	5.24	100
Work for Money (Kabita)	97.14	2.86	100

TR (cash)	64.24	35.76	100
Employment for the extremely poor/ Skills for Employment Investment Programme	77.91	22.09	100
Food Friendly Programme	86.67	13.33	100
Primary Education Level Student Stipend	81.86	18.14	100
Stipend for secondary, higher secondary and madrasa education level	81.29	18.71	100
Stipend for undergraduate and postgraduate students	53.63	46.37	100
Stipends for students of technical education institutions	68.55	31.45	100
Stipend for students with disabilities	95.29	4.71	100
Relief work (flood, drought, cyclone and others)	47.66	52.34	100
Interest subsidy for small (including cottage industry and service sector entrepreneurs	65.5	34.5	100
Covid-19: Incentives	71.63	28.37	100
Agricultural Subsidy	89.53	10.47	100
Financial support for cancer, kidney and liver cirrhosis patients	0	100	100
Grants for families of government employees who die in the line of duty	54.91	45.09	100
School Feeding Programme and School Feeding Activities in Poverty Affected Areas	0	100	100
Income Support Programme for the Poorest (Care + Dream)	95.65	4.35	100
Asrayan-2 and 3 project	92.84	7.16	100
Child Sensitive Social Protection in Bangladesh	92.14	7.86	100
Development programme for distressed and neglected women and children	73.78	26.22	100
Other	67.71	32.29	100
Total	79.64	20.36	100

Source: Authors' estimation using HIES 2022 data.

Annex 3: Eligibility criteria for major SSPs

Box A1: Eligibility criteria for the MCBP benefits

- Should be at least 20 years old and not more than 35 years.
- The woman should be pregnant with her first or second child during the annual enrolment of the programme (third child unless there was a fatal death or child mortality within two years for the first or second pregnancy).
- Must have a national identification card.
- Should have a monthly household income of not more than Tk. 8,000 for rural areas. Working women in urban areas should have a household income between Tk. 8,000 and Tk. 10,000. Total household income should be in the range of Tk. 8,000-12,000 in areas where enrolment is conducted by the Bangladesh Garment Manufacturers and Exporters Association (BGMEA) and Bangladesh Knitwear Manufacturers and Exporters Association (BKMEA).
- Low-income families, especially households who lead their livelihood based on day labourer, rickshaw/auto-rickshaw/van, hammersmith, potter, washerman, coolie, fisherman roles, etc., in rural areas, and garment and domestic workers in urban areas, will get priority.
- Those who are landless or who do not own any land except for the homestead, or if any dwelling and cultivable land is less than 15 decimals, will get priority.
- Autistic and physically or mentally disabled women will get priority.
- Women whose husbands have deserted them or widowed women will get priority.

Source: DWA, MoWCA.

Box A2: Eligibility criteria for the Allowance for the Widow, Destitute and Deserted Women

Basic Criteria:

- The candidate must be a permanent citizen of Bangladesh and have an NID/a birth certificate;
- Must be above the age of 18;
- Annual average income of the candidate: must be less than 15,000 (fifteen thousand) taka;
- Under the Widows and Husbands Abuse Women Allowance Programme - 'Widow' means the person whose husband is dead; 'Husband abuse' refers to those who are divorced by their husbands or for any other reason.

Priority Criteria:

- Preference will be given to aged helpless and distressed widows or deserted women;
- A person who is destitute, destitute, almost landless, widowed or deserted by husband and has 2 children below the age of 16 years will get priority in getting allowance;
- Disadvantaged, poor, widows and widows, disabled and sick persons will be given priority in getting allowance;
- She who is physically disabled i.e. completely incapacitated should be given the highest priority;
- Among the poor, the widows and the oppressed, the disabled and the sick will be given priority in receiving allowances;
- To be selected by the selection committee.

Source: MoSW.

Box A3: Eligibility and non-eligibility criteria for the Old Age Allowance (OAA) programme

- The recipient must be at the age of 65 and above if male, and 62 if female.
- Average annual income must be below Tk.10,000 (ten thousand).

Health conditions:

- Priority will be given to physically infirm and handicapped, mentally handicapped, physically and mentally handicapped and partial handicapped respectively.

Socio-economic condition:

- Financial Condition: Chronologically priority will be given to those who are wealth less, homeless, and landless (if the amount of land of a person other than a house is 0.5 acre or less, he will be considered landless.).
- Social Condition: Chronologically priority will be given to those who are widow, divorcee, wifeless, spouseless and deserted from family.
- Expenditure status: Priority will be given to those who have no savings after expenditure behind foodstuff.

