

## **Youth Unemployment and Underemployment in Rangpur: Dimensions, Causes, and Policy Implications**

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### ***Abstract***

*Although the youth labor force in Bangladesh has been growing rapidly, youth unemployment and underemployment are already a matter of concern. The country may be ready for tapping into the demographic dividend, but many youngsters face hurdle after hurdle in entering the labor market and getting jobs. The problem is crucial, and this study assesses its extent, causes, and remedies in Rangpur. Both qualitative and quantitative methods were used in the study. A sample of 407 rural and urban young people in Rangpur for primary data was selected using stratified random sampling, while qualitative data were collected through KIIs and FGDs. The quantitative analysis employed the logistic regression model. Youth unemployment in rural areas (42.7%) was higher than in urban areas (31.1%), the study revealed. Additionally, the study shows that underemployment (36.75%) is high among youth. Based on the surveyed data, age, sex, training, job-searching intensity, internet access, and the place of residence contribute highly towards youth unemployment in the district. According to experts and FGDs data, besides lack of required skills, weak coordination of educational qualifications and job market needs, unrealistic job expectations, limited networking, dependency on agriculture, lack of job security, and lower industrialization altogether led to higher unemployment among youth. The study suggests enhancing vocational training programs, promoting youth entrepreneurship through financial support, strengthening industrial-academia ties, and implementing regional industrialization to improve employment conditions. Rangpur can make effective use of its demographic dividend by addressing the above issues, ensuring job creation for the youth in a sustainable and meaningful way.*

**Keywords:** Youth Unemployment; Underemployment; Logistic Regression; Rangpur

**JEL Classification:** J64, J23, J24, R11

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## **Introduction**

### **Background of the Study**

Youth unemployment and underemployment have become a serious socio-economic challenge in Bangladesh. It involves human development, social sustainability, and maximization of the demographic dividend. On the national level, workers in the youth labor force, generally defined as people aged 15–29 years, have an unemployment rate that is significantly higher than that of the working-age population. According to the Bangladesh Bureau of Statistics (2023), around 1.94 million youths are unemployed, constituting almost 7.2 per cent of the youth labor force of the country.

While those numbers give an overall impression of the country teeming with people, the differences in regions are huge. Rangpur division has been marked as one of the poorest and most underdeveloped regions of Bangladesh for a long while. Throughout the years, Rangpur has been one of the areas where poverty incidence has been among the highest in the country. Many of the districts in Rangpur have continuous poverty incidences that are numerous times the national average (The Business Standard, 2023). Given these socio-economic conditions, the youth in Rangpur would be faced with more impediments to access decent employment or livelihood compared to more developed divisions.

Underemployment forms another context of youth unemployment. This means that youths who works less hours than they would like, get paid less than they need, or engage in informal, unskilled, and unstable work. Most rural income in Rangpur comes from seasonal and informal sources, according to studies. Many youths migrate from rural areas to cities in search of work; among those who remain, daily wage labor and low-skilled jobs are common. The region also experiences higher dropout rates from education, limited access to technical and vocational training, and infrastructural deficits, all contributing to limited employment opportunities (Prothom Alo, 2017).

In this context, a study particularly a research on Rangpur district is justified. Knowledge of the size (extent, forms) of youth unemployment and underemployment in Rangpur in addition to the underlying factors (structural, educational, social, geographical) will be necessary in designing effective policy interventions.

### **Objectives of the Study**

The main objectives of this research are:

- To examine the current state of youth unemployment and underemployment in Bangladesh.
- To identify the key factors contributing to youth unemployment and underemployment.
- To propose policy recommendations aimed at reducing youth unemployment and underemployment.

## **Literature review**

### **Framing youth unemployment and underemployment**

Youth unemployment and underemployment are related but distinct labor-market problems. The ILO (2024) uses the term “youth unemployment” to refer to young people who are not only actively seeking but also unable to find any paid work. Underemployment refers to workers in inadequate jobs (e.g., who are working less than they wish, in lower-skill or informal jobs, or who are employed below their level of education). Both these phenomena matter, as they reduce lifetime earnings, waste human capital, and may produce social frustration and instability - particularly, when a large cohort of youth enters the job market (World Bank, 2025).

