2023

National Statistics Bureau

QUARTERLY LABOUR FORCE SURVEY REPORT

CONTENTS

FOREWORD

It is with great pleasure and anticipation that we present to you the inaugural Quarterly Labour Force Survey (QLFS) Report, an initiative of the National Statistics Bureau to meet the ever increasing demand for data. This marks a transformative moment in our commitment to providing timely and comprehensive insights into the dynamics of labour market in Bhutan.

In accordance with the directive received from the Office of the Prime Minister, the National Statistics Bureau has embarked on the journey to conduct the Labour Force Survey on a quarterly basis, commencing this year 2023. This progressive step aligns with our collective vision for a more dynamic and responsive understanding of the ever-evolving landscape of employment and labor in our country.

The third quarter of 2023 witnessed the culmination of our efforts, resulting in the successful completion of the first-ever Quarterly Labour Force Survey. The findings presented in this concise report encapsulate a wealth of information, with key insights disseminated at both the national and domain levels. This approach ensures a nuanced understanding of the intricacies of our labor force, considering the unique characteristics of various domains within Bhutan.

As we navigate through the report, you will discover a mosaic of key findings, shedding light on employment patterns, unemployment rates, and other vital indicators that shape the socio-economic fabric of our country. It is important to note that while the majority of findings are presented at the domain level, some are specifically tailored to offer a comprehensive national perspective.

We extend our heartfelt gratitude to the dedicated team at the National Statistics Bureau whose commitment and expertise have made this survey a reality. Their unwavering efforts in collecting, analyzing, and presenting the data have been instrumental in shaping the foundation of this report.

This report is not merely a compilation of statistics; it is a testament to our collective pursuit of knowledge and understanding. May the insights gleaned from this survey inform policy decisions, inspire further research, and contribute to the overall development of the country.

We invite you to delve into the pages of the report, explore its findings, and join us in envisioning a future where informed decision-making empowers our labor force and propels our nation toward greater prosperity.

ACKNOWLEDGEMENT

The completion of the 2023 Quarterly Labour Force Survey (QLFS) and the preparation of this report have been made possible through the collaborative efforts and support of various individuals and entities.

The survey was funded by the Royal Government of Bhutan (RGoB) in its entirety while the Asian Development Bank (ADB) has helped with the revision of the QLFS methodology including the sampling.

The dedication and expertise of the core team from the National Statistics Bureau (NSB) played a pivotal role in the preparation of the report. Our sincere thanks go to Mr. Phub Sangay (Specialist/ Officiating Director) for his general guidance and Mr. Tashi Dorjee (Chief Statistical Officer), Mr. Sonam Tobgay (Sr. Statistical Officer), Ms. Jigme Choden (Statistical Officer), Mr. Bikash Subba (Statistical Officer), and Ratu Yoezer (Statistical Officer) for their contributions.

We would be remiss not to acknowledge and appreciate the diligence of the officials, supervisors, and enumerators who were instrumental in the field enumeration for the QLFS. Their hard work and commitment are commendable and have significantly enriched the quality of the data gathered.

A special mention goes to the authorities and officials of the local government whose support during the field enumeration phase was indispensable. The collaborative spirit and assistance provided by these individuals greatly facilitated the smooth execution of the survey.

Lastly, our heartfelt thanks go to the respondents who participated in the QLFS. Their kind cooperation and willingness to share invaluable information have been instrumental in shaping the findings presented in this report.

This report stands as a testament to the collective effort and collaboration of all parties involved, and we express our sincere appreciation to each and every contributor.

LIST OF TABLES

LIST OF FIGURES

EXECUTIVE SUMMARY

KEY HIGHLIGHTS

Key Indicator	Bhutan (%)	Male (%)	Female (%)	Urban (%)	Rural (%)
Labour Force Participation Rate	65	72.4	56.8	63.4	65.9
Inactivity Rate	35	38.3	61.7	41.3	58.7
Employment Rate	96.5	97.3	95.5	93.8	98.1
Unemployment Rate	3.5	2.7	4.5	6.2	1.9
Youth Unemployment Rate	15.9	13.5	18.3	23.9	9.4

Introduction

The inaugural Quarterly Labour Force Survey (QLFS) conducted in September 2023 represents a significant stride towards enhancing our understanding of Bhutan's labor market landscape. This survey, funded by the Royal Government of Bhutan is aimed at furnishing critical data for monitoring socio-economic development, informing policy formulation related to job creation and poverty reduction, and supporting similar programs.

Survey Methodology

A meticulously designed sample of 3,027 households (37.7% urban, 62.3% rural), spanning twenty Dzongkhags, facilitated the collection of comprehensive data at both national and Dzongkhag/Thromde levels. The survey achieved an impressive response rate of 99.4%, thanks to the dedication of 75 enumerators and 20 supervisors who conducted field enumeration across the country.

Key Findings:

I. Economically Active Population and Inactive Population:

- Approximately 76.8% of the total population falls within the working-age bracket, with 65.0% considered economically active.
- The Labour Force Participation Rate (LFPR) stands at 65.0%, with variations observed between rural (65.9%) and urban (63.4%) areas, as well as between male (72.4%) and female (56.8%) LFPR.

II. Employment:

- Bhutan’s overall employment rate stands at 96.5% with variations between rural (98.1%) and urban (93.8%) areas.
- By major occupational groups, “Skilled Agricultural, Forestry and Fishery Worker” (43.0%) tops employment, while “Armed Force” (0.8%) represents the lowest
- The country's highest employment rate is in Wangdue Phodrang (99.7%) Dzongkhag, contrasting with the lowest in Thimphu Thromde (91.9%).

III. Unemployment:

- The unemployment rate for 2023 is 3.5%, with distinctions between urban (6.2%) and rural (1.9%) areas.
- Females experience a higher unemployment rate (4.5%) than males (2.7%)
- Thimphu Thromde exhibits the highest unemployment rate (8.1%) while Wangdue Phodrang has the lowest at 0.3%.

IV. Youth Unemployment:

- The overall youth unemployment rate is 15.9% with differences between males (13.4%) and females (18.3%).

This concise quarterly labour force survey report presents a wealth of insights crucial for informed decision-making and strategic planning and lays a robust foundation for future surveys fostering a more nuanced and dynamic understanding of Bhutan's labour market.

1. INTRODUCTION

1.1 GENERAL BACKGROUND

The history of the Labour Force Survey (LFS) dates back to 1998 and 1999 when the Central Statistical Organization (CSO), operating under the erstwhile Planning Commission, initiated the first two surveys to monitor the supply and demand of labour in our economy. Unfortunately, due to resource constraints, the survey was not conducted in 2000.

In 2001, the Department of Employment and Labour (DEL) took charge of the LFS. However, with the restructuring of the governance system in 2003 and establishment of the Ministry of Labour and Human Resources (MoLHR), the mandate of LFS was seamlessly transferred to MoLHR. Since then the Labour Market Information & Research Division (LMIRD) under the Department of Employment & Human Resources has diligently conducted the LFS on an annual basis. The conduct of Population and Housing Census of Bhutan (PHCB) in 2005 and Bhutan Living Standard Survey (BLSS) in 2007 lead to a brief hiatus in the LFS.

The year 2008 presented another unique circumstance, as the LFS was not conducted owing to the historic first national elections.

In a significant turn of events aligned with the Tenth session of the Second Parliament of Bhutan in 2008, the mandate to conduct the LFS was transferred to National Statistics Bureau (NSB) from the MoLHR. The Social Statistics Division (SSD) under NSB in particular was entrusted with mandate to take over the responsibility of conducting the LFS thereafter.

Initially conducted on an annual basis, the Prime Minister's Office has directed the NSB to increase the frequency of LFS data collection and hence it has transitioned from an annual to quarterly basis starting 2023. The 2023 Quarter three LFS is executed as the pilot QLFS.

The LFS stands as a linchpin, playing a pivotal role in generating information that deepens our understanding of the intricate labour dynamics within the country. This, in turn, aids in the formulation of policies and plans related to job creation, poverty reduction and other pertinent programs. The journey of the LFS in Bhutan has been marked by evolution, adaptation and steadfast commitment to providing insights that contribute to holistic development of our nation.

1.2 OBJECTIVES

Accurate and reliable statistics on the labour force play a pivotal role in comprehending the size and the composition of Bhutan’s human resources. These statistics are not merely numbers; they serve as the cornerstone for projecting the future supply of labour in our country. In this context, the LFS emerges as an indispensable tool, providing invaluable insights into the dynamics of our workforce.

1. Understanding the Unemployment Situation

   The primary objective of the LFS is to delve into the intricacies of Bhutan’s unemployment landscape. By meticulously examining and quantifying the unemployment situation, we get a nuanced understanding of the challenges and opportunities within our labour market.

This knowledge is indispensable for crafting targeted interventions and policies to address unemployment effectively.

2. Monitoring plans and programs related to employment
   A crucial facet of the LFS is its role in monitoring the efficacy of plans and programs related to employment. By tracking the outcomes of various initiatives, we can assess their impact on the labour market. This monitoring function ensures that our efforts in promoting employment align with the evolving needs of our dynamic economy.

3. Understanding the industrial and occupational status of employment

   The LFS goes beyond numbers; it provides a comprehensive view of the industrial and occupational landscape of employment in Bhutan. This understanding is vital for tailoring strategies that not only promote job creation but also foster a diverse and resilient workforce. Whether in agriculture, manufacturing, services, or the other sectors, a nuanced comprehension of the industrial and occupational status of employment guides informed decision-making.

4. Checking the seasonality of the unemployment

   The survey, in alignment with its objectives delves into the seasonality of unemployment, providing insights crucial for understanding fluctuations over time.

1.3 SAMPLING DESIGN & ESTIMATION PROCEDURE

1.3.1 Coverage of the Survey

The QLFS 2023 has been designed to cover the entire country. The country is divided into a number of Enumeration Areas (EAs) in both urban and rural areas. The urban areas are classified as defined by the then Department of Urban Development and Engineering Services (DUDES) under the then Ministry of Works and Human Settlement (MoWHS), and as used in the 2017 PHCB. The rural areas are comprised of *gewogs* and *chiwogs* from all twenty *dzongkhags*. The smaller *chiwogs* are considered as one EA, while the bigger *chiwogs* were divided into several EAs.

1.3.2 Sampling Frame

The sampling frame was developed from the 2017 PHCB and updated in 2023 with merging of undersized EAs and the splitting of oversized EAs across the country. A fresh listing of households was carried out while splitting the EAs.

1.3.3 Sample Design

The sample for QLFS 2023 is designed to provide estimates of the labour force-related indicators at the national and domain levels. In addition to 20 domains of interest, which are *dzongkhags*, the four *thromdes* are also considered as domains. Every *dzongkhag* is further stratified into urban and rural areas, resulting into 44 strata for the survey.

A stratified two-stage sampling design was adopted. The urban and rural areas of each Dzongkhag served as first-level stratification. Within each first-level strata, all Primary Sampling Units

(PSUs) were first ordered geographically. From the ordered list, the PSUs were further stratified in such a way that the total number of households within second-level strata are approximately equal. The number of secondary-level strata per primary strata were based on the sample size allocated. In each secondary-level stratum, Probability Proportional to number of households and with Replacement (PPSWR) was used to select four PSUs. All PSUs in each stratum were randomly assigned numbers 1-4. All PSUs with the same assigned number were then grouped to form replicates. These replicates constitute the sample areas to be covered for each quarter.

In the second stage of sampling, all the regular households in the sampled PSUs were listed, and the required number of households in each PSU was selected based on the Circular Systematic Sampling (CSS).

