Republic of Rwanda

NATIONAL INSTITUTE OF
STATISTICS OF RWANDA

Labour Force Survey Trends

-August 2023 (Q3)-

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October

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 bi-annual 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 third quarter (Q3) of the year 2023 whose data collection was conducted in August 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 August 2022, November 2022, February 2023, May 2023 and August 2023. However, some tables and graphs are presented with more observed data points of the labour force surveys.

In August 2023 (Q3), the working age population (16 years and above) was around 8.1million of whom 3,972,193 were employed, 874,876 were unemployed, and 3,253,361 were out of labour force. The sum of employed and unemployed population gives the population in labour force equivalent to 4,847,069 persons. The proportion of working age population who were in the labour force increased to 59.8 percent in August 2023 (Q3) compared to 54.3 percent in August 2022(Q2). The proportion of the working age population outside the labour force decreased to 40.2 percent in August 2023(Q3) as compared to 43.4 percent in August 2022(Q3) .

The share of subsistence agriculture in population outside labour force was 37.6 percent in August 2023(Q3). It decreased by 2.0 percentage points as compared to 39.6 percent observed in August 2022(Q3). The sum of employed population (3,045,027 persons) and subsistence agricultural without employment (2,476,424) gives the estimate number of workforce[1] in August 2023(Q3) equivalent to 5,521,450 persons. Therefore, in August 2023(Q3), the proportion of working age population engaged in employment or subsistence agriculture was 68.2percent which is almost the same as the observed proportion one year back in August 2022(68.6 percent).

The employment-to-population ratio increased to 49.0 percent in August 2023(Q3) as compared to 46.4 percent in August 2022 (Q3).

In August 2023 (Q3), the number of employed populations increased by about 260,939 persons as compared to the same quarter one year back (August 2022) indicating an increase of 7.1 percent.

The sectors that had a high gain of the number of workers in absolute terms are, Wholesale and retail trade; repair of motor vehicles and motorcycles (+180,637 workers), Construction (+ 89,465 workers), Transportation and storage (+ 64,846 workers), Accommodation and food services activities (+ 47,456 workers) and Education (+42,930 workers). On the other hand, agriculture forestry and fishing sector lost a considerable number of workers (-206,057) when comparing August 2022 (Q3) to August 2023 (Q3).

The August 2022(Q3) results revealed that the share of paid employees in the total employment decreased to 67.1 percent as compared to 70.9 percent in August 2022(Q3).

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[1] This number exclude own-use production in unpaid services, unpaid trainees, and volunteer workers

The share of self-employed persons slightly increased to 28.8 percent from 23.7 percent in August 2022(Q2).

In August 2023 (Q3), the unemployment rate(18.0 percent) remained the same as compared to the estimated value in August 2023(18.1 percent). It remained relatively higher among females (21.9 percent) as compared to males (14.8 percent). It is also relatively higher among youth population aged 16 years to 30 years (21.0percent).

Labour underutilization rate which accounts for unemployment, time-related underemployment and potential labour force decreased to 55.8 percent in August 2023(Q3) from 58.3 percent in August 2022(Q3). The labour underutilization rate was remarkably higher among females (63.6 percent) as compared to males (48.0 percent) in August 2023.

Rwanda Labour force survey, August 2023(Q3) Summary labour force indicators

Working age population 16 years old and over 8,100,430 persons								
Outside the labour force (Not employed nor unemployed) 3,253,361persons **Out of LF rate: 40.2 %**			Labour force (The sum of employed and unemployed) 4,847,069persons Labour force participation rate **59.8 %**					
Subsistence agriculture	Exclusively students	Other outside LF (Elderly, disable, discouraged job seekers…)	**Employed** (All who worked for pay or profit) 3,972,193 persons **Employment to population ratio: 49.0 %**			**Unemployed** (All not employed but seeking and available to work for pay or profit) **874,876** persons **Unemployment rate: 18.0%**		
			Agriculture excluding subsistence foodstuff production	Industry	Services	Unemployed but engaged in subsistence agriculture.	Other unemployed	
37.6%	18.9%	43.5%	37.4%	21.6 %	41.0%	37.4%	62.5%	
Potential labour force 1,461,393	**Other out of labour force** 1,791,968		**Time related underemployed** 1,186,283	**Other employed** 2,785,910				
Labour underutilization (**3,972,193 persons**): Unemployed **(874,876)** + Time-related underemployed **(1,186,283)** + Potential labour force (**1,461,393**) Composite measure of labour underutilization (**55.8%**)								

Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS), August 2023(Q3)

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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 third quarter of LFS 2023 that was conducted in August 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 98.5 percent, which is 1.7 percentage points higher than the previous quarter (96.8 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 August 2023(Q3) labour force survey are mainly compared with August 2022(Q3) and May 2023(Q2). 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.

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 August 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 59.8 percent of the working age population in August 2023(Q3). It increased by 3.2 percent as compared to August 2022(Q3) and remained almost the same as compared to the previous quarter May 2023(Q2).

The LFS results indicate that the population outside the labour force was 3,253,361 in August 2023(Q3). It decreased by 3.2 percent as compared to the same quarter one year back (August 2022) and decreased by 1.9 percent compared to the previous quarter (May2023). The population in working age who were outside the labour force and involved in subsistence agriculture (Food producers) was estimated at 37.6 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 614,732 corresponding to 18.9 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 3.5 in August 2023 percentage points as compared with the same quarter one year back and decreased by 5.1 percentage points as compared to the previous quarter (May 2023(Q2)).

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 1,416,912 in August 2023(Q3). Its share increased up to 43.5 percentage point from 38.0 percentage point as compared to August 2022(Q3) but decreased by 7.1 percent as compared to May2023(Q2).

Figure 2. 1: Trend of the main component of the working age population (, 000s)
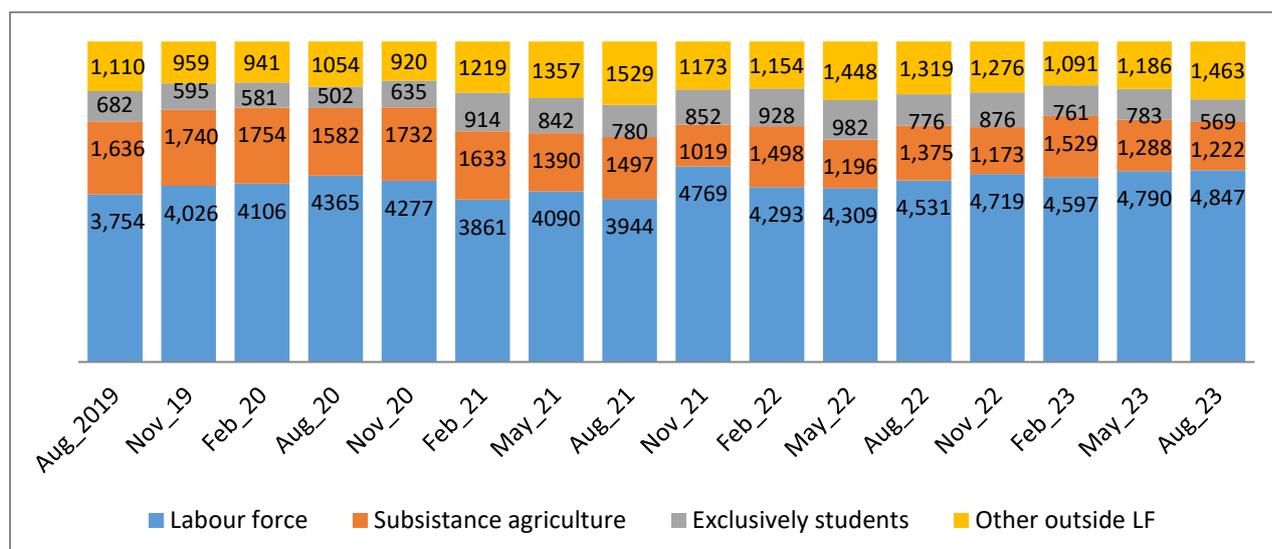
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS)

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 August 2023 (Q3), the unemployment rate increased to 18.0 percent from 16.8 percent estimated in the previous quarter. In comparison with the situation one year earlier (August 2022); the unemployment rate remained almost the same(18.1 percent).

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 August 2023(Q3), the estimated number of employed population was 3,972,193 persons while it was 3,711,254 in August 2022, indicating an annual increase of 7.0 percent. In comparison with the previous quarter, the estimated number of employed population remained almost unchanged.

The employment-to-population ratio increased to 49.0 percent in August 2023 (Q3) as compared to 46.4 percent observed in the same quarter one year earlier(August 2022) and slightly decreased as compared to the previous quarter(49.5 percent in May 2023 (Q2)).

According to the results of the LFS presented in Figure 2.2, the labour force participation rate was 59.8 percent in August 2023(Q3). In comparison with the situation of the same quarter one year earlier (August 2022), the labour force participation rate increased by 3.2 percentage points.

and it was almost the same as the one recorded in the previous quarter((59.5 percent).

Figure 2. 2: Trend of the main labour force indicators
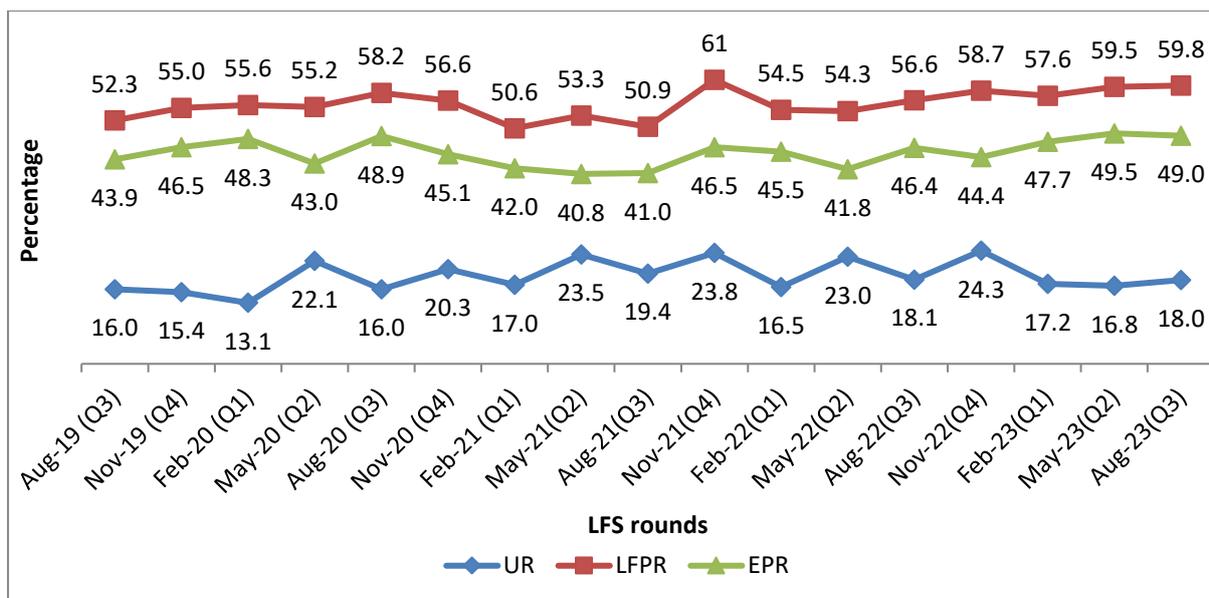
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS)

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 recoded in   in August 2023 (Q3) was 40.2 percent, which is 3.2 percentage points lower than the estimated value in the same quarter one year earlier (August 2022). Compared to the previous quarter, the proportion of working age population who were out of labour force remained almost the same(40.5 percent).

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 August 2023(Q3) increased by 0.8 percentage points compared to the estimate of the same quarter one year back (August 2022). The results show that there was an increase of 2.9 percentage points in August 2023as compared to the previous quarter (May 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 increased to 12.9 percent in August 2023(Q3) from 11.6 percent observed the same quarter one year back (August 2022) and from 10.5 percent observed in May 2023(Q2).

Figure 2. 1: Trend of the ratio of population outside labour force to working age population
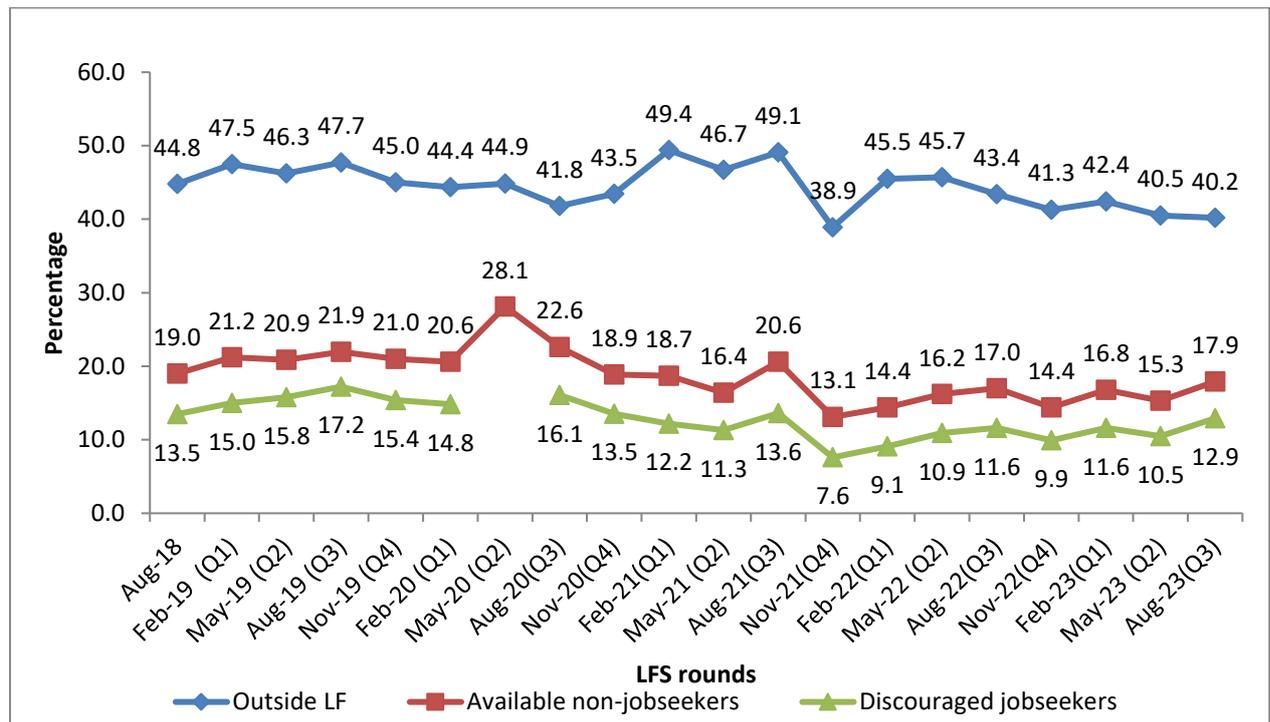
3.1 Labour force participation among males and females

The labour force participation rate, which is the ratio of the labour force to the working age population expressed in percentage terms, stood at 59.8 percent in August 2023(Q3) compared to 56.6 percent in August 2022(Q3), indicating an increase of 3.2 percentage points. The observed increase during this period is higher among males (3.9 percentage points) than among females (2.7 percentage points). The results show the increasing rate of labour force participation rate among male (2.4 percentage points) and a decrease of 1.6 percentage points among female as compared to the previous round.