### **Global and national trends relevant to Bangladesh**

Compared to adults, youth unemployment rates are greater around the world, and youths’ jobs are more often informal and precarious (ILO, 2024). According to recent labor force surveys and analyses of Bangladesh, there are similar trends: youth share a large portion of the unemployed while informal employment continues to be the most dominant form of employment (BBS, 2023; CPD, 2024; Action Aid, 2024). According to the Labor Force Survey (LFS) released by the Bangladesh Bureau of Statistics (BBS), the working population is 73.75 million, out of which the total number of youth labor force (ages 15-29 years) is estimated at 25.92 million. This demographic represents a significant potential for economic growth, but challenges remain in terms of employment opportunities and skill development (Hossain, 2024). According to the latest assessments of the World Bank, Bangladesh should create far more and better jobs with the youth cohort remaining big so that youth entrants can be absorbed over the coming years (World Bank, 2025).

### **Dimensions of youth unemployment and underemployment in Bangladesh**

The key dimensions that are measurable, identified in the literature and policy documents relevant for Bangladesh, are incidence (unemployment rate by age/education), duration (long-term vs short-term unemployment), quality (informal vs formal employment; underemployment by hours/earnings), and their spatial distribution (urban/rural and divisional differences). The proportion of unemployed youth in total unemployed and the high incidence of informal employment indicate that a significant number of young workers are either unemployed or underemployed (BBS, 2023; CPD, 2024). Graduate unemployment has been flagged separately. Recent studies show that unemployment among youngsters with tertiary education is on the rise. The implication of the studies is the acute skills-mismatch problem for some cohorts (Arab, 2025).

### **Regional disparities - why Rangpur matters**

The poverty maps of the Bangladesh Bureau of Statistics (BBS) and The Business Standard (2023) suggest Rangpur division is one of the poorest and most socially disadvantaged areas of Bangladesh. Reports based on HIES and mapping of poverty show that Rangpur has a very high

incidence of poverty compared to other divisions. It also affects the labor market outcome of youth; that is, the poverty situation limits their educational attainment, hinders access to networks and capital, and pushes youths into seasonal and low-paid informal work (The Business Standard, 2023). The research report “Rural-Urban Migration in Rangpur City” shows that local economic push factors of Rangpur drive rural to urban migration to take up precarious urban employment. This is often a younger cohort. The regional disadvantages suggest that the national averages hide a large diversity: youth in Rangpur suffer from poverty, weak demand in local labor markets, and shortcomings in training (Hossain & Tasnim, 2023).

### **Causes and contributing factors identified in the literature**

The literature on Bangladesh (and comparable contexts) attributes youth unemployment and underemployment to interacting supply- and demand-side causes. Several studies report a mismatch between what educational systems produce and employers’ needs; the rapid expansion of tertiary education has not consistently translated into employable skills, creating pockets of graduate unemployment and underemployment (Ahmed, 2021). Moreover, the limited reach and variable quality of Technical and Vocational Education and Training (TVET) restrict alternatives for non-university youth (Khan, 2019). The dominance of informal employment, estimated at over 80 % of jobs in some assessments, means many positions are low-security and low-pay, while formal-sector job growth has been insufficient to absorb large youth cohorts (CPD, 2024). Spatial and structural constraints further exacerbate the problem: peripheral regions such as Rangpur experience weaker private investment, limited industry diversification, and poor infrastructure, reducing local demand for youth labor and prompting migration or underemployment (The Business Standard, 2023). As per the TIME (2022) and ILO (2024) reports, socio-economic and household factors are also important. Household poverty often pushes adolescents and youth into work or care. Further, weaker socio- economic factors coupled with the COVID-19 pandemic strengthened these patterns, which include school dropouts, a rise in child labor, and job losses in the service sector. This particular phase has impacted youth employment trajectories permanently. Women still face gendered barriers in the labor force at considerably lower rates than men. Cultural barriers and safety concerns limit access to decent work for young women, further provoking gendered underemployment (ILO, 2024). In the end, both internal and international migration patterns connect local labor markets. Return migration during shocks (e.g., during the pandemic) can lead to an increase in local supply with no commensurate demand. Migrants typically take informal, low-paid urban jobs (Hossain & Tasnim, 2023).