1.3.4 Sample Size Determination

The overall sample size was determined based on various precision targets, i.e., at 1%, 3%, and 5% margin of error values, for six major labour force-related indicators at both national and domain levels. It was decided that the estimation of the required sample size would be based on the generation of reliable estimates of Employment/Unemployment Rates at the domain levels and Youth Unemployment Rates in the annual sample. The sample size was determined using the following formula:

$$n = \frac{p(1-p) * deff}{SE^2 * R}$$

Taking into account the estimates from LFS 2022, the computation was conducted.

n= is the number of households required in the sample

p = is the estimated proportion of the population that possesses a certain characteristic

deff = design of effect

SE = standard error of the estimate

R = response rate, assumed to be 90%

Utilizing the above-mentioned formula, the total sample size for the pilot QLFS was adjusted at 3,000 households, resulting in an annual sample of 12,000 households to achieve the survey objectives.

1.3.5 Sample Allocation

Considering equal importance to produce estimates at national and domain levels, a compromise allocation scheme was used for sample allocation. The sample allocation for each domain followed as per the given formula:

$$n_h = n * \frac{\sqrt{\theta W_h^2 + (1-\theta)/L^2}}{\sum_{h=1}^{L} \sqrt{\theta W_h^2 + (1-\theta)/L^2}}$$

Where:

n= overall sample size

θ = relative importance given to proportional allocation,

L = total number of strata

$W_h = N_h/N$

N_h = total number of units in stratum h

N = population size

The allocated sample size for each domain was then distributed proportionately to the number of households in both urban and rural areas, except for Thromdes.

Table 1.1 Sample Allocation by Dzongkhag and Urban/Rural Areas (QLFS 2023 – September)

Dzongkhag/Thromde	Rural		Urban		Both Areas	
	No. of EA	No. of HHs	No. of EA	No. of HHs	No. of EA	No. of HHs
Bumthang	4	64	3	36	7	100
Chhukha	7	112	2	24	9	136
Phuentshogling Thromde	-	-	10	120	10	120
Dagana	6	96	2	24	8	120
Gasa	6	63	2	24	8	87
Haa	4	64	2	24	6	88
Lhuentse	5	80	1	12	6	92
Monggar	6	96	3	36	9	132
Paro	8	128	3	36	11	164
Pema Gatshel	5	80	3	36	8	116
Punakha	6	96	2	24	8	120
Samdrup Jongkhar	6	96	1	12	7	108
S/Jongkhar Thromde	-	-	7	84	7	84
Samtse	10	160	3	36	13	196
Sarpang	7	112	1	12	8	124
Gelephu Thromde	-	-	8	96	8	96
Thimphu	6	96	1	12	7	108
Thimphu Thromde	-	-	28	336	28	336
Trashi Yangtse	5	80	2	24	7	104
Trashigang	8	128	2	24	10	152
Trongsa	4	64	2	24	6	88
Tsirang	6	96	1	12	7	108
Wangdue Phodrang	6	96	3	36	9	132
Zhemgang	5	80	3	36	8	116
Total	**120**	**1,887**	**95**	**1,140**	**215**	**3,027**

1.3.6 Sampling Weights

The sampling weights were made up of three components namely:

Base weight (w_1);

Nonresponse weight (w_2); and

Post-stratification Weight (w_3).

The final weight was computed as $W_f = w_1 * w_2 * w_3$

Base weight is the inverse of the selection probabilities for a stratified two-stage sampling. In the 1st stage sampling, the selection probability for i[th] PSU in a stratum was computed as follows:

$$P_{psu_i} = \frac{M_i}{\sum_{i=1}^{N} M_i} * n \qquad (1)$$

Where,

M_i = number of households in i[th] PSU

n = total number of PSUs selected in the stratum

$\sum_{i=1}^{N} M_i$ = total number of households in the stratum

In the 2nd stage sampling, the selection probability for j[th] household in the i[th] PSU in a stratum, was computed as follows:

$$P_{psu_{ij}} = \frac{n_{ij}}{m_{ij}} \qquad (2)$$

Where,

n_{ij} = total number of households interviewed in the i[th] PSU

m_{ij} = total number of households during fresh listing in the i[th] PSU

Then base weight for j[th] household in the i[th] PSU in a stratum is computed as follows:

$$w_1 = \frac{1}{P_{psu_i} * P_{psu_{ij}}}$$

The non-response weight is computed at the stratum level, i.e., in urban and rural areas within each domain. It is the inverse of stratum response rate as follows:

$$w_2 = \frac{1}{weighted\ response\ rate\ in\ a\ stratum\ (R)}$$

Where,

$$R = \frac{weighted\ number\ of\ completed\ interviews\ in\ the\ stratum}{weighted\ total\ number\ of\ households\ in\ the\ stratum}$$

To further improve the precision of the estimates and account for changes in the population structure, a post-stratification adjustment was additionally employed, utilizing population projections by Dzongkhag, ten-year age group, and sex. To achieve this, the post-stratification adjustment weight for each post-stratification cell was calculated as

$$w_3 = N_{[g]}^{2023} / \hat{N}_{[g]}^{2023}$$

Where $N_{[g]}^{2023}$ is the projected population for adjustment cell [g]. In here an adjustment cell refers to 10-year age-group by sex for each Dzongkhag. The age-groups are <15, 15-24, 25-34, 35-44, 45-54, 55-64, 65+. Further $\hat{N}_{[g]}^{2023}$ is simply the sum of assigned weights (after adjusting for non-response) of all individuals belonging to adjustment cell [g]. Therefore, the final survey weight is then defined as

$$W_f = w_1 * w_2 * w_3$$

1.3.7 Estimation

Given the final weight attached to a sample unit, the population total is estimated as

$$\hat{Y} = \sum_{i\epsilon s} W_{f_i} * y_i, \quad i\epsilon s \text{ is all sampled units}$$

The population mean is estimated as

$$\bar{y} = \frac{\sum_{i\epsilon s} W_{f_i} * y_i}{\sum_{i\epsilon s} W_{f_i}}$$

The population proportion is estimated as

$$\hat{p} = \frac{\sum_{i\epsilon s} W_{f_i} * y_i}{\sum_{i\epsilon s} W_{f_i}}$$

$$y_i = 1 \text{ if unit } i \text{ posses attribute}, 0 \text{ othewise}$$

CHAPTER II: LABOUR FORCE AND INACTIVE POPULATION

INTRODUCTION

As per the International Labour Organization (ILO) labour force framework (Figure 2.1), all persons 15 years and above are considered as the working-age population. The working age population is divided into two major groups: economically active and economically inactive. The economically active population which is also referred as the 'labour force', is further composed of employed and unemployed persons.

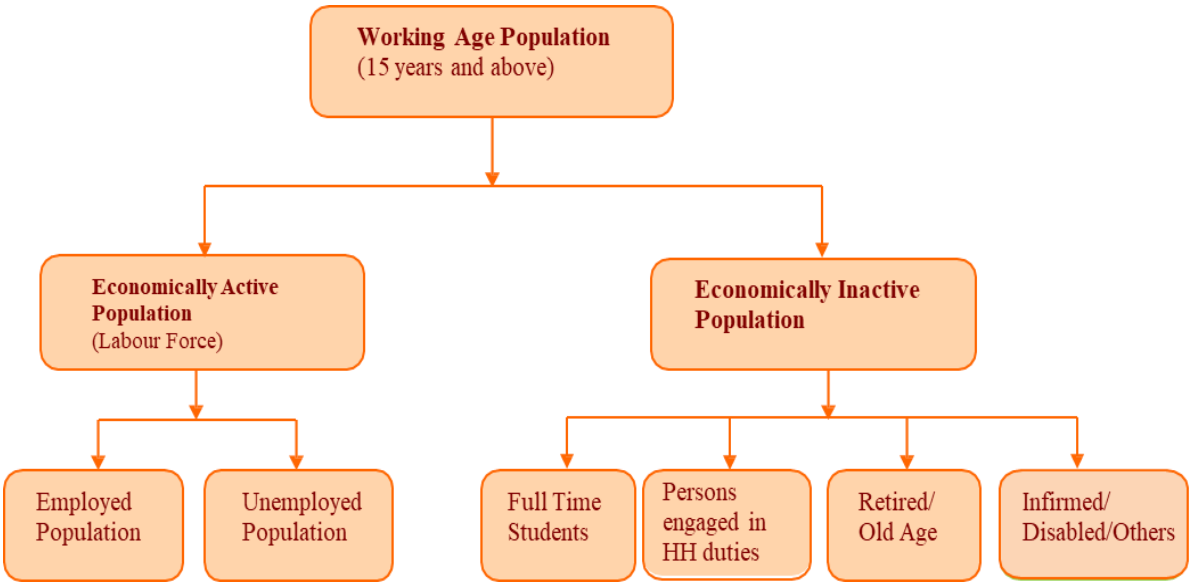

Figure 2.1 Components of Economically Active and Inactive Population

2.1 MEASURING LABOUR FORCE INDICATORS

In estimating the labour force indicators such as unemployment rate and labour force participation rate, a person's current economic activity status is a key concept in labour force surveys. The 2023 Quarterly Labour Force Survey collected information on labour and employment from all persons aged 15 years and above. Based on the person's activity status during the reference period, he/she is classified into economically active and economically inactive. The employed and the unemployed persons aged 15 years and above together constitute the national labour force.

The measure of unemployment depends on how the term 'unemployment' is defined. The criteria to measure employment, unemployment, and economically inactive is as below:

I Employed: a person is considered to be 'employed' if

a. He/she did any work for pay, profit or family gain during the reference period (person who worked during the last one week) or
b. He/she has a job or business from which he/she was absent during the reference period.

II. Unemployed: a person is considered 'unemployed' if

a. He/she is without work during the reference period (person who did not work during the last one week);

b. He/she has actively looked for the work in the last four weeks; and
c. He/she is available to work within the next two weeks.

III. Economically Inactive Population: economically inactive population are those who did not work during the reference period (because of studies, taking care of household or family, illness or disability, other reasons), provided they are not seeking and available for work.

2.2 WORKING-AGE POPULATION

Table 2.1 presents the distribution of the working-age population by sex and area. Out of the total population, 76.8% are in the working-age. Among them, 52.4% are males, and 47.6% are females. This means there are more males than females in the working-age population. Overall, most of the working-age population resides in rural (63.3%) than in urban (36.7%) areas.

Table 2. 1 Working-Age Population by Area and Sex, 2023

Sex	Urban	Rural	Both Areas
	Percent	Percent	Percent
Male	52.4	52.4	52.4
Female	47.6	47.6	47.6
Both Sex	**100.0**	**100.0**	**100.0**

2.3 LABOUR FORCE (ECONOMICALLY ACTIVE POPULATION)

Figure 2.2 presents the population in the labour force by sex and area. Of the total working age population, 65.0% are in the labour force in 2023. Among them, 58.4% are males and 41.6% are females. The share of the economically active population is higher in rural (64.2%) areas compared to urban (35.8%) areas. The share of economically active population is more prominent among the males than females in both urban and rural areas.

