



# Labour Force Survey Trends







## Labour Force Survey Trends

May 2023 (Q2)

August

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#### Foreword

Labour statistics play an essential role in the efforts of the country to achieve decent work for all. These statistics are needed for the development of policies towards this goal and for assessing progress towards decent work.

The government of Rwanda needs updated information for monitoring progress on programmes and policies as stipulated in the first National Strategy for Transformation (NST1), Sustainable Development Goals (SDGs) as well as vision 2050. To monitor progress towards these goals and targets, relevant, reliable, coherent, timely and accessible labour statistics must be produced.

The National Institute of Statistics of Rwanda introduced the labour force survey (LFS) program to provide key stakeholders, Ministry of Public Service and Labour and Ministry of Finance and Economic Planning, the Ministry of Education, International Labour Organization, and other users, with needed labour statistics.

The ultimate goal of the Labour Force survey is to provide data on the structure and trends of labour force, employment, and unemployment as well as other related labour market statistics for the implementation and evaluation of economic and social policies related to employment creation, income generation, skills development, and related decent work policies.

The Labour Force survey programme begun with a pilot survey conducted in February 2016. The first round of the survey was conducted in August 2016, and continued on biannual basis until August 2018. Since the year 2019, the survey was re-designed to provide estimates of the labour market aggregates on quarterly basis. The present report is for the second quarter (Q2) of the year 2023 whose data collection was conducted in May 2023.

NISR congratulates all those who contributed in one way or the other in this exercise. In particular, NISR expresses its gratitude to the survey coordinators, supervisors, Analysts, team leaders, interviewers, drivers, and respondents for their valuable time that made this survey possible.

The National Institute of Statistics of Rwanda invite policy makers, program managers, researchers, and all users to play an important role in using the valuable data showcased in the LFS rounds to contribute to enhancing Rwandans' Economic

development.

MURANGWA Yusuf

Director General of NISR

#### **Executive summary**

The Quarterly Labour Force Survey (QLFS) is a household-based sample survey conducted by the National Institute of Statistics of Rwanda (NISR). It collects data on the labour market activities of individuals aged 14 years and older who live in private households in Rwanda though only persons aged 16 years and above are covered for reporting. In this report, the survey results are mainly compared for May 2022, August 2022, November 2022, February 2023, and May 2023. However, some tables and graphs are presented with more observed data points of the labour force surveys.

In May 2023 (Q2), the working age population (16 years and above) was around 8 million of whom 3,984,502 were employed; 805,819 unemployed and 3,257,600 out of labour force. The sum of the employed and unemployed population gives the population in labour force equivalent to 4,790,321 persons. The proportion of the working-age population who are in labour force stood at 59.5 percent in May 2023(Q2) and has increased by 5.2 percent as compared to May 2022(Q2) and by 1.9 percent as compared to the previous quarter (February 2023).

The proportion of the working age population outside the labour force was 40.5 percent in May 2023 as compared to 45.7 percent in May 2022(Q2), and to 42.4 percent in February 2023(Q1).

The share of subsistence agriculture in population outside labour force was 44.0 percent in May 2023(Q2). It decreased by 1.2 percentage points as compared to 45.2 percent observed in February 2023(Q1) and decreased by 0.9 percentage points as compared to 44.9 percent observed in May 2022(Q2).

The sum of employed population (3,984,502 persons) and subsistence agricultural without employment (1,655,416) gives the estimated number of workforce<sup>1</sup> equivalent to 5,639,918 persons in May 2023(Q2). Therefore, in May 2023(Q2), the proportion of working-age population engaged in employment or subsistence agriculture was 70.1 percent as compared to 72.2 percent observed in February 2023(Q2) and 62.5 percent registered in May 2022(Q2).

In May 2023(Q2), the share of agricultural workers in the total workforce (employed in agriculture + involved in subsistence agriculture) was 60.7 percentage as compared to 64.8 percent observed in February 2023(Q1) and to 62.4 percent observed in May 2022(Q2).

The labour force participation rate stood at 59.5 percent in May 2023(Q2) compared to 54.3 percent in May 2022(Q2), indicating an increase of 5.5 percentage points. The comparison with the previous quarter indicated an increase of 1.9 percentage point from 57.6 percent recorded in February 2023

The employment-to-population ratio increased to 49.5 percent in May 2023 (Q2) as compared to 41.8 percent observed in May 2022 and to 47.7 percent observed in

<sup>&</sup>lt;sup>1</sup> This number exclude own-use production in unpaid services, unpaid trainees, and volunteer workers.

February 2023 (Q1). The total employment in February 2023 (4.03 million) increased by 21.6 percent from 3.3 million in May 2022. In the same way, it increased by 6.0 percentage points in comparison with the previous quarter.

In May 2023(Q2), the employment in agriculture sector increased by around 299 thousand jobs as compared to the situation in the same quarter one year earlier (May 2023) but declined by around 9 thousand jobs as compared to February 2023(Q1). In the same way, the industry sector gained 88 thousand more jobs while service sector gained 280 thousand additional jobs in May 2023 as compared to May 2022. In industry sector, the increase in employment from May 2022 to May 2023 was mainly influenced by construction (57 thousand jobs), and Manufacturing (41 thousand jobs). In services sector, the important gain of employment was observed in Wholesale and retail trade (146 thousand jobs), transport and storage (42 thousand jobs), and Accommodation and food services (48 thousand jobs)

The results of LFS in May 2023 reveal that the share of employees and paid apprentices in May 2023(Q2) was 68.9 percent while for Own account workers this proportion was 27.5 percent and 0.8 percent for Employers. The comparison of May 2023(Q2) with February 2023(Q1) shows that there was a decrease in both the share of employees and employers by 1.1 and 0.9 percentage points respectively while there was an increase in other status of employment.

In May 2023 (Q2), the unemployment rate decreased to 16.8 percent as compared to 23.5 percent and 17.3 observed in May 2022 and February 2023 respectively. It remained relatively higher among females (20.1 percent) as compared to males (13.9 percent); and slightly higher in Rural areas (17.1 percent) than in urban areas (16.3 percent). The unemployment rate was also relatively higher among youth population aged 16 years to 30 years than among adults (21.5 percent and 13.7 percent respectively).

The labour underutilization rate which accounts for unemployment, time-related underemployment and potential labour force decreased to 53.2 percent in May 2023 as compared to 60 percent observed in May 2022(Q2). Compared with the previous quarter the underutilisation rate slightly decreased by 1percentage point from 54.2 percent. The labour underutilization rate was remarkably higher among females (58.8 percent) as compared to males (47.4 percent) in May 2023.

#### Rwanda Labour force survey, May 2023(Q2) Summary labour force indicators

Working age population 16 years old and over 3,984,502 persons								
Outside the labour force (Not employed nor unemployed) 3,257,600 persons Out of LF rate: 40.5 %			Labour force (The sum of employed and unemployed)  4,790,321 persons  Labour force participation rate  59.5 %					
	clusivel etudents	Other outside LF (Elderly, disable, discourage d job seekers)	Employed  (All not employed (All not employed but seeking and available work for pay or profit)  3,984,502 persons Employment to population ratio: 49.5 %  Agriculture excluding subsistence  Unemployed Othe but engaged unemployed but engaged of the content of th				oyed but vailable to or profit) ons ent rate:	
39.6 % 24.0 % 36.4 %  Potential labour other out of labour force 1,245,866 2,011,734		39.7 % Time related underemployed 1,157,957 underutilization (3,2	2,826	<u> </u>	45.6 %	54.4%		

Unemployed **(805,819)** + Time-related underemployed **(1,157,957)** + Potential labour force **(1,245,866)**Composite measure of labour underutilization **(53.2 %)** 

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#### **Chapter 1: Introduction**

The Rwanda Labour Force Survey (LFS) started in 2016 with an annual sample spread into two rounds to provide bi-annual estimates of main labour market indicators at National level. From February 2019, the sample was spread into four rounds to provide estimates of labour market indicators at national level on a quarterly basis.

In 2020, there was a change in the methodology and techniques of data production not only in Rwanda but also all over the World due to the covid-19 pandemic. The pandemic was identified for the first time in Rwanda in mid-March 2020 and different preventive measures including lockdowns were taken. Despite the pandemic, the labour force Survey continued to be conducted on a quarterly basis with some adjustments to cope with covid-19 prevention measures. It is in this context that NISR introduced the telephone interviews in May 2020(Q2) and was used in all rounds of LFS except for August 2020 till November 2022. Since February 2023 a new sampling design using 2-2-2 rotational design to improve the precision in quarter-to-quarter comparison was introduced and the face-to-face data collection method was resumed. The current findings are for the first quarter of LFS 2023 that was conducted in May 2023.

The main objective of the survey is to provide data on the structure and trends of labour force, employment, and unemployment as well as other related labour market statistics for the implementation and evaluation of economic and social policies related to employment creation, income generation, skills development, and related decent work policies.

The current quarterly Labour Force survey is designed according to a two-stage stratified design with a rotation scheme. At the first stage of sampling, a stratified sample of 288 census enumeration areas, called primary sampling units (PSUs) are drawn from the 2022 census sampling frame with probabilities proportional to size measured in terms of number of households according to the latest census of population. The strata are composed of the 30 administrative districts of the country, sub-divided into urban and rural areas. At the second stage of sampling, 16 households were selected from each of sampled PSUs with equal probabilities, after a fresh listing of the households in the new sample PSUs. All household members in the sample are then selected for survey interview. At the end of the data collection, the response rate was evaluated to 96.8 percent, which is 3.5 percentage points higher than the previous quarter (93.3 percent).

The focus of the present report is the analysis of trends of employment and labour underutilization including unemployment at the national level by selected demographic and socioeconomic characteristics such as sex, age group, educational attainment, etc. In the present report, the results of May 2023(Q2) labour force survey are mainly compared with May 2022(Q2) and February 2023(Q1). However, in some sections, the tables or figures are presented with the additional time series including results of all quarters of the year from 2019 to 2023. This comparison allows tracking the change in labour market indicators over time and enabling to compare the labour market performance during the pre-and post-covid-19 pandemic period in Rwanda.

The resulting estimates of the main labour force indicators at the national level have the standard errors of about 0.8 percent.

The survey results analysed in this report are presented into seven chapters including this introduction. The other chapters cover the following: Trend of main indicators, labour force participation, employment, unemployment and labour underutilization, population outside labour force and work in agriculture.

#### **Chapter 2: Trends of main indicators**

The present chapter provides information on the trends of the main labour force indicators since February 2019. The different Labour Force survey rounds results are compared to have the time series of the main indicators such as Working age population, Labour force participation rate, Employed to population ratio, unemployment rate, and labour underutilisation rate.

#### 2.1 Working age population.

The labour force constituted 59.5 percent of the working age population in May 2023(Q2) (4,790,320 persons). It increased by 5.2 percent as compared to May 2022(Q2) and increased by 1.9 percent as compared to the previous quarter February 2023(Q1).

The LFS results indicate that the population outside the labour force was 3,257,600 in May 2023(Q2). It decreased by 5.2 percent as compared to the same quarter one year back (May 2022) and decreased by 1.9 percent compared to the previous quarter (February 2023). The population in working age who were outside the labour force and involved in subsistence agriculture (Food producers) was estimated at 39.6 percent.

Students who are not involved in any economic activity make another important component of the population outside the labour force. Their number was estimated at 783,311corresponding to 24.0 percent of the population outside the labour force. The proportion of students outside the labour force and not involved in any economic activity decreased by 1.5 percentage points from 25.5 percent in February 2023(Q1).

The remainder of working age population outside the labour force consists of elderly persons, disables, discouraged jobs seekers, etc. Their total number was estimated at 1,185,932 in May 2023(Q2). Its share decreased up to 36.4 percentage point from 39.9 percentage point as compared to May 2022(Q2) and by 1.3 percent as compared to February2023 (Q1).