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 18.2 percentage points in August 2023(Q3) and it increased by 1.2 percentage points as compared to the situation of the same quarter one year back (17 percent).

Figure 3. 1: Labour force participation rate by sex
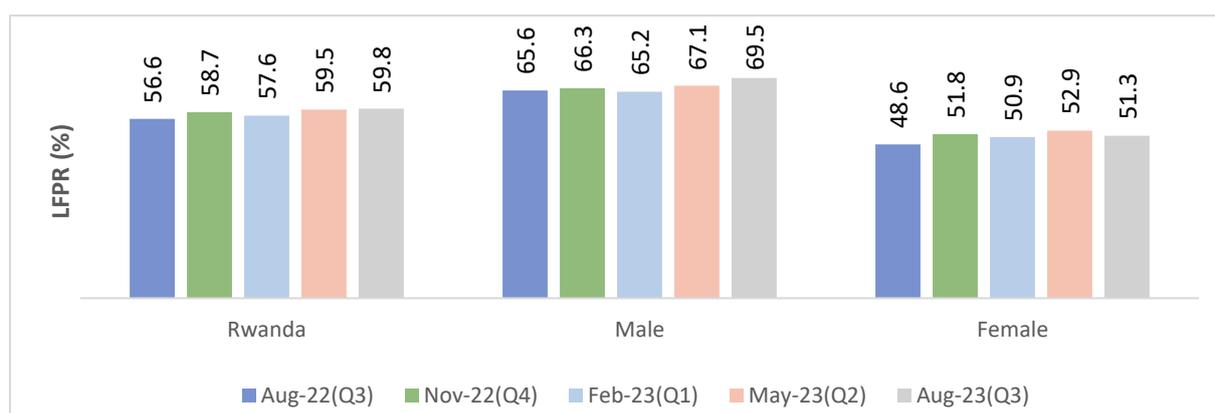
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS)

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 August 2022(Q3) with August 2023(Q3) shows an increase of labour force participation rate in all levels of education except for university level that marked a decrease of 4.5 percentage points. The highest increase was observed among holders of lower secondary level of education (8.7) followed by upper secondary (4.2 percentage points each).

The comparison of the results of the current quarter with the previous quarter shows that there was a labour force participation rate increase among holders of lower secondary and primary level of education (4.3 and 1.6 percentage points respectively) while it shows a decrease of 3.5 percentage points among holders of upper secondary level of education.

Figure 3. 2: Labour force participation rate by level of education
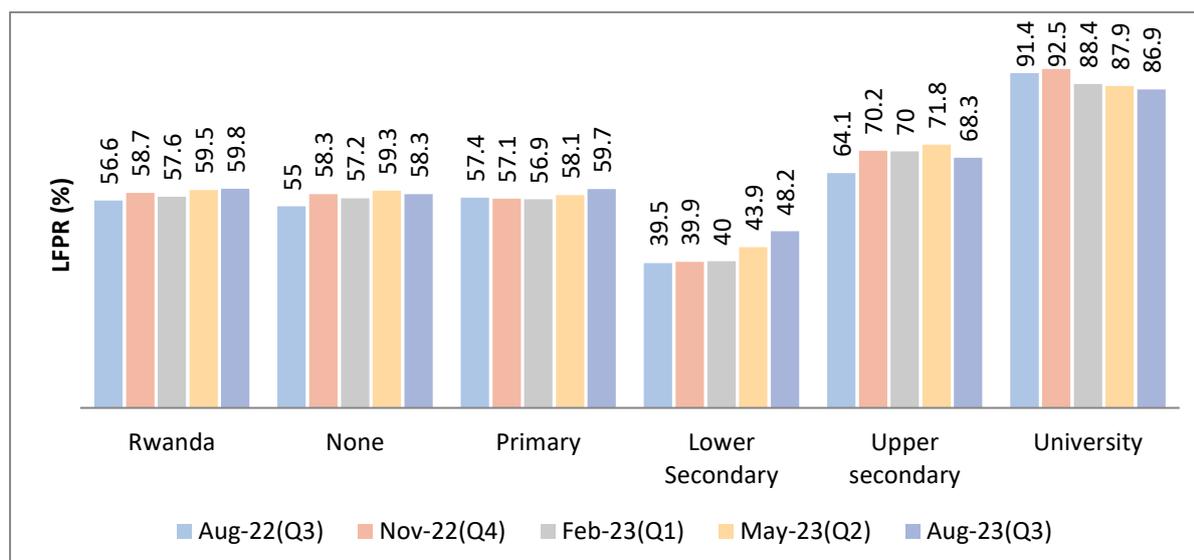
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS)

3.3 Labour force participation by age group

In August 2023(Q3), the labour force participation rate among youth aged 16 to 30 years was 58.7 percent. It significantly increased by 5.8 percentage points as compared to the same quarter one year back (August 2022) while it remained the same in higher age groups depicted in the graph below in the same period. Compared to the previous quarter, the labour force participation rate among youth increased by 4.0 percentage points while it decreased by 2.0 percentage points, and 3.9 percentage points for age groups 31-55 years and 55 years and above respectively.

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

Figure 3. 3: Labour force participation rate by age group
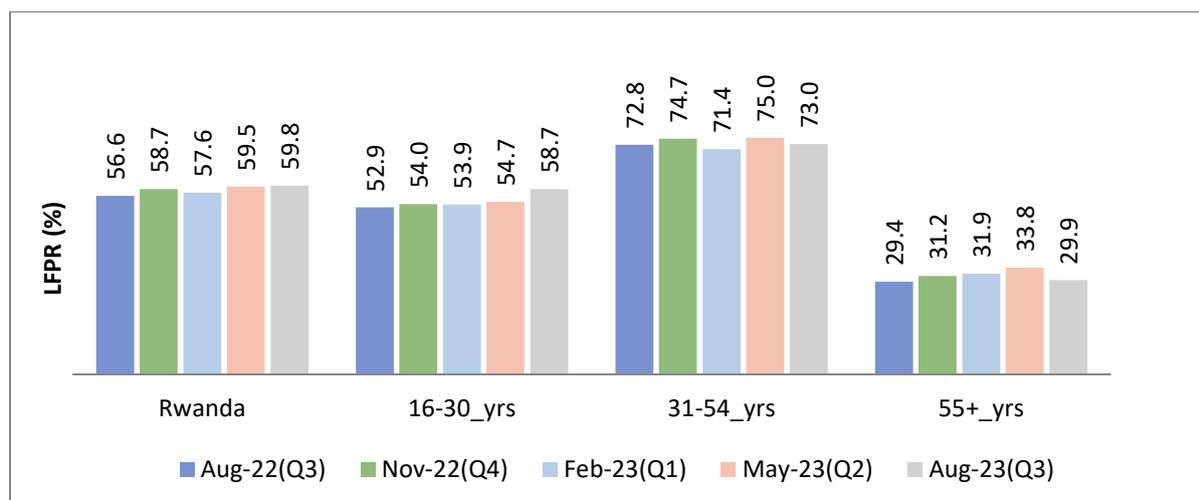
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS)

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 decreased from 14 percentage points in August 2022(Q3) to 12.4 percentage points in August 2023(Q3).

The comparison of August 2023 (Q3) and August 2022(Q3)reveals that the labour force participation rate increased by 2.1 percentage points in rural areas and by 0.5 percentage points in urban areas. The comparison of LFS August 2023(Q3) and May 2023(Q2) shows that the labour force participation rate remained almost unchanged in both urban and rural.

Figure 3. 4: Labour force participation rate by area of residence
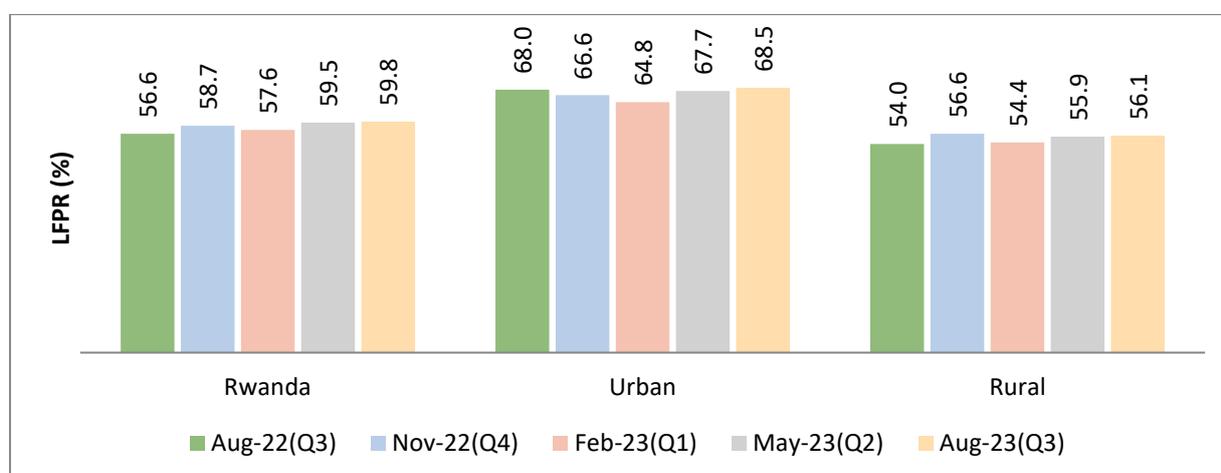
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS)

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 of 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 August 2023 (Q3), the Employment-to-population ratio was 49 percent which is 2.6 percentage points higher than the observed rate in August 2022. The employment to population ratio increased by 1.4 percentage points in urban areas and by 1.2 percentage point in rural areas in the same period.

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 August 2023 (Q3) (12.3 percentage points) and it remained stable as compared by August 2022(Q3).

Figure 4. 1: Employment to population ratio (EPR) by area of residence.
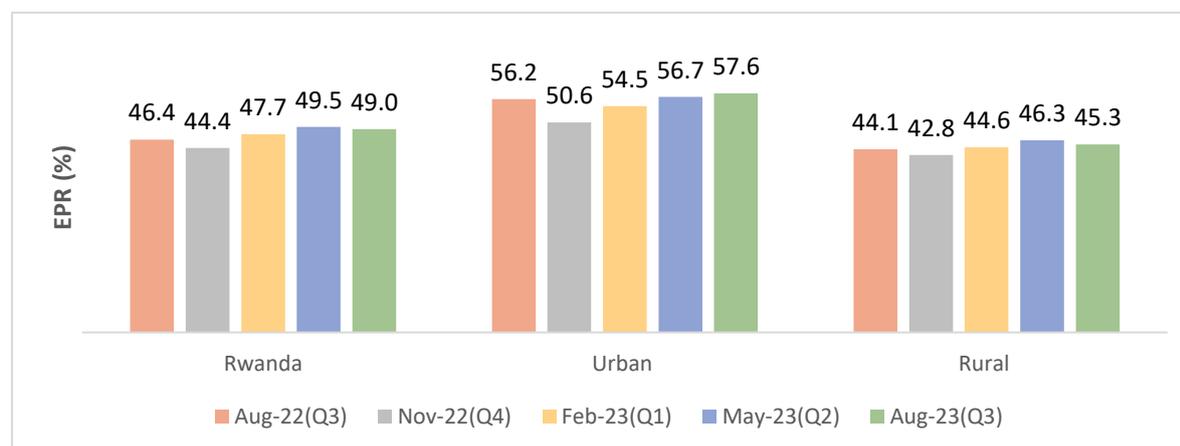
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS)

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 August 2023 (Q3) the employment-to-population ratio increased among both males (3.7 percentage points) and females (1.9 percentage points) as compared to August 2022(Q3). The gender gap in employment to population ratio in August 2023(Q3), remained significant (19.1 percentage points) and it has increased as compared to the situation in the same quarter

one year earlier (17.3 percentage points). A comparison between the current quarter and the previous quarter (May 2023(Q2)) shows that the employment to population ratio decreased by 2.2 percentage points among females while it increased by 1.7 percentage points among males,.

Figure 4. 2: Employment to population ratio by sex
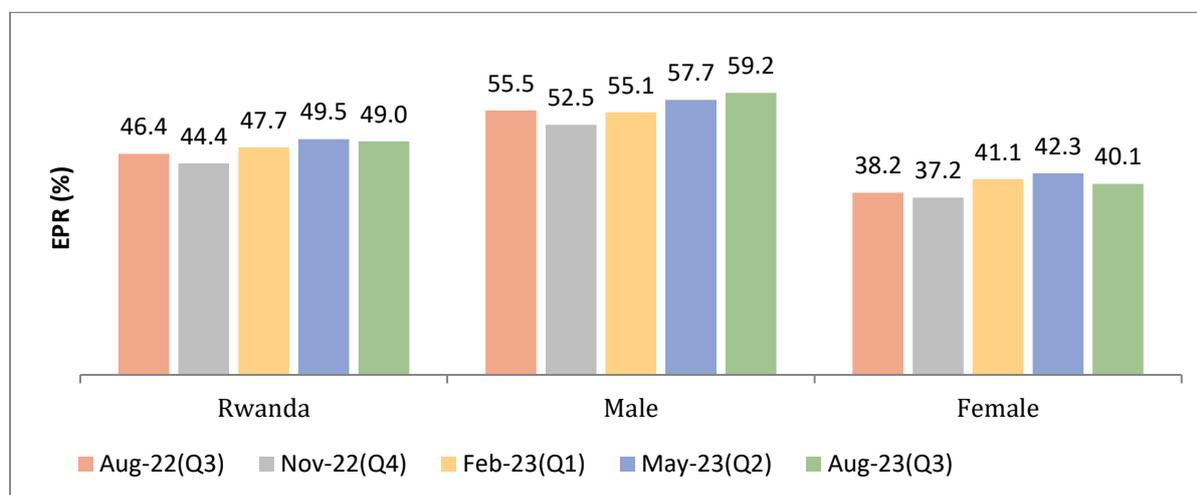
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS)

4.2 Status in employment

The results in Table 4.1 below reveal that, in August 2023(Q3) the number of employed populations increased by around 7.0 percent as compared to August 2022(Q3) and it slightly decreased by around 0.3 percent as compared to May 2023(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 August 2023 (Q3), the number of employees and paid apprentices increased by 1.3 percent as compared to August 2022(Q3). The number of employers and the number of Own account worker (without regular employees) increased by 44.8 percent and 30.2 percent respectively. The number of Contributing family workers and member of cooperatives decreased by 35.7 percent and 5.8 percent respectively.