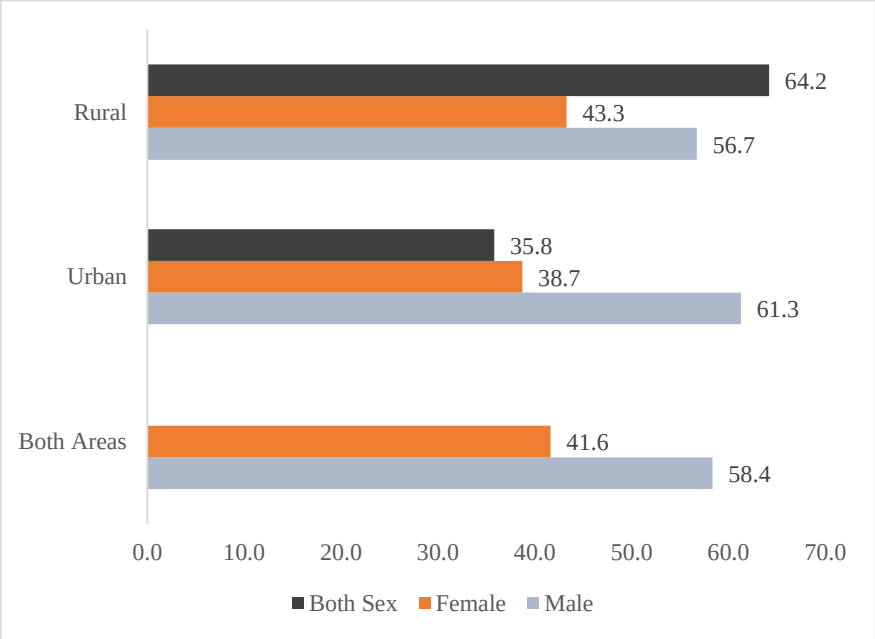

Figure 2.2 Distribution of Economically Active Persons by Sex and Area, 2023

2.4 MEASURING LABOUR FORCE INDICATORS

The distribution of the economically active population by sex and *Dzongkhag* is presented in Figure 2.3. Among the *Dzongkhags/Thromdes*, the share of the economically active population is highest in Thimphu *Thromde* (17.4%) while the lowest is observed in Gasa (0.6%) and Samdrup Jongkhar *Thromde* (0.7%). There are more males labour force compared to females across all the domains.

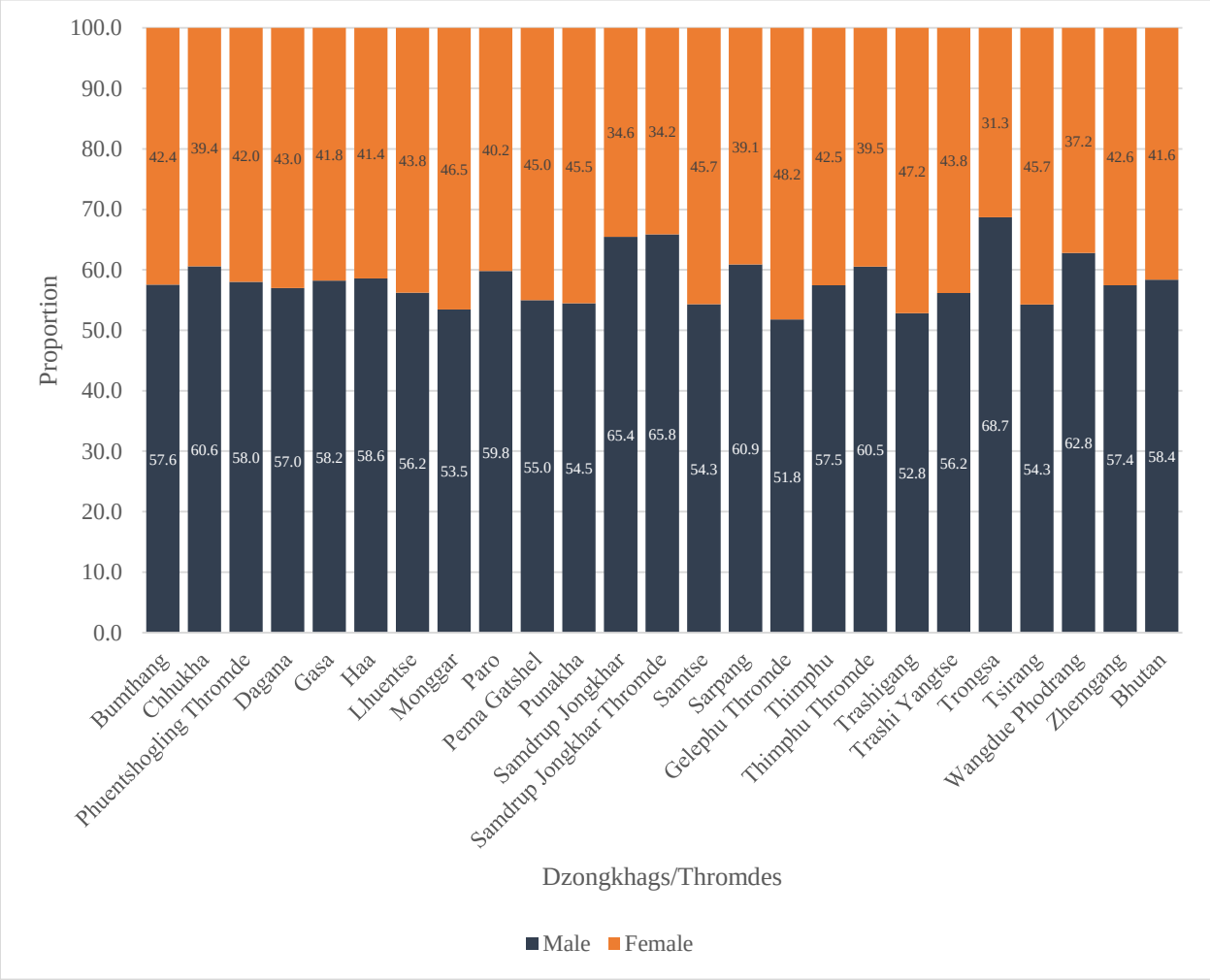

Figure 2.3 Percentage Distribution of Economically Active Population by Sex and *Dzongkhag/Thromde*, 2023

2.4.1 Labour Force Participation Rate (LFPR)

The LFPR is defined as the proportion of the economically active population to the working-age population. It is calculated by expressing the number of persons in the labour force given as a percentage of the working-age population. The figure 2.4 provides labour force participation rate by sex for urban and rural areas.

In 2023, the LFPR is 65.0%. Males have higher LFPR at 72.4% compared to women at 56.8%, with a difference of 15.6 percentage points. Additionally, the LFPR is higher in rural areas (65.9%) than in urban areas (63.4%).

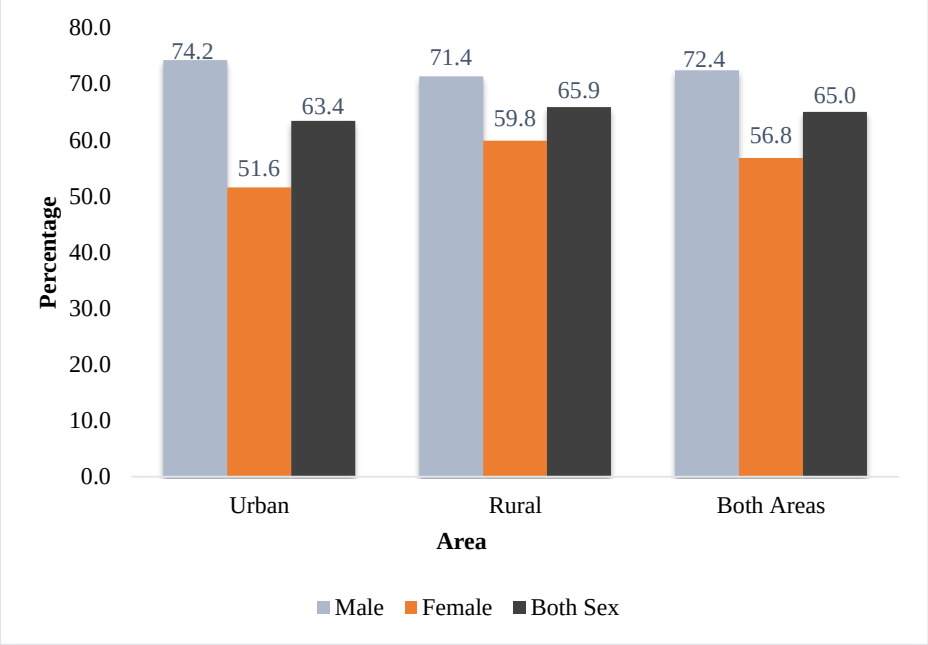

Figure 2.4 Labour Force Participation Rate by Sex and Area, 2023

The Labour Force Participation Rate (LFPR) is lowest among people aged 15-19 years (10.0%) and those aged 65 years and above (34.1%). This is because many in the younger age groups are either in school or training, and those in the older age groups are often retired. So, they are considered economically inactive. The data shows that LFPR increases significantly until the age group 25-29 years, reaching its highest point at 40-44 years (86.1%), and then gradually decreases. For both sexes, LFPR follows a similar pattern, but for females it increases steadily until 40-44 years and then declines, reaching 27.8% at 65 years and above. Males have higher LFPR than females across all age groups figure 2.5).

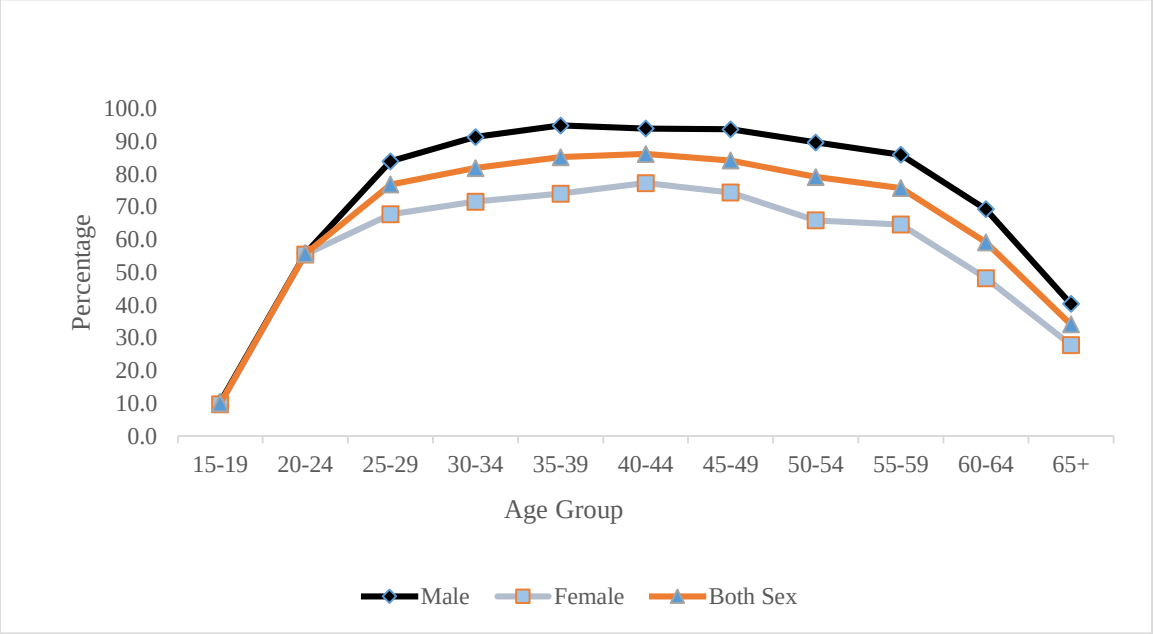

Figure 2.5 Labour Force Participation Rate by Age Group and Sex, 2023

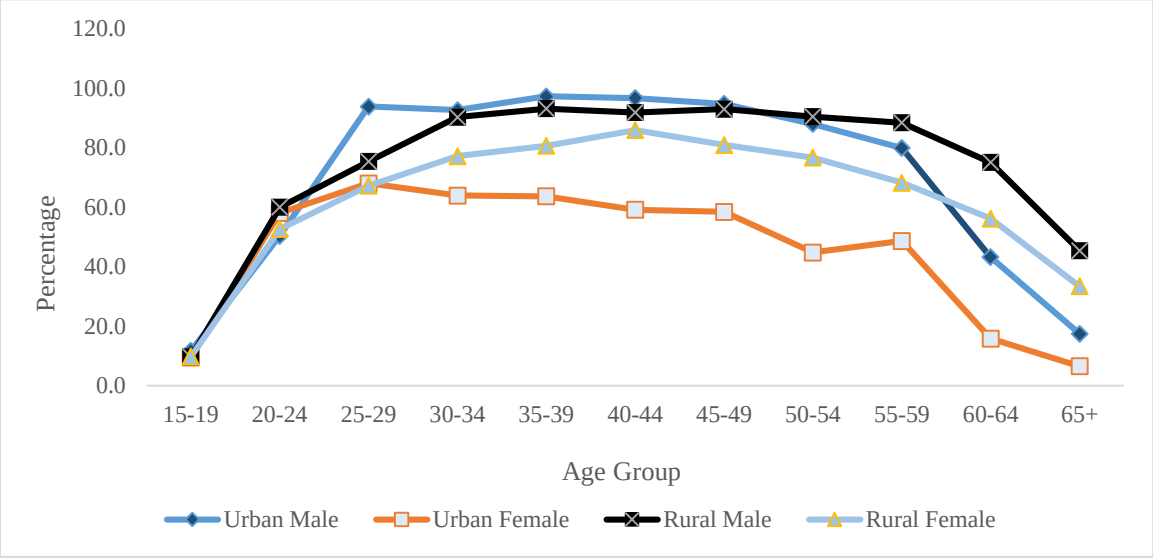

Figure 2.6 Labour Force Participation Rate by Age Group, Area and Sex, 2023

Figure 2.6 illustrates the Labour Force Participation Rate (LFPR) by sex and area. In urban areas, the overall LFPR for males (74.2%) is consistently higher than for females (51.6%) across all age groups, except for the 20-24 age group where females have a higher LFPR.