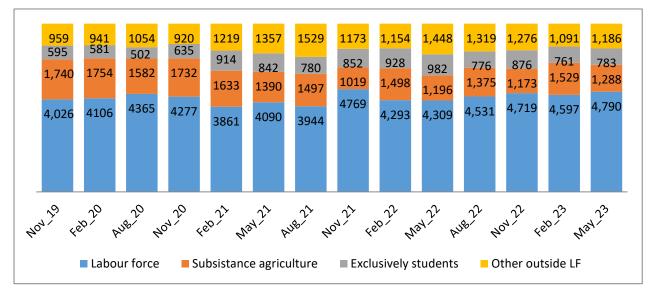


Figure 2. 1: Trend of the main component of the working age population (, 000s)

#### 2.2 Labour force participation rate, employment to population ratio and unemployment rate

Figure 2.2 illustrates the trends of some key labour market indicators. In May 2023 (Q2), the unemployment rate decreased to 16.8 percent from 17.2 percent estimated in the previous quarter. In comparison with the situation one year earlier (May2022); the current unemployment rate with a higher decrease of 6.2 percentage points.

The employment-to-population ratio (EPR), i.e., the percentage of the working age population who is employed, is an indicator of the performance of the national economy in providing employment to its growing population. The analysis of employment trends shows that in May 2023(Q2), the estimated number of employed population was 3,984,502 persons while it was 3,803,942 persons in February 2023(Q1), indicating an increase of 4.5 percent.

The employment-to-population ratio increased to 49.5 percent in May 2023 (Q2) as compared to 47.7 percent in February 2023 (Q1). The recorded employment to population ratio in May 2023 (O2) is higher by 7.7 percentage points as compared to the one registered one-year earlier (May 2022).

According to the results in Figure 2.2, the labour force participation rate increased to 59.5 percent in May 2023(Q2) as compared to 57.6 percent in February 2023 (Q1). In comparison with the situation of the same quarter one year earlier (May 2022), the labour force participation rate increased by 5.2 percentage points.

61 54.5 54.3 <sup>56.6</sup> <sup>58.7</sup> 57.6 <sup>59.5</sup> 55.0 55.6 55.2 <sup>58.2</sup> 56.6 Percentage 46.5 45.5 41.8 46.4 46.5 43.9 43.0 42.0 40.8 41.0 23.8 23.0 22.1 18.1 16.0 17.2 16.8 14.3 14.5 15.0 16.0 15.4 19.4 LFS rounds -LFPR

Figure 2. 2: Trend of the main labour force indicators

UR=Unemployment rate, EPR=Employment-to-population Ratio, LFPR=Labour Force Participation Rate

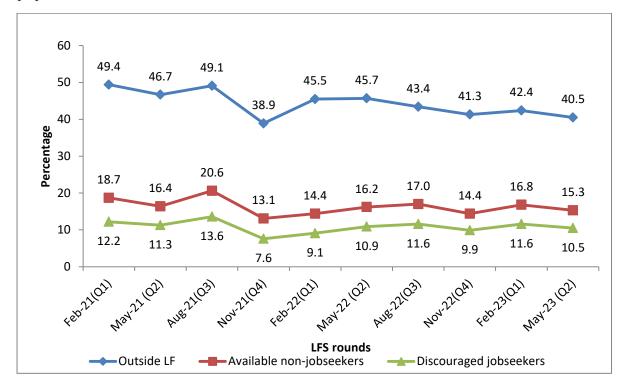
#### 2.3 Population outside labour force

Figure 2.3 presents the trend of the proportion of the working age population who was outside the labour force according to different categories. The results show that the proportion of the working age population outside the labour force decreased to 40.5 percent in May 2023 (Q2) as compared to 42.4 percent observed in February 2023(Q1). In the same vein, the comparison of the current quarter with the same quarter one year earlier (May 2022) shows a decrease of 5.2 percentage points.

Among the components of population out of labour force; Available non-job seekers constitute a substantial category. In Rwanda, most of the population in this category are mainly subsistence farmers. The proportion of working age population falling in this category in May 2023(Q2) decreased by 0.9 percentage points compared to the estimate of the same quarter one year back (May 2022) and by 1.5 percentage points as compared to the previous quarter (February 2023).

An important sub-category of the available non-job seekers is the discouraged jobseekers, i.e., those outside the labour force who did not "seek employment" for labour market-related reasons (past failure, to find a suitable job, lack of experience, qualifications or jobs matching the person's skills, lack of jobs in the area, considered too young or too old by prospective employers). The proportion of discouraged jobseekers among the working age population decreased to 10.5 percent in May 2023(Q2) from 11.6 percent in February 2023(Q1). In comparison to the same quarter one year back (May2022), it slightly decreased by 0.4 percentage points.

Figure 2. 1: Trend of the ratio of population outside labour force to working age population.



#### **Chapter 3: Labour Force Participation**

#### 3.1 Labour force participation among males and females

The labour force participation rate, which is the ratio of the labour force to the working age population expressed in percentage terms, stood at 59.5 percent in May 2023(Q2) compared to 54.3 percent in May 2022(Q2), indicating an increase of 5.2 percentage points. The observed increase during this period is higher among males (7.6 percentage points) than among females (6.6 percentage points). The results show the increasing rate of labour force participation rate among both male and female population as compared to previous round and the increasing rate as compared to the same quarter one year earlier (May 2022).

Generally, the labour force participation rate is higher among male population than the female population over time. The gender gap in labour force participation rate was around 14.2 percentage points in May 2023(Q2) indicating a decrease of 1.7 percentage points as compared to the situation of the same quarter one year back (15.9 percent).

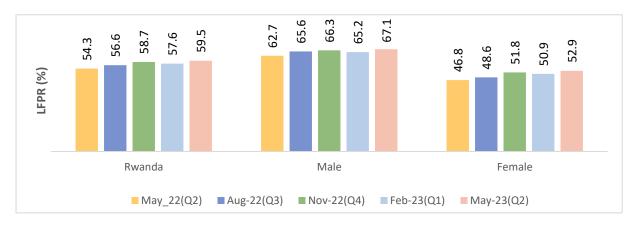


Figure 3. 1: Labour force participation rate by sex

Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS)

#### 3.2 Labour force participation and education

The analysis of the labour force participation rate by educational attainment shows that it was higher among those with relatively higher levels of education compared to those with lower levels of education over time. A comparison of May 2022(Q2) with May 2023(Q2) shows an increase of labour force participation rate in all levels of education except among the university graduates where a slight decrease of 1.4 percentage points was observed. The highest increase was observed among those who completed any level of education and lower secondary (6.2 percentage points each), followed by primary level (6.0 percentage points). The lowest increase was observed among upper secondary (1.6 percentage points).

The comparison of the results of the current quarter with the previous quarter shows that there was a significant labour force participation rate increase among lower secondary level of education (3.9 percentage points) and those with no completed level of education (2.1 percentage points).

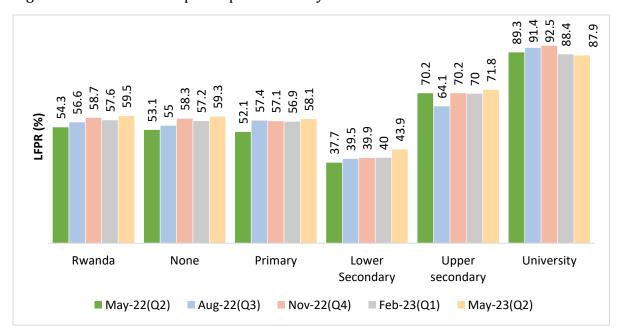


Figure 3. 2: Labour force participation rate by level of education

Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS)

#### 3.3 Labour force participation by age group

In May 2023(Q2), the labour force participation rate among youth aged 16 to 30 years (54.7 percent) increased by 6.0 percentage points compared to February 2022(Q2). For the age group 31-54 years old, the LFPR was 75.0 percent in May 2023, and it has an increase of 4.1 percentage points as compared to the same quarter one year back (February 2022). For the age group 55 years old and above, the labour force participation rate in May2023 (Q2) increased by 1.9 percentage points as compared to February 2023(Q1).

Generally, the labour force participation rate is higher in the age group 31-54 years compared to the remaining age groups.

75.0 74.7 71.4 56.6 54.0 53.9 52.9 54.7 LFPR (%) Rwanda 16-30\_yrs 31-54\_yrs 55+\_yrs ■ Nov-22(Q4) ■ Feb-23(Q1) May-22(Q2) Aug-22(Q3) May-23(Q2)

Figure 3. 3: Labour force participation rate by age group

#### 3.4 Labour force participation and area of residence

Labour force participation rate by area of residence (urban and rural) was revealed to be high in urban areas compared to rural areas. This may be attributed to the diversity of job opportunities in urban areas as compared to rural areas where the number of employment opportunities is limited, and most people are involved in subsistence agriculture. The gap between the labour force participation rate in urban and rural areas slightly increased from 11.8 percentage points in May 2022(Q2) to 11.8 percentage points in May 2023(Q2).

The comparison of May 2023 and May 2022 reveals that the labour force participation rate increased by 3.6 percentage points in rural areas and by 4.4 percentage points in urban areas. The comparison of LFS May 2023(Q2) and February 2023(Q1) shows that the labour force participation rate increased by 2.9 percentage in urban areas and by 1.5 percentage points in rural areas.

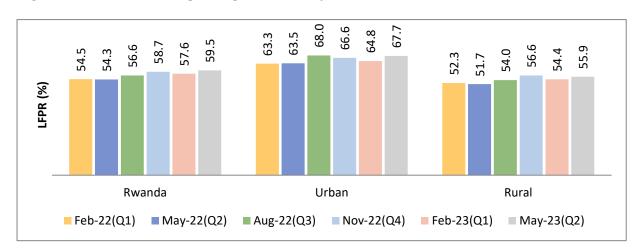


Figure 3. 4: Labour force participation rate by area of residence

#### **Chapter 4: Employment**

According to the recent international standards, persons of working age are classified as employed if, during a short reference period of 7 days or one week, (I) they did some work (even for just one hour) for profit or pay, in cash or in kind; or (ii) they were attached to a job or had an enterprise from which they were 'temporarily' absent during this period.

#### 4.1 Employment to population ratio (EPR)

Aggregate employment generally increases with growing population. Therefore, the EPR is a measure of the extent to which the economy is providing income-generating jobs for persons who are in working age. It thus gives an indication of the demand for labour in the economy, in terms of the quantity of workers. An increase in the employment-to population ratio is often regarded as an indicator of economic acceleration and an increase in total employment as an indicator of economic stability. In May 2023 (Q2), the Employment-to-population ratio was 49.5 percent. It increased as compared to February 2023 (Q1) at the national level as well as in Urban and rural areas. The results show that between February 2023 (Q1) and May 2023(Q2), the employment-to-population ratio increased by 1.8 percentage points at national level, by 2.2 percentage points in urban areas and by 1.7 percentage points in rural areas.

The comparison of the results of the same quarter one year back (May 2022(Q2)), shows that the employment to population ratio increased by 7.7 percentage points at the national level and in both urban and rural areas by 7.1 percentage points and 6.7 percentage points respectively.

It is observed that the employment-to-population ratio is generally higher in urban areas as compared to rural areas in all rounds of the labour force survey. The gap between the employment-to-population ratio between urban and rural areas remained significant in May 2023 (Q2) (10.4 percentage points) and it slightly increased by 0.5 percentage points as compared by February 2023 (Q1).

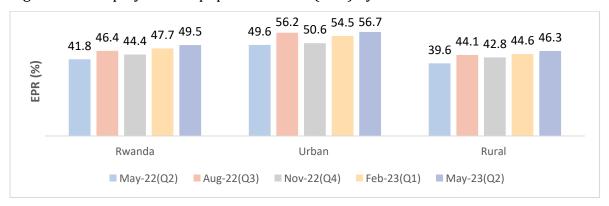


Figure 4. 1: Employment to population ratio (EPR) by area of residence.

Figure 4.2 shows the trend in the employment-to-population ratio for the male and female separately. It is informative to note that there is a high gap between the employment-to-population ratio of males and females over time. In May 2023 (Q2) the employment-to-population ratio increased among both males (2.6 percentage points) and females (1.2 percentage points) as compared to February 2023(Q1). The comparison of May 2023 with same quarter one year back shows that the employment to population ratio also increased among both males (7.6 percentage points) and females (7.9 percentage points). The gender gap in employment to population ratio in May 2023(Q2), remained significant (15.4 percentage points) even though it slightly decreased compared to the situation in the same quarter one year earlier (15.7 percentage points)

Rwanda Male Female

May-22(Q2) Aug-22(Q3) Nov-22(Q4) Feb-23(Q1) May-23(Q2)

Figure 4. 2: Employment to population ratio by sex

Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS)

#### 4.2 Status in employment

The results in Table 4.1 below reveal that, in May 2023(Q2) the number of employed populations increased by around 4.7 percent as compared to February 2023(Q1) and by around 20.1 percent as compared to May 2022(Q2). It is observed that the category of employees and paid apprentices recorded the highest share of employment across all rounds of the labour force survey followed by own-account workers, contributing family workers, employers, and member of cooperatives. In May 2023 (Q2), the number of employees and paid apprentices increased by 3.1 percentage points as compared to February 2023(Q1). The number of Member of cooperative, Own account workers and Contributing family worker also increased by 42.2 percentage points, 12.5 percentage points, and 6.2 percentage points respectively. In May 2023 (Q2), the number of employees and paid apprentices increased by 15.3 percent as compared to May 2022(Q2), while the number of employers decreased by 28.8 percent.