### **Policy responses and evaluated interventions**

The literature and policy reviews identify several broad instruments used or proposed in Bangladesh to improve youth employment: expanding and strengthening TVET- by aligning curricula with private-sector needs, enhancing apprenticeships and industry linkages-is a core recommendation, with market-oriented training that includes job-placement support showing

higher employment impacts (Khan, 2019), though outcomes vary with program quality and local labor demand; entrepreneurship and micro-enterprise support-through micro-finance, entrepreneurship training and seed grants-aims to foster youth self-employment, yet evidence indicates that such programs are more successful when accompanied by market-access assistance and business-development services (World Bank, 2025); labor-market regulation and public-works schemes (short-term cash-for-work) can provide temporary relief and income smoothing but do not replace sustained private-sector job creation (CPD, 2024); regional development and decentralized investment-through infrastructure projects and incentives for firms to locate in lagging regions-can stimulate demand for local youth labor, though they require substantial fiscal commitment and careful targeting (BBS, 2025); and social-protection and transition supports-such as conditional cash transfers, training subsidies and targeted assistance for vulnerable youth-help reduce immediate poverty pressures and improve young people's capacity to search for and wait for better job matches rather than accept precarious work (CPD, 2024).

## **Methodology**

The research study adopts a mixed-methods research design that combines quantitative and qualitative research on Youth Unemployment and Underemployment in Rangpur District. The methods of research discuss data collection techniques, determination of sample size, sampling method, and data analysis.

## **Data Collection**

The data collection was done through sample surveys, key informant interviews (KII), and focus group discussions (FGD). Quantitative data on the present status of youth unemployment and underemployment were gathered through a structured questionnaire. The survey facilitated the acquisition of demographic information, work status, and socio-economic characteristics of the Respondents. Interviews with policymakers, government officials, employers, and NGO representatives were conducted to get to the root-cause of unemployment and to see how institutions respond to it. Focus group discussions with unemployed and underemployed youths were held to deeply probe their perceptions, challenges, and needed policies. We chose methods in such a way that each method acts as a supplement to the other. While our survey throws up measurable trends, KIIs and FGDs allow us to further probe why those trends came up.

## **Sample Size Determination**

To calculate the sample size of this research, we use the formula for the sample size of survey research.

$$n = \frac{Z^2 \times p \times (1 - p)}{E^2}$$
$$n = \frac{(1.96)^2 \times 0.5 \times (1 - 0.5)}{(0.05)^2} = 384.16 \approx 385$$

The minimum sample size was calculated to be 385 respondents at 95% confidence level ( $Z = 1.96$ ), an estimated population proportion  $p = 0.5$ , and an error margin  $E$  of 5%. A total of 407 responses were gathered to strengthen the study findings and mitigate the effect of nonresponse bias or incomplete responses on the final results (Qualtrics, 2023). In survey research, it's common practice to collect more than the minimally required sample size, which helps increase the precision and generalizability of the results.

### **Sampling Strategy**

The district was sampled using a stratified random sampling method for a proper proportion of the population. Required steps were included.

- Division of Rangpur District into its eight upazilas: Rangpur Sadar, Gangachara, Kaunia, Mithapukur, Badarganj, Pirgachha, Pirganj, and Taraganj.
- Ensuring proportional representation from both urban and rural areas within each upazila.
- Random selection of unions, villages, and wards as clusters for data collection.

This strategy was adopted to minimize sampling bias and ensure that the collected data reflected the diverse socio-economic realities of the district.