In rural areas, the LFPR for males peak at 35-39 years (93.2%) and gradually decreases thereafter. Conversely, in urban areas, it declines after reaching its peak (97.3%) in the same age group. Urban females reach their LFPR peak (68.1%) in the 25-29 age group and gradually decline. Rural females, on the other hand, peak at 40-44 years (86.0%), experience a gradual decline until 60-64 years (56.2%), and then sharply drop to 33.4% in the 65 years and above age group.

The table 2.2 displays the Labour Force Participation Rate (LFPR) by sex in different *Dzongkhags/Thromdes.* Among the *Dzongkhags* Dagana has the highest LFPR at 74.9% followed by Gasa at72.6%, while Lhuentse has the lowest at 42.5%.

Across all *Dzongkhags*, the LFPR for males is higher than females. Punakha Dzongkhag has the highest female LFPR at 69.8% followed by Wangdue Phodrang Dzongkhag at 68.5%, whereas Samdrup Jongkhar has the lowest at 37.9%. In terms of male LFPR, Samdrup Jongkhar Thromde leads with 83.0%, while Lhuentse has the lowest at 46.2% (Table 2.2).

Table 2.2 Labour Force Participation Rate by Sex and Dzongkhag/Thromde, 2023

Dzongkhag/Thromde	**Sex**		
	Male	**Female**	**Both Sex**
Bumthang	70.0	54.9	62.7
Chhukha	73.3	53.8	64.1
Phuentshogling Thromde	76.4	51.4	63.4
Dagana	81.9	67.3	74.9
Gasa	78.3	66.0	72.6
Haa	72.0	63.6	68.2
Lhuentse	46.2	38.6	42.5
Monggar	66.7	52.4	59.2
Paro	71.1	49.4	60.5
Pema Gatshel	77.1	64.5	70.9
Punakha	74.5	69.8	72.3
Samdrup Jongkhar	62.7	37.9	51.1
S/Jongkhar Thromde	83.0	45.6	64.8
Samtse	75.5	64.0	69.7
Sarpang	73.6	55.8	65.4
Gelegphu Thromde	71.0	58.8	64.6
Thimphu	66.9	59.4	63.5
Thimphu Thromde	76.8	51.6	64.4
Trashigang	68.4	64.5	66.5
Trashi Yangtse	77.2	61.3	69.3
Trongsa	68.5	54.1	63.2
Tsirang	74.6	67.2	71.0
Wangdue Phodrang	73.6	68.5	71.6
Zhemgang	58.9	47.9	53.7
Bhutan	**72.4**	**56.8**	**65.0**

2.5 ECONOMICALLY INACTIVE POPULATION

The economically inactive population consists of individuals who are not employed and are not available for any form of work. This includes full-time students, monks/nuns, full-time homemakers (such as housewives and house husbands), those with chronic illness, individuals too old to work, trainees, retirees, and person with disabilities.

Figure 2.7 illustrates the distribution of the economically inactive population by sex and areas. Among individuals aged 15 years and above, 35.0% are economically inactive, with 41.3% in urban areas and 58.7% in rural areas. The data reveals that females make up the majority of economically inactive population at 61.7%, a trend that is consistent in both urban and rural areas.

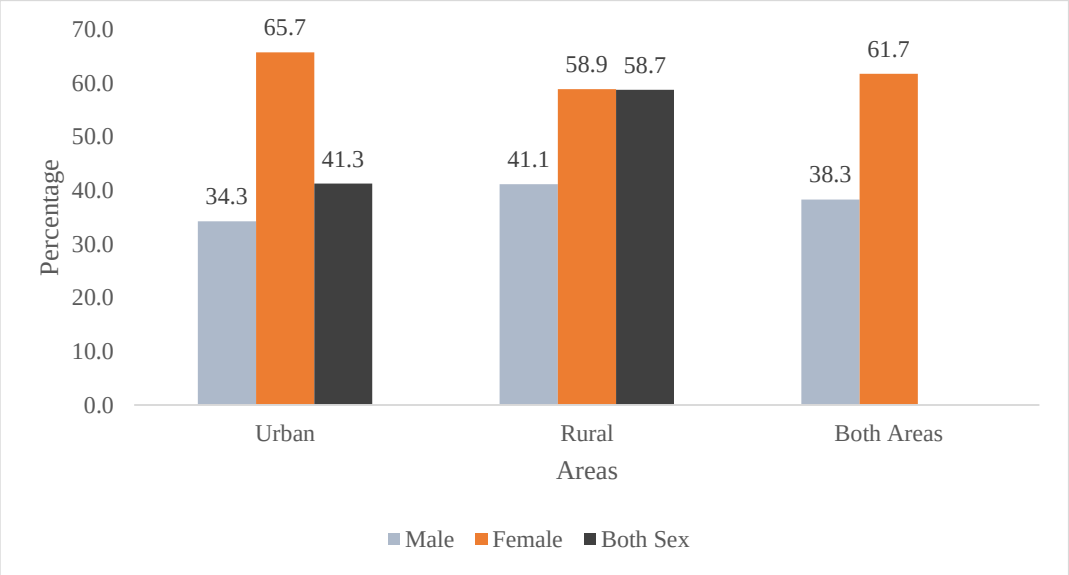

Figure 2.7 Distributions of Economically Inactive Persons by Sex and Area, 2023

2.5.1 Economically Inactivity Rate

Economically Inactivity Rate is defined as the proportion of economically inactive persons to the working-age population (economically active and economically inactive).

Bhutan has an economically inactivity rate of 35.0%, with a higher rate among females (43.2%) compared to males (27.6%). Analyzing by *Dzongkhags/Thromdes*, Lhuentse has the highest economically inactivity rate at 57.5%, while Dagana has the lowest at 25.1% (Table 2.3)

In terms of female economically inactivity rate, Samdrup Jongkhar has the highest at 62.1%, while Punakha has the lowest at 30.2%. For males, Lhuentse also has the highest economically inactivity rate at 53.8%, and Samdrup Jongkhar Thromde has the lowest at 17.0%.

Table 2. 3 Economically Inactivity Rate by Sex and *Dzongkhag/Thromde*, 2023

Dzongkhag/Thromde	Economically Inactivity Rate		
	Male	**Female**	**Total**
Bumthang	30.0	45.1	37.3
Chhukha	26.7	46.2	35.9
Phuentshogling Thromde	23.6	48.6	36.6
Dagana	18.1	32.7	25.1
Gasa	21.7	34.0	27.4
Haa	28.0	36.4	31.8
Lhuentse	53.8	61.4	57.5
Monggar	33.3	47.6	40.8
Paro	28.9	50.6	39.5
Pema Gatshel	22.9	35.5	29.1
Punakha	25.5	30.2	27.7
Samdrup Jongkhar	37.3	62.1	48.9
Samdrup Jongkhar Thromde	17.0	54.4	35.2
Samtse	24.5	36.0	30.3
Sarpang	26.4	44.2	34.6
Gelegphu Thromde	29.0	41.2	35.4
Thimphu	33.1	40.6	36.5
Thimphu Thromde	23.2	48.4	35.6
Trashigang	31.6	35.5	33.5
Trashi Yangtse	22.8	38.7	30.7
Trongsa	31.5	45.9	36.8
Tsirang	25.4	32.8	29.0
Wangdue Phodrang	26.4	31.5	28.4
Zhemgang	41.1	52.1	46.3
Bhutan	27.6	43.2	35.0

Figure 2.8 presents the distribution of LFPR and economically inactivity rate across different age group, revealing significant variations. The data indicates that the highest inactivity rate, at 90.0%, is observed in the 15-19 age group, while the LFPR is only 10.0%. This substantial difference suggests that individuals in this age group are dedicating more time either to higher education or in training.

In 20-24 age group, the difference between inactivity rate and LFPR is minimal. From ages 25 to 64, the economically active population surpasses the inactive population. However, for the age group 65 and above, the inactivity rate is notably high at 65.9%, primarily due to individuals in retirement. Interestingly, it also highlights that 34.1% of the working-age population in this older age group (65 and above) remains economically active.

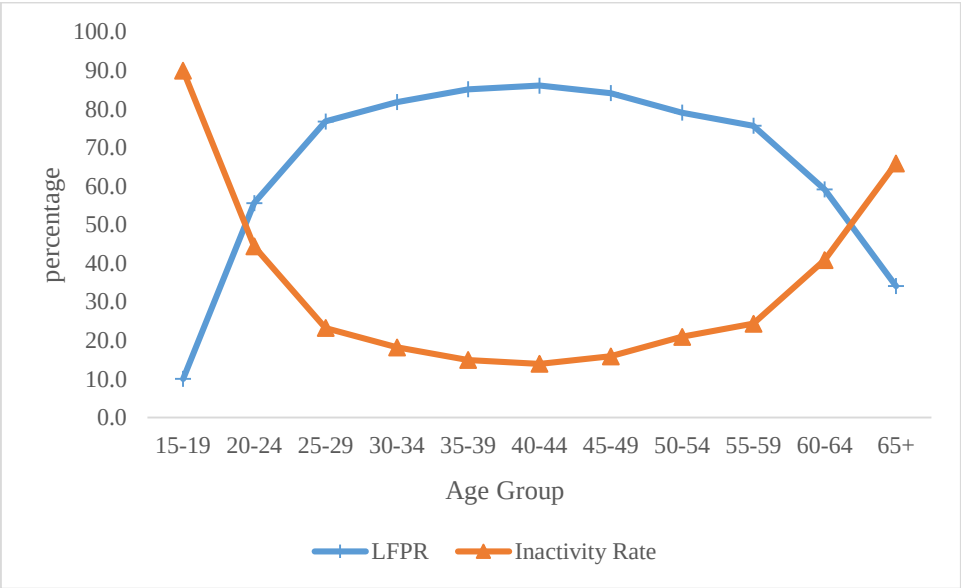

Figure 2.8 Labour Force Participation Rate (LFPR) and Economically Inactivity Rate by Age Group, 2023

2.5.2 Economically Inactive Population by Level of Education

About 30.4% of the economically inactive population lack any formal education, with 18.6% having Middle Secondary education and 18.4% having Higher Secondary education.