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

Status in employment	22-Aug	22-Nov	23-Feb	23-May	23-Aug	% Change Aug22-Aug23
Total	**3,711,254**	**3,571,236**	**3,803,942**	**3,984,502**	**3,972,193**	**7.0%**
Employee and paid apprentices	2,630,327	2,571,462	2,663,932	2,746,632	2,664,454	1.3%
Employer (with regular employees)	38,754	30,837	63,583	31,325	56,128	44.8%
Own account worker (without regular employees	879,256	870,824	965,238	1,085,947	1,145,229	30.2%
Member of cooperative	5,559	5,023	7,125	10,131	5,234	-5.8%
Contributing family worker	157,357	93,090	104,063	110,467	101,147	-35.7%

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

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 August

2023(Q3) was 67.1 percent while it was 28.8 percent for Own account workers. Compared with August 2022(Q3), the share of employees decreased by 3.8 percentage points while it increased by 5.1 percentage points among own account workers.

Figure 4. 3: Distribution of employed population by status in employment
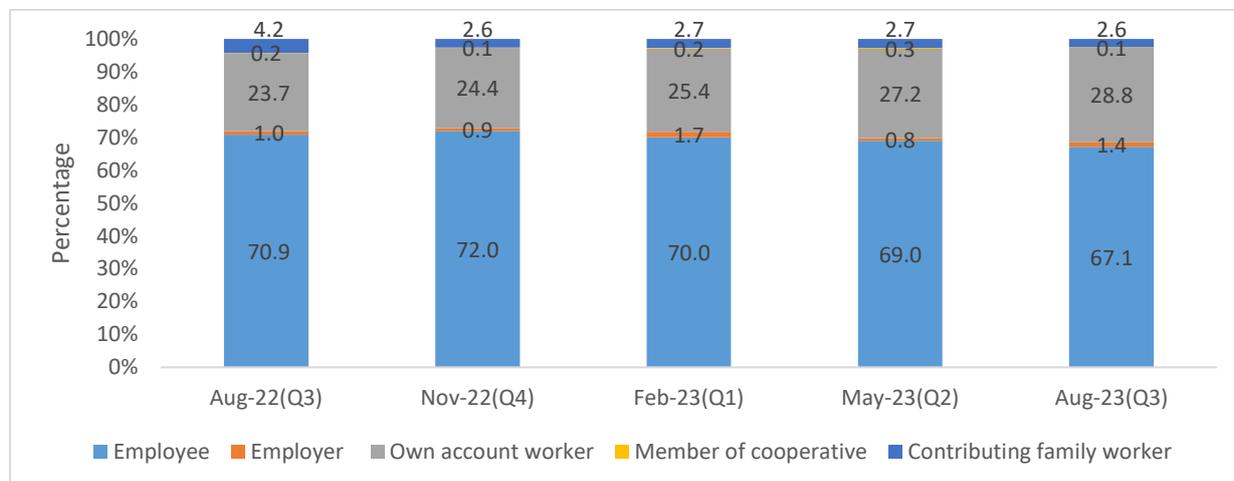
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS)

4.3 Main occupation

The table below presents the number of employed persons by occupation and its change over time. The comparison of August 2023 (Q3) with August 2022(Q3) reveals that there was a loss of employment in five occupation groups: Technicians and associate professionals (-38.2 percent), Skilled agricultural forestry and fishing (-25.6 percent), Clerical support workers (-21.9 percent), Craft and related trades workers (-1.6 percent) and Managers (-1.1 percent). The following occupation groups recorded a gain in employment: Service and sales workers (+53.8 percent), Plant and machine operators and assemble (+40.5 percent), Professionals (+19.8 percent) and Elementary occupations (+1.4 percent).

Table 4. 2 Number of employed persons by occupation

Major Occupation Group	22-Aug	22-Nov	23-Feb	23-May	23-Aug	% Change Aug 22-Aug 23
Total	3,711,254	3,571,236	3,803,942	3,984,502	3,972,193	7.0%
Managers	38,243	41,033	30,859	31,368	37,810	-1.1%
Professionals	215,991	249,863	201,663	215,755	258,664	19.8%
Technicians and associate professionals	46,745	35,240	27,387	31,921	28,881	-38.2%
Clerical support workers	37,910	28,383	34,208	31,084	29,595	-21.9%
Service and sales workers	468,663	513,042	675,104	716,338	720,745	53.8%
Skilled agricultural forestry and fishing	247,882	173,397	211,343	234,544	184,423	-25.6%
Craft and related trades workers	371,985	291,008	284,643	304,435	365,960	-1.6%
Plant and machine operators and assemble	78,276	103,208	105,915	107,748	109,949	40.5%
Elementary occupations	2,205,559	2,136,062	2,232,821	2,311,310	2,236,166	1.4%

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 shows that Elementary Occupations (56.3 percent) usually registered a highest share, followed by

Service and Sales Workers (18.1 percent), and then Craft and Related Trades Workers (9.2 percent) among others. The comparison of August 2023 (Q3) with the same quarter in 2022 shows that the distribution has remained relatively unchanged except for elementary occupation where a decline of 3.1 percentage points was observed as well as in Service and Sales Workers that marked an increase of 5.5 percentage points.

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

Major Occupation Group	22-Aug	22-Nov	23-Feb	23-May	23-Aug	Change in % Aug 22 - Aug 23
Total employed ('000)	3,711	3,571	3,803	3,984	3,972	
Total (percent)	100	100	100	100	100	0
Managers	1	1.2	0.8	0.8	1.0	0.0
Professionals	5.8	7	5.3	5.4	6.5	0.7
Technicians and Associate Professionals	1.3	1	0.7	0.8	0.7	-0.6
Clerical Support Workers	1	0.8	0.9	0.8	0.7	-0.3
Service and Sales Workers	12.6	14.4	17.7	18	18.1	5.5
Skilled Agricultural, Forestry and Fishery Workers	6.7	4.9	5.6	5.9	4.6	-2.1
Craft and Related Trades Workers	10	8.2	7.5	7.6	9.2	-0.8
Plant and Machine Operators and Assemblers	2.1	2.9	2.8	2.7	2.8	0.7
Elementary Occupations	59.4	59.8	58.7	58	56.3	-3.1

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 (37.4 percent) in August 2023(Q3). Other sectors that employed a substantial number of populations were Construction (14 percent); Wholesale and retail trade; repair of motor vehicles and motorcycles (13.7 percent), Transportation and storage (6.7 percent); Manufacturing (6.2 percent) Activities of households as employers (4.3 percent), Education (4.1 percent), Accommodation and food services activities (3 percent); and Other services (2.9 percent).

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

ISIC High level	22-Aug	22-Nov	23-Feb	23-May	23-Aug
Agriculture forestry and fishing	42.6	45.3	46.3	44	37.4
Mining and quarrying	1.6	1.8	1.1	1.1	1.3
Manufacturing	5.7	4.8	5.1	5.5	6.2
Electricity gas stream and air condition	0.2	0.1	0.2	0.2	0.1
Water supply, gas and remediation services	0.2	0.2	0.1	0.1	0.0
Construction	10.6	9.8	8.1	9.5	14.0
Wholesale and retail trade; repair of motor vehicles and motorcycles	13	10.6	13	13.4	13.7
Transportation and storage	4.8	5.9	5.4	6.4	6.7
Accommodation and food services activities	2.3	2.6	2.9	2.9	3.0
Information and communication	0.3	0.1	0.4	0.2	0.3
Financial and insurance activities	1	0.7	0.8	0.9	1.0
Real estate activities	0.1	0.1	0.2	0.2	0.1
Professional, scientific, and technical	0.7	0.8	0.9	0.5	0.4
Administrative and support activities	1.7	1.9	2.7	1.8	1.7
Public administration and defence; compulsory social security	1.9	1.6	1	1.5	1.5
Education	3.6	5	3.8	4.1	4.1
Human health and social work activities	1.5	1.4	1.3	0.8	1.0
Arts, entertainment, and recreation	0.3	0.1	0.3	0.2	0.2
Other services	2.5	3	2.7	2.8	2.9
Activities of households as employers	5.2	4	3.9	3.9	4.3
Activities of extraterritorial organization	0.3	0.1	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 260,939 persons in August 2023 (Q3) as compared to the same quarter one year back (August 2022). The sectors that had a high gain of the number of workers in absolute terms are, Wholesale and retail trade; repair of motor vehicles and motorcycles (+180,637 workers), Construction (+ 89,465 workers), Transportation and storage (+ 64,846 workers), Accommodation and food services activities (+ 47,456 workers) and Education (+42,930 workers). On the other hand, agriculture forestry and fishing sector lost a considerable number of workers (-206,057) when comparing August 2022 (Q3) to August 2023 (Q3).

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

Branch of economic activity	22-Aug	22-Nov	23-Feb	23-May	23-Aug	Change (Aug22-Aug23)
Total	**3,711,254**	**3,571,236**	**3,803,942**	**3,984,502**	**3,972,193**	**260,939**
Agriculture forestry and fishing	1,690,912	1,616,544	1,760,605	1,751,283	1,484,855	**-206,057**
Mining and quarrying	51,568	65,304	40,519	43,549	53,320	**1,752**
Manufacturing	239,992	172,259	195,191	219,500	246,543	**6,551**
Electricity gas stream and air condition	1,606	4,654	6,697	7,320	2,170	**564**
Water supply, gas and remediation services	4,352	5,567	5,279	1,965	1,415	**-2,937**
Construction	464,978	349,928	307,229	379,411	554,443	**89,465**
Wholesale and retail trade; repair of motor vehicles and motorcycles	363,931	376,880	492,726	535,188	544,568	**180,637**
Transportation and storage	201,368	210,487	203,586	254,797	266,214	**64,846**
Accommodation and food services activities	72,964	94,045	110,540	115,887	120,420	**47,456**
Information and communication	10,790	4,275	16,195	9,332	11,974	**1,184**
Financial and insurance activities	25,077	25,775	29,107	35,691	38,239	**13,162**
Real estate activities	5,115	4,954	5,813	5,818	2,998	**-2,117**
Professional, scientific, and technical	30,478	27,121	32,569	19,971	16,758	**-13,720**
Administrative and support activities	57,220	68,620	101,344	72,425	66,254	**9,034**
Public administration and defence; compulsory social security	66,925	55,676	38,676	59,973	61,046	**-5,879**
Education	120,721	179,074	144,661	161,895	163,651	**42,930**
Human health and social work activities	46,737	51,150	49,639	32,456	37,856	**-8,881**
Arts, entertainment, and recreation	7,621	4,978	10,836	8,157	8,321	**700**
Other services	95,391	105,396	101,569	111,160	116,604	**21,213**
Activities of households as employers	148,837	144,071	147,074	155,486	170,076	**21,239**
Activities of extraterritorial organization	4,671	4,479	4,089	3,239	4,468	**-203**

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

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 increased by 1 hour along the period from August 2022(Q3) to August 2023(Q3). The increase of working hours happened among males(1 hour of increase) while it remained stable among females. It is remarkable that employed males are working around five hours higher than the number weekly hours worked by employed females. The same trend of increase can be observed when observing the data by urban and rural (See table 13 in Annex B).

Figure 4. 4: Average actual hours worked.
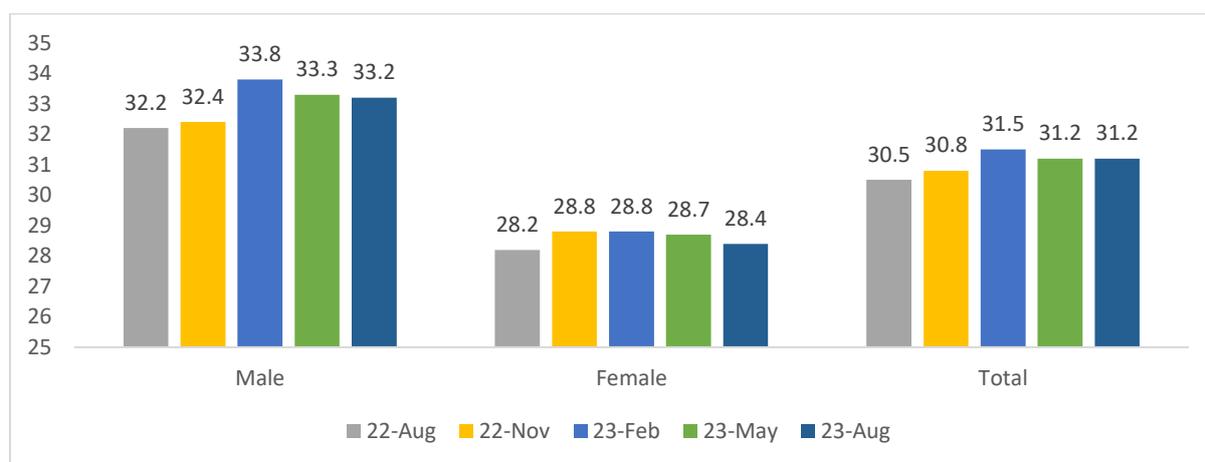
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey Series

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 August 2023(Q3), the unemployment rate in Rwanda was 18 percent and has remained relatively stable as compared to August 2022(Q3) (18.1 percent). The figure 5.1 below shows that the unemployment rate was higher among females (21.9 percent) as compared to males (14.8 percent) in August 2023; and there is a slightly increase of 0.5 percentage points of unemployment rate among females while the rate among males slightly decreased by 0.6 percentage points in comparison with observed estimates in August 2022. The analysis of the unemployment rate dynamics for males and females between August 2023(Q3) and May 2023(Q2) revealed an increase of unemployment rate at the national level (1.2 percentage points) and among both males and females (0.9 percentage points and 1.8 percentage points respectively).