Table 4. 1: Distribution of employed population by status in employment

Status in employment	22-May	22-Aug	22-Nov	23-Feb	23-May	% Change May22- May23
Total	3,317,006	3,711,254	3,571,236	3,803,942	3,984,502	20.1%
Employee and paid apprentices	2,382,596	2,630,327	2,571,462	2,663,932	2746632	15.3%
Employer (with regular employees)	43,979	38,754	30,837	63,583	31,325	-28.8%
Own account worker (without regular employees	812,760	879,256	870,824	965,238	1085947	33.6%
Member of cooperative	591	5,559	5,023	7,125	10,131	14.2%
Contributing family worker	77,080	157,357	93,090	104,063	110,467	43.3%

Figure 4.3 shows the distribution of employed population according to the status of employment. It reveals that the share of employees and paid apprentices in May 2023(Q2) was 69 percent while for Own account workers, it was 27.2 percent and 0.8 percent for Employers. The comparison of May 2023(Q2) with February 2023(Q1) reveals that the share of employees and employer decreased by around 1 percentage points. The share of own account workers increased by 1.8 percentage points, and it remained stables among member of cooperatives and Contributing family workers. Compared with May 2022(Q2), the share of employees decreased by 2.8 percentage points and 0.5 percentage points in employers while it increased in other status of employment except in contributing family workers where it remained stable.

Figure 4. 3: Distribution of employed population by status in employment



#### 4.3 Main occupation

The table below presents the number of employed persons by occupation and its change over time. The data covers five quarters, starting from May 2022 and ending in May 2023. The comparison of May 2023 (Q2) with February 2023(Q1) reveals that the Employment in Clerical support workers occupation marked a downturn, with a 9.1% decrease from February 2023 to May 2023. Meanwhile, from May 2022 to May 2023, Clerical workers increased by 6.7 percent.

The number of professionals employed decreased from 242,418 in May 2022 to 215,755 in May 2023 representing 11 percent decrease. However, it has increased by 7 percent from February 2023 to May 2023.

From February 2023 to May 2023, there was a 7.0 percent increase in professional employment. Technicians and Associate Professionals known a notably decline in employment to 27,387 in February 2023, however, there was a rebound, and the employment increased to 31,921 in May 2023, with a notable 16.6 percent increase during February 2023 to May 2023. Employment in Service and Sales Workers has been on the rise, reaching 716,338 in May 2023 and the period between February 2023 and May 2023 marked a 6.1 percent increase of employment in Service and Sales Workers.

The employment in Skilled Agricultural Forestry and Fishing marked an increase of 11.0 percent growth from February 2023 to May 2023. There was a 7.0 percent increase in employment in Craft and Related Trades Workers during the same period, reaching 304,435 employed persons in May 2023. The Employment among Plant and Machine Operators and Assemblers experienced a small increase of 1.7 percent from February 2023 to May 2023, with 107,748 persons employed in May 2023.

The number of individuals employed in elementary occupations increased from 1,993,084 in May 2022 and 2,232,821 in February 2023 to 2,311,310 in May 2023. The growth during the period of February 2023 to May 2023 was 3.5 percent.

Overall, the results indicate a positive trend in employment during the mentioned period, with several occupation groups experiencing growth.

Table 4. 2 Number of employed persons by occupation

						% Ch	ange
Major Occupation Group	22-May	22-Aug	22-Nov	23-Feb	23-May	Feb23- May23	May22- May23
Total	3,317,006	3,711,254	3,571,236	3,803,942	3,984,502	4.7%	20.1%
Managers	27,768	38,243	41,033	30,859	31,368	1.6%	13.%
Professionals	242,418	215,991	249,863	201,663	215,755	7.%	-11%
Technicians and associate professionals	41,997	46,745	35,240	27,387	31,921	16.6%	-24%
Clerical support workers	29,125	37,910	28,383	34,208	31,084	-9.1%	6.7%
Service and sales workers	476,022	468,663	513,042	675,104	716,338	6.1%	50.5%
Skilled agricultural forestry and fishing	153,122	247,882	173,397	211,343	234,544	11%	53.2%
Craft and related trades workers	252,311	371,985	291,008	284,643	304,435	7%	20.7%
Plant and machine operators and assemble	101,160	78,276	103,208	105,915	107,748	1.70%	6.5%
Elementary occupations	1,993,084	2,205,559	2,136,062	2,232,821	2,311,310	3.5%	16.0%

Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS)

The percentage distribution of employed population by occupational categories across selected rounds of the Labour Force Survey as presented in table 4.3 below reveals that some occupation groups experienced slight changes in their proportion of total employment, the overall distribution remained relatively stable from February 2023 to May 2023. The employment in elementary occupations, experienced a relatively higher decline (-0.7 percent) in its share during this period.

The comparison of May 2023 (Q1) with the same quarter in 2022 shows that there has been a substantial increase in the proportion of Service and Sales Workers (+3.6 percent) Elementary and professionals occupations known a decrease of 2.1 percent.

Table 4. 3: Percentage distribution of employed population by major occupation group

Major Occupation Group	22- May	22- Aug	22- Nov	23- Feb	23- May	Change in % Feb 23-	Change in % May 22-
Total employed ('000)	3,317	3,711	3,571	3,803	3,984	May 23	May 23
Total (percent)	100	100	100	100	100	0	0
Managers	8.0	1	1.2	8.0	8.0	0	0
Professionals	7.3	5.8	7	5.3	5.4	0.1	-1.9
Technicians and Associate Professionals	1.3	1.3	1	0.7	0.8	0.1	-0.5
Clerical Support Workers	0.9	1	8.0	0.9	8.0	-0.1	-0.1
Service and Sales Workers	14.4	12.6	14.4	17.7	18	0.2	3.6
Skilled Agricultural, Forestry and Fishery Workers	4.6	6.7	4.9	5.6	5.9	0.3	1.3
Craft and Related Trades Workers	7.6	10	8.2	7.5	7.6	0.2	0
Plant and Machine Operators and Assemblers	3	2.1	2.9	2.8	2.7	-0.1	-0.3
Elementary Occupations	60.1	59.4	59.8	58.7	58	-0.7	-2.1

Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS)

#### 4.4 Main Economic activity

According to the results presented in Table 4.4 below, the bulk of employed population were engaged in Agriculture, forestry, and fishing (44 percent) in May 2023(Q2). Other sectors that employed a substantial number of population were Wholesale and retail trade; repair of motor vehicles and motorcycles (13.4 percent); construction (9.5 percent), Transportation and storage (6.4 percent); Manufacturing (5.5 percent)

Education (4.1 percent), Activities of households as employers (3.9 percent); and Accommodation and food services activities (2.9 percent).

Table 4. 4: Percentage distribution of employed population by branch of economic activity.

ISIC High level	22- May	22-Aug	22-Nov	23- Feb	23- May
Agriculture forestry and fishing	43.8	42.6	45.3	46.3	44.0
Mining and quarrying	1.5	1.6	1.8	1.1	1.1
Manufacturing	5.4	5.7	4.8	5.1	5.5
Electricity gas stream and air condition	0.1	0.2	0.1	0.2	0.2
Water supply, gas, and remediation services	0.3	0.2	0.2	0.1	0.1
Construction	9.7	10.6	9.8	8.1	9.5
Wholesale and retail trade; repair of motor vehicles and motorcycles	11.7	13	10.6	13	13.4
Transportation and storage	6.4	4.8	5.9	5.4	6.4
Accommodation and food services activities	2.1	2.3	2.6	2.9	2.9
Information and communication	0.2	0.3	0.1	0.4	0.2
Financial and insurance activities	0.8	1	0.7	8.0	0.9
Real estate activities	0.1	0.1	0.1	0.2	0.2
Professional, scientific, and technical	0.7	0.7	8.0	0.9	0.5
Administrative and support activities	2.1	1.7	1.9	2.7	1.8
Public administration and defence; compulsory social security	1.8	1.9	1.6	1	1.5
Education	4.3	3.6	5	3.8	4.1
Human health and social work activities	1.5	1.5	1.4	1.3	8.0
Arts, entertainment, and recreation	0.3	0.3	0.1	0.3	0.2
Other services	3.1	2.5	3	2.7	2.8
Activities of households as employers	4.2	5.2	4	3.9	3.9
Activities of extraterritorial organization	0	0.3	0.1	0.1	0.1

Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS)

The number of employed populations increased by about 229,183 persons in May 2023 (Q1) as compared to February 2023(Q1). The sectors that had a high gain of the number of workers in absolute terms are Construction (+72,182 workers), Transportation and storage (+51,212 workers), Wholesale and retail trade; repair of motor vehicles and motorcycles (+42,462 workers), and Manufacturing (+24,310 workers). On the other hand, Administrative and support activities sector lost a considerable number of workers (-28,919 workers).

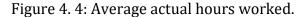
May 2023 results compared to the same quarter one year back, reveals that the number of employed populations increased by about 667,948 persons. The sectors that had a high gain of the number of workers in absolute terms are Agriculture forestry and fishing (+299,038 workers), Wholesale and retail trade; repair of motor vehicles and motorcycles (+146,590 workers), and Construction (+57,175 workers).

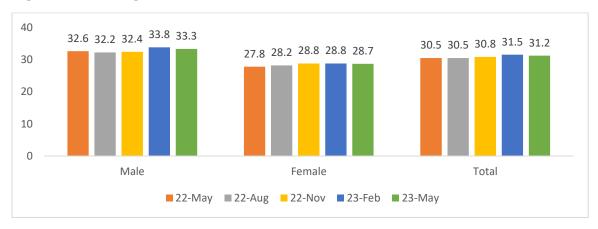
Table 4. 5: Number of employed persons by economic activity

Branch of economic activity	22-May	22-Aug	22-Nov	23-Feb	23-May	Change (Feb23- May23	Change (May22- May23)
Total	3,316,553	3,711,254	3,571,236	3,803,942	3,984,502	180,560	667,948
Agriculture forestry and fishing	1,452,245	1,690,912	1,616,544	1,760,605	1,751,283	-9,322	299,038
Mining and quarrying	49,297	51,568	65,304	40,519	43,549	3,030	-5,748
Manufacturing	178,466	239,992	172,259	195,191	219,500	24,310	41,034
Electricity gas stream and air condition	4,684	1,606	4,654	6,697	7,320	623	2,636
Water supply, gas, and remediation services	8,785	4,352	5,567	5,279	1,965	-3,315	-6,821
Construction	322,237	464,978	349,928	307,229	379,411	72,182	57,175
Wholesale and retail trade; repair of motor vehicles and motorcycles	388,599	363,931	376,880	492,726	535,188	42,462	146,590
Transportation and storage	212,688	201,368	210,487	203,586	254,797	51,212	42,109
Accommodation and food services activities	67,886	72,964	94,045	110,540	115,887	5,347	48,001
Information and communication	7,489	10,790	4,275	16,195	9,332	-6,863	1,843
Financial and insurance activities	27,549	25,077	25,775	29,107	35,691	6,584	8,142
Real estate activities	3,076	5,115	4,954	5,813	5,818	5	2,742
Professional, scientific, and technical	22,162	30,478	27,121	32,569	19,971	-12,598	-2,191
Administrative and support activities	68,430	57,220	68,620	101,344	72,425	-28,919	3,995
Public administration and defence; compulsory social security	60,592	66,925	55,676	38,676	59,973	21,297	-619
Education	141,855	120,721	179,074	144,661	161,895	17,234	20,040
Human health and social work activities	49,301	46,737	51,150	49,639	32,456	-17,183	-16,845
Arts, entertainment, and recreation	8,635	7,621	4,978	10,836	8,157	-2,678	-477
Other services	102,031	95,391	105,396	101,569	111,160	9,591	9,129
Activities of households as employers	139,151	148,837	144,071	147,074	155,486	8,412	16,335
Activities of extraterritorial organization	1,398	4,671	4,479	4,089	3,239	-850	1,841

#### 4.5 Actual hours worked.

The Figure 4.4 below shows the average number of hours worked in the reference week. It is observed that the actual worked hours during the reference period in the current quarter slightly decreased from February 2023(Q1) to May 2023(Q2) at national level and among both males, females. Compared to May 2022 (Q2), the increase trend can be observed at the national level and in both males and females, but it is less than 1 hour in each category.