Both in urban and rural areas, the highest percentage of inactive individual are those with no formal education. In urban areas, among the male inactive population, 22.7% have Higher Secondary education, and 22.4% have Middle Secondary education. For females in urban areas, 24.3% have no formal qualifications.

In rural areas, 26.2% of the inactive males have no education, while 40.3% of inactive females in rural areas also lack any formal qualifications.

Table 2.4 Percentage Distribution of Economically Inactive Population by Area, Sex, and Level of Education, 2023

Level of Education	Urban			Rural			Both Areas		
	Male	Female	Total	Male	Female	Total	Male	Female	Both Sex
None	12.6	31.2	24.3	26.2	40.3	34.1	21.6	36.6	30.4
Primary	4.8	6.8	6.0	6.0	6.0	6.0	5.6	6.3	6.0
Lower Secondary	10.7	7.2	8.5	12.8	10.5	11.5	12.1	9.1	10.3
Middle Secondary	22.4	18.7	20.1	16.5	18.6	17.7	18.5	18.7	18.6
Higher Secondary	22.7	21.0	21.6	17.1	15.7	16.3	19.0	17.9	18.4
Certificate/Diploma*	1.8	2.5	2.2	1.4	0.3	0.8	1.5	1.2	1.3
Bachelor's Degree	21.3	7.4	12.5	6.7	4.1	5.2	11.7	5.5	8.0
Master's Degree and Above	2.5	0.7	1.3	0.9	0.3	0.6	1.5	0.4	0.9
Monastic Education	1.2	0.2	0.6	11.7	0.3	5.3	8.1	0.3	3.5
Non-Formal Education	0.0	4.3	2.7	0.7	3.8	2.5	0.5	4.0	2.6
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

** This excludes those who are enrolled in TVET under the MoESD*

CHAPTER III: EMPLOYMENT

INTRODUCTION

Reliable information on employment is crucial for effective planning, monitoring, and assessing the economic conditions in the country. The data on the number of employed persons provide insights into the economy's capacity to create jobs. The employment rate reflects proportion of the working age population actively involved in the production of goods and services.

3.1 CONCEPTS AND DEFINITIONS

Persons in **employment** are defined as all those household members who are 15 years and above and are engaged in any activity to produce goods or provide services for pay or profit during a reference period. It comprises employed persons "at work" and "not at work". Employed persons "not at work" are those persons who still maintained a job attachment during their absences, including those such as sick leave due to their illness or injury and periods of maternity or paternity leave during the reference period.

The term "for pay or profit" refers to work done as part of a transaction in exchange for remuneration in cash or in kind. The remuneration may be paid directly to the person performing the work or indirectly to a household or family member.

"Managers" in the occupation category include parliamentarians, executives, local government leaders, and working proprietors.

This chapter presents information on employed persons by major industry, employment across *Dzongkhags/Thromdes*, employment status, and major occupation and education level. Key statistics like the employment-to-population ratio are also presented. Occupation and industrial codes are contextualized to national standards.

The overall employment rate in Bhutan for 2023 is 96.5% *(CI[1] 95.8-97.2)*, with a higher rate among males *(*97.3%) than females (95.5%). Among *Dzongkhags/Thromdes*, Wangdue Phodrang (99.7%) has the highest proportion of employed persons followed by Dagana (99.6%). Conversely, Thimphu Thromde and Gelegphu Thromde exhibits the lowest proportion of employed persons at 91.9% and 93.5% respectively (Table 3.1).

[1]1. **Confidence Interval (CI 95%):** A confidence interval indicates where the population parameter is likely to reside. A 95% confidence interval suggests that we can be 95% confident that the population mean is between the interval values.

Table 3.1 Proportion of Employed Persons by *Dzongkhag/Thromdes* and Sex, 2023

Dzongkhag/Thromde	Employment Rate		
	Male	**Female**	**Both sex**
Bumthang	99.3	98.0	98.8
Chhukha	97.4	97.0	97.3
Phuentshogling Thromde	96.0	94.6	95.4
Dagana	99.3	100.0	99.6
Gasa	100.0	98.8	99.5
Haa	100.0	98.7	99.4
Lhuentse	100.0	93.1	97.0
Monggar	98.1	95.4	96.9
Paro	99.5	93.4	97.0
Pema Gatshel	98.0	96.8	97.5
Punakha	98.3	95.4	96.9
Samdrup Jongkhar	92.5	100.0	95.1
S/Jongkhar Thromde	96.4	89.8	94.2
Samtse	99.6	99.2	99.4
Sarpang	94.5	96.9	95.4
Gelegphu Thromde	95.8	91.0	93.5
Thimphu	93.3	96.9	94.8
Thimphu Thromde	94.8	87.4	91.9
Trashigang	100.0	98.4	99.2
Trashi Yangtse	99.5	96.7	98.3
Trongsa	100.0	97.3	99.2
Tsirang	92.6	98.9	95.5
Wangdue Phodrang	100.0	99.2	99.7
Zhemgang	98.1	96.6	97.5
Total	97.3	95.5	96.5

Table 3.2 illustrates the proportion of employed persons by age group and sex. The employment proportions vary across different age categories. Notably all individuals aged 60 years and above are employed. Conversely, the lowest employment proportion is observed in the 20-24 age group at 83.8%. For individuals aged 15-64, the employment proportion is 96.4%, with a slightly higher rate for males (97.2%) compared to females (95.3%). This pattern persists in the age range of 18 to64 years as well.

Table 3.2 Proportion of Employed Persons by Age Group and Sex, 2023

Age Group	Employed (%)		
	Male	Female	Both Sex
15-64	97.2	95.3	96.4
18-64	97.2	95.3	96.4
15-19	84.8	86.6	85.7
20-24	86.9	80.7	83.8
25-29	96.6	93.9	95.6
30-34	96.8	96.1	96.5
35-39	98.4	97.2	97.9
40-44	99.9	99.0	99.5
45-49	99.8	99.1	99.5
50-54	99.7	100.0	99.8
55-59	98.6	100.0	99.2
60-64	100.0	100.0	100.0
65+	100.0	100.0	100.0
Bhutan	97.3	95.5	96.5

3.2 EMPLOYED PERSONS BY SECTOR

The largest segment of employed individuals, accounting for 43.5%, is engaged in the agriculture sector, whereas the lowest percentage, 13.6%, is in the industry sector. The service sector holds a share of 42.9% in the total employment.

Females constitute a higher proportion (52.3%) of the workforce in the agriculture sector compared to males (37.3%). Conversely, in the service and industry sectors, the proportion of employed males surpasses that of females.

In rural areas, the majority of individuals are employed in the agriculture sector, making up 65.3% of the workforce. On the other hand, in urban areas, approximately 78.5% of individuals are employed in the service sector.

Table 3.3 Proportion of Employed Persons by Sector, Sex and Area, 2023

Sector	Area		Sex		Total
	Urban	Rural	Male	Female	
Agriculture	2.8	65.3	37.3	52.3	43.5
Industry	18.7	10.9	16.3	9.9	13.6
Service	78.5	23.8	46.4	37.8	42.9
All Sectors	100.0	100.0	100.0	100.0	100.0

3.3 EMPLOYMENT STATUS

When it comes to employment status, persons working in agriculture as 'Family worker' (24.8%) and 'Own account worker' (17.9%) together make up the biggest group at 42.7%. The next largest group is 'regular paid employee' at 30.9%, and the smallest group is 'Apprenticeship/Internship' at (0.0%) (Table 3.4).

A *contributing family worker* is someone who works in a family business or on a farm without getting paid. More females than males work in family business in both agriculture and other fields. Employers make up less than 1% of the workforce.

In urban areas, almost three-fifths (58.7%) of the employed persons are regular paid employees, while in rural areas, the largest group is people working as own account worker in agriculture (37.4%).

Table 3.4 Distribution of Employed Persons by Nature of Employment, Sex and Area, 2023

Nature of Employment	Urban			Rural			Both Area		
	Male	Female	Both Sex	Male	Female	Both Sex	Male	Female	Both Sex
Employee (regular paid)	61.8	53.4	58.7	20.3	10.7	16.1	35.7	24.1	30.9
Employee (Casual paid)	9.8	3.4	7.4	13.4	3.0	8.9	12.0	3.1	8.4
Own-account worker(Non-agriculture)	20.2	30.1	23.9	7.9	9.3	8.5	12.5	15.9	13.9
Own-account worker(Agriculture)	1.6	1.8	1.7	27.1	25.9	26.6	17.6	18.3	17.9
Family worker(Non-agriculture)	5.2	7.9	6.2	1.3	3.4	2.2	2.8	4.8	3.6
Family worker(Agriculture)	0.4	2.1	1.0	29.7	47.6	37.4	18.8	33.3	24.8
Employer	0.9	1.3	1.0	0.4	0.1	0.2	0.6	0.4	0.5
Apprenticeship/Internship	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

3.4 EMPLOYMENT BY MAJOR OCCUPATION

Occupation refers to the specific type of work, trade, or profession a person is engaged in during the reference period. Table 3.5 illustrates the proportion of employed males and females across major occupational categories, highlighting the contribution of females to the total employment in each group. Overall, females contribute 41.2% to total employment. Among major occupational groups, the highest female contribution is in 'Clerical Support Workers' at 58.6%, while the lowest is in 'Armed Forces Occupations'

Table 3.5 Percentage Distribution of Employed Persons by Major Occupation and Sex, 2023

Major Occupation	Area		Sex		Total	% contribution of females to the total employment
	Urban	Rural	Male	Female		
Managers	19.5	5.8	9.2	12.5	10.6	48.7
Professionals	14.1	3.9	8.2	6.3	7.4	34.9
Technicians and Associate Professionals	9.0	3.5	7.6	2.3	5.4	17.8
Clerical Support Workers	7.0	1.0	2.2	4.4	3.1	58.6
Services and Sales Workers	19.5	5.3	10.3	10.3	10.3	41.2
Skilled Agricultural, Forestry and Fishery Workers	2.6	64.5	36.6	52.0	42.9	49.9
Craft and Related Trades Workers	11.8	6.3	8.7	7.4	8.2	37.4
Plant and Machine Operators and Assemblers	9.4	4.5	10.1	0.6	6.2	3.8
Elementary Occupations	4.9	5.2	5.7	4.2	5.1	34.1
Armed Forces Occupations	2.2	0.1	1.4	0.0	0.8	0.0
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**41.2**

By occupational groups, the most significant share of employment is found among 'Skilled Agricultural, Forestry, and Fishery Workers' at 42.9%, with both males (36.6%) and females (52.0%) contributing substantially.

In urban areas, the predominant occupational groups are 'Service and Sales Workers' and 'Managers', together accounting for 19.5% of employment. On the other hand, in rural areas, the largest proportion (64.5%) of employment is in the category of 'Skilled Agricultural, Forestry, and Fishery Workers'.

3.5 EMPLOYMENT BY EDUCATIONAL ATTAINMENT

Out of all employed persons, 34.1% have no formal education. The percentage of those without any education is higher among females (40.3%) compared to males (29.7%). The concentration of employed persons with higher educational qualifications is more pronounced in urban areas than in rural areas.

Among all employed females, only 1.3% have master's degree or higher qualification, while for males, the corresponding figure is 2.9%.