Figure 5. 1: Unemployment rate by sex.
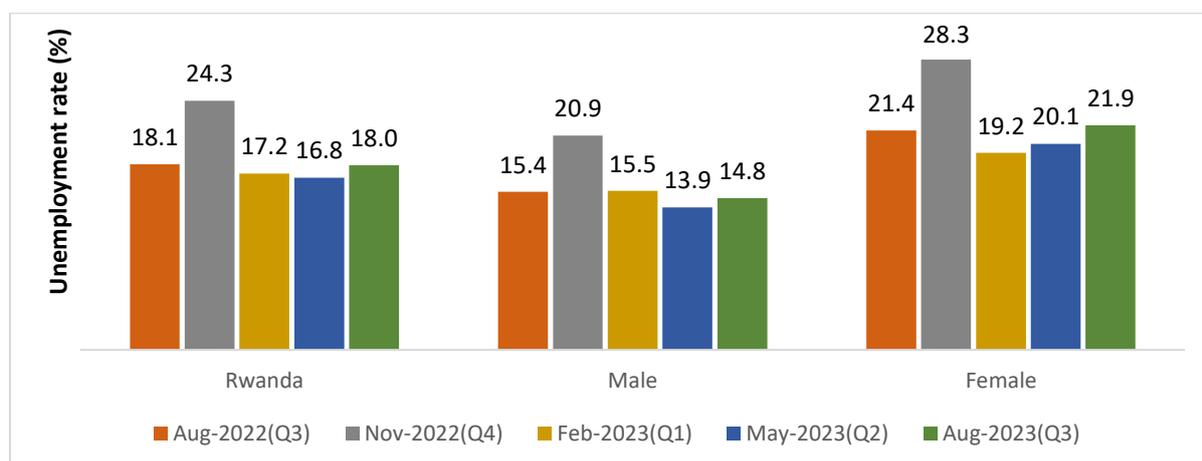
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS)

Figure 5.2 shows that in August 2023, the unemployment rate was higher among the population living in rural areas as compared to those living in urban areas of Rwanda (19.2 percent vs 15.9 percent respectively). The comparison between the current quarter with the same quarter in 2022 shows that the unemployment rate increased by 0.9 percentage points among population living in rural areas while it decreased by 1.4 percentage points among population living in urban areas of Rwanda.

A comparison of the results of the current quarter and the previous quarter shows that the unemployment rate was almost stable in urban areas while it increased by 2.1 percentage points in rural areas.

Figure 5. 2: Unemployment rate by area of residence.
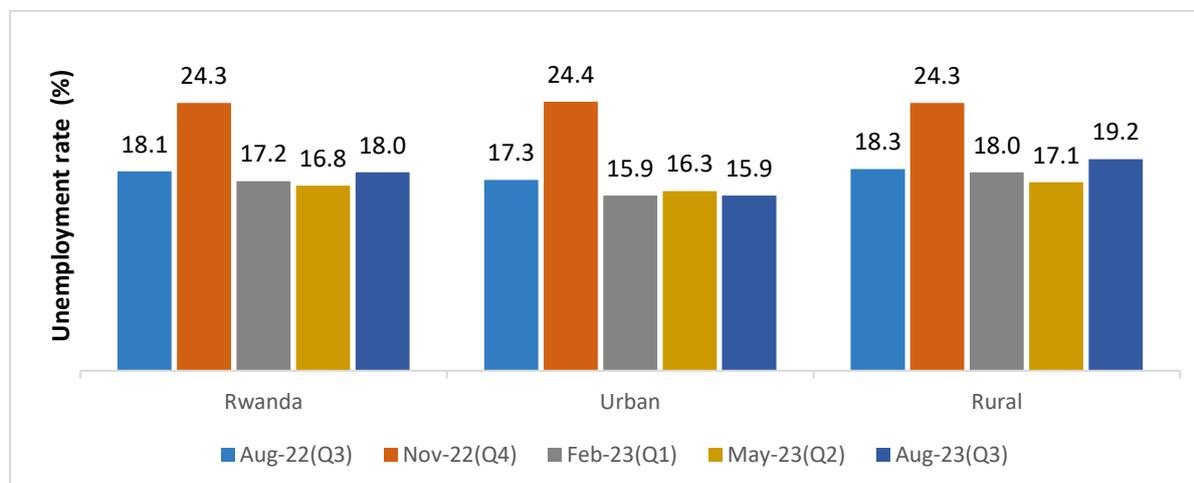
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS)

Figure 5.3 shows the trend of the unemployment rate among youth and adult 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 survey results with the ones obtained one-year back shows that the unemployment rate decreased by 1.6 percentage points among youth population while it slightly increased by 0.9 percentage points among adults aged 31 years and over. The comparison of May 2023 (Q2) and August 2023 (Q3) reveals that the unemployment rate among the youth (16-30 years) was stable while it increased by 2.2 percentage points among adults.

Figure 5. 3: Unemployment rate among youth and Adult
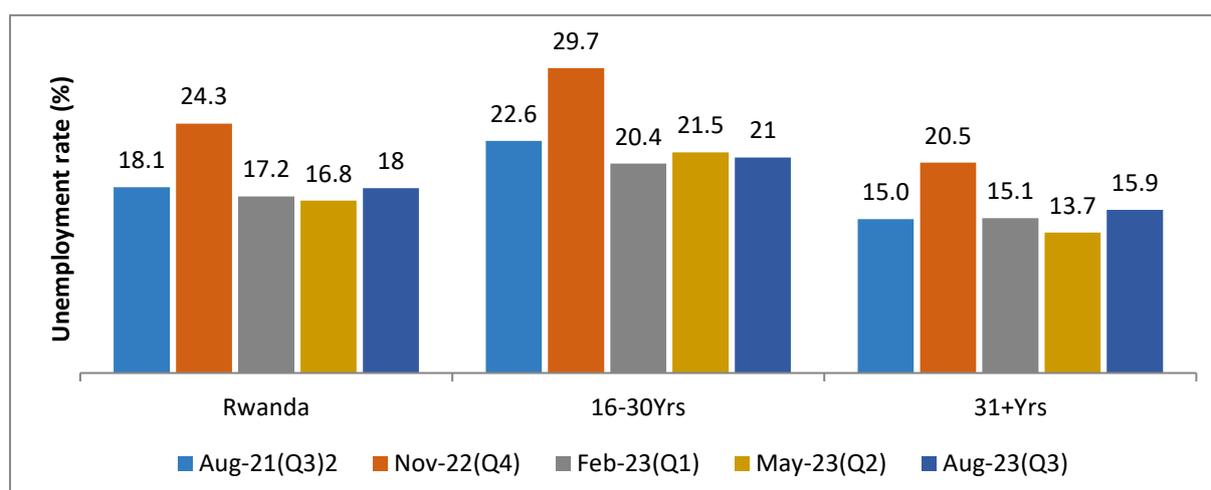
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS)

The figure 5.4 below shows the trend of unemployment rate among selected age groups. In August 2023 (Q3), the highest unemployment rate was observed among those aged 16 to 24 years old (23.6 percent), while the lowest rate was observed among those aged 45 years and above (12.2

percent). The comparison between August 2022(Q3) and August 2023(Q3) shows that the unemployment rate decreased among those aged 16 to 24 years old (0.8 Percentage points) and among those age 45 years old and above (2.6 percentage points) while it increased among the age group 25-44 years old (1.1 percentage points).

Figure 5. 4: Unemployment rate by selected age groups
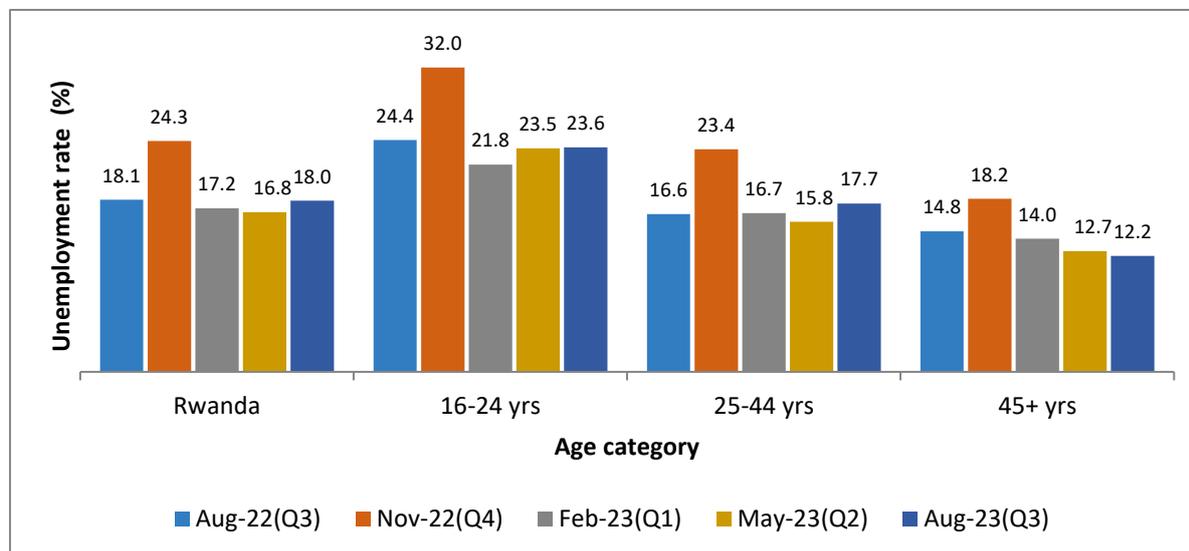
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS)

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 August 2023 (Q1), the full count of young population aged 16 to 24 years old, who neither were in employment nor in education or training was 771,576 persons while among those aged between 16 and 30 years old, the NEET counts was 1,171,713 persons.

The share of youth (16 to 24 years old) neither in employment nor in education or training (NEET) stood at 32.5 percent in August 2023(Q3) and stable compared to August 2022 (Q3) (32.9 percent). A decline of 1 percentage points of the rate of youth(aged 16-24) NEET rate was recorded among males and stood stable among females. In the same vein, an increase of 2.6 percentage points was recorded among those living in urban areas and 0.5 percentage points increase was observed among the young population living in rural areas.

The survey results also shows that the NEET rate among youth (16-30 years) was 33.2 percent in August 2023(Q3) with higher rate among females (41.1 percent) than among males (24.7 percent). As regard to the area of residence, the rate was higher in rural areas (37 percent) than in urban areas (25.5 percent).

The comparison of the current NEET rate with the results of the same quarter one year earlier shows that the NEET rate increased by 2.5 percentage points at national level. The increase of 8.9 percentage points was observed among females' population while for males, there was a decrease of 4.4 percentage points of NEET rate. Among the youth population living in urban, an increase NEET rate of 7.5 percentage points was recorded .

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

Age group	sex/ Residence	22-Aug	22-Nov	23-Feb	23-May	23-Aug	% change Aug 22. to Aug 23
16-24 years	Total	32.9	36	32.1	32.7	32.5	-0.4
	Male	28	29.9	28.5	29.4	27	-1
	Female	37.6	41.9	35.6	35.9	37.9	0.3
	Urban	21	31.2	24.8	25.6	23.6	2.6
	Rural	36	37.5	35.6	36	36.5	0.5
16-30 years	Total	30.7	34.5	33.2	33.7	33.2	2.5
	Male	29.1	31	27.4	27.3	24.7	-4.4
	Female	32.2	38	38.7	39.6	41.1	8.9
	Urban	18	29.6	26.1	27.4	25.5	7.5
	Rural	33.8	35.8	36.8	36.9	37	3.2

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

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 55.8 percent in August 2023(Q3) representing a decrease of 2.5 percentage points as compared to 58.3 percent recorded in August 2022(Q3). The labour underutilization rate was higher among females (63.6 percent) than among males (48.0 percent). The comparison of the results in August 2023(Q3) and May 2023(Q2) shows that the labour underutilization rate increased by around 2.6 percentage points at National level and by 4.8 percentage points. among female population while it remained almost stable among males.

Figure 5. 5: Labour under-utilization rate by sex
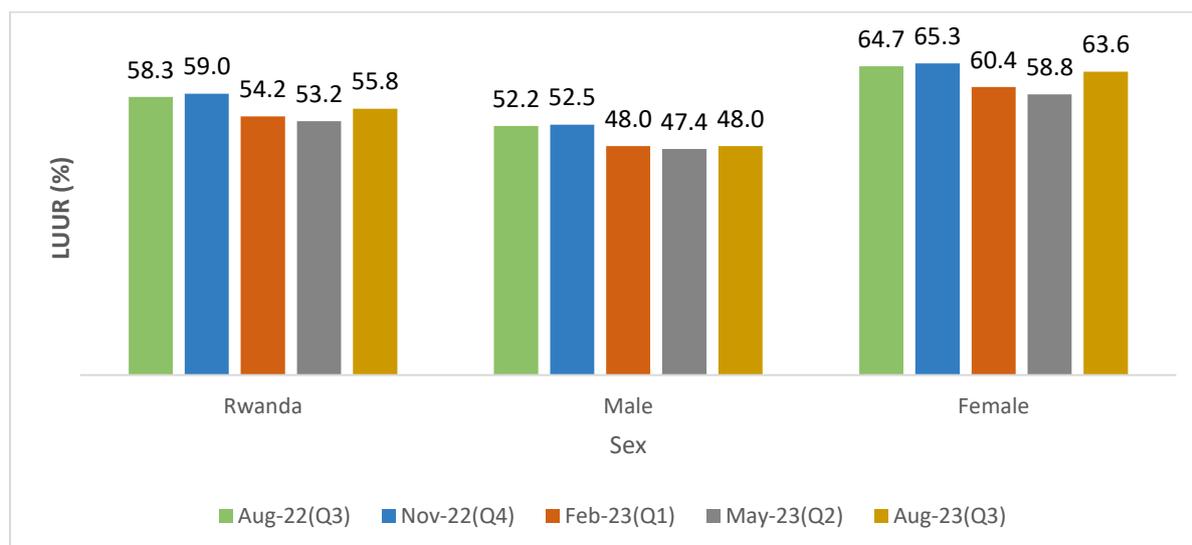
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey Series

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. The comparison of August 2023(Q3) and August 2022(Q3) reveals that the labour underutilization increased by 7.7 percentage points among the population living urban areas of Rwanda while among population living in rural areas, it decreased by 2.6 percentage points. A comparison of the labour underutilization rate in the current quarter with the previous quarter reveals that the labour underutilisation increased by 2.6 percentage points at the national level and by 3.4 percentage points in rural areas while for population living in urban, it stood almost stable.