#### **Chapter 5: Unemployment and Labour Underutilization**

Unemployment is a particular form of labour underutilization. It reflects the pressure on the labour market. It is measured in terms of the number of persons without employment, actively seeking and available for employment. Labour underutilization is a more general concept. It refers to mismatches between labour supply and demand, which translate into an unmet need for employment among the population. Labour underutilization includes unemployment, time-related underemployment, and the potential labour force referring to population not in employment who express an interest in this form of work, but for whom existing conditions limit their active job search or their availability for employment.

#### 5.1 Unemployment rate

The unemployment rate is defined as the ratio of the number of unemployed persons to the labour force. It is the most used indicator of the labour market. It is sometimes used in a general sense as an indicator of the health of the economy, not just the labour market.

According to the Labour Force Survey results of the May 2023(Q2), the unemployment rate in Rwanda was 16.8 percent and it declined as compared to February 2023(Q1) (17.2 percent) and May 2022 (23 percent). The figure 5.1 below shows that the unemployment rate was higher among females (20.1 percent) as compared to males (13.9 percent) in May 2023; and it slightly increased among females by 0.9 percentage points while among male, it decreased by 1.6 percentage points in comparison with observed estimates in February 2023. The analysis of the unemployment rate dynamics for males and females between May 2023(Q2) and May 2022(Q2) revealed a significant decline of unemployment rate among females (6.5 percentage points) and males population (6.1 percentage points).

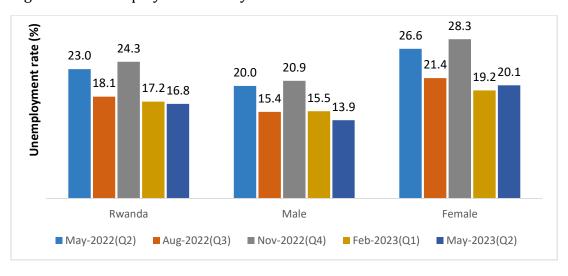


Figure 5. 1: Unemployment rate by sex.

Figure 5.2 shows that in May 2023, the unemployment rate was slightly higher by 0.8 percentage points among the population living in rural areas as compared to those living in urban areas of Rwanda. The comparison between the February 2023(Q1) and May 2023 (Q2) shows that the unemployment rate was almost stable among population living in urban areas while it slightly declined by 0.9 percentage points among population living in rural areas of Rwanda. The comparison of May 2023 with the same quarter one year back reveals that the employment rate significantly declined in both urban and rural areas by 5.6 percentage points and 6.3 percentage points respectively.

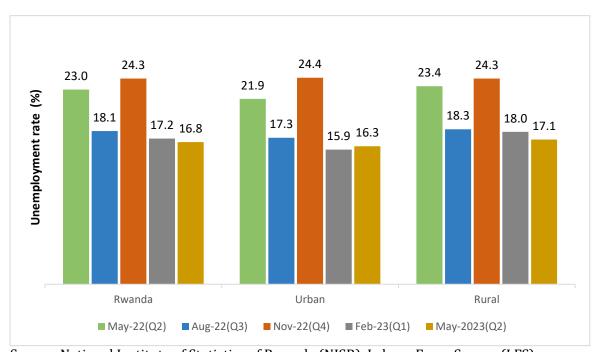


Figure 5. 2: Unemployment rate by area of residence.

Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS)

Figure 5.3 shows the trend of the unemployment rate among youth and adults population. In Rwanda, the youth population is defined as persons with 16 to 30 years of age. The results show that the unemployment rate among the youth has been relatively higher than the unemployment rate among adults over time. A comparison of the current quarterly survey results with the ones obtained in February 2023(Q1) shows that the unemployment rate increased by 1.1 percentage points among youth population while it decreased by 1.4 percentage points among adults aged 31 years and over. The comparison of the current quarter with the same quarter one year back shows that the employment rate declined in both youth and adults by 6.9 percentage points and 5.7 percentage points respectively.

29.7 28.4 Unemployment rate (%) 24.3 23 22.6 20.4 21.5 20.5 19.4 18.1 17.2 16.8 15.1 13.7 15.0 Rwanda 16-30Yrs 31+Yrs ■ May-22(Q2) ■ Aug-21(Q3)2 ■ Nov-22(Q4) ■ Feb-23(Q1) May-23(Q2)

Figure 5. 3: Unemployment rate among youth and Adult

The figure 5.4 below shows the trend of unemployment rate among selected age groups. In May 2023 (Q2), the highest unemployment rate was observed among those aged 16 to 24 years old (23.5 percent), while the lowest rate was observed among those aged 45 years and above (12.7 percent). The comparison between February 2023(Q1) and May 2023(Q2) shows that the unemployment rate increased among those aged 16 to 24 years old by 1.7 percentage points while it decreased in the age group 25-44 years old and among those aged 45 years and above by 0.9 percentage points and 1.3 percentage points respectively.

The comparison between May 2022(Q2) and May 2023(Q2) shows that the unemployment rate decreased by 6.7 percentage points among those aged 16 to 24 years old, by 6.4 percentage points among the age group 25-44 years old and by 4.6 percentage points among those aged 45 years and above.

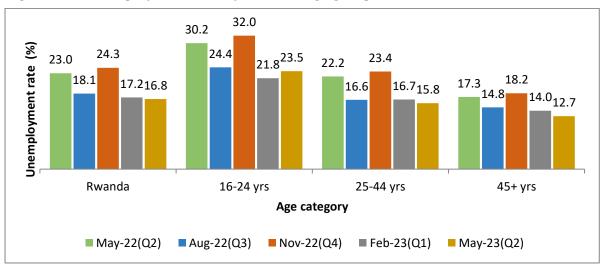


Figure 5. 4: Unemployment rate by selected age groups

#### **5.2 Youth Not in Employment, Education or Training (NEET)**

Participation in employment, education or training is important for youth in their transition to the labour market and achieves self-sufficiency. To examine this issue, two age groups (16 to 24 years old) and (16 to 30 years old) are separately used in presenting the results in table 5.1.

In May 2023 (Q2), the full count of young population aged 16 to 24 years old, who neither were in employment nor in education or training was 780,461 persons while among those aged between 16 and 30 years old, the NEET counts was 1,166,387 persons.

The share of young (16 to 24 years old) neither in employment nor in education or training (NEET) stood at 32.7 percent in May 2023(Q2) and it declined compared to May 2022 (Q2) (33.9 percent). From May 2022 to May 2023 there has been a decrease in the rate of NEET among youth aged 16-24 by 1.2 percentage points at the National level, by 2.1 percentage points among males while it remained almost stable among females f. In the same vein, the NEET rate estimate remained almost state in both urban and rural (around 25 and 36 percent respectively) in the same period.

The survey results also shows that the NEET rate among youth aged 16-30 years was 33.7 percent in May 2023(Q2) with higher rate among females (39.6 percent) than among males (27.3 percent). As regard to the area of residence, the rate was higher in rural areas (36.9 percent) than in urban areas (27.4 percent). The comparison of the current NEET rate with the results of the same quarter one year back shows that the NEET rate declined at national level and among both sexes and both types of areas of residence. both s. The highest decrease was observed among males (-3.4 percentage points) and among youth living in urban areas (-2.2 percentage points).

Table 5. 1: Share of youth Not in Employment, Education or Training (NEET) by sex and area of residence

Age	sex/						% change
group	Residence	22-May	22-Aug	22-Nov	23-Feb	23-May	May 22 to May 23
	Total	33.9	30.7	34.5	32.1	32.7	-1.2
46.04	Male	31.5	29.1	31	28.5	29.4	-2.1
16-24 years	Female	36.2	32.2	38	35.6	35.9	-0.3
years	Urban	25	18	29.6	24.8	25.6	0.6
	Rural	36.3	33.8	35.8	35.6	36	-0.3
	Total	36.2	32.9	36	33.2	33.7	-2.5
46.00	Male	30.7	28	29.9	27.4	27.3	-3.4
16-30 years	Female	41.4	37.6	41.9	38.7	39.6	-1.8
	Urban	29.6	21	31.2	26.1	27.4	-2.2
	Rural	38.3	36	37.5	36.8	36.9	-1.4

#### 5.3. Labour Underutilization

Labour underutilization includes unemployment, time-related underemployment, and potential labour force. Time-related underemployment refers to the situation when the working time of persons in employment is insufficient in relation to alternative employment situations in which they are willing and available to engage. Potential labour force is defined as all persons of working age outside the labour force who, during the reference period, were neither in employment nor in unemployment but who were considered as either (a) unavailable jobseekers (seeking employment but not currently available) or (b) available potential jobseekers (currently available for employment but did not carry out activities to seek employment).

The results presented in figure 5.5 shows that the composite measure of labour underutilization rate was 53.2 percent in May 2023(Q2) representing a decrease of 1 percentage point as compared to 54.2 percent recorded in February 2023(Q1). The labour underutilization rate was higher among females (58.8 percent) than males (47.4 percent). The comparison of the results in May 2023(Q2) and May 2022(Q2) shows that the labour underutilization rate decreased by 6.8 percentage points at the national level. It also decreased among both males and females by 5.7 percentage points and 8.2 percentage points respectively.

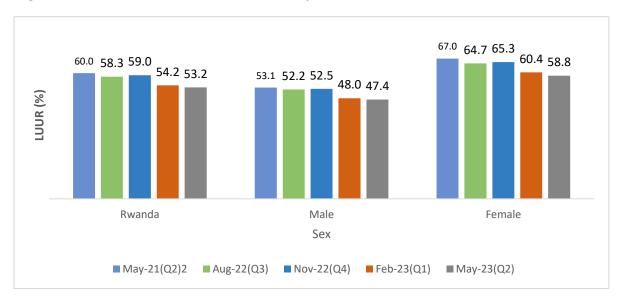


Figure 5. 5: Labour under-utilization rate by sex

Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey Series

The results presented in figure 5.6 below shows that the labour under-utilization rate was higher among the population living in rural than those living in urban areas of Rwanda over time. The comparison of May 2022(Q2) and May 2023(Q2) reveals that the labour underutilization decreased by 6.9 percentage points among the population living rural areas of Rwanda and stood stable among population living in rural areas.

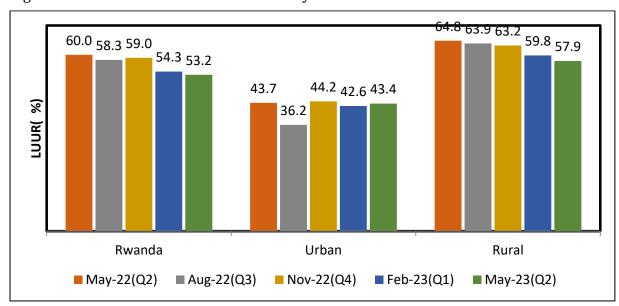


Figure 5. 6: Labour under-utilization rate by area of residence.

Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS)

Figure 5.7 presents the results of the labour underutilization rate by age group (youth and adults). It is observed that the labour underutilization rate stood almost stable among youth population from February 2023(Q1) to May 2023(Q2) while among the adult population, it decreased by 1.6 percentage points. Compared to the results of same quarter one year back (May 2022), it is observed that the labour underutilization rate by age group declined among both youth and adults by 5.8 percentage points and 7.5 percentage points respectively.

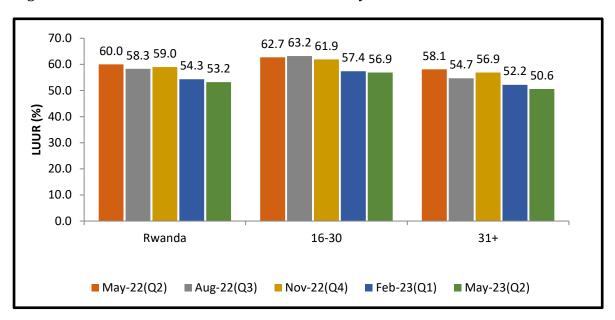


Figure 5. 7: Trend in labour underutilization rate by Youth and Adult.

Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS)

The survey results presented in figure 5.8 below, reveals that the labour underutilisation rate was higher among population in lower age group than among adult population. In May 2023(Q2), the labour underutilization rate was 59.4 percent among youth in age group 16-24 while it was 51.6 percent among population aged 25-44 years and 50.4 percent among those in age group 45 and above.

A comparison between May 2022(Q2) and May 2023(Q2) reveals that the labour underutilisation rate substantially decreased among population aged 45 years and above and those aged 16-24 years by years by 10.5 percentage points and 7 percentage points respectively.

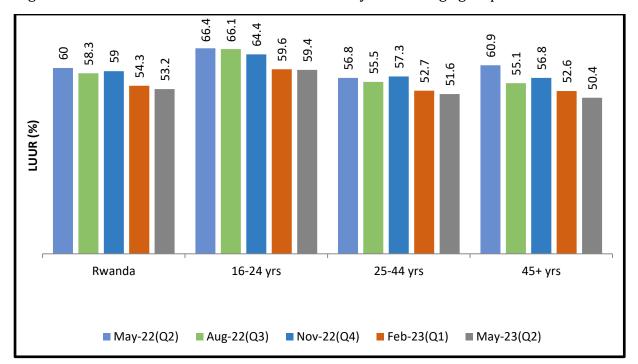


Figure 5. 8: Trend in labour underutilization rate by selected age group

Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LF)

### **Chapter 6: Population outside the Labour Force**

The population outside the labour force constitutes a large part of the working age population. It includes population engaged exclusively in activities for producing goods or services such as subsistence production of goods, own use production of services, volunteer production of goods or services and unpaid trainee or apprentice work, who have not carried out any activity for pay or profit during the reference period. It also includes students who are enrolled in schools, persons who currently do not seek for employment opportunities (not job seekers) such as discouraged job seekers. particular characteristic of countries with large subsistence foodstuff production is the fact that the size of the working age population outside the labour force may be larger than the size of the labour force itself.

The population outside the labour force decreased to around 3,203,495 in May 2023(Q2) from 3380192 in February 2023(Q1) which is equivalent to a decrease of 5 percent as compared to the previous round. The comparison of the current population outside labour force with the estimated value in the same quarter one year back (3,627,294) reveals that they have been a decline of 11 percent.

### 6.1 Main components of population outside the labour Force

The population outside labour force can be divided into three important components, namely, students, persons involved in subsistence agriculture and other outside labour force including largely population who are available to work but do not do anything to search for a job, retired persons, people unable to work because of illness or disability.

Table 6.1 presents the main components of population outside the labour force. The population outside the labour force who was engaged in subsistence agriculture represented 39.6 percent in May 2023 (Q2). Those who were exclusively classified as students represented 24.1 percent while the remaining part represented 36.4 percent. The comparison with the previous quarter reveals significant changes in both magnitude and distribution of the population outside labour force. The share of students increased by 2 percentage points, the share of subsistence agriculture declined by 6 percentage points, while the share of other outside labour force increased by 4.

Table 6. 1: Main components of Persons outside the labour force

Main components	LFS rounds						% change	
% Main components	Feb-22(Q1)	May- 22(Q2)	Aug- 22 (Q3)	Nov- 22(Q4)	Feb- 23(Q1)	May- 23(Q1)	Feb-23 to May23	
Count (,000)	3,580	3,627	3,470	3,324	3,380	3258	-122	
Total	100	100	100	100	100	100	100	
Exclusively student	25.9	27.1	22.3	26.3	22.5	24.1	2	
Subsistence								
agricultural farmers	41.9	33	39.6	35.3	45.2	39.6	-6	
Other outside LFS	32.2	39.9	38	38.4	32.3	36.4	4	

Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS)

### 6.2 Population outside the labour force by area of residence

The results in figure 6.1 below are about the percentage of population outside labour force as proportion of working age population at national level and in both urban and rural separately.

The comparison of February 2023 (Q1) and May 2023(Q2) reveals that there was a slight decrease in the proportion of the population outside labour force at the National level (1.9 percentage points), 1.5 percentage points in rural areas and 2.9 percentage points in urban areas. The comparison of May 2022 (Q2) and May 2023 (Q2) shows that the proportion of population outside labour force decreased by 5.2 percentage points at the national level, by 4.2 percentage points in both urban and rural areas.

It is also observed from Figure 6.1 that the proportion of population outside labour force is normally higher in rural areas relatively to urban areas. In May 2023(Q2), the urban-rural gap was around 11.8 percentage points compared to 10.4 percent in February 2023(Q1).

60.0  $^{48.3}\,_{46.0}\,_{43.4}\,^{45.6}\,_{44.1}$ 45.7 43.4 41.3 42.4 40.5 50.0 36.5 32.0 33.4 35.2 32.3 Percentages 40.0 30.0 20.0 10.0 0.0 Urban Rwanda Rural May-22(Q2) ■ Aug-22(Q3) ■ Nov-22(Q4) ■ Feb-23(Q1) ■ May-23(Q2)

Figure 6. 1: Population outside Labour force by Area of residence

Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS)

## 6.3 Population outside the labour force by age group

Figure 6.2 shows that the proportion of population outside labour force among youth (16-30 years old) decreased from 46.1 percent in February 2023 (Q1) to 45.3 percent in May 2023(Q2) and from 39.6 percent to 36.8 percent among adult (31 years and above), in the same period.

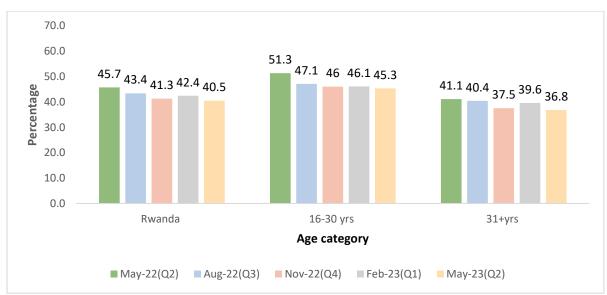


Figure 6. 2: Population outside the Labour force by Age category

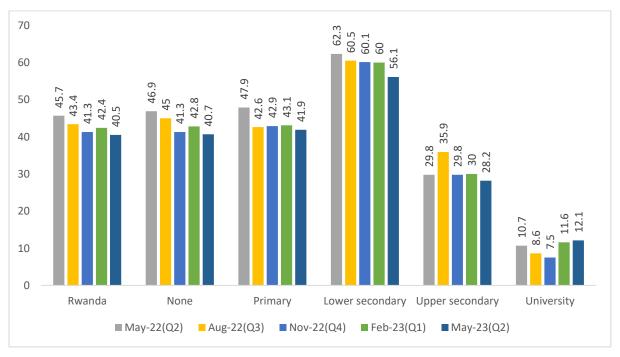
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS)

### 6.4 Population outside the labour force by level of educational attainment

The survey results revealed that the share of population outside the labour force in the working age population was lower among population who hold higher educational attainment as compared to those with lower education levels. From February 2023(Q1) to May 2023 (Q2), the proportion of working age population outside the labour force decreased by 1.9 at National level. In the same vein, it decreased in all levels of education. The highest decrease was observed among persons with no level of

education (3.9 percentage points) while the lowest decrease was observed among holders of upper level of education (0.5 percentage points).

Figure 6. 3: Population outside the Labour force by Education level attained.



Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS)

### **Chapter 7: Work in agriculture**

Due to the importance of the agriculture sector in the economy of Rwanda, a special attention has been paid to it in the present report. The introduction of 2013 standards on work, employment, and labour underutilization statistics split workers in agriculture occupation into two parts: market oriented and non-market oriented. Workers in the former part are considered as employed while those in latter are not counted as employed. In this report, all parts are brought together to analyse the work in agriculture sector.

### 7.1 Agricultural status of workers

Workers engaged in the agriculture sector may be subdivided into four parts: (a) those who were engaged in market-oriented agriculture as main job, working for pay or self-employed; (b) those who were exclusively engaged in subsistence agriculture; (c) those who had the main job outside agriculture but performed foodstuff production activities for own use; and finally, (d) those who were involved in market-oriented agriculture as their secondary job.

The full count of workers in agriculture sector (Market oriented in agriculture + Subsistence agriculture) as presented in table 7.1 revealed that in May 2023 (Q2), 48.1 percent of working age population were involved in agriculture activity, it decreased as compared to February 2023(Q1) (52.5 percent).

The share of persons who exclusively participated in Subsistence agriculture decreased by 3.9 percentage points while the shares of those involved in market-oriented agriculture increased by around 3 percentage points as compared to February 2023(Q2).

Table 7. 1: Works status in agriculture

Categories of agriculture	May- 22(Q2)	Aug- 22(Q3)	Nov- 22(Q4)	Feb- 23(Q1)	May- 23(Q2)
Market oriented agriculture as main job (a)	41.7	43.3	42.9	42.1	45.2
Subsistence agriculture exclusively (b)	47.3	45.5	45.9	46.6	42.7
Participated in Subsistence agriculture but have non-agriculture main job (c)	11.1	11.1	11.1	10.9	12.1
Market oriented agriculture as secondary job (d)	0	0.1	0.1	0.4	0.2
Total (100%)	100	100	100	100	100
Count ('000s)	3,486	3,906	004	4,186	3,873
Proportion of working age population	43.9	48.8	46.9	52.5	48.1

Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS).

Note: The proportion computed here is subject to the agriculture workers not to the employed population.

### 7.2 Characteristics of agricultural workers

The focus of the following sections is on the two first categories of table 7.1 (Workers in market oriented agricultural in main job and those involved exclusively in subsistence agriculture).

The results reveal that the bulk of agricultural workers were involved in subsistence agriculture with the higher proportion among female farmers than among agricultural male farmers.

In May 2023(Q2), the share of agricultural workers engaged in subsistence agriculture was 48.3 percent and it decreased by 4.3 percentage points as compared to February 2023(Q1).

The proportion of male farmers engaged in market-oriented agriculture was 57.7 Percent in May 2023(Q2), it was greater than the corresponding proportion of females involved in the same activity (47.4 percent). Conversely, the proportion of female farmers engaged in subsistence agriculture was higher than the corresponding proportion of males (52.6 percent and 42.3 percent, respectively). The results reveals that the engagement of both male and female farmers in market-oriented agriculture increased between February 2023 and May 2023. On the other side, the participation in subsistence agriculture decreased during the same period.

Table 7. 2: Trend of proportion of agricultural workers by sex.

				% Change			
		May- 22(Q2)	Aug- 22(Q3)	Nov- 22(Q4)	Feb- 23(Q1)	May- 23(Q2)	Feb-23(Q1) to May- 23(Q2)
	Total	100	100	100	100	100	Fe
Both	Market oriented agriculture	46.8	48.8	48.3	47.4	51.4	4
	Subsistence agriculture	53.2	51.2	51.7	52.6	48.3	-4.3
	Total	100	100	100	100	100	0
Male	Market oriented agriculture	55	49.1	55.8	53.3	57.7	4.4
	Subsistence agriculture	45	50.9	44.2	46.7	42.3	-4.4
	Total	100	100	100	100	100	0
Female	Market oriented agriculture	41.3	43.9	43	43.4	47.4	4
	Subsistence agriculture	58.7	56.1	57	56.6	52.6	-4

Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS).

Table 7.3 below presents the trend of the share of market oriented and subsistence agricultural workers among young and adult's persons separately. The share of adults population engaged in subsistence agriculture was higher than the share of youth population in the same activity (50.3 percent and 44.7 percent respectively) in May 2023(Q2). The share of subsistence agriculture among agricultural youth decreased by

3.2 percentage points and increased by 3.2 percentage points among adults from February 2023 to May 2023.