Table 3. 6 Proportions of Employed Persons by Level of Education, Area and Sex, 2023

Level of Education	Area		Sex		Total
	Urban	Rural	Male	Female	
None	14.5	44.5	29.7	40.3	34.1
Primary/Nursery	8.8	15.0	15.0	9.8	12.8
Lower Secondary	6.5	5.3	6.3	4.8	5.7
Middle Secondary	17.9	10.4	13.4	12.4	13.0
Higher Secondary	23.5	7.9	13.1	13.6	13.3
Certificate/Diploma*	4.3	0.8	2.5	1.3	2.0
Bachelor's Degree	15.1	3.2	8.4	5.9	7.4
Master's Degree & Above	4.6	1.0	2.9	1.3	2.3
Monastic Education	2.3	3.6	5.3	0.1	3.2
Non-Formal Education	2.4	8.3	3.4	10.4	6.3
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

** This excludes those who are enrolled in TVET under the MoESD*

Table 3.7 provides the percentage distribution of employed persons based on their education levels. Among those in the 'Manager' group, slightly over one-fourth (24.9%) have education levels of Lower and Middle Secondary. In the 'Professional' group, the majority (72.3%) possess a bachelor's degree or higher, while the "Technicians & Associate professionals' (25.8%) and 'Clerical Support Workers' (58.5%) groups have Higher Secondary level of education.

Conversely, the highest proportion of employed persons without any formal education is observed in the 'Skilled Agricultural, Forestry and Fishery Workers,' 'Armed Forces Occupation,' and 'Elementary Occupations' categories.

Table 3.7 Percentage Distribution of Employed Persons by Major Occupation and Level of Education, 2023

Major Occupation	Level of Education								Total
	None	Primary/ Nursery	Lower & Middle Secondary	Higher Secondary	Certificate/ Diploma	Bachelors Degree & Above	Monastic Education	Non-Formal Education	
Managers	17.0	10.4	24.9	21.0	1.9	20.3	1.5	3.1	100.0
Professionals	1.2	1.4	5.1	11.6	6.8	72.3	1.5	0.0	100.0
Technicians and Associate Professionals	6.9	6.4	18.9	25.8	16.0	10.8	13.2	2.0	100.0
Clerical Support Workers	1.5	2.8	25.2	58.5	2.2	8.3	1.3	0.2	100.0
Services and Sales Workers	17.6	13.0	28.8	26.2	1.3	8.2	2.4	2.4	100.0
Skilled Agricultural, Forestry and Fishery Workers	55.1	16.1	11.4	3.7	0.1	0.6	3.0	10.0	100.0
Craft and Related Trades Workers	25.2	13.0	28.5	15.7	2.1	0.8	4.5	10.2	100.0
Plant and Machine Operators and Assemblers	31.7	15.0	33.8	12.1	0.0	0.8	3.6	3.1	100.0
Elementary Occupations	37.3	15.7	29.3	12.3	0.0	0.5	0.6	4.3	100.0
Armed Forces Occupations	45.6	23.6	11.9	11.0	0.0	2.5	0.0	5.4	100.0
Total	**34.1**	**12.8**	**18.7**	**13.3**	**2.0**	**9.6**	**3.2**	**6.3**	**100.0**

3.6 EMPLOYED PERSONS BY MAJOR ECONOMIC ACTIVITY

As indicated in Table 3.8, a significant portion of the total employed persons (43.5%) is involved in 'Agriculture, Forestry, and Fishing,' followed by 'Wholesale and Retail Trade' at 10.3%, and then 'Public Administration and Defense; Compulsory Social Forestry Security' at 7.9%.
The majority of employed females (52.3%) are found in the 'Agriculture, Forestry, and Fishing' sector, with employed males following a similar pattern.

In rural areas, over three-fifths (65.3%) of the persons are engaged in 'Agriculture, Forestry and Fishing,' contrasting sharply with their urban counterparts (2.8%). Conversely, in urban areas, the highest proportions of individuals are involved in 'Wholesale and Retail Trade; Repair of Motor Vehicles and Motorcycles' at 20.4%.

Table 3.8 Total Employed Persons by Major Economic Activity, Area and Sex, 2023

Major Economic Activity	Area		Sex		Total
	Urban	Rural	Male	Female	
Agriculture, Forestry and Fishing	2.8	65.3	37.3	52.3	43.5
Mining and Quarrying	0.4	1.0	1.1	0.4	0.8
Manufacturing*	10.8	4.5	5.4	8.5	6.7
Electricity, Gas, Steam and Air Conditioning Supply	2.7	0.8	2.1	0.7	1.5
Water Supply; Sewerage, Waste Management and Remediation Activities	0.1	0.0	0.0	0.0	0.0
Construction	7.5	5.4	9.8	1.0	6.1
Wholesale & Retail Trade; Repair of Motor Vehicles and Motorcycles	20.4	4.9	8.9	12.4	10.3
Transportation and Storage	5.2	3.1	6.3	0.3	3.8
Accommodation and Food Service Activities	9.8	2.8	3.5	7.7	5.3
Information and Communication	2.0	0.2	1.0	0.5	0.8
Financial and Insurance Activities	2.9	0.4	1.3	1.2	1.3
Real Estate Activities	0.8	0.0	0.1	0.5	0.3
Professional, Scientific and Technical Activities	1.3	0.1	0.5	0.5	0.5
Administrative and Support Service Activities	2.4	0.2	1.4	0.4	1.0
Public Administration and Defense; Compulsory Social Security	15.6	3.8	10.5	4.2	7.9
Education	7.9	4.6	5.7	5.8	5.8
Human Health and Social Work Activities	3.8	0.9	2.1	1.6	1.9
Arts, Entertainment and Recreation	1.3	0.3	0.5	0.9	0.6
Other Service Activities	2.2	1.6	2.5	0.8	1.8
Activities of Households as Employers	0.0	0.1	0.0	0.1	0.0
Activities of Extraterritorial Organizations and Bodies	0.2	0.0	0.0	0.1	0.1
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

** This includes weaving of home-based textiles, cane and wood products*

3.7 EMPLOYED PERSONS BY WORKING HOURS

Among the total employed persons, 32.5% worked for 40-49 hours per week, followed by slightly over one-fifth (21.8%) working for 50-59 hours a week. The lowest observed working hours were less than 30 hours accounting for 9.7%.

The proportion of males working more than 80+ hours a week (7.8%) is slightly higher than that of females (6.2%). In terms of weekly working hours, a higher percentage of individuals in urban areas (36.7%) work between 40-49 hours compared to those in rural areas (30.2%).

Looking at the different sectors, the service sector has the lowest proportion (5.9%) of employed persons working less than 30 hours a week, in contrast to the industry (10.9%) and agriculture (13.1%) sectors.

However, the percentage of persons working 80 or more hours per week is higher in the service sector (9.4%) compared to the industry (6.2%) and agriculture (5.3%) sectors (Table 3.9)

Table 3.9 Proportion of Employed Person by the Total Number of Hours worked, Area, Sex and Sector, 2023.

Hours worked per Week	Area		Sex		Sector			Total
	Urban	Rural	Male	Female	Agriculture	Industries	Services	
<30 hours	6.9	11.2	7.8	12.4	13.1	10.9	5.9	9.7
30-39 hours	11.3	12.3	11.5	12.6	12.2	8.4	12.8	11.9
40-49 hours	36.7	30.2	31.8	33.4	28.2	34.6	36.2	32.5
50-59 hours	18.7	23.4	23.3	19.5	24.4	21.6	19.1	21.8
60-69 hours	7.9	10.5	10.3	8.6	10.5	11.4	8.2	9.6
70-79 hours	9.7	6.1	7.4	7.2	6.3	6.8	8.5	7.3
80+hours	8.7	6.3	7.8	6.2	5.3	6.2	9.4	7.2
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

The average number of hours worked by employed persons in a week is 50 hours. On average, male employed persons work three hours more than their female counterparts in a week. The mean hours worked is 52 hours per week in urban areas, while in rural areas, it is slightly lower at 50 hours per week.

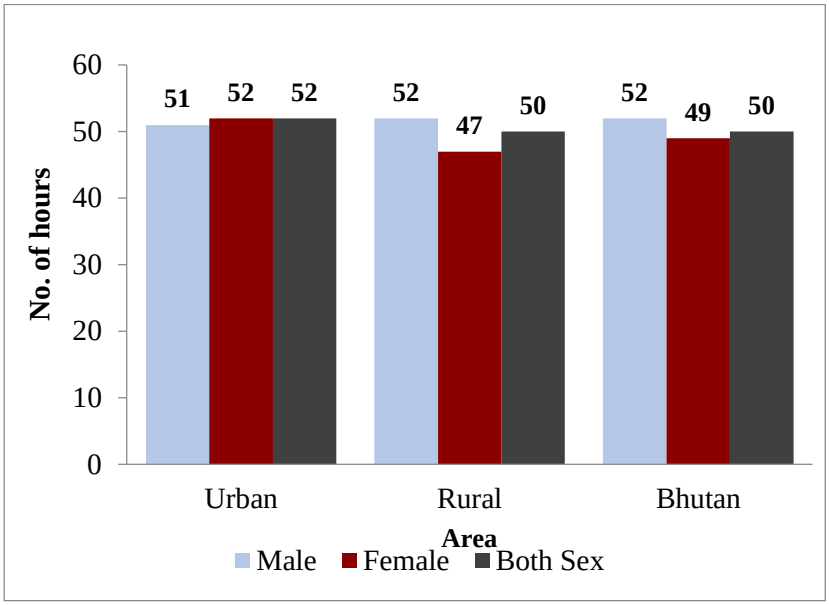

Figure 3.1 Mean Hours Worked in a Week by Area and Sex, 2023

3.8 EMPLOYMENT-TO-POPULATION RATIO

The employment-to population ratio represents the percentage of employed persons relative to the working age population. In 2023, this ratio stands at 62.7%. Notably, the ratio of employed males to the male working age population is notably higher at 70.5% compared to females at 54.3%. This pattern holds true for both urban and rural areas, as outlines in table 3.10.

Table 3.10 Employment-to-Population Ratio by Area and Sex, 2023

Area	Employment to Population Ratio (%)		
	Male	**Female**	**Both Sex**
Urban	71.3	46.6	59.5
Rural	69.9	58.7	64.6
Bhutan	**70.5**	**54.3**	**62.7**

The employment-to-population ratio for youth (15-24 years) is lowest among special age groups, standing at 26.3% (Figure 3.2). Conversely, the highest ratios for both males and females are observed in the prime age group (25-54), reaching 89.3% for males and 69.9% for females.