Figure 5. 6: Labour under-utilization rate by area of residence.
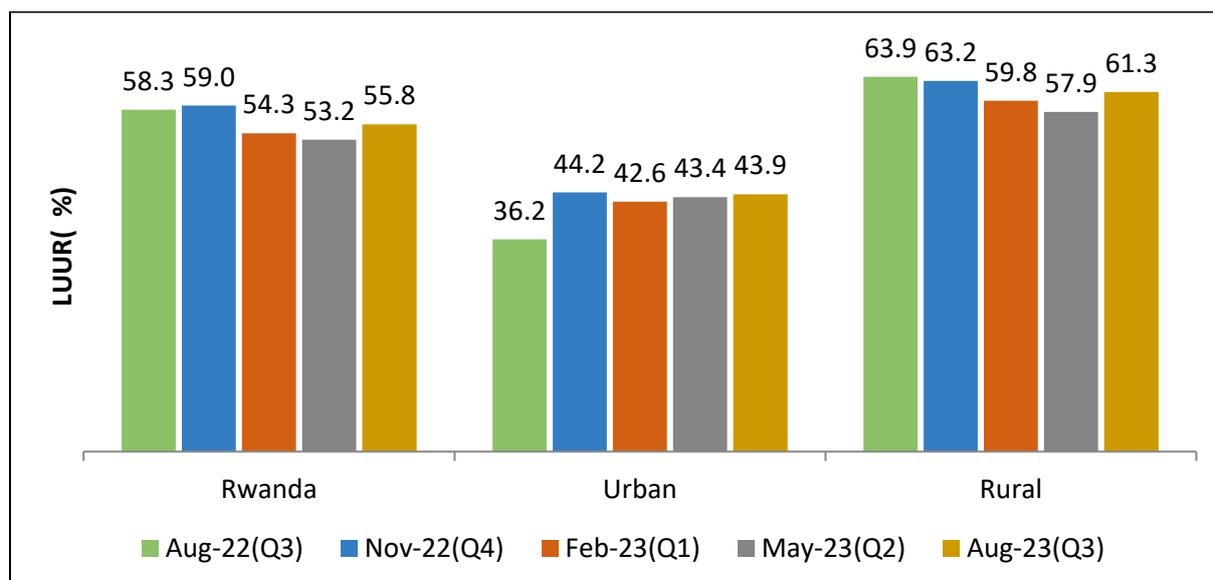
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS)

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 decreased by 4.4 percentage point among youth population from 63.2 percent in August 2022(Q3) to 58.8 percent in August 2023(Q3) while it decreased by 1.2 percentage points among the adult population in the same period.

Figure 5. 7: Trend in labour underutilization rate by Youth and Adult.
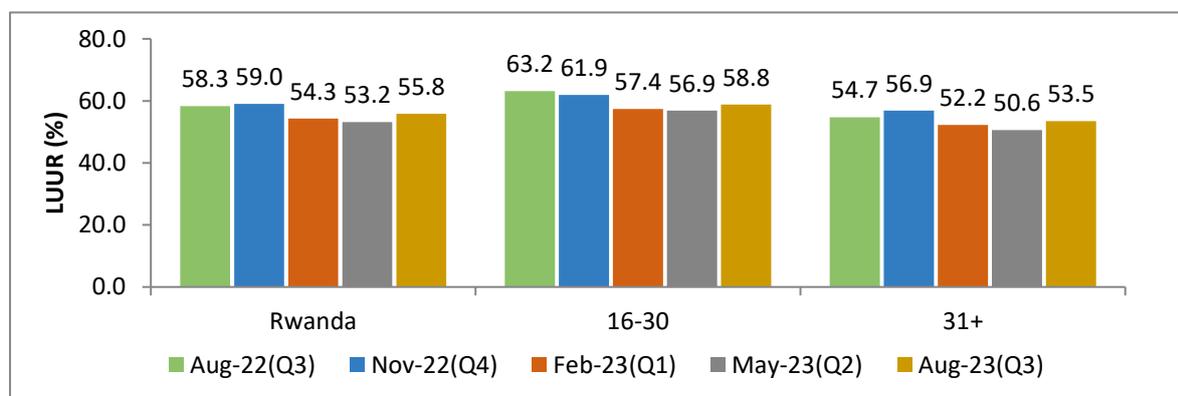
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS)

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 August 2023(Q3), the labour underutilization rate was 61.8 percent among youth in age group 16-24 while it was 54 percent among population aged 25-44 years and 52.9 percent among those in age group 45 and above.

A comparison between August 2022(Q3) and August 2023(Q3) reveals that the labour underutilisation rate substantially decreased by 4.3 percentage points among youth aged 16-24 years old. In the same way,iIt decreased by 1.5 percentage points and by 2.2 percentage points among population aged 25-44 years and 45 years and above respectively.

Figure 5. 8: Trend in labour underutilization rate by selected age group
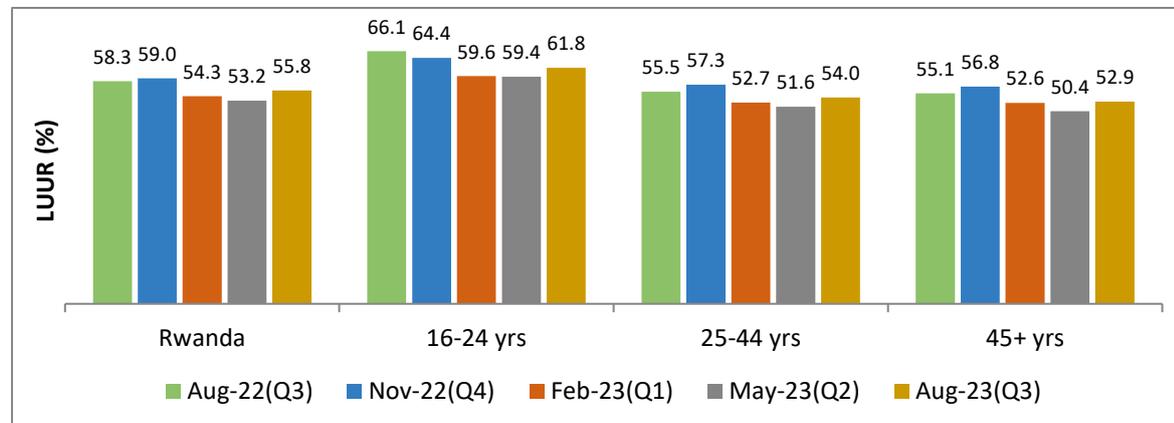
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LF)

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. A 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 stood at 40.2 percentage of the working age population. The comparison of the current population outside labour force with the estimated value in the same quarter one year back reveals that it decreased by 2.2 percentage points.

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 37.6 percent in August 2023 (Q3). Those who were exclusively classified as students represented 18.9 percent while the remaining part represented 43.6 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 decreased by 3 percentage points, the share of subsistence agriculture declined by 2 percentage points, while the share of other outside labour force increased by 6 from August 2022 to August 2023.

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

Main components					LFS rounds	% change
% Main components	Aug-22 (Q3)	Nov-22(Q4)	Feb-23(Q1)	May-23(Q2)	Aug-23(Q3)	Aug-22 to Aug - 23
Count (,000)	3,470	3,324	3,380	3,258	3,253	- 217
Total	100	100	100	100	100	
Exclusively student	22.3	26.3	22.5	24.1	18.9	- 3
Subsistence agricultural farmers	39.6	35.3	45.2	39.6	37.6	- 2
Other outside LFS	38	38.4	32.3	36.4	43.6	6

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 August 2022 (Q3) and August 2023(Q3) reveals that there was a decrease in the proportion of the population outside labour force evaluated to 3.2 percentage points at the National level, 2.1 percentage points in rural areas while it remained almost stable in urban areas. The comparison of August 2023(Q3) and May2023 (Q2) shows that the proportion of population outside labour force remained stable in both urban and rural areas.

It is also observed from Figure 6.1 that the proportion of population outside labour force is higher in rural areas in comparison to urban areas. In August 2023(Q3), the urban-rural gap was around 12.4 percentage points compared to 14.0 percent in August 2022(Q3), indicating a decrease of 2.4 percentage points

Figure 6. 1: Population outside Labour force by Area of residence
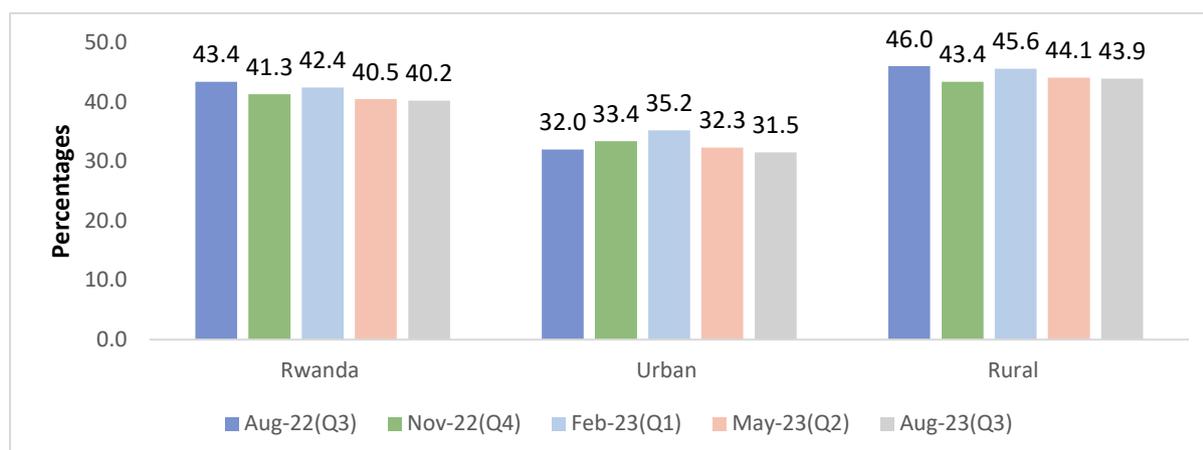
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS)

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 47.1 percent in August 2022 (Q3) to 41.3 percent in August 2023(Q3) and remained relatively stable among adult (31 years and above) in the same period (40.4 percent and 39.3 percent, respectively).

Figure 6. 2: Population outside the Labour force by Age category
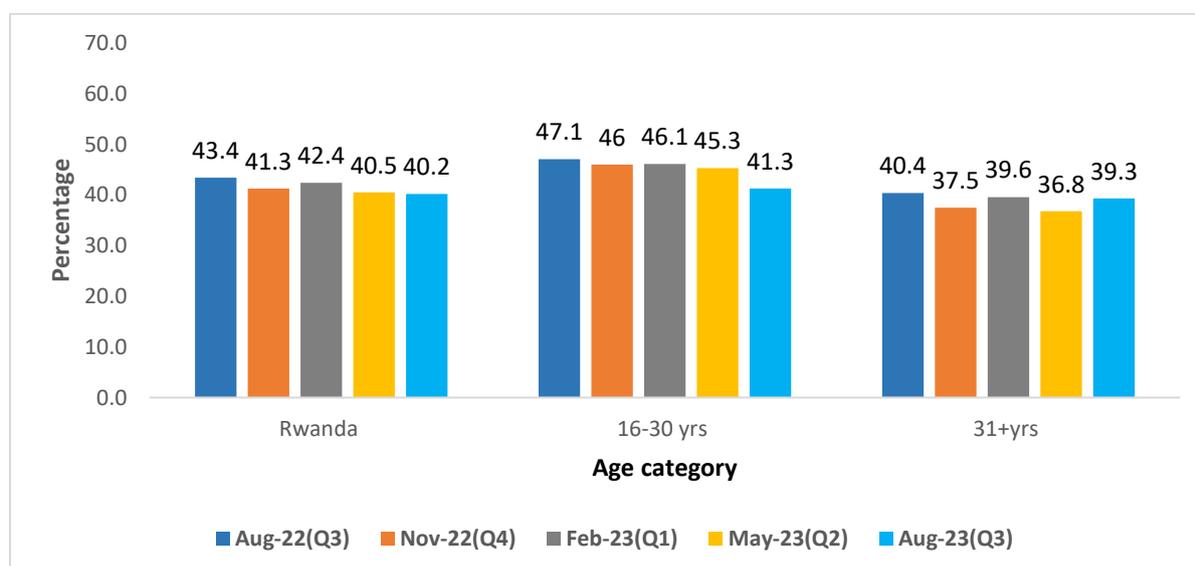
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS)

6.4 Population outside the labour force by level of educational attainment

According to the Labour Force Survey's findings, people with higher educational attainment had a lower fraction of the working-age population outside the labour force than people with lower levels of education. From August 2022(Q3) to August 2023 (Q3), the proportion of working age population outside the labour force decreased in all levels of education with exception to university level where the rate increased by 4.5

percentage points. For the remaining levels of education, the highest decrease was observed among persons with lower secondary level of education (8.7 percentage points).