Table 7. 3: Trend of proportion of agricultural workers by age group

				FS round	ls		Change
		May- 22(Q2)	Aug-22 (Q3)	Nov- 22(Q4)	Feb- 23(Q1)	May- 23(Q2)	Feb 23- to May-23(Q2)
	Total	100	100	100	100	100	I Ma
Both	Market oriented agriculture	46.8	48.8	48.3	47.4	51.4	4
	Subsistence agriculture	53.2	51.2	51.7	52.6	48.6	-4
	Total	100	100	100	100	100	0
Young (16- 30)	Market oriented agriculture	51.5	51.6	51	52.1	55.3	3.2
	Subsistence agriculture	48.5	48.4	49	47.9	44.7	-3.2
	Total	100	100	100	100	100	0
Adults (31+)	Market oriented agriculture	44.8	47.4	47	45.3	49.7	4.4
	Subsistence agriculture	55.2	52.6	53	54.7	50.3	-4.4

Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS).

The distribution of agricultural workers by education attainment, presented in table 7.4 shows that the higher the level of educational attainment, the lower the likelihood of participation in agricultural activities for both market-oriented and subsistence agriculture.

Table 7. 4: Trend of proportion of agricultural workers by level of education attainment

				LFS R	ounds		
		Feb- 22(Q1)	May- 22(Q2)	Aug- 22(Q3)	Nov- 22(Q4)	Feb- 23(Q1)	May- 23(Q2)
	Total	100	100	100	100	100	100
	None	58.1	57.1	57.5	56.8	59.6	61
Both	Primary	34.2	34.6	34.1	34.6	33	32.5
DOUI	Lower secondary	4.4	4.3	5.1	4.5	4.5	3.9
	Upper secondary	3	3.4	3	3.6	2.6	2.2
	University	0.3	0.7	0.3	0.5	0.4	0.4
	Total	100	100	100	100	100	100
	None	63.8	61.2	61.5	62.7	65	64.9
Market oriented	Primary	31.5	32.8	32.2	31.2	30.2	30.0
agriculture	Lower secondary	3.2	3.7	4.4	3.7	3.5	3.2
	Upper secondary	1.3	1.9	1.6	2.3	1	1.4
	University	0.2	0.5	0.3	0.2	0.4	0.5
	Total	100	100	100	100	100	100
	None	52.5	53.4	53.7	51.3	54.8	56.8
Subsistence	Primary	37	36.1	35.9	37.7	35.4	35.1
agriculture	Lower secondary	5.6	4.8	5.7	5.4	5.4	4.6
	Upper secondary	4.6	4.8	4.4	4.8	4	3.1
	University	0.2	0.9	0.3	0.8	0.4	0.3

Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS).

## 7.5 Share of agriculture in the total work force

The total work force can be defined as the sum of total employment (Paid/Profit or cash oriented) and the total number of workers engaged in subsistence agriculture. Thus, the share of agriculture workers in the total work force is the proportion of agriculture workers in the total workforce.

The results presented in figure 7.1 below shows that the share of agricultural workers in the work force was 60.4 percent in May 2023(Q2). Compared to February 2023(Q1), it decreased by 4.1 percentage points at national level. The proportion of female workers involved in agricultural activities in May 2023(Q2) (71.7percent) is far higher than the one for male workers involved in the same activities (48.4percent). While the proportion of males engaged in agriculture decreased by 6.4 percentage point from February 2023(Q1) to May2023(Q2), the proportion among females slightly decreased by 1.8 percentage points in the same period.

Rwanda Male Female

May-22(Q2) Aug-22(Q3)2 Nov-22(Q4) Feb-23(Q1) May-23(Q3)

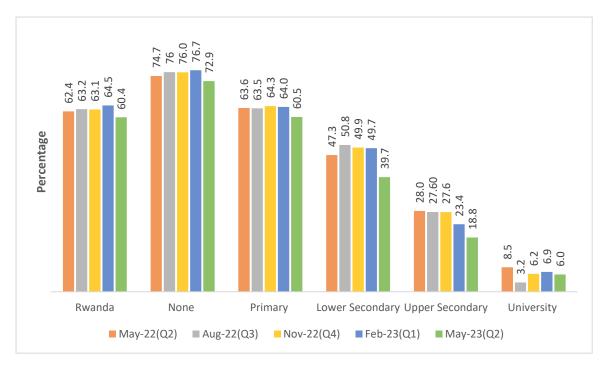
Figure 7. 1: Share of workers in agriculture by sex

Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS).

The share of agriculture workers in total workforce is inversely correlated with the level of education attainment. Persons with lower level of educational attainment are more likely to join agricultural work as compared to others with higher level of education.

The result reveals a declining trend of the share of agriculture workers in all levels of education apart from university as compared to the same quarter one year earlier.

Figure 7. 2: Share of workers in agriculture by level of education attained.



Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS).

### **Appendix A: Survey Methodology and Data quality**

The current quarterly labour force survey is designed according to a two-stage stratified design with a rotation scheme. At the first stage of sampling, a stratified sample of 288 census enumeration areas, called primary sampling units (PSUs), is drawn from the 2012 census sample frame with probabilities proportional to size (pps) measured in terms of number of households according to the latest census of population.

The strata are composed of the 30 administrative districts of the country, sub-divided into urban and rural areas. At the second stage of sampling, 16 households were selected in all PSUs, with equal probabilities after a fresh listing of the households in the new sample PSUs. Thereafter, all household members in the sample are then selected for survey interview.

The sample size in the current quarter is about 4,608 households, composed of three rotation groups marked with the symbol r in the table. The proposed rotation design is 2-2-2, that is each sample household is interviewed four times, once in each of 2 consecutive quarter of each year. Accordingly, a sample household is in the sample in one quarter remains in the sample in the next quarter, leaves the sample in the two subsequent quarters and returns in the sample in the same two quarters of the subsequent year before leaving the sample altogether.

## · Sample weights

Three steps were involved in the calculation of the sample weights: Calculation of the design weight, Adjustment for non-response; and Calibration to known population projections.

The design weight of a given sample household is the inverse of the probability of selection of a sample household. This probability is calculated as the product of two probabilities. The first is the probability of selection of the enumeration area k where the sample household is residing,

$$p_k = \eta \times N_k$$

Where  $N_k$  is the number of households in the enumeration area according to the sampling frame and  $\eta$  is the proportionality factor of the pps-sampling scheme.

The second is the probability of selection of the sample household within the enumeration area k.

$$p(hh_k) = \frac{16}{N_k^1}$$

Where 16 is the fixed sample-take in enumeration area k and  $N_k$  is the listed or estimated number of households in the enumeration area k.

The designed sampling weights for the quarterly Labour Force Survey are labelled "Designed Weight". They are calculated as a function of the weights calculated earlier for the Quarterly survey:

The design calculated as,

$$DesignWeight(hh_k) = d_k = \frac{1}{p_k} \times \frac{1}{p(hh_k)}$$

The non-response adjusted weight is then obtained by the dividing the design weight with the response rate,

$$AdjastedWeight(hh_k) = d_k = \frac{d_k}{r_k}$$

Where the response rate in enumeration area k is the percentage number of responding households among the total eligible households in the sample enumeration area.

Finally, the adjusted weights were calibrated to known population projections for four demographic groups: Males and females under 16 years old, and males and females aged 16 years old and above.

The population projections were derived from the NISR census publication.<sup>2</sup> The projections were adjusted by deducting estimated values for the institutional population not living in private households. The calibration procedure followed the methodology of Deville and Sarndäl.3 Accordingly, the final calibrated weights were obtained from the formula,

CalibratedWeight(
$$hh_k$$
) =  $w_k = d_k \times (1 + \lambda x_k)$ 

### **Data quality**

Like in all sample surveys, the results of the LFS May 2023(Q2) are subject to sampling and different forms of measurement errors. This section provides information on sampling errors.

#### Sampling errors

Sampling errors arise because the survey did not cover all elements of the population, but only a selected portion. The sampling error of an estimate is calculated based on the difference between the estimate and the value that would have been obtained based on a complete count of the population under otherwise identical conditions.

The table A.1 below gives the sampling errors of the main labour force estimates obtained from the LFS May 2023(Q2). They have been calculated based on the general principle that in multi-stage sample designs the variance contributed by the later stages of sampling is, under broad conditions, reflected in the observed variation among the

<sup>&</sup>lt;sup>2</sup> National Institute of Statistics of Rwanda, Fourth Population and Housing Census, Rwanda, 2012, Thematic Report Population Projections, January 2014.

<sup>&</sup>lt;sup>3</sup> Deville, J.C., and Sarndäl, C.E., "Calibration Estimators in Survey Sampling," *Journal of* the American Statistical Association, Vol. 87, 1992, pp. 376-382.

sample results for first-stage units. Thus, the sampling variance of a variety of statistics, such as totals, means, ratios, proportions, and their differences can be obtained based on totals calculated for the primary sampling units, here the localities<sup>4</sup>. The calculations considered the fact that the sampling weights were calibrated and used the residual method proposed by Deville and Sarndäl p. 380.

Table A. 1: Sampling errors of estimates of main Labour force aggregates

Indicator	Estimate	Standard	Relative standard	Confidence interval		
		error	error	Lower	Upper	
Population 16+ yrs	8,048,000	419,000	5.2%	7,223,000	8,873,000	
Labour force	4,790,000	254,000	5.3%	4,290,000	5,291,000	
Employment	3,985,000	219,000	5.5%	2,884,000	3,632,000	
Unemployment	806,000.00	49,000	6.1%	708,000	903,000	
Outside labour force	3,258,000	190,000	5.8%	3,078,000	3,354,000	

Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS), May 2023(Q2)

As an illustration of the use of the table, consider the fourth row of the table on the labour force. The total labour force is 4,790,000 estimated with a relative standard error of 5.3 percent. The true value at 95 percent confidence level lies within the interval 4,290,000 and 5,291,000.

The next table (Table A.2) gives the estimated sampling errors for the main labour force indicators expressed in rates or percentages. For example, the results indicate that the unemployment rate estimated at 16.8 percent has a standard error of .9 percentage points. This may be interpreted to mean that the true unemployment rate lies with 95 percent confidence within the interval, 15.4 percent to 18.2 percent.

<sup>&</sup>lt;sup>4</sup> Verma, Vijay, *Sampling Methods*, Manual for Statistical Trainers Number 2, Statistical Institute for Asia, and the Pacific (SIAP), Tokyo, Revised 2002.

Table A. 2: Sampling errors of estimates of main labour force indicators (percentage)

Indicator	Estimate	Standard	Confidence interval			
		error	Lower	Upper		
Labour Force Participation Rate	59.5	0.9	57.7	61.3		
Employment-Population Ratio	49.5	0.9	47.7	51.3		
Unemployment rate	16.8	0.7	15.4	18.2		

Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS), May 2023(Q2)

## **Appendix B: Statistical Tables**

Table B. 1: Summary labour force indicators, May 2023(Q2)

		Se	ex	Residen	tial area	Participated	Not
	Total	Male	Female	Urban	Rural	in subsistence agriculture	participated in subsistence agriculture
Population 16 years old and over	8,047,921	3,767,222	4,280,699	2,484,614	5,563,307	2,912,573	5,135,348
Labour force	4,790,321	2,526,447	2,263,873	1,682,779	3,107,542	1,624,216	3,166,105
- Employed	3,984,502	2,175,512	1,808,989	1,408,296	2,576,206	1,257,156	2,727,345
- Unemployed	805,819	350,935	454,884	274,483	531,336	367,060	438,760
Outside labour force	3,257,600	1,240,775	2,016,826	801,835	2,455,765	1,288,357	1,969,243
Labour underutilization	3,209,642	1,415,941	1,793,701	847,998	2,361,644	1,622,843	1,586,801
- Unemployed	805,819	350,935	454,884	274,483	531,336	367,060	438,760
- Time-related underemployed	1,157,957	604,486	553,471	300,611	857,346	503,699	654,259
- Potential labour force	1,245,866	460,520	785,346	272,904	972,962	752,084	493,782
Labour force participation rate (%)	59.5	67.1	52.9	67.7	55.9	55.8	61.7
Employment-to-population ratio (%)	49.5	57.7	42.3	56.7	46.3	43.2	53.1
Time related underemployment rate (%)	29.1	27.8	30.6	21.3	33.3	40.1	24.0
LU1 - Unemployment rate (%)	16.8	13.9	20.1	16.3	17.1	22.6	13.9
LU2 - Combined rate of unemployment and	41.0	27.0	44.5	24.2	44.7	F2.C	24.5
time-related underemployment (%)	41.0	37.8	44.5	34.2	44.7	53.6	34.5
LU3 - Combined rate of unemployment and potential labour force (%)	34.0	27.2	40.7	28.0	36.9	47.1	25.5
LU4 - Composite measure of labour							
underutilization (%)	53.2	47.4	58.8	43.4	57.9	68.3	43.4
Youth unemployment rate (16-30 yrs) (%)	21.5	17.6	25.8	20.0	21.5	31.4	18.2
Median monthly earnings at main job	30,000	39,000	26,000	52,000	26,000	26,000	39,000