### **Data Analysis Technique**

Qualitative and quantitative techniques were adopted for data analysis. In the analysis of youth unemployment and underemployment, descriptive analysis is done using frequencies, percentages, and averages. To find out the relationship between the predictor and outcome variables regression is run. Thematic analysis of the qualitative data generated from KIIs and FGDs to identify patterns, perceptions, and recurring issues. This aided in contextualizing the quantitative findings and informing effective policy responses. We utilize binary logistic regression with employment status (1 = Employed; 0 = Unemployed) as a dependent variable to assess the factors affecting employment status. This model is suitable for a binary outcome and estimates the probability of youth participating in employment given various predictors. A wide range of independent variables is taken into account in the study, such as the continuous variables of age and household size, the categorical and ordinal variables. Gender is coded as a dummy variable, and 1 is the male and 0 is the female and marital status is also a dummy variable, where 1 is married and 0 is single or other statuses. Education level and job search intensity are addressed as ordinal variables, with a scale of 1- 5 and 1- 3, respectively. As dummy variables, parental employment status, skill training, access to the internet, place of residence, and awareness of government programs are all included with certain coding to show the existence of the variables. This wide range of variables will seek to be used to capture social-economic and demographic variables that have the potential to affect the outcomes of interests in the study. The logistic regression model takes the form:

$$\ln\left(\frac{P_i}{1-P_i}\right) = \beta_1 + \beta_2 \text{ Age} + \beta_3 \text{ Gender} + \beta_4 \text{ Education\_Level} + \beta_5 \text{ Marital\_Status} + \beta_6 \text{ Household\_Size} + \beta_7 \text{ Parental\_Employment} + \beta_8 \text{ Skill\_Training} + \beta_9 \text{ Job\_Search\_Intensity} + \beta_{10} \text{ Internet\_Access} + \beta_{11} \text{ Place\_of\_Residence} + \beta_{12} \text{ Policy\_Awareness}$$

Where,  $P_i$  indicates the likelihood of employment. This approach facilitates the evaluation of socio-economic and demographic factors influencing the likelihood of getting employed by acknowledging multiple variables at the same time (Hosmer, Lemeshow, & Sturdivant, 2013).

### Findings and discussion

The research shows that the youth in Rangpur District are alarmingly jobless and underemployed. The rate of unemployment recorded by our youth survey is 37.6%. In this instance, a total of 153, whereby a total of 407 people reported being unemployed. The high percentage indicates the structural impediments experienced by the youth in the region to enter the job market.

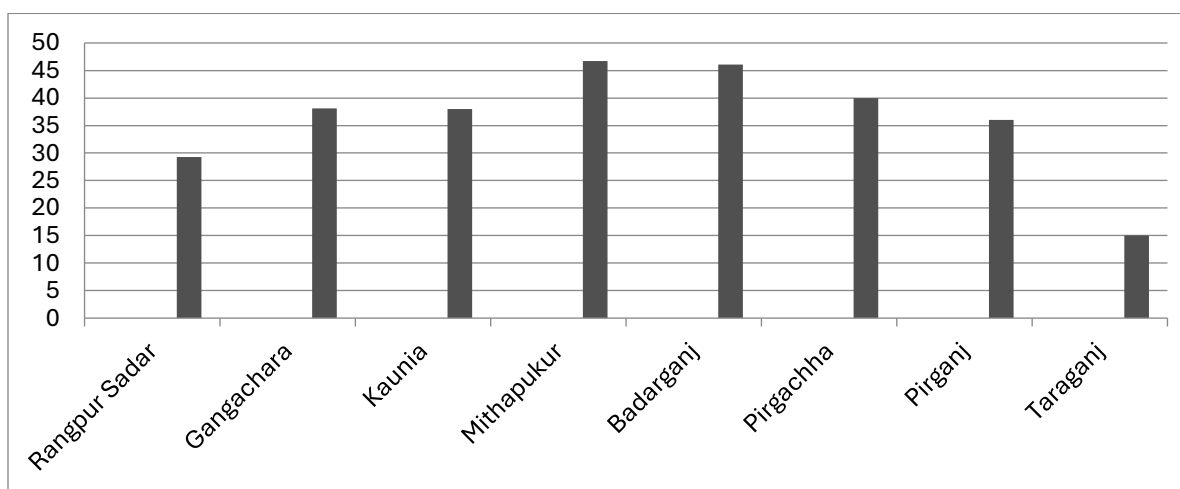
### Unemployment by Area

The difference between rural and urban areas on account of unemployment is huge, as it appears. The unemployment rate is 42.7 per cent for rural areas, and 31.1 per cent for urban areas.