Figure 6. 3: Population outside the Labour force by Education level attained.
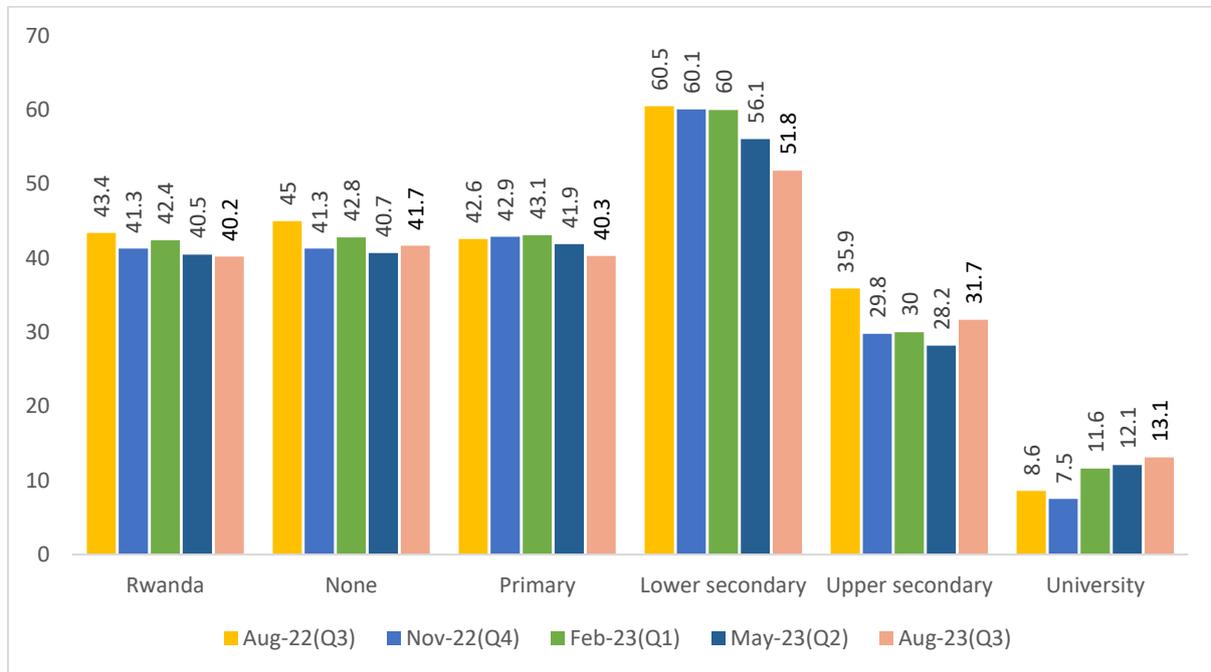
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS)

Due to the importance of the agriculture sector in the economy of Rwanda, a special attention has been given 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 categories: market oriented and non-market oriented. Workers in the former category 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

Four categories of agricultural workers can be distinguished: (a) those who worked exclusively in market-oriented agriculture for pay or as a self-employed individual; (b) those who only engaged in subsistence agriculture; (c) those whose primary occupation was outside of agriculture but who performed activities related to the production of food for their own consumption; and (d) those who worked in market-oriented agriculture as a secondary occupation.

The full count of workers in agriculture sector (Market oriented in agriculture + Subsistence agriculture) as presented in table 7.1 revealed that in August 2023 (Q3), 42.6 percent of working age population were involved in agriculture activity, marking a decrease of 6.2 percentage points as compared to August 2022(Q3) (48.8 percent).

The share of persons who exclusively participated in Subsistence agriculture slightly declined while the shares of those involved in market-oriented agriculture remained relatively stable as compared to August 2022(Q3).

Table 7. 1: Works status in agriculture

Categories of agriculture	Aug-22(Q3)	Nov-22(Q4)	Feb-23(Q1)	May-23(Q2)	Aug-23(Q3)
Market oriented agriculture as main job (a)	43.3	42.9	42.1	45.2	43.0
Subsistence agriculture exclusively (b)	45.5	45.9	46.6	42.7	44.8
Participated in Subsistence agriculture but have non-agriculture main job (c)	11.1	11.1	10.9	12.1	12.1
Market oriented agriculture as secondary job (d)	0.1	0.1	0.4	0.2	0.2
Total (100%)	**100**	**100**	**100**	**100**	**100**
Count ('000s)	**3,906**	**3,771**	**4,186**	**3,873**	**3,456**
Proportion of working age population	**48.8**	**46.9**	**52.5**	**48.1**	**42.6**

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 August 2023(Q3), the share of agricultural workers engaged in subsistence agriculture was 51.1 percent and it remained relatively stable as compared to August 2022(Q3).

The proportion of male farmers engaged in market-oriented agriculture was 56.3 Percent in August 2023(Q3), it was greater than the corresponding proportion of females involved in the same activity (44.5 percent). Conversely, the proportion of female farmers engaged in subsistence agriculture was higher than the corresponding proportion of males (55.5 percent and 43.7 percent, respectively). The results reveals that the engagement of male farmers in market-oriented agriculture increased by 7.2 percentage points while it remained stable among female farmers between August 2022 and August 2023.

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

| | | LFS rounds | | | | | % Change |
		Aug-22(Q3)	Nov-22(Q4)	Feb-23(Q1)	May-23(Q2)	Aug-22(Q3)	Aug-23(Q3) to Aug-22(Q3)
Both	Total	**100**	**100**	**100**	**100**	**100**	
	Market oriented agriculture	48.8	48.3	47.4	51.4	48.9	0.1
	Subsistence agriculture	51.2	51.7	52.6	48.3	51.1	-0.1
Male	Total	100	100	100	100	100.0	0.0
	Market oriented agriculture	49.1	55.8	53.3	57.7	56.3	7.2
	Subsistence agriculture	50.9	44.2	46.7	42.3	43.7	-7.2
Female	Total	100	100	100	100	100	0.0
	Market oriented agriculture	43.9	43	43.4	47.4	44.5	0.6
	Subsistence agriculture	56.1	57	56.6	52.6	55.6	-0.6

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 youth and adult separately. The share of adults population engaged in subsistence agriculture was higher than the share of youth population in the same activity (53.2 percent and 46.3 percent respectively) in August 2023(Q3). The share

of subsistence agriculture among agricultural youth increased by 2.1 percentage points and remained relatively stable among adults from August 2022 to August 2023.

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

| | | LFS rounds | | | | | % Change |
		Aug-22 (Q3)	Nov-22(Q4)	Feb-23(Q1)	May-23(Q2)	Aug-23 (Q3)	Aug 22- to Aug-23 (Q3)
Both	**Total**	**100**	**100**	**100**	**100**	**100**	
	Market oriented agriculture	48.8	48.3	47.4	51.4	43.5	-5.3
	Subsistence agriculture	51.2	51.7	52.6	48.6	56.5	5.3
Youth (16-30)	**Total**	**100**	**100**	**100**	**100**	**100**	0.0
	Market oriented agriculture	51.6	51	52.1	55.3	53.7	2.1
	Subsistence agriculture	48.4	49	47.9	44.7	46.3	-2.1
Adults (31+)	**Total**	**100**	**100**	**100**	**100**	**100**	0.0
	Market oriented agriculture	47.4	47	45.3	49.7	46.8	-0.6
	Subsistence agriculture	52.6	53	54.7	50.3	53.2	0.6

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 Rounds				
		Aug-22(Q3)	Nov-22(Q4)	Feb-23(Q1)	May-23(Q2)	Aug-23(Q3)
Both	Total	100	100	100	100	100
	None	57.5	56.8	59.6	61	63.71
	Primary	34.1	34.6	33	32.5	31.16
	Lower secondary	5.1	4.5	4.5	3.9	3.57
	Upper secondary	3	3.6	2.6	2.2	1.37
	University	0.3	0.5	0.4	0.4	0.2
Market oriented agriculture	Total	100	100	100	100	100
	None	61.5	62.7	65	64.9	53.42
	Primary	32.2	31.2	30.2	30	34.65
	Lower secondary	4.4	3.7	3.5	3.2	8.04
	Upper secondary	1.6	2.3	1	1.4	3.71
	University	0.3	0.2	0.4	0.5	0.18
Subsistence agriculture	Total	100	100	100	100	100
	None	53.7	51.3	54.8	56.8	58.46
	Primary	35.9	37.7	35.4	35.1	32.94
	Lower secondary	5.7	5.4	5.4	4.6	5.85
	Upper secondary	4.4	4.8	4	3.1	2.56
	University	0.3	0.8	0.4	0.3	0.19

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.

According to the findings shown in figure 7.1 below, the proportion of agricultural workers in the workforce in August 2023(Q3) was 55.0%. At the national level, it dropped by 8.2 percentage points from August 2022(Q2). In August 2023(Q3), 68.1 percent of female workers were engaged in agricultural activity, compared to 41.7 percent of male workers..

Figure 7. 1: Share of workers in agriculture by sex
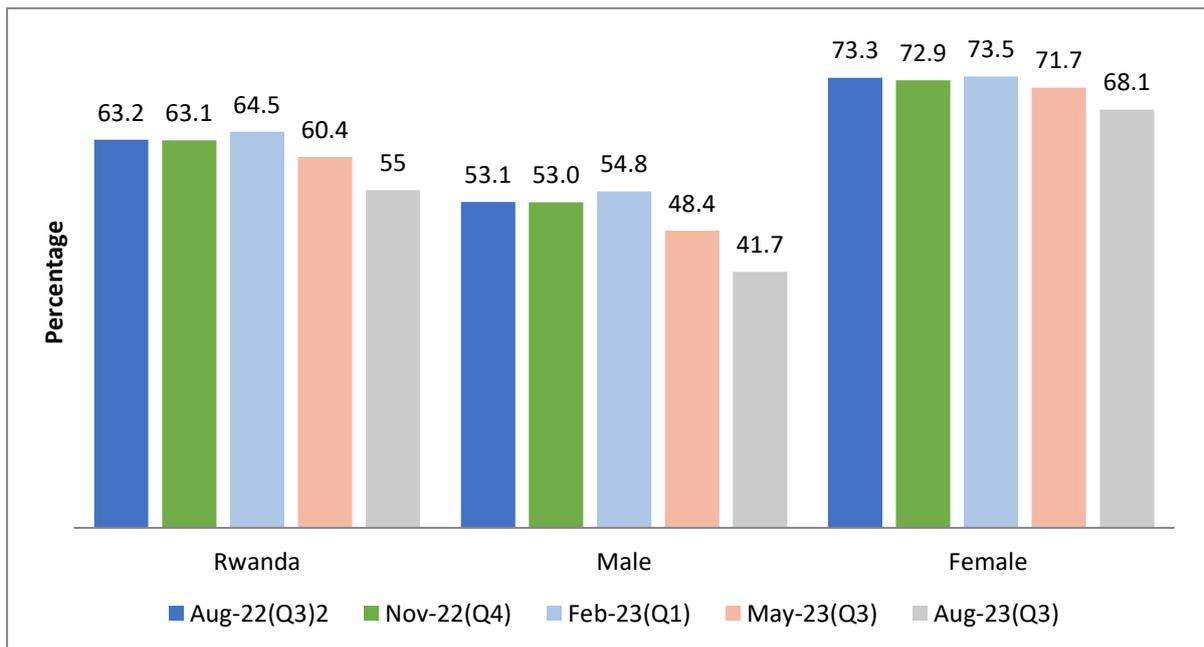
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS).

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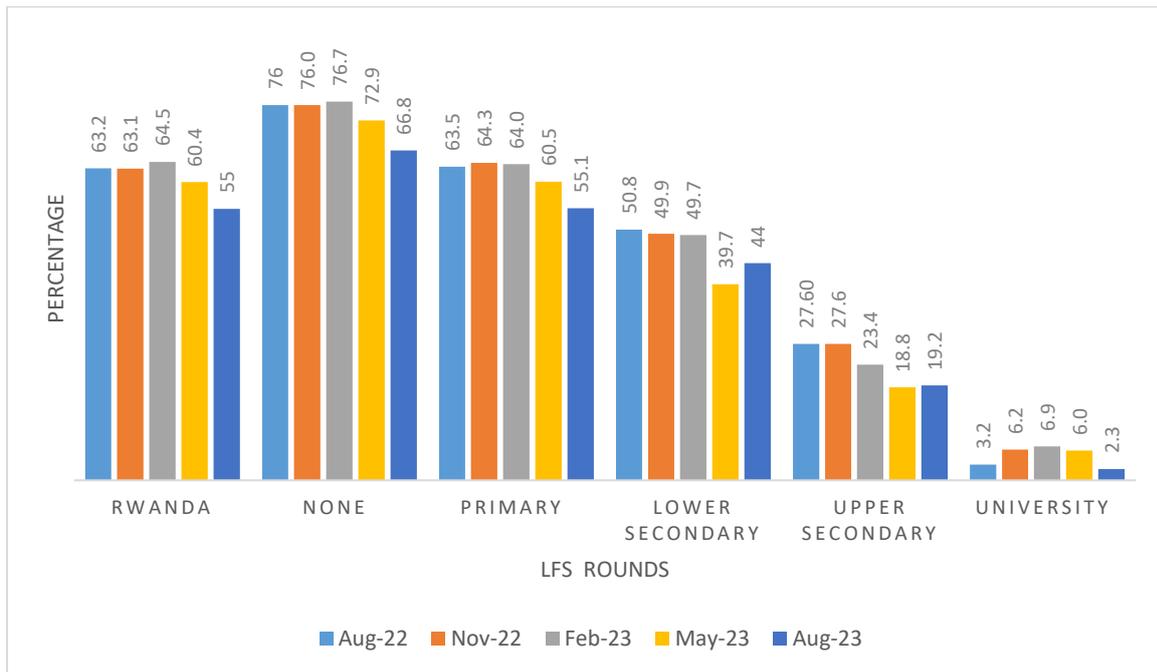
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS).

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 during the period of 2 years. Accordingly, a sample household is in the sample in two consecutive quarters, leaves the sample in the next two quarters, returns in the sample in the same 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 η 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 "DesignedWeight". 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.[2] 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 August 2023(Q3) 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 August 2023(Q3). 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

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[2] National Institute of Statistics of Rwanda, *Fourth Population and Housing Census, Rwanda, 2012, Thematic Report Population Projections*, January 2014.
[3] 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 on the basis of totals calculated for the primary sampling units, here the localities[4]. The calculations took into account 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 error	Relative standard error	Confidence interval	
				Lower	Upper
Population 16+ yrs	8,100,430	315,781	3.9%	7,478,594	8,722,266
Labour force	3,972,193	154,831	3.9%	3,667,300	4,277,086
Employment	874,876	56,415	6.4%	763,783	985,970
Unemployment	4,847,069	191,211	3.9%	4,470,537	5,223,601
Outside labour force	3,253,361	161,877	5.0%	2,934,591	3,572,130

Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS), August 2023(Q3)

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 3,972,193 estimated with a relative standard error of 3.9 percent. The true value at 95 percent confidence level lies within the interval 3,667,300 and 4,277,086.

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 18.0 percent has a standard error of 0.8 percentage points. This may be interpreted to mean that the true unemployment rate lies with 95 percent confidence within the interval, 16.5 percent to 19.6 percent.