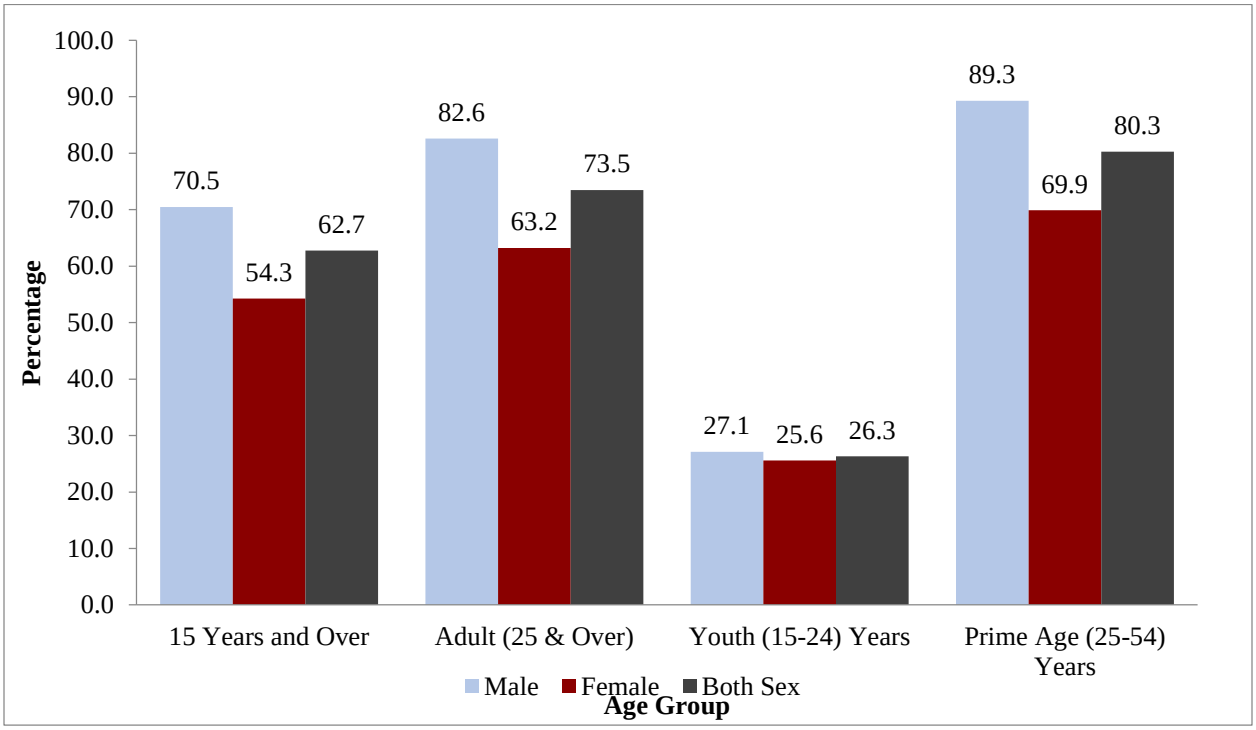

Figure 3.2 Employments-to-Population Ratio by Special Age Group and Sex, 2023

3.9 EMPLOYMENT BY TYPE OF ENTERPRISE

A little less than half (43.3%) of the persons are employed in 'Agriculture Farming' with the 'Private Business' sector following closely at 33.7%. Employment in 'Government Agencies' accounts for 12.4% (Table 3.11). When considering specific enterprises, the percentage of employed females is higher in 'A Household(s) as a Domestic Worker' (70.2%) and 'Agriculture Farming' (49.6%) compared to males working in the same enterprises.

Table 3.11 Percentage Distribution of Employed Persons by Type of Enterprise and Sex, 2023

Type of Enterprise	Sex			% contribution of females to the total employment
	Male	Female	Both Sex	
Government Agency	14.1	10.0	12.4	33.2
Armed Forces	3.8	0.4	2.4	6.8
Agriculture Farming	37.1	52.1	43.3	49.6
Public/Government Company	6.4	3.2	5.0	26.0
Private Limited Company	3.3	2.1	2.8	31.1
Private Business	35.0	31.7	33.7	38.8
A Household(s) as a Domestic Worker	0.0	0.1	0.1	70.2
NGO/INGO/CSO	0.3	0.3	0.3	41.5
Total	**100**	**100**	**100**	41.2

CHAPTER IV: UNEMPLOYMENT

INTRODUCTION

The survey gathered data on the employment status of household members aged 15 years and above, including details on efforts to find employment or establish a business, the duration of job searches, and willingness to engage in available work. Unemployment indicators adhere to international standards, specifically those set by the International Labour Organization (ILO). According to the ILO criteria, a person is considered as unemployed only if three conditions are met simultaneously; the person is without work, actively seeking employment, and available for work if given the opportunity.

4.1 CONCEPTS AND DEFINITIONS

Unemployment: Unemployment is defined as those persons aged 15 years and above without work, who were seeking work in the last four weeks prior to interview and are available for work in the next two weeks.

Long-Term Unemployment: Those persons who have been unemployed for 12 months or more.

Youth Unemployment: Those unemployed persons aged 15-24 years.

This chapter provides insights into the national unemployment rate, youth unemployment rate, and long term unemployment (chronic unemployment) rate. All the estimates in this chapter pertains to persons aged 15 years and above, with data disaggregated by sex, age group, and *Dzongkhag/Thromde*.

4.2 UNEMPLOYMENT RATE

The unemployment rate is a widely utilized indicator for assessing the economic well-being of a country. It serves as a valuable measure for evaluating employment creation and the level of participation in economic activities. A lower unemployment rate is indicative of a growing economy, while a higher rate signals an economic decline and challenges in absorbing individuals of working age.

The unemployment rate is defined as the proportion of unemployed persons in the labor force, also known as the economically active population. Mathematically, it is calculated by dividing the number of unemployed individuals by the total labor force, multiplied by 100. For the year 2023, the estimated unemployment rate is 3.5% (CI 2.82-4.22)[2]. This rate is higher for females compared to males. Specifically, the unemployment rate for females is 4.5% (CI 3.50-5.76), almost twice as high as the rate for males at 2.7% (CI 2.11-3.46). This difference is considered significant.

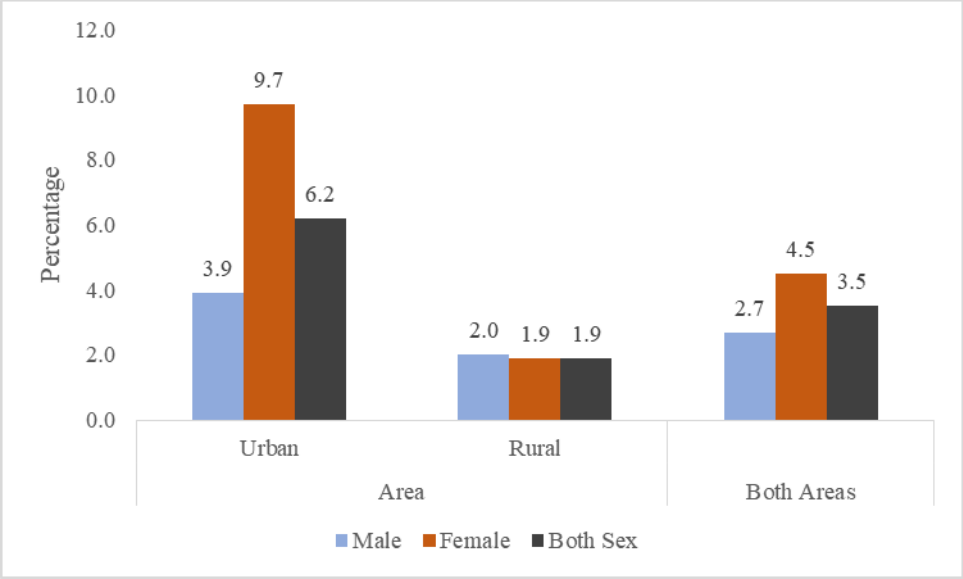

Figure 4.1 Unemployment Rate by Sex and Area, 2023

In urban areas, the unemployment rate is 6.2%, which is three times higher than the rate in rural areas (1.9%). Notably, urban females experience a comparatively higher unemployment rate of 9.7% compared to 3.9% for their rural counterparts. This pattern is illustrated in Figure 4.1, highlighting higher unemployment rates among urban females than their rural counterparts.

Divergent unemployment rates are observed among *Dzongkhags/Thromdes*. Thimphu Thromde has the highest unemployment rate at 8.1% followed by Thimphu (5.2%), and Samdrup Jongkhar (4.9%). Conversely, Wangdue Phodrang (0.3%) has the lowest unemployment rate, followed by Dagana (0.4%) and Gasa Dzongkhags, each with an unemployment rate of 0.5%. In most Dzongkhags, the female unemployment rate surpasses that of males, except in Dagana, Samdrup Jongkhar, Sarpang, Thimphu, and Tsirang (Table 4.1).

Table 4.1 Unemployment Rate by Sex and *Dzongkhag/Thromde*, 2023

Dzongkhags/Thromde	Sex		Both Sex
	Male	**Female**	
Bumthang	0.7	2.0	1.2
Chhukha	2.6	3.0	2.7
Phuentshogling Thromde	4.0	5.4	4.6
Dagana	0.7	0.0	0.4
Gasa	0.0	1.2	0.5
Haa	0.0	1.4	0.6
Lhuentse	0.0	6.9	3.0
Monggar	1.9	4.6	3.1
Paro	0.5	6.6	3.0
Pema Gatshel	2.1	3.2	2.6
Punakha	1.7	4.6	3.1
Samdrup Jongkhar	7.5	0.0	4.9
Samdrup Jongkhar Thromde	3.6	10.2	5.9
Samtse	0.4	0.8	0.6
Sarpang	5.5	3.1	4.6
Gelegphu Thromde	4.2	9.0	6.5
Thimphu	6.7	3.1	5.2
Thimphu Thromde	5.2	12.6	8.1
Trashigang	0.0	1.6	0.8
Trashi Yangtse	0.5	3.3	1.7
Trongsa	0.0	2.7	0.8
Tsirang	7.4	1.1	4.5
Wangdue Phodrang	0.0	0.8	0.3
Zhemgang	1.9	3.4	2.5
Bhutan	**2.7**	**4.5**	**3.5**

4.2.1 Unemployment-to-Population Ratio

The unemployment-to-population ratio is a metric defined as the proportion of unemployed persons relative to the total working-age population. Unlike the unemployment rate, which considers only the labor force, this ratio encompasses the entire working-age population, providing insight into the question: "What proportion of the working-age population is unemployed?"

Among the total working-age population, 3.5% are unemployed, resulting in an unemployment-to-population ratio of 2.2% (Figure 4.2). This ratio is further broken down into 2.0% for males and 2.6% for females. Notably, the urban area exhibits a higher ratio of 3.9%, which is three times the ratio observed in rural areas at 1.3%.

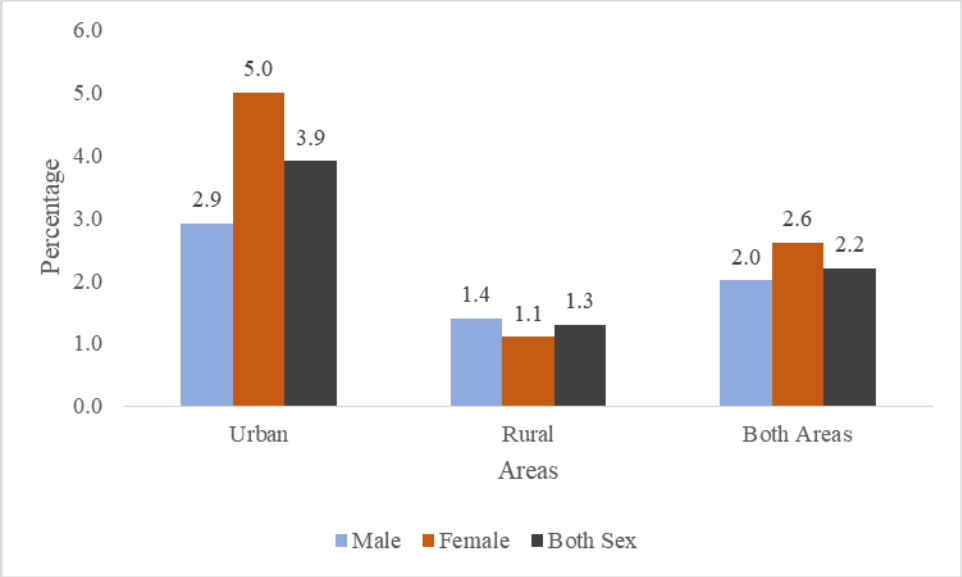

Figure 4. 2 Unemployment-to-Population Ratio by Sex and Area, 2023

Across *Dzongkhags/Thromde*, Thimphu Thromde has the highest unemployment-to-population ratio at 5.2%, trailed by Gelegphu Thromde (4.2%), Samdrup Jongkhar Thromde (3.8%), and Thimphu (3.3%). In contrast, Wangdue Phodrang Dzongkhag has the lowest unemployment-to-population ratio at 0.2% (Table 4.2)