Table B. 2: Population by sex and age group, May 2023(Q2)

	Total	Se	ex
	Total	Male	Female
Population	13,335,665	6,415,733	6,919,932
0-4 yrs	1,659,628	827,303	832,325
5-9 yrs	1,768,232	897,616	870,615
10-14 yrs	1,538,559	770,834	767,725
15-19 yrs	1,523,555	767,256	756,299
20-24 yrs	1,187,798	585,020	602,779
25-29 yrs	902,715	404,282	498,432
30-34 yrs	896,410	416,466	479,944
35- 39 yrs	849,038	421,046	427,993
40-44 yrs	743,670	356,835	386,835
45-49 yrs	533,507	225,405	308,102
50-54 yrs	418,762	189,861	228,901
55-59 yrs	349,780	143,056	206,724
60-64 yrs	373,652	163,140	210,512
65-69 yrs	219,631	101,753	117,878
70-74 yrs	161,428	70,136	91,293
75+	209,299	75,723	133,575

Table B. 3: Households by household size, sex of head of household and urban/rural area, May 2023(Q2)

Household size	Total number households	Head of hou	usehold Female	Area of residence Urban Rural		Participated in subsistence agriculture	Not participated in subsistence agriculture
3120	3,273,845	2,340,540	933,306	1,014,716	2,259,130	1,333,637	1,940,208
	3,2,3,6,3	_,5 10,5 10	233,300	2,611,710	_,	_,555,657	2)3 10)200
1	359,724	186,085	173,638	178,285	181,439	90,316	269,408
2	393,043	187,651	205,392	123,622	269,421	154,549	238,494
3	583,986	394,893	189,093	188,015	395,971	240,790	343,196
4	674,670	526,786	147,884	165,260	509,410	277,120	397,550
5	523,980	418,593	105,387	139,622	384,358	254,857	269,123
6	346,503	297,764	48,740	94,093	252,411	157,378	189,125
7	217,492	179,160	38,333	57,720	159,772	95,903	121,589
8	98,350	82,600	15,751	32,501	65,849	37,824	60,527
9	43,628	40,946	2,682	18,711	24,918	16,293	27,336
10+	32,469	26,064	6,405	16,887	15,582	8,608	23,860

Table B. 4: Population 16 years old and over by labour force status, sex, age group, and urban/rural area, May 2023(Q2)

			Labour fo	rce status		Labour force	Employment-	
	Total	Labour force	Employed	Unemployed	Outside labour force	participation rate (%)	population ratio (%)	Unemployment rate (%)
Total Population 16 yrs and over	8,047,921	4,790,321	3,984,502	805,819	3,257,600	59.5	49.5	16.8
16-24 yrs	2,390,029	1,078,728	824,767	253,961	1,311,301	45.1	34.5	23.5
25-34 yrs	1,799,124	1,386,928	1,147,726	239,202	412,196	77.1	63.8	17.2
35-54 yrs	2,544,978	1,880,682	1,620,929	259,753	664,296	73.9	63.7	13.8
55-64 yrs	723,432	337,717	293,899	43,818	385,715	46.7	40.6	13.0
65+ yrs	590,358	106,266	97,181	9,085	484,092	18.0	16.5	8.5
		-						
Male Pop. 16+ yrs	3,767,222	2,526,447	2,175,512	350,935	1,240,775	67.1	57.7	13.9
16-24 yrs	1,199,519	584,574	462,308	122,266	614,945	48.7	38.5	20.9
25-34 yrs	820,749	700,452	622,597	77,855	120,297	85.3	75.9	11.1
35-54 yrs	1,193,146	996,457	876,851	119,606	196,689	83.5	73.5	12.0
55-64 yrs	306,196	180,202	154,238	25,964	125,994	58.9	50.4	14.4
65+ yrs	247,612	64,762	59,518	5,244	182,850	26.2	24.0	8.1
Female Pop. 16+ yrs	4,280,699	2,263,873	1,808,989	454,884	2,016,826	52.9	42.3	20.1
16-24 yrs	1,190,510	494,154	362,459	131,695	696,356	41.5	30.4	26.7
25-34 yrs	978,376	686,477	525,129	161,348	291,900	70.2	53.7	23.5
35-54 yrs	1,351,832	884,224	744,078	140,146	467,607	65.4	55.0	15.8
55-64 yrs	417,236	157,515	139,661	17,854	259,721	37.8	33.5	11.3
65+ yrs	342,746	41,504	37,663	3,841	301,242	12.1	11.0	9.3

			Labour fo	rce status		Labour force	Employment-	
	Total	Labour force	Employed	Unemployed	Outside labour force	participation rate (%)	population ratio (%)	Unemployment rate (%)
Urban Pop. 16+ yrs	2,484,614	1,682,779	1,408,296	274,483	801,835	67.7	56.7	16.3
16-24 yrs	764,764	350,673	271,090	79,583	414,091	45.9	35.4	22.7
25-34 yrs	680,883	566,074	481,389	84,685	114,809	83.1	70.7	15.0
35-54 yrs	783,205	660,861	567,395	93,466	122,344	84.4	72.4	14.1
55-64 yrs	151,435	91,101	76,564	14,537	60,333	60.2	50.6	16.0
65+ yrs	104,327	14,068	11,857	2,211	90,258	13.5	11.4	15.7
						0.0	0.0	0.0
Rural Pop. 16+ yrs	5,563,307	3,107,542	2,576,206	531,336	2,455,765	55.9	46.3	17.1
16-24 yrs	1,625,265	728,055	553,677	174,378	897,210	44.8	34.1	24.0
25-34 yrs	1,118,241	820,854	666,337	154,517	297,387	73.4	59.6	18.8
35-54 yrs	1,761,773	1,219,820	1,053,534	166,286	541,953	69.2	59.8	13.6
55-64 yrs	571,997	246,616	217,335	29,281	325,382	43.1	38.0	11.9
65+ yrs	486,031	92,198	85,324	6,874	393,834	19.0	17.6	7.5

Table B. 5: Population 16 years old and over by labour force status and level of educational attainment, May 2023(Q2)

			Labour fo	orce status		Labour force	Employment-	
Marital status	Total	I Labour force L. Employed I Unemployed I		Outside labour force	participation rate (%)	population ratio (%)	Unemployment rate (%)	
Population 16 yrs and								
over	8,047,921	4,790,321	3,984,502	805,819	3,257,600	59.5	49.5	16.8
None	3,803,746	2,255,532	1,909,433	346,099	1,548,214	59.3	50.2	15.3
Primary	2,598,803	1,510,556	1,247,916	262,640	1,088,246	58.1	48.0	17.4
Lower secondary	734,524	322,771	256,407	66,364	411,753	43.9	34.9	20.6
Upper secondary	614,864	441,331	352,591	88,740	173,534	71.8	57.3	20.1
University	295,985	260,132	218,155	41,977	35,853	87.9	73.7	16.1

Table B. 6: Population 16 years old and over by labour force status and marital status, May 2023(Q2)

			Labour fo	rce status		Labour force	Employment-	
Marital status			Outside labour force	participation rate (%)	population ratio (%)	Unemployment rate (%)		
Population 16 yrs								
and over	8,047,921	4,790,321	3,984,502	805,819	3,257,600	59.5	49.5	16.8
Married	2,919,170	1,805,056	1,564,069	240,987	1,114,113	61.8	53.6	13.4
Living together	1,450,403	1,128,044	951,108	176,936	322,359	77.8	65.6	15.7
Divorced/separated	275,897	197,642	165,715	31,927	78,255	71.6	60.1	16.2
Single	2,854,398	1,462,299	1,128,889	333,410	1,392,099	51.2	39.5	22.8
Widow/widower	548,053	197,279	174,721	22,558	350,773	36.0	31.9	11.4

Table B. 7: Employed population by sex, age group, and urban/rural area, May 2023(Q2)

		Se	ex	Residen	tial area	Participated in	Not participated
	Total	Male	Female	Urban	Rural	subsistence	in subsistence
		Iviale	Terriale	Orban	Nurai	agriculture	agriculture
Employed population 16+	3,984,502	2,175,512	1,808,989	1,408,296	2,576,206	1,257,156	2,727,345
16-19 yrs	269,812	145,897	123,915	69,112	200,700	45,953	223,860
20-24 yrs	554,955	316,411	238,544	201,978	352,977	135,240	419,715
25-29 yrs	548,666	298,477	250,189	234,553	314,112	109,558	439,107
30-34 yrs	599,060	324,121	274,940	246,836	352,225	186,265	412,796
35- 39 yrs	595,266	338,886	256,380	223,568	371,698	202,048	393,218
40-44 yrs	481,515	269,056	212,459	178,605	302,910	187,663	293,852
45-49 yrs	314,807	149,311	165,496	110,183	204,624	118,431	196,376
50-54 yrs	229,341	119,597	109,744	55,039	174,302	108,534	120,806
55-59 yrs	164,135	89,343	74,792	51,785	112,350	65,545	98,590
60-64 yrs	129,764	64,895	64,869	24,779	104,985	60,275	69,488
65-69 yrs	59,036	37,664	21,372	7,689	51,347	26,418	32,618
70-74 yrs	27,727	18,243	9,484	2,975	24,753	10,365	17,362
75+	10,418	3,611	6,807	1,194	9,224	861	9,557

Table B. 8: Employed population by sex, occupation group, and urban/rural area, May 2023(Q2)

		Se	ex	Residen	tial area	Participated in	Not participated
	Total	Male	Female	Urban	Rural	subsistence	in subsistence
		Iviale	Terriale	Orban	Kurai	agriculture	agriculture
Occupation group (ISCO High level)	3,984,502	2,175,512	1,808,989	1,408,296	2,576,206	1,257,156	2,727,345
Managers	31,368	18,651	12,716	29,534	1,834	294	31,074
Professionals	215,755	119,146	96,609	134,353	81,401	31,192	184,563
Technicians and associate professionals	31,921	26,587	5,333	27,853	4,068	1,349	30,571
Clerical support workers	31,084	19,684	11,400	21,914	9,170	5596	25,488
Service and sales workers	716,338	324,735	391,603	410,607	305,731	164,951	551,387
Skilled agricultural, forestry and fishery workers	234,544	113,035	121,509	24,806	209,738	20,168	214,376
Craft and related trades workers	304,435	233,748	70,687	151,377	153,058	89,089	215,346
Plant and machine operators and assemblers	107,748	106,644	1,104	72,363	35,384	11,269	96,478
Elementary occupations	2,311,310	1,213,282	1,098,029	535,488	1,775,822	933,248	1,378,063

Table B. 9: Employed population by sex, educational attainment, and urban/rural area, May 2023(Q2)

		Sex		Resider	ntial area	Participated in	Not participated
	Total					subsistence	in subsistence
		Male	Female	Urban	Rural	agriculture	agriculture
Employed population	3,984,502	2,175,512	1,808,989	1,408,296	2,576,206	1,257,156	2,727,345
None	1,909,433	996,370	913,063	464,833	1,444,599	708,057	1,201,375
Primary	1,247,916	720,388	527,528	409,550	838,366	418,817	829,099
Lower secondary	256,407	140,382	116,025	125,574	130,834	61,219	195,188
Upper secondary	352,591	193,705	158,885	218,005	134,585	54,556	298,035
University	218,155	124,667	93,487	190,333	27,821	14,507	203,648

Table B. 10: Employed population by sex, branch of economic activity, and urban/rural area, May 2023(Q2)