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[4] 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 error	Confidence interval	
			Lower	Upper
Labour Force Participation Rate	59.8	1.0	57.9	61.8
Employment-Population Ratio	49.0	1.0	47.1	50.9
Unemployment rate	18.0	0.8	16.5	19.6

Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS), August 2023(Q3)

Appendix B: Statistical Tables

Table B. 1: Summary labour force indicators, August-23 (Q3)

	Sex			Area of Residence		Subsistence agriculture participation	
	Total	Male	Female	Urban	Rural	Participated	Not participated
Working age population(16+ years)	8,100,430	3,798,558	4,301,872	2,441,445	5,658,985	2,521,332	5,579,098
Labour force	4,847,069	2,640,227	2,206,843	1,671,352	3,175,717	1,299,616	3,547,454
Employed	3,972,193	2,248,640	1,723,553	1,405,959	2,566,234	972,074	3,000,119
Unemployed	874,876	391,587	483,289	265,393	609,483	327,541	547,335
out of labour force	3,253,361	1,158,332	2,095,029	770,093	2,483,267	1,221,716	2,031,645
Labour underutilisation							
Unemployed	874,876	391,587	483,289	265,393	609,483	327,541	547,335
Time related underemployed	1,186,283	619,243	567,040	291,660	894,623	401,729	784,554
Potential labour force	1,461,393	493,438	967,954	314,360	1,147,032	401,729	741,349
Labour force participation rate(%)	59.8	69.5	51.3	68.5	56.1	401,729	63.6
Employment-to-population ratio(%)	49.0	59.2	40.1	57.6	45.3	401,729	53.8
Time related underemployment rate(%)	29.9	27.5	32.9	20.7	34.9	401,729	26.2
LU1-Unemployment rate (%)	18.0	14.8	21.9	15.9	19.2	401,729	15.4
LU2-Combined rate of unemployment and time-related underemployment(%)	42.5	38.3	47.6	33.3	47.4	401,729	37.5
LU3-Combined rate of unemployment and potential labour force(%)	37.0	28.2	45.7	29.2	40.6	401,729	30.0
LU4 - Composite measure of labour underutilization(%)	55.8	48.0	63.6	43.9	61.3	401,729	48.3
Youth unemployment rate (%)	21.0	16.9	25.8	20.3	21.3	401,729	18.6
Median monthly earnings at main job	31,200	39,000	26,000	65,000	26,000	401,729	39,000

Table B. 2: Population by sex and age group, August-23 (Q3)

	Sex			Area of Residence	
	Total	Male	Female	Urban	Rural
Total	**13,394,471**	**6,450,887**	**6,943,584**	**3,872,554**	**9,521,917**
0-4 yrs	1,741,549	852,588	888,961	489,580	1,251,969
5-9 yrs	1,728,858	867,838	861,020	459,930	1,268,928
10-14 yrs	1,518,585	768,665	749,920	407,992	1,110,593
15-19 yrs	1,506,449	759,588	746,861	422,416	1,084,033
20-24 yrs	1,174,599	587,361	587,238	396,604	777,995
25-29 yrs	966,593	429,043	537,550	339,503	627,090
30-34 yrs	899,064	422,404	476,660	328,169	570,895
35-39 yrs	854,388	411,341	443,047	287,420	566,968
40-44 yrs	816,248	409,198	407,050	249,836	566,412
45-49 yrs	490,029	212,361	277,668	136,597	353,433
50-54 yrs	396,900	178,916	217,983	113,032	283,868
55-59 yrs	332,827	136,132	196,696	70,377	262,451
60-64 yrs	381,831	172,077	209,754	67,384	314,447
65-69 yrs	230,206	101,436	128,770	40,733	189,473
70-74 yrs	161,118	65,494	95,625	25,341	135,777
75+ yrs	195,226	76,445	118,781	37,640	157,586

Table B. 3: Households by household size, sex of head of household and urban/rural area, August-23 (Q3)

	Total number households	Sex of Household head		Area of Residence		Subsistence agriculture participation	
		Male	Female	Urban	Rural	Participated	Not participated
Total	**3,315,116**	**2,451,940**	**863,176**	**995,547**	**2,319,568**	**1,124,538**	**2,190,577**
1 person	355,783	189,538	166,246	162,314	193,469	69,295	286,488
2 persons	434,439	238,741	195,699	128,699	305,741	134,846	299,594
3 Persons	633,943	426,943	207,000	187,398	446,545	204,617	429,326
4 Persons	628,149	513,180	114,969	153,973	474,176	246,845	381,305
5Persons	527,218	435,144	92,074	146,616	380,602	178,483	348,735
6 persons	354,366	303,827	50,539	98,602	255,764	143,976	210,390
7 persons	181,672	164,742	16,930	46,983	134,689	78,818	102,854
8 persons	119,965	108,919	11,047	34,192	85,773	43,425	76,541
9 persons	49,199	45,171	4,028	27,173	22,026	13,901	35,298
10+ persons	30,381	25,736	4,645	9,598	20,783	10,334	20,047

Table B. 4: Population 16 years old and over by labour force status, sex, age group, and urban/rural area, August-23 (Q3)

	Total	Labour force	Employed	Unemployed	out of labour force	Labour force particiaption rate	Employment to population ratio	Unemployment rate
Total pop. 16+ years								
Total	8,100,430	4,847,069	3,972,193	874,876	3,253,361	59.8	49.0	18.0
16-24_yrs	2,376,000	1,190,619	909,629	280,990	1,185,380	50.1	38.3	23.6
25-34_yrs	1,865,657	1,439,142	1,170,374	268,769	426,515	77.1	62.7	18.7
35-54_yrs	2,557,565	1,828,642	1,545,576	283,066	728,923	71.5	60.4	15.5
55-64_yrs	714,658	302,130	265,877	36,253	412,528	42.3	37.2	12.0
65+_yrs	586,550	86,536	80,737	5,799	500,014	14.8	13.8	6.7
Male pop. 16+ years								
Total	3,798,558	2,640,227	2,248,640	391,587	1,158,332	69.5	59.2	14.8
16-24_yrs	1,183,712	680,879	533,458	147,422	502,833	57.5	45.1	21.7
25-34_yrs	851,447	743,297	655,530	87,766	108,150	87.3	77.0	11.8
35-54_yrs	1,211,816	997,398	863,106	134,292	214,419	82.3	71.2	13.5
55-64_yrs	308,209	163,232	145,054	18,178	144,977	53.0	47.1	11.1
65+_yrs	243,374	55,421	51,492	3,929	187,953	22.8	21.2	7.1
Female pop. 16+ years								
Total	4,301,872	2,206,843	1,723,553	483,289	2,095,029	51.3	40.1	21.9
16-24_yrs	1,192,288	509,740	376,172	133,569	682,548	42.8	31.6	26.2
25-34_yrs	1,014,210	695,845	514,843	181,002	318,365	68.6	50.8	26.0
35-54_yrs	1,345,748	831,244	682,470	148,775	514,504	61.8	50.7	17.9
55-64_yrs	406,449	138,898	120,823	18,074	267,552	34.2	29.7	13.0
65+_yrs	343,176	31,115	29,245	1,870	312,061	9.1	8.5	6.0
Urban pop. 16+ years								
Total	2,441,445	1,671,352	1,405,959	265,393	770,093	68.5	57.6	15.9
16-24_yrs	745,414	384,006	295,894	88,112	361,407	51.5	39.7	22.9

	Total	Labour force	Employed	Unemployed	out of labour force	Labour force particiaption rate	Employment to population ratio	Unemployment rate
25-34_yrs	667,672	546,628	459,457	87,171	121,044	81.9	68.8	15.9
35-54_yrs	786,885	644,105	562,115	81,989	142,780	81.9	71.4	12.7
55-64_yrs	137,760	76,838	71,251	5,588	60,922	55.8	51.7	7.3
65+_yrs	103,714	19,775	17,242	2,534	83,939	19.1	16.6	12.8
Rural pop. 16+ years								
Total	5,658,985	3,175,717	2,566,234	609,483	2,483,267	56.1	45.3	19.2
16-24_yrs	1,630,586	806,613	613,735	192,878	823,973	49.5	37.6	23.9
25-34_yrs	1,197,985	892,514	710,917	181,598	305,471	74.5	59.3	20.3
35-54_yrs	1,770,680	1,184,537	983,461	201,077	586,143	66.9	55.5	17.0
55-64_yrs	576,898	225,291	194,626	30,665	351,607	39.1	33.7	13.6
65+_yrs	482,836	66,761	63,496	3,265	416,075	13.8	13.2	4.9

Table B. 5: Population 16 years old and over by labour force status and level of educational attainment, August-23 (Q3)

	Total	Labour force	Employed	Unemployed	out of labour force	Labour force particiaption rate	Employment to population ratio	Unemployment rate
Total pop. 16+ years								
Total	8,100,430	4,847,069	3,972,193	874,876	3,253,361	59.8	49.0	18.0
None	3,742,523	2,182,853	1,825,744	357,109	1,559,670	58.3	48.8	16.4
Primary	2,632,241	1,570,730	1,277,562	293,168	1,061,512	59.7	48.5	18.7
Lower_secondary	732,867	353,500	278,889	74,611	379,367	48.2	38.1	21.1
Upper_secondary	662,007	452,385	346,961	105,424	209,622	68.3	52.4	23.3
University	330,792	287,602	243,037	44,565	43,190	86.9	73.5	15.5
Male pop. 16+ years								
Total	3,798,558	2,640,227	2,248,640	391,587	1,158,332	69.5	59.2	14.8
None	1,705,528	1,168,277	994,006	174,271	537,251	68.5	58.3	14.9
Primary	1,294,115	891,788	769,758	122,029	402,327	68.9	59.5	13.7
Lower_secondary	315,849	190,462	157,728	32,734	125,386	60.3	49.9	17.2
Upper_secondary	305,424	230,046	186,336	43,710	75,378	75.3	61.0	19.0
University	177,643	159,653	140,811	18,842	17,990	89.9	79.3	11.8
Female pop. 16+ years								
Total	4,301,872	2,206,843	1,723,553	483,289	2,095,029	51.3	40.1	21.9
None	2,036,995	1,014,576	831,738	182,838	1,022,419	49.8	40.8	18.0
Primary	1,338,126	678,942	507,804	171,138	659,184	50.7	37.9	25.2
Lower_secondary	417,018	163,038	121,161	41,877	253,981	39.1	29.1	25.7
Upper_secondary	356,583	222,338	160,625	61,713	134,245	62.4	45.0	27.8
University	153,149	127,949	102,226	25,723	25,200	83.5	66.7	20.1

Table B. 6: Population 16 years old and over by labour force status and marital status, August-23 (Q3)

	Total	Labour force	Employed	Unemployed	out of labour force	Labour force particiaption rate	Employment to population ratio	Unemployment rate
Total pop. 16+ years								
Total	8,100,430	4,847,069	3,972,193	874,876	3,253,361	59.8	49.0	18.0
Married	3,112,358	1,895,280	1,584,061	311,220	1,217,077	60.9	50.9	16.4
Living together	1,388,756	1,049,259	878,870	170,389	339,498	75.6	63.3	16.2
Divorced/separeted	295,445	212,919	169,407	43,512	82,526	72.1	57.3	20.4
Single	2,771,705	1,516,082	1,188,088	327,995	1,255,623	54.7	42.9	21.6
Widow/widower	532,165	173,529	151,767	21,762	358,636	32.6	28.5	12.5
Male pop. 16+ years								
Total	3,798,558	2,640,227	2,248,640	391,587	1,158,332	69.5	59.2	14.8
Married	1,548,011	1,099,391	957,121	142,270	448,620	71.0	61.8	12.9
Living together	695,132	601,896	542,118	59,778	93,236	86.6	78.0	9.9
Divorced/separeted	54,828	40,278	28,731	11,547	14,550	73.5	52.4	28.7
Single	1,444,127	881,633	705,591	176,042	562,494	61.0	48.9	20.0
Widow/widower	56,460	17,029	15,079	1,950	39,430	30.2	26.7	11.5
Female pop. 16+ years								
Total	4,301,872	2,206,843	1,723,553	483,289	2,095,029	51.3	40.1	21.9
Married	1,564,346	795,889	626,940	168,949	768,457	50.9	40.1	21.2
Living together	693,624	447,363	336,752	110,611	246,261	64.5	48.5	24.7
Divorced/separeted	240,617	172,641	140,677	31,965	67,976	71.7	58.5	18.5
Single	1,327,578	634,449	482,496	151,953	693,129	47.8	36.3	24.0
Widow/widower	475,706	156,500	136,688	19,812	319,206	32.9	28.7	12.7

Table B. 7: Employed population by sex, age group, and urban/rural area, August-23 (Q3)

	Total	Sex		Area of Residence		Subsistence agriculture participation	
		Male	Female	Urban	Rural	Participated	Not participated
Total	**3,972,193**	**2,248,640**	**1,723,553**	**1,405,959**	**2,566,234**	**972,074**	**3,000,119**
15-19 yrs	322,790	182,765	140,025	89,475	233,315	47,134	275,655
20-24 yrs	586,840	350,693	236,147	206,420	380,420	91,699	495,141
25-29 yrs	603,320	333,086	270,234	223,444	379,876	137,550	465,770
30-34 yrs	567,053	322,444	244,610	236,013	331,041	127,521	439,533
35-39 yrs	540,358	302,996	237,362	216,230	324,128	136,108	404,249
40-44 yrs	489,003	287,918	201,086	171,792	317,212	150,478	338,525
45-49 yrs	295,037	154,501	140,536	103,190	191,848	94,689	200,348
50-54 yrs	221,177	117,691	103,486	70,905	150,273	76,888	144,289
55-59 yrs	135,729	69,726	66,004	40,266	95,463	36,803	98,926
60-64 yrs	130,148	75,328	54,820	30,984	99,164	42,634	87,514

Table B. 8: Employed population by sex, occupation group, and urban/rural area, August-23 (Q3)

Main Occupation	Total	Sex		Area of Residence		Subsistence agriculture participation	
		Male	Female	Urban	Rural	Participated	Not participated
Total	**3,972,193**	**2,248,640**	**1,723,553**	**1,405,959**	**2,566,234**	**972,074**	**3,000,119**
Managers	37,810	21,065	16,745	34,777	3,033	289	37,521
Professionals	258,664	159,306	99,358	143,555	115,109	36,797	221,867
Technicians_and_associate_professionals	28,881	20,100	8,781	25,069	3,812	319	28,562
Clerical_support_workers	29,595	11,104	18,491	26,985	2,610	911	28,684
Service_and_sales_workers	720,745	324,510	396,234	373,066	347,679	136,990	583,755
Skilled_agricultural,_forestry_and_fishery workers	184,423	99,776	84,648	19,268	165,155	9,939	174,484
Craft_and_related_trades_workers	365,960	273,962	91,998	154,784	211,176	74,686	291,274
Plant_and_machine_operators_and_assemblers	109,949	105,903	4,045	66,296	43,653	7,442	102,507
Elementary_occupations	2,236,166	1,232,913	1,003,253	562,158	1,674,008	704,701	1,531,465