Table 4.2 Unemployed to Population Ratio by Sex and *Dzongkhag/Thromde*, 2023

Dzongkhag/Thromde	Sex		Both Sex
	Male	Female	
Bumthang	0.5	1.1	0.8
Chhukha	1.9	1.6	1.8
Phuentshogling Thromde	3.1	2.8	2.9
Dagana	0.6	0.0	0.3
Gasa	0.0	0.8	0.4
Haa	0.0	0.9	0.4
Lhuentse	0.0	2.7	1.3
Monggar	1.2	2.4	1.9
Paro	0.4	3.3	1.8
Pema Gatshel	1.6	2.0	1.8
Punakha	1.3	3.2	2.2
Samdrup Jongkhar	4.7	0.0	2.5
Samdrup Jongkhar Thromde	3.0	4.6	3.8
Samtse	0.3	0.5	0.4
Sarpang	4.1	1.7	3.0
Gelegphu Thromde	3.0	5.3	4.2
Thimphu	4.5	1.8	3.3
Thimphu Thromde	4.0	6.5	5.2
Trashigang	0.0	1.1	0.5
Trashi Yangtse	0.4	2.0	1.2
Trongsa	0.0	1.5	0.5
Tsirang	5.5	0.7	3.2
Wangdue Phodrang	0.0	0.5	0.2
Zhemgang	1.1	1.6	1.4
Bhutan	**2.0**	**2.6**	**2.2**

4.2.2 Unemployment Rate and Educational Attainment

The survey findings reveal varying unemployment rates among individuals with different educational backgrounds. The highest unemployment rate is observed among those with a Bachelor's Degree (12.1%), followed by Certificate/Diploma holders (11.3%), and individuals with Higher Secondary education (8.9%). Those with education levels ranging from primary to higher secondary (including primary, lower secondary, middle secondary, and higher secondary) experience a lower unemployment rate of 4.5%, while individuals with education beyond the secondary level (certificate/diploma, bachelor's degree, and master's degree and above) has a higher rate of 9.8%. Notably, the unemployment rate for individuals with no formal education (none, religious professionals, and NFE) is low at 0.5%.

When examining the data by gender, the female unemployment rate surpasses that of males across all categories of educational levels. Specifically, females with a Certificate/Diploma face an unemployment rate of 23.6%, while males experience a rate of 6.0%. For those with a Bachelor's Degree, the unemployment rate is 9.7% for males and 16.5% for females. Similarly, females with Higher Secondary education have an unemployment rate of 10.9%, compared to 7.3% for males (Table 4.3)

Table 4.3 Unemployment Rate by Level of Education and Sex, 2023

Level of education	Male	Female	Both Sex
	Rate (%)	Rate (%)	Rate (%)
None	0.3	0.6	0.5
Primary	0.5	2.1	1.0
Lower Secondary	1.9	2.5	2.1
Middle Secondary	2.5	6.4	4.1
Higher Secondary	7.3	10.9	8.9
Certificate/Diploma	6.0	23.6	11.3
Bachelor's Degree	9.7	16.5	12.1
Master's Degree and Above	0.0	0.0	0.0
Monastic Education	0.3	0.0	0.3
Non-Formal Education	0.9	0.4	0.6
Total	**2.7**	**4.5**	**3.5**

Figures may not add up to the totals because of rounding

4.3 YOUTH UNEMPLOYMENT RATE

The youth demographic holds significant potential for influencing the overall socio-economic development of the country. When this human capital remains untapped and overlooked, it can result in an escalating social burden for the nation. While the government has consistently prioritized investment in employment creation, the active involvement and investments from the private sector are equally crucial in addressing youth unemployment issues.

The youth unemployment rate, defined as the percentage of unemployed individuals in the age group 15-24 years relative to the labor force (also known as the economically active population) in the same age group, is estimated at 15.9% (CI 12.47-20.20) in 2023. Notably, the youth unemployment rate for males (13.4%) is lower than that for females (18.3%). Additionally, variations exist in the youth unemployment rate between males and females in both urban and rural areas. Youth unemployment emerges as predominantly an urban phenomenon, with a rate of 23.9%, which is more than half of the rate observed in rural areas 9.4%.

Table 4.4 Youth Unemployment Rate by Sex, Area, and Age Group, 2023

	Urban			Rural			Both Areas		
Age Group	Male	Female	Total	Male	Female	Total	Male	Female	Bhutan
15-24	19.3	27.6	23.9	9.5	9.2	9.4	13.4	18.3	15.9
25-34	3.4	7.3	5.0	3.2	2.8	3.0	3.3	4.8	3.9
35-44	1.8	4.4	2.7	0.4	1.0	0.7	1.0	2.0	1.4
45-54	0.0	2.2	0.7	0.4	0.0	0.2	0.2	0.5	0.4
55-64	1.8	0.0	1.3	0.5	0.0	0.3	0.8	0.0	0.5
65+	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
All Ages	**3.9**	**9.7**	**6.2**	**2.0**	**1.9**	**1.9**	**2.7**	**4.5**	**3.5**

4.3.1 Share of Youth Unemployed to Total Unemployment

The share of unemployed youth to total unemployment expresses the number of youth unemployed as a proportion of all unemployed persons.

The share of youth unemployed in total unemployment stands at 50.6%, indicating that for every 100 unemployed persons, approximately 51 are youth. This share is further broken down by gender, with males contributing a share of 47.0%, while females account for 53.5% (Figure 4.3)

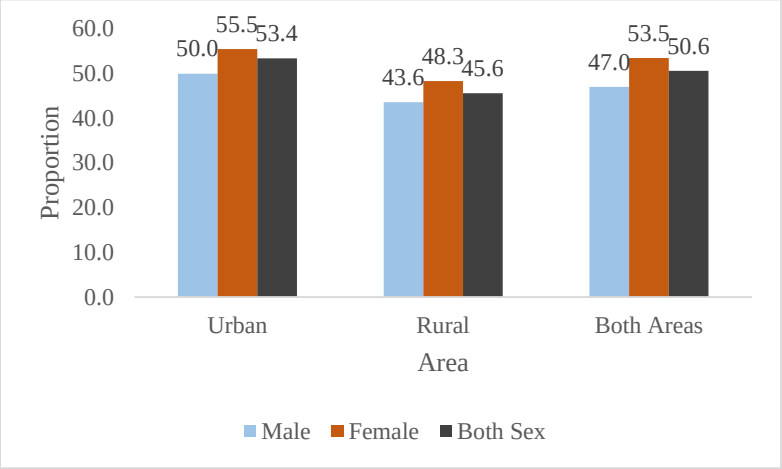

Figure 4. 3 Proportion of Youth Unemployed to the Total Unemployment, 2023

4.3.2 Youth Unemployment-to-Population Ratio[2]

The youth unemployment-to-population ratio is defined as the number of unemployed youth expressed as a proportion of the working-age population within the same age group. Distinguishing itself from the youth unemployment rate, this ratio considers the entire youth population, encompassing both those in the labor force (employed and unemployed) and those who are not.

In the context of 2023, the youth unemployment-to-population ratio is measured at 5.0%. Notably, there exists a slight disparity between the proportion of young males (4.2%) and females (5.7%) who are unemployed (Figure 4.4). This ratio provides an alternative perspective, addressing the question: "What proportion of the youth working-age population is unemployed?"

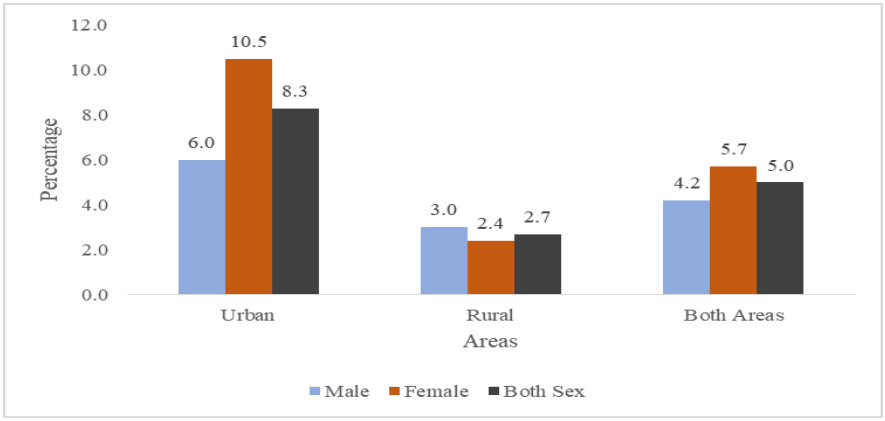

Figure 4.4 Youth Unemployment-to-Population Ratio by Area and Sex, 2023

[2] Youth (15-24 years) unemployed expressed per 100 youth population

ANNEXURE I: INDICATORS, DEFINITION, NUMERATOR AND DENOMINATOR

LFS indicators: Definition, Numerators and Denominator

Sl No	Indicators	Definition	Numerator	Denominator
1	Working-age Population	Persons aged 15 years and above		
2	Economically Active Population (labour force)	Working-age population who were/are employed or unemployed during the reference period of the survey are referred to as Economically active population or Labour Force.		
3	Economically Inactive Population (out of labour force)	Working-age population who are/were neither employed nor unemployed during the reference period		
4	Labour Force Participation Rate (LFPR)	LFPR is defined as proportion of economically active persons (labour force) to the working age population	Economically active/labour force	Working-age population
5	Economically Inactivity Rate	It is defined as proportion of economically inactive persons (out of labour force) to the working-age population	Economically inactive population	Working-age population
6	Employment Rate	It is defined as proportion of employed persons to the economically active population	Employed persons	Economically active population
7	Employment-to-Population Ratio	It is defined as the proportion of employed persons to the working-age population	Employed persons	Working-age population
8	Unemployment Rate	Unemployment rate is defined as the proportion of unemployed persons to the economically active population	Unemployed persons	Economically active Population
9	Unemployment-to-Population Ratio	It is defined as the proportion of unemployed persons to the working-age population	Unemployed persons	Working-age population
10	Youth Unemployment Rate	Youth unemployment rate is defined as the percentage of unemployed persons in the age group 15-24 years to the economically active population in the same age group	Unemployed persons (aged 15-24 years)	Economically active youth population
11	Share of Youth Unemployment	It is expressed as percentage of youth unemployed persons to all unemployed persons	Youth Unemployed persons	Total Unemployed persons

ANNEXURE II: REABILITY ESTIMATES

Statistics based on the quarterly labour force survey data are subject to both sampling and non - sampling errors.

When a sample rather than the entire population is surveyed, there is a chance that the sample estimates may differ from the 'true' population values they represent.

The exact differences or sampling error, varies depending on the particular sample selected, and this variability is measured by the standard error of the estimate. There is about a 95 percent chance, or level of confidence, that an estimate based on a sample will differ by no more than 1.96 standard errors from the 'true' population value, because of sampling error. Analyses relating to the Labour Force Survey are generally conducted at the 95 percent level of confidence. For example, the confidence interval for the quarterly unemployment rate is calculated as follows:

When the estimated unemployment rate is 3.5 and standard error of unemployment rate is 0.35 then at 95% confidence interval, the estimated value (of the unemployment rate) ± (standard error) * (1.96)

3.5 ± (0.35) * (1.96)

(3.5 ± 0.686)

This means, the 95 percent confidence interval on the quarterly unemployment rate could range from (2.8 to 4.2). This implies that there is about 95 percent chance that the 'true' unemployment rate lies within this interval. This range includes all the values range from 2.8 to 4.2.

Therefore, for the quarterly labour force report, a separate table is given including approximate standard errors for some selected indicators, so that users could understand this statistical scenario clearly.

Indicator	Rate (%)	Std. Error	95% Confidence Interval	
			Lower Limit	Upper Limit
Labour Force participation Rate	65	0.88	63.2	66.7
Inactivity Rate	35.9	0.88	33.3	36.8
Employment Rate	96.5	0.35	95.78	97.18
Unemployment Rate	3.5	0.35	2.82	4.22
Youth Unemployment Rate	15.9	1.95	12.47	20.2