**Table 01: Youth Unemployment rate by location**

Area	Total Respondents	Employed	Unemployed	Unemployment Rate (%)
Urban	180	124	56	31.1
Rural	227	130	97	42.7
Total	407	254	153	37.6

*Source: field survey, 2025*



**Fig. 01: Youth Unemployment rate by Upazila in Rangpur district**

*Source: field survey, 2025*

Rural youth find it relatively harder to get jobs than their urban counterparts, probably due to a lack of diversification in economic activities, over-dependence on agriculture, and lack of access to modern technologies and the labor market information system.

### **Unemployment by Education Level**

The level of education is a composite factor regarding the employment status of youth in Rangpur. The study finds that only those with primary schooling have a 17.9 per cent unemployment rate. In contrast, the unemployment rate of people with secondary schooling is 54.2 per cent and 56.1 per cent of bachelor's degree or higher.

**Table 02: Youth Unemployment by Education Level**

<b>Education Level</b>	<b>Total Respondents</b>	<b>Employed</b>	<b>Unemployed</b>	<b>Unemployment Rate (%)</b>
Primary	106	87	19	17.9
Secondary	120	55	65	54.2
Higher Secondary	96	66	30	31.3
Diploma/Technical	28	21	7	25.0
Bachelor's or Higher	57	25	32	56.1
Total	407	254	153	37.6

*Source: field survey, 2025*

The situation may suggest that well-educated youth are struggling to secure jobs for which they are qualified and either embarking on a prolonged search for employment or that they do not wish to opt for a low-skilled job. People who have only completed primary school tend to opt for low-skilled jobs in the informal sector. This choice does reduce their unemployment rate. However, it makes them underemployed and vulnerable to bad working conditions.

### **Unemployment by Age Group (15–29)**

Table 03 shows some striking differences among different age groups too. Unemployment is highest among the youngest age group of 15-19 years, which recorded over half of the respondents (54.1 percent) unemployment. The unemployment rate for people aged 20-24 years came down to 37.6 per cent. For the 25-29-year age group, it stood at 23.6 per cent.

**Table 03: Youth Unemployment by Age Group**

<b>Age Group</b>	<b>Total Respondents</b>	<b>Employed</b>	<b>Unemployed</b>	<b>Unemployment Rate (%)</b>
15–19	122	56	66	54.1
20–24	141	88	53	37.6
25–29	144	110	34	23.6
Total	407	254	153	37.6

*Source: field survey, 2025*

As youths become older, they seem more likely to secure jobs, perhaps due to experience, skills, and increased access to networking opportunities. Still, elevated unemployment of the youngest group is suggestive of a blockage at the school-to-work transition.

### **Logistic Regression Results**

The analysis of logistic regression reveals the determinants of youth unemployment in Rangpur. Age emerges as a key positive predictor of employment. In other words, as the age of an individual increases, the probability of being employed also increases. Gender is another important factor, as men are more likely to be working than women. Marital status has a positive association with employment. This implies that those who are married tend to be more likely to be employed. This may be due to social pressure or financial requirements that compel people to work more in the job market.

**Table 04: Logistic Model for Determining the Factors Affecting Youth Unemployment**

<b>Variable</b>	<b>Coefficient (<math>\beta</math>)</b>	<b>Standard Error (SE)</b>	<b>z-value</b>	<b>p-value</b>
Age	0.07	0.03	2.33	0.031*
Gender	0.85	0.28	3.04	0.0024*
Education Level	0.01815	0.0214	0.8481	0.313
Marital Status	0.38	0.085	4.470	0.000*
Household Size	-0.124	0.071	-1.746	0.07**
Parental Employment	0.247	0.192	1.286	0.137
Skill Training	0.175	0.0000425	4.12	0.000*
Job Search Intensity	0.412	0.11	3.745	0.0002*
Internet Access	0.0199	0.0206	0.97	0.333
Place of Residence	1.7981	0.9281	1.94	0.053*
Policy Awareness	0.271	0.18	1.505	0.139
Log-likelihood=-92.87, LRchi-square=47.09, Prob> $\chi^2$ =0.000, Pseudo $R^2$ =0.482				