Non-Eligibility:

- Government Servants and pension holders will not be eligible to get old-age allowance.
- VGD Card holders and destitute women are not eligible to get old-age allowance.
- Recipients of government grants from other sources are not eligible to get old-age allowance.
- (iv) Regular Recipients of grants from any non-government organisation or Social welfare agency are not eligible to get old-age allowance.
- Labourer, maidservant, vagrant - are not eligible to get old-age allowance.

Targeting of Beneficiaries: Through the collection of local information and involving UP members by the Union Parishads, beneficiaries are targeted via a community level open meeting (ward meeting).

Source: WBG and MoSW.

Box A4: Eligibility criteria for the Allowance for the indigent disabled programme

Basic Criteria:

- Registered PWDs: in accordance to the definition of disability stipulated in the Persons with Disabilities Welfare and Protection Act 2013, and registered as a PWD in the area of residence;
- Residency: Permanent resident of the area;
- Minimum age in years: At least 6; and
- Annual income (household): less than Tk.36,000.

Eligible applicants shall be prioritized if they are:

- among the oldest of applicants;
- affected by multiple disabilities;
- children with intellectual disability or autism;
- women;
- landless (own less than 0.5 acre) and/or destitute; and
- extreme poverty stricken or live in remote areas.

Non-eligibility criteria:

- If he or she is employed in a Government or private organisation;
- If he/she receives Government pension or regular safety net benefits or grants from the Government, NGOs or any other source. Participation of multiple members of the same household is not specifically limited in the implementation guidelines, and, considering the nature of vulnerability, a multiple-benefit-per-household practice.

Source: MoSW.

Table A7: Coefficients of logit model estimates for individual-level determinants of enrollment in social protection programs

	Rural	Urban	National
log of household income	-0.0651	-0.1266***	-0.0934***
Working hours of the individual	-0.0588	-0.0611***	-0.0581***
Household experienced a shock (yes=1; no=0)	0.0154	0.1819***	0.0716**
The person is a child (yes=1; no=0)	0.7043	0.5669***	0.6465***
The individual is a widow (yes=1; no=0)	1.1754	1.1612***	1.1760***
The individual is an elder member (yes=1; no=0)	1.7318	1.8903***	1.7907***
Gender (male=1; female=0)	0.0006	0.0410	0.0168
Urban (yes=1; no=0)			-0.3224***
Individuals' average years of schooling	-0.0428	-0.0403***	-0.0414***
Employment status (yes=1; no=0)	0.6461	0.6796***	0.6452***
Extreme poor (yes=1; no=0)	0.0646	0.1485	0.0977*
Moderate poor (yes=1; no=0)	0.0569	0.2396***	0.1341***
Vulnerable (yes=1; no=0)	0.0805	0.1952***	0.1292***
Intercept	-1.6572	-1.4687***	-1.4226***

Source: RAPID's estimation using the data from HIES 2022, BBS. Statistical significance at the one, five and ten per cent levels are indicated as ***p<0.01, **p<0.05, *p<0.1.

Table A8: Coefficients of Logit model estimates for household-level determinants of enrollment in social protection programs

	Rural	Urban	National
log of household income	-0.0292	-0.1345***	-0.0810***
Sex of the household head (male=1; female/others=0)	-0.2795**	-0.2026	-0.2600***
Dependency ratio	-0.5690***	-0.2106	-0.4531***
Household access to credit facilities (yes=1, no=0)	0.3270***	0.4495***	0.3888***
Working hours of the household head	0.0169**	0.0378***	0.0251***
Household size (number)	-0.0332*	0.0179	-0.0126
Household has a widowed member (yes=1, no=0)	0.7456***	0.7239***	0.7095***
Household has an elderly member (yes=1, no=0)	1.3394***	1.3059***	1.3285***
Household has a child (yes=1, no=0)	0.0208	-0.1572	-0.0362
Household head's education (years)	-0.2392***	-0.3427***	-0.2941***
Household experienced a shock (yes=1; no=0)	0.11008*	0.2594***	0.1584***
Urban (yes=1; no=0)			-0.4040***
Extreme poor (yes=1; no=0)	0.7487***	0.5356***	0.6620***
Moderate poor	0.5268***	0.2735***	0.4274***
Vulnerable poor	0.4102***	0.3322***	0.3822***
Intercept	-0.6384**	-0.3646	-0.2684

Source: RAPID's estimation using the data from HIES 2022, BBS. Statistical significance at the one, five and ten per cent levels are indicated as ***p<0.01, **p<0.05, *p<0.1.