Table B. 9: Employed population by sex, educational attainment, and urban/rural area, August-23 (Q3)

Education Level	Total	Sex		Area of Residence		Subsistence agriculture participation	
		Male	Female	Urban	Rural	Participated	Not participated
Total	**3,972,193**	**2,248,640**	**1,723,553**	**1,405,959**	**2,566,234**	**972,074**	**3,000,119**
None	1,825,744	994,006	831,738	448,242	1,377,503	559,028	1,266,716
Primary	1,277,562	769,758	507,804	421,828	855,734	314,831	962,731
Lower_secondary	278,889	157,728	121,161	128,546	150,342	47,071	231,818
Upper_secondary	346,961	186,336	160,625	194,297	152,664	37,023	309,938
University	243,037	140,811	102,226	213,046	29,991	14,121	228,916

Table B. 10: Employed population by sex, branch of economic activity, and urban/rural area, August-23 (Q3)

Economic activity	Total	Sex		Area of Residence		Subsistence agriculture participation	
		Male	Female	Urban	Rural	Participated	Not participated
Total	**3,972,193**	**2,248,640**	**1,723,553**	**1,405,959**	**2,566,234**	**972,074**	**3,000,119**
Agriculture forestry and fishing	1,484,855	645,223	839,631	188,833	1,296,021	555,350	929,505
Mining and quarrying	53,320	49,142	4,178	3,368	49,952	9,280	44,040
Manufacturing	246,543	138,385	108,159	88,352	158,191	48,885	197,659
Electricity gas stream and air conditioning supply	2,170	1,748	422	2,170		86	2,083
water supply, gas and remediation services	1,415	1,213	202	496	918	143	1,272
Construction	554,443	488,725	65,718	212,522	341,921	130,837	423,607
Whole sale and retail trade; repair of motor vehicles and motorcycles	544,568	219,068	325,499	312,291	232,277	100,907	443,661
Transportation and storage	266,214	253,305	12,909	110,265	155,949	28,758	237,456
Accommodation and food services activities	120,420	72,042	48,378	49,860	70,560	25,572	94,848
Information and communication	11,974	8,524	3,450	9,128	2,846		11,974
Financial and insurance activities	38,239	21,019	17,220	28,411	9,827	1,637	36,602
Real estate activities	2,998	1,920	1,078	2,998			2,998
Professional, scientific and technical activities	16,758	13,262	3,496	13,140	3,618	1,142	15,617
Administrative and support activities	66,254	40,126	26,128	32,166	34,088	8,922	57,332
Public administration and defense; compulsory social security	61,046	42,552	18,495	50,824	10,222	941	60,105
Education	163,651	86,965	76,686	67,626	96,025	30,187	133,464
Human health and social work activities	37,856	17,094	20,762	30,391	7,465	2,139	35,716
Arts, entertainment and recreation	8,321	6,404	1,917	6,316	2,006	300	8,021
Other services	116,604	67,057	49,547	62,152	54,453	21,268	95,336
Ativities of house13holds as employers	170,076	71,549	98,526	130,181	39,895	5,721	164,355
Activities of extraterritorial organizations and bodies	4,468	3,317	1,151	4,468			4,468

Table B. 11: Educational attainment and field of Education by Labour market status, August-23 (Q3)

	Labour force status				Working age pop.(Counts)
	Employed	Unemployed	out of labour force	Total	
Level of education completed					
Total	**49.0**	**10.8**	**40.2**	**100.0**	**8,100,430**
None	48.8	9.5	41.7	100.0	3,742,523
Primary	48.5	11.1	40.3	100.0	2,632,241
Lower_secondary	38.1	10.2	51.8	100.0	732,867
Upper_secondary	52.4	15.9	31.7	100.0	662,007
University	73.5	13.5	13.1	100.0	330,792
Field of education					
Total	**50.6**	**11.4**	**38.0**	**100.0**	**7,120,760**
General Education	50.3	11.1	38.6	100.0	5,827,204
Education	73.1	5.5	21.4	100.0	132,759
Humanity and art	50.5	16.1	33.4	100.0	99,506
Social Science business and art	61.1	15.3	23.6	100.0	269,539
Science	41.3	13.4	45.3	100.0	482,134
engineering, manufacturing and construction	50.1	12.9	37.0	100.0	183,715
Agriculture	49.1	17.9	33.0	100.0	42,107
Health and welfare	62.8	5.5	31.7	100.0	47,451
Services	44.4	17.1	38.5	100.0	36,345

Table B. 12: Employed population by sex, status in employment, and urban/rural area, August-23 (Q3)

	Total	Sex		Area of Residence		Subsistence agriculture participation	
		Male	Female	Urban	Rural	Participated	Not participated
Total	**3,972,193**	**2,248,640**	**1,723,553**	**1,405,959**	**2,566,234**	**972,074**	**3,000,119**
Employee	2,664,454	1,539,632	1,124,822	901,109	1,763,345	741,545	1,922,909
Employer (with regular employees)	56,128	30,223	25,906	34,230	21,898	5,390	50,739
Own account worker(without regular employees)	1,145,229	653,136	492,094	441,674	703,555	211,125	934,104
Member of cooperative	5,234	4,443	791	791	4,443		5,234

Table B. 13: Employed population by sex, hours usually worked per week at all jobs, and urban/rural area, August-23 (Q3)

	Total	Sex		Area of Residence		Subsistence agriculture participation	
		Male	Female	Urban	Rural	Participated	Not participated
Total	**3,972,193**	**2,248,640**	**1,723,553**	**1,405,959**	**2,566,234**	**972,074**	**3,000,119**
1-24 hrs	1,006,486	496,001	510,485	237,398	769,087	363,274	643,212
25-34 hrs	573,273	290,449	282,824	132,156	441,117	171,377	401,897
35-40 hrs	1,038,609	552,228	486,381	312,503	726,106	291,823	746,785
41-48 hrs	556,717	364,620	192,097	269,160	287,557	85,894	470,823
49-61 hrs	527,600	357,719	169,881	303,890	223,711	44,188	483,412

Table B. 14: Youth Population by sex, and residential area, August-23 (Q3)

	Sex			Area of Residence		Subsistence agriculture participation	
	Total	Male	Female	Urban	Rural	Participated	Not participated
Youth aged 16 to 24 years old							
Total	2,376,000	1,183,712	1,192,288	745,414	1,630,586	423,400	1,952,600
Employed	909,629	533,458	376,172	295,894	613,735	138,833	770,796
Unemployed	280,990	147,422	133,569	88,112	192,878	74,313	206,677
out of labour force	1,185,380	502,833	682,548	361,407	823,973	210,254	975,126
Youth aged 16 to 30 years old							
Total	3,530,244	1,697,385	1,832,859	1,159,933	2,370,311	745,369	2,784,875
Employed	1,637,863	932,753	705,110	574,358	1,063,505	304,860	1,333,004
Unemployed	434,706	189,697	245,009	146,097	288,609	129,878	304,828
out of labour force	1,457,674	574,935	882,740	439,478	1,018,196	310,631	1,147,044

Table B. 15: Youth Unemployed (who looked for a job) by sex, duration of seeking employment, and urban/rural area, August-23 (Q3)

	Total			Urban			Rural		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total unemployed Youth(16-30 years old)	**434,706**	**189,697**	**245,009**	**146,097**	**57,248**	**88,849**	**288,609**	**132,449**	**156,160**
Less than 3 months	192,658	95,220	97,438	50,642	29,131	21,511	142,015	66,089	75,927
Less than 6 months	94,551	32,870	61,681	27,312	5,120	22,192	67,239	27,750	39,489
Less than 12 months	40,366	21,302	19,064	19,614	7,279	12,335	20,752	14,024	6,728
1 year to less than 2 years	41,352	14,895	26,456	16,218	2,597	13,621	25,134	12,298	12,836
2 years and above	39,471	11,138	28,333	19,625	6,835	12,791	19,846	4,304	15,542

Table B. 16: Youth not in employment and not currently in education nor in training by sex, age group, and urban/rural area, August-23 (Q3)

	Sex			Area of Residence		Subsistence agriculture participation	
	Total	Male	Female	Urban	Rural	Participated	Not participated
Youth age groups							
Total youth(16-30 years) NEET	**1,171,713**	**419,035**	**752,678**	**295,360**	**876,354**	**358,103**	**813,610**
16-19 yrs	356,093	170,907	185,186	70,265	285,827	78,149	277,943
20-24 yrs	415,484	148,697	266,787	106,016	309,468	126,032	289,451
25-30 yrs	400,137	99,432	300,705	119,078	281,058	153,921	246,216
Level of education completed							
None	414,815	195,933	218,882	63,639	351,176	118,716	296,099
Primary	474,161	147,473	326,687	97,246	376,914	164,801	309,360
Lower_secondary	124,890	27,938	96,952	35,369	89,522	48,519	76,371
Upper_secondary	131,004	38,591	92,413	76,030	54,974	25,837	105,167
University	26,843	9,100	17,743	23,075	3,768	230	26,613

Table B. 17: Unemployed population by sex, broad age group and urban/rural area, August-23 (Q3)

	Sex			Area of Residence		Subsistence agriculture participation	
	Total	Male	Female	Urban	Rural	Participated	Not participated
Total unemployed population(16+ years)	**874,876**	**391,587**	**483,289**	**265,393**	**609,483**	**327,541**	**547,335**
16-24_yrs	280,990	147,422	133,569	88,112	192,878	74,313	206,677
25-34_yrs	268,769	87,766	181,002	87,171	181,598	101,235	167,533
35-54_yrs	283,066	134,292	148,775	81,989	201,077	130,372	152,695
55-64_yrs	36,253	18,178	18,074	5,588	30,665	18,382	17,870
65+_yrs	5,799	3,929	1,870	2,534	3,265	3,239	2,560

Table B. 18: Unemployed population by sex, level of educational and urban/rural area, August-23 (Q3)

Level of education completed	Sex			Area of Residence		Subsistence agriculture participation	
	Total	Male	Female	Urban	Rural	Participated	Not participated
Total unemployed population(16+ years)	**874,876**	**391,587**	**483,289**	**265,393**	**609,483**	**327,541**	**547,335**
None	357,109	174,271	182,838	77,041	280,068	141,634	215,475
Primary	293,168	122,029	171,138	56,554	236,613	132,302	160,865
Lower_secondary	74,611	32,734	41,877	30,190	44,421	28,309	46,302
Upper_secondary	105,424	43,710	61,713	61,343	44,081	23,756	81,668
University	44,565	18,842	25,723	40,265	4,300	1,540	43,025

Table B. 19: Unemployed population (who looked for a job) by sex, method of seeking employment, and urban/rural area, August-23 (Q3)

Search methods	Sex			Area of Residence		Subsistence agriculture participation	
	Total	Male	Female	Urban	Rural	Participated	Not participated
Unemployed population who looked for a job	**816,965**	**363,428**	**453,537**	**240,616**	**576,349**	**310,647**	**506,317**
Arranging for financial resources, applying for permits, licenses	105,722	46,821	58,901	32,470	73,253	43,244	62,478
Looking for land, premises, machinery, supplies, farming inputs	19,536	10,457	9,080	6,244	13,292	10,714	8,822
Seeking the assistance of friends, relatives or other types of intermediaries	311,395	143,615	167,781	90,645	220,751	116,366	195,029
Registering with or contacting public or private employment services	41,432	15,592	25,839	20,581	20,850	18,402	23,030
Applying to employers directly, checking at worksites,farms,factory gates,markets	309,398	138,179	171,219	72,595	236,803	117,130	192,268
Placing or answering newspaper or online job advertisements	17,786	4,156	13,630	12,367	5,419	1,409	16,376
Placing or updating resumes on professional or social networking	11,695	4,608	7,087	5,714	5,981	3,381	8,314
Number of responses per search method							
Arranging for financial ressources,applying for permits,licences	176,873	73,412	103,461	58,415	118,459	74,287	102,586
Looking for land,premises,machinery,supplies,farming inputs	65,710	34,666	31,044	28,621	37,090	29,300	36,410
Seeking the assistance of friends,relatives or other types of intermediaries	330,844	158,103	172,741	105,374	225,470	119,209	211,635
Registering with or contacting public or private employment services	68,313	25,910	42,403	40,232	28,081	20,657	47,656
Placing or answering newspaper or online job advertisements	57,786	22,871	34,915	37,151	20,636	6,094	51,693
Placing and updating resumes on professional or social networking sites online	40,209	15,071	25,138	28,451	11,758	4,294	35,915

Table B. 20: Unemployed population (who looked for a job) by sex, duration of seeking employment, and urban/rural area, August-23 (Q3)

	Total			Urban			Rural		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total unemployed population(16+ years)	874,876	391,587	483,289	265,393	113,074	152,320	609,483	278,513	330,970
Less than 3 months	424,565	204,731	219,834	105,114	58,415	46,699	319,451	146,316	173,135
Less than 6 months	192,311	77,329	114,982	43,814	10,456	33,358	148,497	66,873	81,624
Less than 12 months	68,836	35,120	33,716	31,235	12,100	19,134	37,601	23,020	14,581
1 year to less than 2 years	70,193	27,519	42,674	30,380	8,718	21,662	39,813	18,802	21,011
2 years and above	61,060	18,729	42,331	30,073	11,681	18,393	30,987	7,049	23,938

Table B. 21: Time related under employment by age group sex and area of residence, August-23 (Q3)

	Sex			Area of Residence		Subsistence agriculture participation	
	Total	Male	Female	Urban	Rural	Participated	Not participated
Total time related underemployed)	**1,186,283**	**619,243**	**567,040**	**291,660**	**894,623**	**401,729**	**784,554**
16-24_yrs	278,496	164,151	114,344	63,806	214,690	73,006	205,490
25-34_yrs	369,396	182,720	186,676	105,118	264,278	107,511	261,885
35-54_yrs	454,787	229,797	224,990	109,782	345,004	187,814	266,973
55-64_yrs	63,942	29,559	34,383	11,917	52,025	23,343	40,599
65+_yrs	19,663	13,016	6,647	1,037	18,626	10,054	9,608

Appendix C : Labour Force Survey Personnel

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