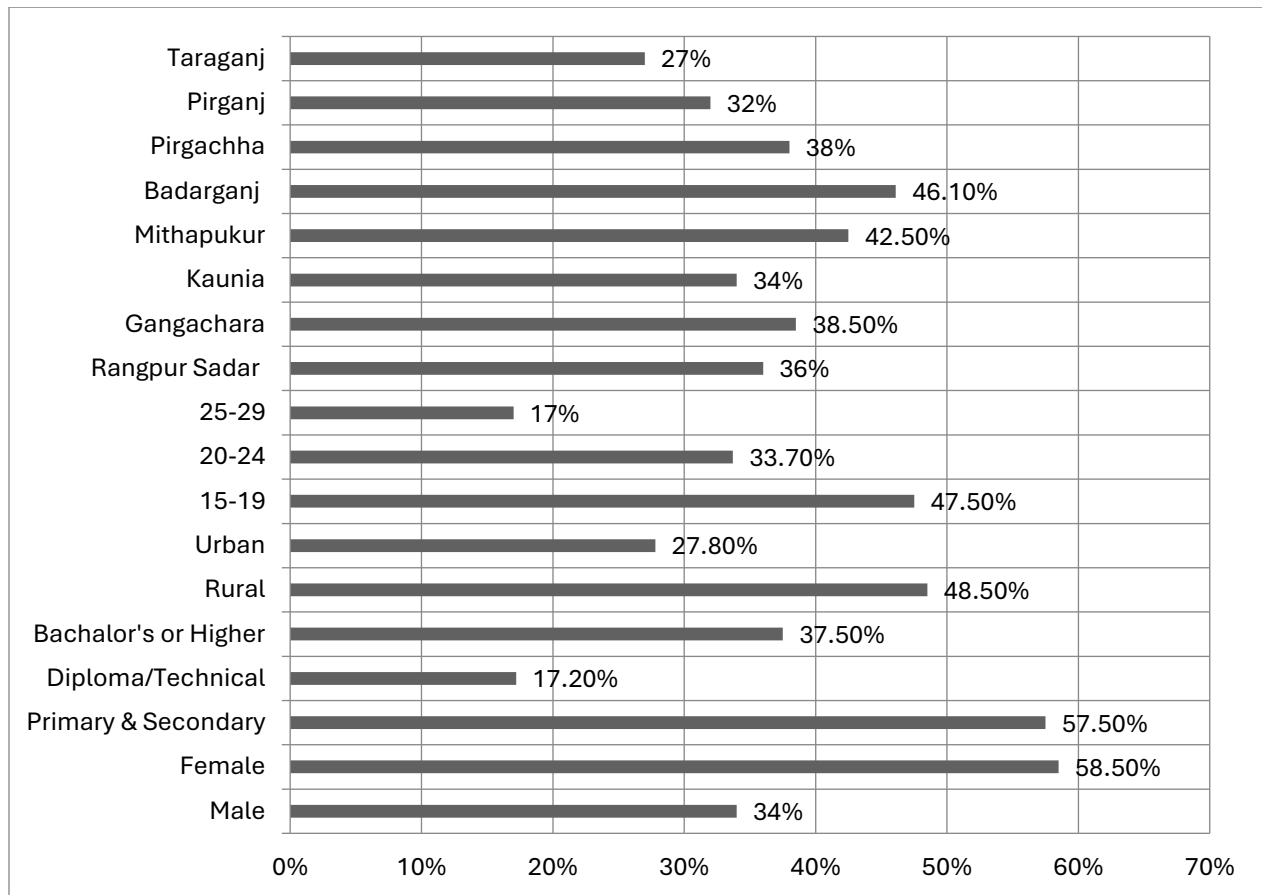
*Source: Author's calculation, 2025*

The chances of getting employed increase when there is skill training and the intensity of job searching. Individuals who have received skill training have a much higher chance of getting a job. Similarly, the higher the intensity of the job search, the higher the probability of finding a job. Location of residence plays a crucial role, as it was found that urban residents had a higher probability of being employed compared to rural residents, though the significance of this variable is marginal.