		Se	ex	Residen	tial area	Participated in	Not participated
	Total	Male	Female	Urban	Rural	subsistence agriculture	in subsistence agriculture
Employed population	3,984,502	2,175,512	1,808,989	1,408,296	2,576,206	1,257,156	2,727,345
Agriculture, forestry, and fishing	1,751,283	763,860	987,423	194,672	1,556,611	798,695	952,588
Mining and quarrying	43,549	36,439	7,109	3,566	39,983	10,538	33,011
Manufacturing	219,500	129,746	89,755	80,570	138,930	69,427	150,073
Electricity, gas, steam, and air conditioning supply	7,320	6,016	1,304	4,471	2,849	1,465	5,855
Water supply, sewerage, and waste management	1,965	535	1,430	1,352	612	612	1,352
Construction	379,411	332,833	46,578	179,231	200,180	101,946	277,465
Wholesale, retail trade, repair of motor vehicles, motorcycles	535,188	216,851	318,337	320,398	214,790	121,919	413,269
Transportation and storage	254,797	247,919	6,878	119,879	134,919	45,351	209,447
Accommodation and food service activities	115,887	66,706	49,181	70,602	45,285	18,198	97,689
Information and communication	9,332	7,008	2,324	8,449	883	0	9,332
Financial and insurance activities	35,691	15,186	20,505	23,954	11,737	6,283	29,407
Real estate activities	5,818	4,910	908	4,637	1,182	236	5,583
Professional, scientific, and technical activities	19,971	15,140	4,831	16,282	3,689	820	19,151
Administrative and support service activities	72,425	44,718	27,707	37,121	35,304	12,872	59,553
Public administration and defence	59,973	44,984	14,989	51,720	8,253	2,584	57,389
Education	161,895	83,275	78,620	79,326	82,569	28,993	132,902
Human health and social work activities	32,456	16,148	16,307	25,311	7,145	6,097	26,359
Arts, entertainment, and recreation	8,157	7,109	1,049	5,182	2,975	796	7,361
Other service activities	111,160	73,169	37,991	63,953	47,206	20,885	90,275
Activities of households as employers	155,486	60,049	95,437	114,384	41,102	9,440	146,045
Activities of extraterritorial organizations and bodies	3,239	2,913	325	3,239	0	0	3,239

Table B. 11: Educational attainment and field of Education by Labour market status, May 2023(Q2)

		Labour 1	force status		Working age pop.
	Employed	Unemployed	out of labour force	Total	(Counts)
Level of education completed					
Total	49.5	10.0	40.5	100.0	8,047,921
None	50.2	9.1	40.7	100.0	3,803,746
Primary	48.0	10.1	41.9	100.0	2,598,803
Lower secondary	34.9	9.0	56.1	100.0	734,524
Upper secondary	57.3	14.4	28.2	100.0	614,864
University	73.7	14.2	12.1	100.0	295,985
Field of education					
Total	49.2	11.3	39.6	100.0	1,273,233
Education	63.6	6.8	29.7	100.0	119,180
Humanity and art	53.8	10.8	35.3	100.0	114,165
Social Science business and art	60.9	13.1	25.9	100.0	265,549
Science	40.2	11.1	48.8	100.0	477,890
engineering, manufacturing, and					
construction	45.7	11.1	43.2	100.0	162,019
Agriculture	56.4	7.7	35.9	100.0	43,788
Health and welfare	48.3	15.8	35.9	100.0	40,590
Services	33.2	14.6	52.3	100.0	50,053

Table B. 12: Employed population by sex, status in employment, and urban/rural area, May 2023(Q2)

		S	Sex		Area of Residence		nce agriculture icipation
	Total	Male	Female	Urban	Rural	Participated	Not participated
Total	3,984,502	2,175,512	1,808,989	1,408,296	2,576,206	1,257,156	2,727,345
Employee	2,746,632	1,504,490	1,242,142	881,790	1,864,842	974,893	1,771,740
Employer (with regular employees)	31,325	21,863	9,461	22,117	9,208	2,953	28,372
Own account worker (without regular employees)	1,085,947	626,603	459,343	468,636	617,310	259,514	826,432
Member of cooperative	10,131	5,340	4,791	3,021	7,110	1,087	9,043

Table B. 13: Employed population by sex, hours usually worked per week at all jobs, and urban/rural area, May 2023(Q2)

	Total	Se	ex	Area of R	Residence	Subsistence agriculture participation		
		Male	Female	Urban	Rural	Participated	Not participated	
Total	3,984,502	2,175,512	1,808,989	1,408,296	2,576,206	1,257,156	2,727,345	
1-24 hrs	1,047,401	487,411	559,990	238,293	809,108	455,548	591,853	
25-34 hrs	530,780	272,817	257,963	129,133	401,646	211,630	319,149	
35-40 hrs	1,081,267	565,716	515,551	303,340	777,927	391,512	689,755	
41-48 hrs	527,062	312,962	214,100	256,166	270,896	111,382	415,680	
49-61 hrs	441,825	295,879	145,946	260,855	180,971	56,061	385,764	

Table B. 14: Youth Population by sex, and residential area, May 2023(Q2)

	Sex			Area of R	esidence	Subsistence agriculture participation		
	Total	Male	Female	Urban	Rural	Participated	Not participated	
Youth aged 16 to 24 years old								
Total	2,390,029	1,199,519	1,190,510	764,764	1,625,265	464,162	1,925,867	
Employed	824,767	462,308	362,459	271,090	553,677	181,192	643,575	
Unemployed	253,961	122,266	131,695	79,583	174,378	86,274	167,687	
out of labour force	1,311,301	614,945	696,356	414,091	897,210	196,696	1,114,605	
Youth aged 16 to 30 years old								
Total	3,466,187	1,672,873	1,793,314	1,185,418	2,280,769	780,822	2,685,365	
Employed	1,487,195	815,181	672,014	553,659	933,536	326,078	1,161,117	
Unemployed	408,261	174,240	234,021	138,195	270,066	149,327	258,934	
out of labour force	1,570,731	683,452	887,279	493,564	1,077,167	305,417	1,265,314	

Table B. 15: Youth Unemployed (who looked for a job) by sex, duration of seeking employment, and urban/rural area, May 2023(Q2)

	Total			Urban			Rural		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total unemployed Youth (16-30 years old)	408,261	174,240	234,021	138,195	53,966	84,228	270,066	120,274	149,792
Less than 3 months	170,564	76,588	93,975	48,921	27,587	21,334	121,642	49,001	72,641
Less than 6 months	82,441	38,400	44,041	28,938	8,613	20,325	53,503	29,787	23,716
Less than 12 months	67,477	23,727	43,750	23,658	6,578	17,080	43,819	17,150	26,669
1 year to less than 2 years	31,403	12,227	19,176	17,646	4,234	13,412	13,757	7,993	5,764
2 years and above	45,421	18,259	27,162	16,955	6,636	10,319	28,467	11,624	16,843

Table B. 16: Youth not in employment and not currently in education nor in training by sex, age group, and urban/rural area, May 2023(Q2)

	Sex			Area of R	Residence	Subsistence agriculture participation	
	Total	Male	Female	Urban	Rural	Participated	Not participated
Youth age groups							
Total youth (16-30 years) NEET	1,166,387	456,983	709,405	324,704	841,683	426,210	740,178
16-19 yrs	371,293	193,190	178,103	80,538	290,755	100,175	271,118
20-24 yrs	409,168	159,294	249,874	115,480	293,688	161,507	247,661
25-30 yrs	385,926	104,499	281,427	128,687	257,240	164,528	221,398
Level of education completed							
None	472,249	225,173	247,076	88,198	384,050	160,328	311,921
Primary	418,176	149,856	268,320	87,036	331,140	196,456	221,720
Lower secondary	127,748	36,626	91,122	48,914	78,834	43,992	83,756
Upper secondary	127,005	33,370	93,635	84,696	42,309	25,348	101,657
University	21,210	11,958	9,252	15,860	5,350	86	21,124

Table B. 17: Unemployed population by sex, broad age group and urban/rural area, May 2023(Q2)

		Sex		Area of R	esidence	Subsistence agriculture participation		
	Total	Male	Female	Urban	Rural	Participated	Not participated	
Total unemployed population (16+ years)	805,819	350,935	454,884	274,483	531,336	367,060	438,760	
16-24	253,961	122,266	131,695	79,583	174,378	86,274	167,687	
25-34	239,202	77,855	161,348	84,685	154,517	104,000	135,203	
35-54	259,753	119,606	140,146	93,466	166,286	143,496	116,257	
55-64	43,818	25,964	17,854	14,537	29,281	29,151	14,667	
65+	9,085	5,244	3,841	2,211	6,874	4,139	4,946	

Table B. 18: Unemployed population by sex, level of educational and urban/rural area, May 2023(Q2)

	Sex			Area of R	esidence	Subsistence agriculture participation		
	Total Male Female			Urban	Rural	Participated	Not participated	
Level of education completed								
Total unemployed population (16+ years)	805,819	350,935	454,884	274,483	531,336	367,060	438,760	
None	346,099	148,136	197,963	76,158	269,941	186,502	159,598	
Primary	262,640	125,122	137,518	73,733	188,907	137,009	125,631	
Lower secondary	66,364	25,600	40,764	28,092	38,271	19,869	46,494	
Upper secondary	88,740	28,153	60,587	58,767	29,973	21,997	66,742	
University	41,977	23,924	18,053	37,733	4,244	1,683	40,294	

Table B. 19: Unemployed population (who looked for a job) by sex, method of seeking employment, and urban/rural area, May 2023(Q2)

	Sex			Area of Residence			ce agriculture icipation
	Total	Male	Female	Urban	Rural	Participated	Not participated
Search methods							
Unemployed population who looked for a job	775,976	338,980	436,995	267,222	508,754	347,933	428,043
Arranging for financial resources, applying for permits, licenses	155,889	58,353	97,536	71,850	84,038	69,197	86,692
Looking for land, premises, machinery, supplies, farming inputs	43,846	24,486	19,359	8,987	34,858	12,233	31,613
Seeking the assistance of friends, relatives, or other types of intermediaries	234,595	114,795	119,800	70,771	163,824	112,281	122,315
Registering with or contacting public or private employment services	31,032	16,000	15,032	21,157	9,874	10,294	20,738
Applying to employers directly, checking at worksites, farms, factory gates, markets	272,414	111,028	161,386	69,571	202,843	134,639	137,776
Placing or answering newspaper or online job advertisements	25,129	13,191	11,939	15,389	9,741	8,790	16,340
Placing or updating resumes on professional or social networking	12,630	1,128	11,502	9,055	3,575	60	12,570
Number of responses per search method							
Arranging for financial resources, applying for permits, licences	156,781	58,353	98,429	72,743	84,038	69,197	87,585
Looking for land, premises, machinery, supplies, farming inputs	60,849	32,218	28,631	13,187	47,663	22,530	38,320
Seeking the assistance of friends, relatives, or other types of intermediaries	310,462	158,822	151,641	102,154	208,308	142,892	167,570
Registering with or contacting public or private employment services	53,750	22,297	31,453	36,236	17,513	12,556	41,194
Placing or answering newspaper or online job advertisements	57,257	31,230	26,026	41,157	16,100	10,810	46,447
Placing and updating resumes on professional or social networking sites online	49,065	24,053	25,012	41,506	7,559	787	48,279

Table B. 20: Unemployed population (who looked for a job) by sex, duration of seeking employment, and urban/rural area, May 2023(Q2)

	Total			Urban			Rural		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total unemployed population (16+ years)	805,819	350,935	454,884	274,483	118,051	156,432	531,336	232,884	298,452
Less than 3 months	403,743	177,334	226,410	114,791	59,213	55,579	288,952	118,121	170,831
Less than 6 months	146,410	74,315	72,095	52,619	21,180	31,439	93,791	53,135	40,656
Less than 12 months	95,011	35,785	59,226	33,888	10,286	23,602	61,123	25,499	35,624
1 year to less than 2 years	53,005	19,980	33,025	29,827	8,839	20,988	23,178	11,141	12,037
2 years and above	77,806	31,567	46,239	36,097	16,426	19,672	41,709	15,141	26,567

Table B. 21: Time related under employment by age group sex and area of residence, May 2023(Q2)

	Sex			Area of R	esidence	Subsistence agriculture participation		
	Total	Total Male Female		Urban	Rural	Participated	Not participated	
Total time related underemployed)	1,157,957	604,486	553,471	300,611	857,346	503,699	654,259	
16-24	239,748	131,763	107,985	61,599	178,149	83,676	156,072	
25-34	341,092	171,806	169,285	94,890	246,201	125,949	215,142	
35-54	486,155	258,168	227,987	124,366	361,789	244,293	241,862	
55-64	70,980	32,242	38,738	18,259	52,721	40,939	30,041	
65+	19,983	10,508	9,476	1,497	18,487	8,842	11,142	

## **Appendix C: Labour Force Survey Personnel**

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