In the regression model, other factors like parents’ education, household size, parent employment, internet access, and policy awareness had no strong or consistent effect. Yet, it cannot be contested that qualitative evidence suggests that a mismatch of education, lack of technology exposure, and low awareness about government schemes still hinder many youths.

**Underemployment**

One of the findings is that underemployment is concentrated in rural areas, where there are few opportunities for full-time and decent work. A significant portion of rural youth is engaged in low-paid agricultural and informal sector occupations, which are mainly seasonal in nature. Such employment provides some income, but the jobs are insecure and unprogressive, reflecting the structural constraints of the rural economy.



**Fig. 02: Underemployment Rate by Different Factors**

*Source: field survey, 2025*

Underemployment also varies according to age. Many young people aged 15-19 are also willing to take irregular or part-time jobs as a first step towards full employment. Nevertheless, overemployment tends to decline slightly with the increase of age, since older youths have greater

access to networks and may switch to more stable positions. Yet, the underemployment of youth in their late twenties shows that even experience does not guarantee adequate employment.

Educational achievement is another paradoxical factor. Young people with just primary education are typically found performing manual or low-skill jobs, which offer role security but very low wages. On the other hand, a large number of educated youth possessing secondary and higher education are underemployed in jobs that are below their level of competence. They take jobs much below their qualifications because better opportunities are not available to them. This mismatch between jobs and skills is an aspect of underemployment in Rangpur due to the non-matching of educated workers with the growth of modern industries or the service sector.

### **Conclusion and policy implications**

This research shows that youth unemployment and underemployment in Rangpur are serious and multidimensional problems. The unemployment rate was nearly 38 percent overall, and the share of underemployed youth engaged in insecure or mismatch jobs is large. The study is also indicative of structural obstacles and individual – level constraints. The females living in rural areas and in the age group of 15-19 years (youngest) face the hardest difficulty in accessing decent jobs. Education is crucial, but it does not always yield better results. Currently, numerous graduates of various levels are facing a challenging job market. The wide gap between the education system and requirement of the labor market is very serious.

Additionally, the results of the logistic regression analysis revealed that age, gender, marital status, skills training, intensity of job search, and place of residence are significant predictors of employment. Training individuals for jobs and engaging them in labor markets raises the probability of ending up employed. However, because of being female and living in a rural area, the odds are reduced. The patterns of youth and the qualitative insights jointly show that youth of Rangpur suffer from weak industrial development, insufficient access to technology, inadequate career guidance, and a weak linkage between skills and jobs.

The results mentioned above have key policy implications. It is critical to expand technical and vocational education and training programs according to the market, as well as internship options, to close the school-to-work gaps. To address the rural-urban divide, initiatives that boost rural enterprise development, establish agro-processing industries, and set up digital job hubs to take the job to the people are required. Moreover, enhancing safe mobility, providing flexible training, and offering employer incentives can address barriers for young women. To sum up, the application of labor market information systems, job-matching services, and school career counseling is crucial. Long-term structural reforms should finally help to improve the diversification of the Rangpur economy and facilitate private sector investment and entrepreneurship in the creation of steady employment.

In conclusion, it appears from observation that lack of work is not the reason for youth unemployment or underemployment in Rangpur. This structural mismatch, inequality, and

institutional failure are behind the problems and consequences. We must observe trends in job supply and labor demand together. When implemented appropriately, they can be effective instruments for making Rangpur youth agents of inclusion and sustainable development of the region.

### **Limitation of the Study**

The levels of youth unemployment and underemployment in Rangpur are revealed in the study, which has some limitations. Because of the cross-sectional nature of the data for different groups, the analysis of the drivers of employment change cannot be causal. Although our definition of underemployment does capture a mismatch of pay and skills, it is only partial. Small upazila diploma holders are poorly represented, which negatively affects the reliability of the comparisons. Due to the self-reporting nature of the data, it might be affected by recall bias and misreporting issues. The model fails to consider the structural elements that impact labor market outcomes, such as seasonal patterns, migration, and industrial backdrop. It did not examine the caliber and safeguarding of jobs in the informal sector, where most youth work. The overall assessment of the qualitative inputs from KII and FGDs may not be representative due to limited representation from youth, employers, and policymakers.

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